

UBS (UK) Pension & Life Assurance Scheme

Climate Disclosure Report

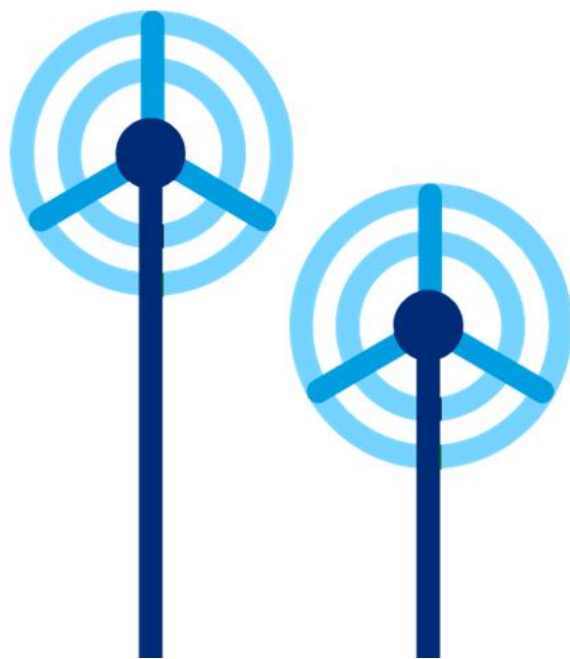
Reporting period: 12 months to 30 June 2023

December 2023



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Section 1

Introduction

Dear Members,

Welcome to our first climate change report, which has been prepared in line with the recommendations of the Task Force on Climate-related Financial Disclosures (“TCFD”) and the statutory requirements prescribed by the Department for Work and Pensions¹.

The UBS Pension Trustee Company Limited (“the Trustee”) has ultimate responsibility for ensuring effective governance of climate change risks and opportunities in relation to the UBS (UK) Pension & Life Assurance Scheme (“the Scheme”). The Trustee believes that climate change is a financially material factor. While climate change is a systemic risk to society, the economy and the financial system; the transition to a low carbon economy can also present opportunities. These risks and opportunities have the potential to impact the Scheme’s investments in both its Defined Contribution (DC) and Defined Benefit (DB) Sections, as well as the Sponsor covenant and the DB Section’s funding position. Having processes in place to identify, assess and manage these risks and opportunities is, therefore, a strategic priority for the Trustee.

Commensurate with the strategic importance of climate change, the Trustee has developed and adopted a Climate Change Policy upon which its approach to managing climate-related risks and opportunities is built. The Climate Change Policy sets out the Trustee’s support, within the context of its fiduciary responsibilities, of the Paris Agreement in order to avoid the worst impacts of climate change by limiting global warming to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C.

The Trustee’s assessment of climate-related risks and opportunities has been carried out based on information that is currently available, both in terms of data from the companies, funds and



¹ The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 and the Occupational Pension Schemes (Climate Change Governance and Reporting) (Miscellaneous Provisions and Amendments) Regulations 2021

assets in which the Scheme invests and in consideration of the various global warming scenarios it has analysed. The Trustee notes that this data is subject to change as climate change reporting improves.

The Trustee believes that climate change risks and opportunities are not independent of other risks and opportunities that the Scheme faces. As such, from a governance perspective, climate change has been integrated into the Trustee’s overall governance framework. The Trustee will therefore continue to mandate its investment managers to invest in companies, funds and assets where there is a sufficiently attractive investment case and the investment manager believes there is an opportunity to engage and influence change in the behaviour and actions of a company, fund manager or asset controller.

This report starts with “At a glance” overviews of all things climate-related and some key results and metrics for the DC and DB Sections of our Scheme.

For the DC Section, the Trustee’s focus is on managing climate-related matters in the funds offered to Members, particularly the default investment options, and on providing Members with climate-conscious fund options should they wish to reflect their own views on climate change in their pension investment choices. The Lifestyle strategies that are default options utilise the Growth Fund and Global Blended Equity Fund, both of which have substantial allocations to the UBS Climate Aware World Equity Fund, which is also the underlying fund of the Climate Aware Fund that is available on a standalone basis in the Freestyle range. In addition, the Global Equity Impact Fund was launched in 2022. Members can explore their investment options further in the DC Investment Guide available on the Member portal.

For the DB Section, the Trustee is responsible for all investment decisions and thus for all climate-related investment policy, strategy and monitoring.

The body of the report is split into the four main sections outlined in the chart. The report is, of necessity to comply effectively with the regulations, somewhat lengthy and you may not have the time or inclination to read it all. The Trustee would particularly like to direct you to the key strategic conclusions at the end of section 3 and the key findings against the agreed metrics in section 5.

The appendices set out the methodology and assumptions used to produce the information contained in this report.

The report’s main sections are as follows:



- Governance:** How the Trustee incorporates climate change into its decision making;
- Strategy:** How potential future global warming scenarios could impact the Scheme;
- Risk Management:** How the Trustee incorporates climate-related risk in its risk management processes; and
- Metrics and Targets:** How the Trustee measures and monitors progress against different climate-related targets.

The Trustee hopes that you find this report interesting and helpful and would like to acknowledge the support of Mercer, its Actuarial and Investment Adviser, in the production and design of the report.

The Trustee would welcome your feedback on this report and is looking forward to building on this report over future years, especially as the availability of climate-related data about our Scheme investments improves.

Richard Hardie

Chair of the Trustee of the UBS (UK) Pension & Life Assurance Scheme

At a glance – DC section

Trustee Ambitions / Targets

Ambition of achieving net zero financed emissions at total Scheme level by 2050;
Interim target of 50% reduction in Weighted Average Carbon Intensity (“WACI”) (scope 1 and 2) by 2030 for physical equity, relative to a 30 June 2020 baseline;
Interim target of 20% reduction in WACI (scope 1 and 2) by 2030 for corporate bond holdings relative to a 30 June 2022 baseline.

Why take action?

The **potential negative impact on the asset value of the Section’s default investment option** over the next 40 years would be **33.5%** in a “Failed Transition” scenario.

▼ **33.5%**

What do we mean by a “Failed Transition”?

Average temperature increase above 4°C by 2100 (relative to pre-industrial average). The world fails to co-ordinate a transition to a low carbon economy.

Progress against targets

Progress relative to the Trustee’s interim carbon intensity (WACI) targets as at 31 December 2022 (relative to baseline) is set out below:

Listed Equities	▼ 41.8%	(versus 50% target, 30 June 2020 baseline)
Corporate Bonds	▼ 8.1%	(versus 20% target, 30 June 2022 baseline)

There has been **positive progress** made towards the Section’s targets, largely driven by the introduction of the UBS Climate Aware World Equity Fund within the equity portfolio and due to the decrease in intensity of the corporate bonds portfolio. The listed equities and corporate bonds portfolios were c.36.7% and c.7.4% less carbon intensive than their benchmark indices as at 31 December 2022, respectively.

Greenhouse Gas Emissions

The Section’s listed equity and corporate bond assets are invested in companies that generate greenhouse gas emissions of:

51,105 tons CO₂e

(Represents total greenhouse gas (GHG) emissions and is reported as CO₂ equivalent. Total emissions quoted is scope 1 & 2 emissions of the DC Section’s listed equity and corporate bond assets (c.91% of DC Section assets in the growth phase) as at 31 December 2022.)

The Trustee is looking to reduce this figure.

Emissions in the real world

A **50% reduction** in total carbon emissions for the Scheme's DC assets is broadly equivalent to **removing from the road:**

10,140 cars

Based on average car mileage of 9,000 per year and 280g CO₂ per mile for a medium sized car.

Source: <https://www.carbonindependent.org/17.html>

Key Actions in 2022 / 2023

The Trustee received **training** covering climate-related investment risks, climate scenario analysis, funding and covenant impacts, metrics and targets, governance roles and responsibilities, and reporting requirements in line with the TCFD recommendations.

The Trustee has developed and adopted a **Climate Change Policy**, which sets out its support of the Paris Agreement in order to avoid the worst impacts of climate change by limiting global warming to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C within the context of its fiduciary responsibilities.

The Trustee has **undertaken climate scenario analysis** to test the resilience of the investment and funding strategy adopted.

Four categories of climate-related metrics have been chosen to monitor exposure to climate-related risks and opportunities.

The **Global Equity Impact Fund** was launched within the Freestyle fund range.

Actions for 2023 / 2024

Stewardship: Assess the Scheme's investment managers' ESG policies and stewardship activities with a focus on climate change as well as broader ESG themes.

Risks: Review of Scheme's Risk Register, governance arrangements and investment policies in relation to climate change.

Investment Strategy Review: Climate change risks and opportunities to be considered as part of the DC triennial investment strategy review.

Target Monitoring: Monitor the data on climate-related metrics and progress against any targets set in relation to these metrics, and evaluation of appropriateness of metrics and target(s).

Scope 3 emissions: Report Scope 3 emissions for the first time, noting expected limitations regarding availability and accuracy.

Training: Ongoing training and review of skills to ensure we are well equipped with sufficient knowledge of developments around climate change risk and regulatory changes.

At a glance – DB section

Trustee Ambitions / Targets

Ambition of achieving net zero financed emissions at total Scheme level by 2050;
Interim target of 50% reduction in Weighted Average Carbon Intensity (“WACI”) (scope 1 and 2) by 2030 for physical equity, relative to a 30 June 2020 baseline.

Why take action?

The **potential negative impact on the Section’s funding level** over the next 25 years would be **17.5%** in a “Failed Transition” scenario.

▼ **17.5%**

What do we mean by a “Failed Transition”?

Average temperature increase above 4°C by 2100 (relative to pre-industrial average).
The world fails to co-ordinate a transition to a low carbon economy.

Progress against target

Progress relative to the Trustee's interim carbon intensity (WACI) target as at 31 December 2022 (relative to a 30 June 2020 baseline) is set out below:

▼ **57.1%** (versus 50% target)

The Trustee **has accomplished** its target, driven by asset allocation decisions that reduced the carbon intensity of the physical equity portfolio. The Section's physical listed equities portfolio was c.59% less carbon intensive than its benchmark index as at 31 December 2022.

Although the target has been achieved, the Trustee will continue to closely monitor the carbon intensity of the portfolio and keep the target under review as the investment strategy evolves.

Greenhouse Gas Emissions

The Section’s listed equity and corporate bond assets are invested in companies that generate greenhouse gas emissions of:

49,149 tonnes CO₂e

(Represents total greenhouse gas (GHG) emissions and is reported as CO₂ equivalent. Total emissions quoted is scope 1 & 2 emissions of the DB Section’s listed equity and corporate bond assets (c.31% of DB Section assets) as at 31 December 2022.

The Trustee is looking to reduce this figure.

Emissions in the real world

A **50% reduction** in total carbon emissions for the Scheme's DB assets is broadly equivalent to **removing from the road:**

9,750 cars

*Based on average car mileage of **9,000** per year and **280g CO₂** per mile for a medium sized car.*

Source: <https://www.carbonindependent.org/17.html>

Key Actions in 2022 / 2023

The Trustee received **training** covering climate-related investment risks, climate scenario analysis, funding and covenant impacts, metrics and targets, governance roles and responsibilities, and reporting requirements in line with the TCFD recommendations.

The Trustee has developed and adopted a **Climate Change Policy**, which sets out its support of the Paris Agreement in order to avoid the worst impacts of climate change by limiting global warming to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C within the context of its fiduciary responsibilities.

The Trustee has **undertaken climate scenario analysis** to test the resilience of the investment and funding strategy adopted.

Four categories of climate-related metrics have been chosen to monitor exposure to climate-related risks and opportunities.

The **carbon intensity** of the Section's listed equity portfolio has **improved**, driven by investment in a climate aware fund that takes into account company emissions when selecting investments.

Actions for 2023 / 2024

Stewardship: Assess the Scheme's investment managers' ESG policies and stewardship activities with a focus on climate change as well as broader ESG themes.

Risks: Review of Scheme's Risk Register, governance arrangements and investment policies in relation to climate change.

Investment Strategy Review: Climate change risks and opportunities to be considered as part of the DB investment strategy review.

Target Monitoring: Monitor the data on climate-related metrics and progress against any targets set in relation to these metrics, and evaluation of appropriateness of metrics and target(s).

Scope 3 emissions: Report Scope 3 emissions for the first time, noting expected limitations regarding availability and accuracy.

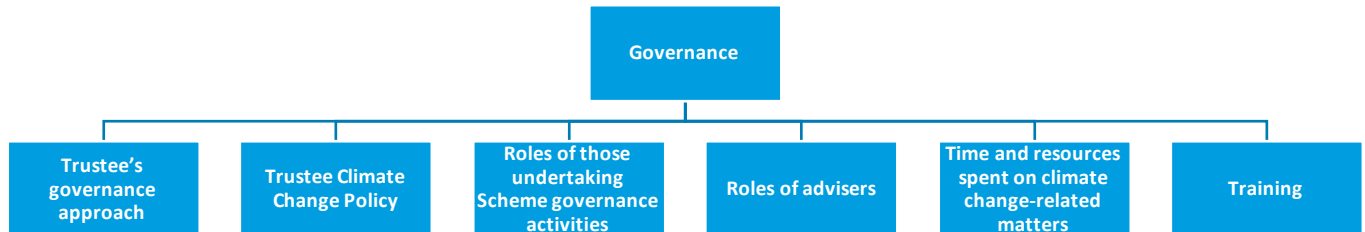
Training: Ongoing training and review of skills to ensure we are well equipped with sufficient knowledge of developments around climate change risk and regulatory changes.

Section 2

Governance



This section outlines how the Trustee incorporates climate change into its decision making, and covers the following:



Trustee’s governance approach

The Trustee has ultimate responsibility for ensuring effective governance of climate-related risks and opportunities. The Trustee maintains a Statement of Investment Principles (SIP), which details the key objectives, risks and approach to considering Environmental, Social and Governance (“ESG”) factors, such as climate change, as part of its investment decision making. It is the Trustee’s policy to review the SIP on an annual basis or following a significant change in investment policy.

In addition, the “*Trustee Climate Governance Statement on the Oversight of Climate Change Risks and Opportunities*” documents the governance processes the Trustee has put in place to ensure that it meets its statutory and fiduciary obligations in respect of climate-related risks and opportunities, as well as the Trustee’s Climate Change Policy. This statement was approved by the Trustee on 14 September 2022 and the Trustee’s policy is to review it at least every 15 months. The last review was undertaken by the Trustee’s Investment Committee on 31 August 2023 and by the Trustee on 13 September 2023.

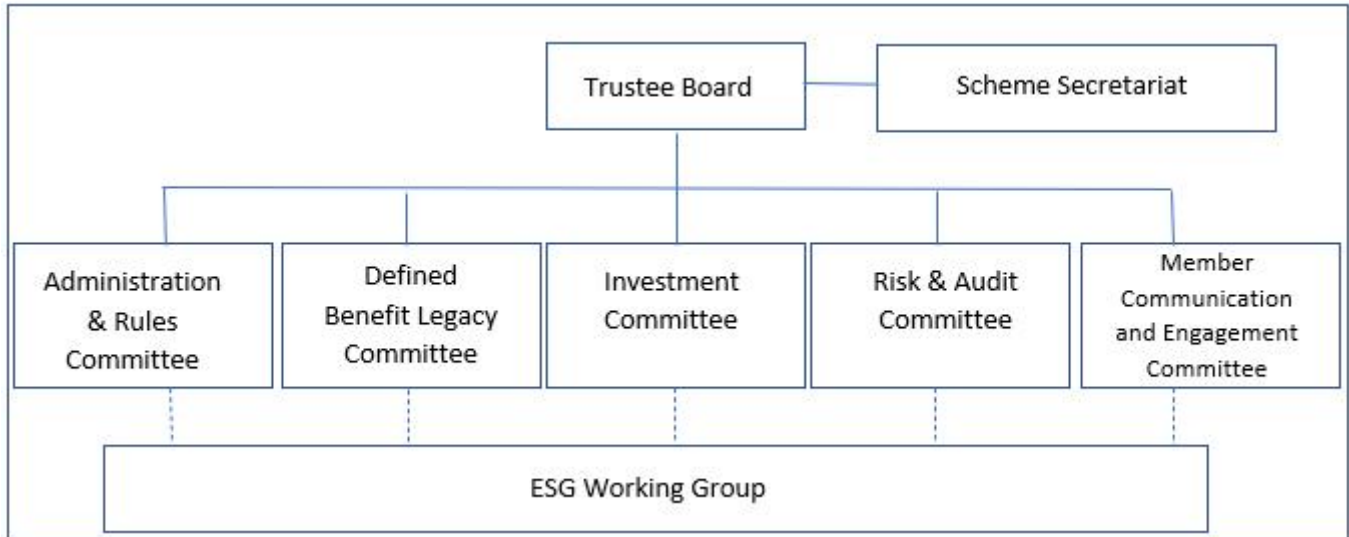
Trustee Climate Change Policy

The Trustee is supportive, within the context of its fiduciary responsibilities, of the Paris Agreement in order to avoid the worst impacts of climate change by limiting global warming to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C. As a result, the Trustee:

- Considers the risks of climate change within an integrated risk management framework, covering the investment, funding and covenant implications where applicable;
- Expects its appointed investment managers and advisers to integrate financially-relevant climate change risks (e.g. transition risk and physical risk) and opportunities within their investment and advice processes as applied to the Scheme. Investment managers are further expected to report on how these risks and opportunities have been incorporated into their investment processes at least once a year;
- Prefers 'Engagement' as a key pillar of its policy rather than 'Exclusion' with regards to incorporating climate change risks into an effective fiduciary framework. The Trustee expects investment managers to independently consider whether exclusion or engagement is more appropriate within their investment processes and mandates;
- Encourages the further development of asset classes, investment products and Member choices (for DC Section) that support achieving the well below 2°C target, provided they are all based within the primary fiduciary framework;
- Is supportive of the recommendations of the Task Force on Climate-related Financial Disclosures. It will report against and set climate change-related targets in line with this framework;
- Supports and encourages the further development of effective climate change risk metrics to enhance the ability of all stakeholders in the investment chain to assess and minimise such risks;
- Is cognisant that climate change will be subject to much further analysis and subsequent policy changes in the coming years. The Trustee is supportive of adopting an evolving policy in order to ensure all relevant developments are captured; and
- Welcomes, and where appropriate encourages, policies and initiatives that, in its opinion, contribute towards achieving the well below 2°C target.

Roles of those undertaking scheme governance activities

The Trustee believes that climate change risks and opportunities are not independent of other risks and opportunities that the Scheme faces. As such, from a governance perspective, climate change has been integrated into the Trustee's overall governance framework. The chart below illustrates the Board and Committees structure of the Trustee. Beneath the chart, the major roles and responsibilities with regards to climate change are explained.



- **Trustee Board**

The Trustee Board, led by the Chair of the Trustee, has ultimate responsibility for the management of climate change risks and opportunities. In fulfilling that responsibility the Trustee Board is assisted by the Scheme Secretariat and its appointed Scheme advisers.

The Trustee Board also delegates specific aspects of the management of climate change risks and opportunities to its Committees, whilst retaining overall accountability.

Specific roles and responsibilities retained by the Trustee Board are:

- Putting in place effective climate governance arrangements. This includes ensuring that the roles and responsibilities of the Board and its Committees in relation to climate change issues are recorded in the relevant Terms of Reference and monitored for adherence;
- Ensuring that the appropriate level of training on climate change-related activities is delivered and recorded as part of the overall Trustee training plan. This is to ensure that the Trustee has sufficient knowledge and understanding of climate change to fulfil its statutory and fiduciary obligations, and that it is keeping this knowledge and understanding up to date. This includes knowledge and understanding of the principles relating to the identification, assessment and management of climate-related risks and opportunities for the Scheme;
- Responsibility for approving all strategic aspects of the management of climate change, as recommended and endorsed by the relevant Committees. This includes ensuring that:
 - The short, medium and long-term time periods to be used when identifying climate-related risks and opportunities of the Scheme (DB and DC Sections) have been agreed;
 - The main climate-related risks and opportunities (including physical and transition risks) have been identified and assessed appropriately;

- The management of climate change risks and opportunities has been appropriately documented in the relevant sections of the Trustee's Risk Register;
- Strategic decisions on the DB Section's funding and DB and DC Sections' investment arrangements have incorporated climate-related considerations;
- Climate change risks have been incorporated in the assessment of the Sponsor's covenant;
- Climate metrics and targets are reviewed and monitored on at least an annual basis by the Board;
- The Trustee's advisers (Covenant, Actuarial and DB and DC Investment) have clearly defined responsibilities in respect of climate change and they have adequate expertise to fulfil their respective roles;
- The Trustee's appointed investment managers are managing climate-related risks and opportunities with regards to the assets for which they are responsible and that they have sufficient expertise and resources to do so;
- Communication to Members (especially DC Members) and other stakeholders on the Trustee's activities with regard to the management of climate change risks and opportunities is undertaken effectively and when required;
- Membership of any third party organisations or initiatives that in the Trustee's opinion further contribute towards achieving the well below 2°C target has been appropriately approved.

To enable the Trustee Board to ensure that the management of climate change risk and responsibilities is effective, it receives reports containing recommendations for approval from the Committees to which it has delegated the responsibility:

- **Administration & Rules Committee (ARC)**

The ARC receives a regular report from the Scheme's appointed Administrator. The Committee asks the Administrator to report on the risk of climate change on its operations and whether it has a target to reduce its carbon footprint.

- **Defined Benefit Legacy Committee (DBLC)**

The DBLC, working with the Trustee's appointed advisers, is responsible for recommending the overall DB Section's investment (including liability hedging) and funding strategy to the Board for approval. This strategy is built upon the integrated risk framework of investment strategy, covenant support and funding.

The primary roles of the DBLC with regards to climate change management relate to the potential effect of climate change on the Sponsor's covenant and on the Scheme's liabilities.

As such, the DBLC works with the Trustee's Covenant Adviser and the Scheme Actuary in fulfilling those responsibilities, which includes scenario analysis. The appointment letters for both advisers include the management of climate change risks and opportunities in their duties to the Trustee.

While the DBLC sets an overall investment return target, the development of the Strategic Asset Allocation of the DB Section and management of climate risks and opportunities in the DB Section's investments falls to the Investment Committee.

- **Investment Committee (IC)**

The IC, working with its appointed DB and DC investment advisers, is responsible for making recommendations to the Board on the Strategic Asset Allocation of the DB Section and the DC Section's default investment strategy, lifestyle and freestyle fund ranges. Once the strategic

investment strategies are approved it is for the IC to implement them and monitor them on an ongoing basis.

In this context, the IC ensures that:

- Climate change-related risks and opportunities are incorporated into the strategic design of the DB and DC investment strategies.
- Annual carbon footprinting exercises for the DB and DC Sections' investments are undertaken with the output feeding into the ongoing strategic development of both sections' investment strategies. In addition, scenario analysis is undertaken at least every three years to measure the robustness of these investment strategies to both physical and transition risks under different scenarios.
- The funds the Scheme invests in and/or the segregated mandates established with third party managers take climate change risks and opportunities into account in their investment process at the time of the Trustee's initial investment and are monitored by the investment managers through time.
- The funds and mandates are monitored through time by both quarterly reports and annual due diligence meetings, which include monitoring that the managers' climate change policies (including both the management of climate-related risks and opportunities as well as the managers' stewardship policies) are being implemented and further improved through time.

- **Risk & Audit Committee (RAC)**

The RAC has the responsibility for ensuring that the Scheme operates within a risk-controlled environment. As such, it is responsible for overseeing that the management of climate-related risks and opportunities is effectively implemented into the processes of the Board and Committees. This means ensuring that the Trustee Risk Registers are appropriately populated for climate change risks and opportunities. Further, the RAC has a role in highlighting if the mitigants appear unlikely to be effective.

- **Member Communication and Engagement Committee (MCEC)**

The MCEC has the responsibility of communicating to Members (especially DC Members) and other stakeholders on the Trustee's activities with regard to the management of climate change risks and opportunities. This undertaken effectively and when required.

- **Scheme Secretariat**

The Scheme Secretariat is responsible for assisting the Trustee Board and its committees in fulfilling their duties, including climate change responsibilities. The Scheme Secretariat also oversees the Trustee training log.

- **ESG Working Group**

Prior to coming under the formal TCFD reporting regulations, the Trustee Board established an ESG Working Group, consisting of a number of the Trustee Directors and assisted by the Trustee appointed advisers. The initial objective of the ESG Working Group, which typically has met quarterly, was to establish a detailed action plan to build upon the Trustee's existing climate change risk and opportunities activities, and to make sure the Trustee complies with the TCFD legislative timetable. Output from the ESG Working Group has been presented to the relevant Committees as explained above for consideration and endorsement, where appropriate, before going to the Trustee Board for approval.

The ESG Working Group is not a committee and has no decision making powers, but its existence has allowed the Trustee to devote more time to detailed consideration of ESG and in particular

climate change issues as applicable to the Scheme. This includes issues such as the appropriate short, medium and long-term periods for each Section, and the chosen climate metrics and target(s). This has also allowed for greater challenge and questioning on the advice and input received from the Trustee's appointed advisers.

It is intended that the ESG Working Group will continue to be convened on an ad hoc basis as a forum for detailed consideration of developments in climate change policy and practice and to make recommendations to the Committees and/or Trustee Board as required.

Roles of advisers

There are four advisers who provide advice with regards to the management of climate-related risks and opportunities. In many cases, the advice received by the Trustee is not mutually exclusive and must be considered in the round. Those advisers are:

Actuarial Adviser

The Scheme's Actuarial Adviser is responsible, as agreed by the Trustee, for:

- Providing training and other updates to the Trustee on relevant climate-related matters;
- Advising how climate-related risks and opportunities might affect the Scheme's funding position over the short, medium and long term and the implications for the Scheme's funding strategy and long-term objectives;
- Working with the Trustee's other advisers to assist the Trustee in incorporating climate change in its investment and covenant monitoring, and communication with Members and other stakeholders as appropriate.

Investment Adviser to the DC Section

The Scheme's DC Investment Adviser is responsible, as agreed by the Trustee, for:

- Providing training and other updates to the Trustee on relevant climate-related matters that relate to the DC Section;
- Helping the Trustee to formulate its investment beliefs in relation to climate change and reflecting these in the Scheme's DC investment policies and strategy;
- Advising how climate-related risks and opportunities might affect the various asset classes in which the DC Section of the Scheme might invest over the short, medium and long term, and the implications for the Scheme's DC investment strategy;
- Advising the Trustee (through the Investment Committee) on the appropriateness and effectiveness of the DC Section's underlying investment managers' processes, expertise and resources for managing climate-related risks and opportunities, given the Trustee's investment objectives and beliefs;
- Advising on the inclusion of climate change in the DC Section's governance arrangements and appropriate sections of the Scheme's Risk Register, working with the Trustee and its other advisers as appropriate; and
- Assisting the Trustee in identifying and monitoring suitable climate-related metrics and targets in relation to the DC Section's investments, including liaising with the Scheme's DC underlying investment managers regarding provision of the metrics.

Investment Adviser to the DB Section

The Scheme's DB Investment Adviser is responsible, as agreed by the Trustee, for:

- Providing training and other updates to the Trustee on relevant climate-related matters that relate to the DB Section;
- Helping the Trustee to formulate its investment beliefs in relation to climate change and reflecting these in the Scheme's DB investment policies and strategy;
- Advising how climate-related risks and opportunities might affect the various asset classes in which the Scheme might invest over the short, medium and long term, and the implications for the Scheme's DB investment strategy;
- Advising the Trustee (through the Investment Committee) on the appropriateness and effectiveness of the DB Section's investment managers' processes, expertise and resources for managing climate-related risks and opportunities, given the Trustee's investment objectives and beliefs;
- Advising on the inclusion of climate change in the DB Section's governance arrangements and appropriate sections of the Scheme's Risk Register, working with the Trustee and its other advisers as appropriate;
- Assisting the Trustee in identifying and monitoring suitable climate-related metrics and targets in relation to the DB Section's investments, including liaising with the DB Section's investment managers as required; and
- Leading on the preparation of the Trustee's TCFD reporting, working with the ESG Working Group, the Trustee, and its other advisers (in particular the DC Investment Adviser) as appropriate.

The Trustee aims to ensure that the advisers who provide support and technical expertise on various climate issues, have the appropriate level of climate-related risk expertise and resources to enable them to carry out their duties. In light of this, the Trustee has set expectations for its DB and DC Investment Advisers that are recorded in the objectives set for them.

Covenant Adviser

The Scheme's Covenant Adviser is responsible, when requested by the Trustee, for:

- Supporting the Trustee in a proportionate way to understand as part of its covenant monitoring framework, how climate-related risks and opportunities might affect the Scheme's Sponsor over the short, medium and long term; and
- Working with the Trustee's other advisers, if and when requested, to assist the Trustee in incorporating climate change in its governance arrangements and monitoring framework as appropriate.

Assessment of Advisers

The Trustee expects advisers to act with integrity and diligence in fulfilling the set objectives, and uses meetings with the advisers to assess and challenge them. Where relevant, this includes discussion of the steps taken by advisers to identify and assess any climate-related risks and opportunities.

The Trustee expects its appointed investment managers and advisers to integrate financially relevant climate change risks (e.g. transition risk and physical risk) and opportunities within their investment and advice processes as applied to the Scheme. Investment managers are further expected to report on how these risks and opportunities have been incorporated into their investment processes at least once a year.

Time and resources spent on climate change-related matters

The Trustee considers a range of information about the climate change risks and opportunities faced by the Scheme to enable it to fulfil its responsibilities set out above. Climate change will form an explicit agenda item at least annually for the Trustee and its Committees when the Trustee's annual TCFD report is prepared. It will also be covered as part of other agenda items, such as wider discussions on funding or investment strategy, and during investment manager appointment and review discussions. The Trustee is satisfied that the amount of governance time spent is reasonable and will allocate more time at future meetings if any analysis or wider industry research requires additional Trustee review and consideration.

Quarterly

The Trustee's policy is to receive and review the Scheme's Risk Register at its regular Board meetings, which incorporates the current status on managing climate change risks and opportunities.

The IC receives both DB and DC investment reports that cover manager performance and ESG ratings, as well as reports on that quarter's Manager Monitoring visits. Relevant climate-related issues would then be reported to the Board in the IC Chair's quarterly update.

Quarterly reports received by the Board from the other Committees incorporate updates on climate change-related risks and opportunities as appropriate.

Annually

The Trustee's policy is to review, revise where appropriate and approve the following at one or more Board meetings each year:

- Its governance arrangements and investment policies in relation to climate change;
- Its TCFD reporting, as proposed by the ESG Working Group and IC;
- Target monitoring and evaluation of target appropriateness;
- A business plan for the following year in relation to climate change considerations; and
- The data on climate-related metrics and progress against any targets set in relation to these metrics.

In addition, the Trustee will review:

- Whether it is appropriate, due to material changes to modelling assumptions or strategy, to carry out scenario analysis that illustrates how the Scheme's assets and liabilities might be affected under various climate change scenarios, in the years when this is not required because it has been carried out within the previous two years (see "less frequent reviews" below).

The IC's policy is to at least once a year assess:

- The Scheme's investment managers' ESG policies and stewardship activities with a focus on climate change as well as broader ESG themes;
- Its choice of Scheme climate metrics to review regularly to inform its assessment and management of climate-related risks and opportunities; and
- The relevant advisers' climate competency and assess how they have performed against their climate responsibilities, along with its annual review of DB and DC Investment Advisers against the objectives set for them by the Trustee.

The key outputs of these assessments are presented to the Trustee Board by the Chair of the IC.

Less Frequent Reviews

The Trustee will consider, to the extent it is proportionate, climate-related risks and opportunities whenever the following activities are undertaken:

- An actuarial valuation of the DB Section of the Scheme;
- Review of the investment strategy for the Scheme's DB and DC Sections; and
- Any detailed assessment of the Sponsor's covenant (in a proportionate way and to the extent possible in the context of the available data).

The Trustee will also, at least every three years and following any major changes in the Scheme's position, review:

- Its choice of short, medium and long-term time periods to be used by the Scheme when identifying climate-related risks and opportunities;
- The results of scenario analysis that illustrate how the Scheme's assets and liabilities might be affected under various climate change scenarios, along with commentary on the potential impacts for the sponsoring employers.

Whenever it reviews its agreements with external advisers, or appoints new advisers, the Trustee will consider and document the extent to which the advisers' climate-related responsibilities are included in the agreements and/or any adviser objectives set.

Training

It is essential that the Trustee Directors have sufficient knowledge and understanding of climate change, and related risks and opportunities, to fulfil their statutory and fiduciary obligations. The Trustee will review its skills and experience in this area when undertaking the Trustee Board's annual review of Trustee Directors' self-assessment of their Trustee Knowledge and Understanding. The Trustee will also consider what training is likely to be required over the coming year when setting its annual business plan, incorporating training sessions as appropriate. In addition, some Committees of the Board may receive more detailed training on specific climate-related issues consistent with the Committee's responsibilities. This training will, where required, be extended to the Scheme Secretariat which assists the Trustee Directors in meeting their obligations under the Regulations.

The Trustee's Annual Training Programme will also be updated to reflect any training held during the year. Any training provided to members of the Scheme Secretariat referred to above will also be recorded.

The Trustee Board will receive training on climate change topics at least annually to ensure that the Trustee has a significant level of knowledge and understanding to identify, assess and manage climate-related risks and opportunities.

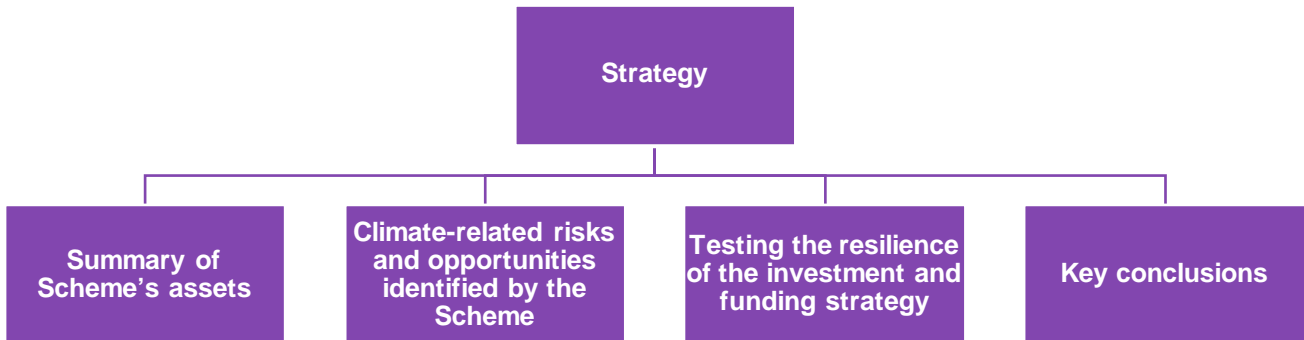
During the year to 30 June 2023 the Trustee, IC and ESG Working Group received training covering climate-related investment risks, climate scenario analysis, funding and covenant impacts, metrics and targets, governance roles and responsibilities, and reporting requirements in line with the TCFD recommendations. The ESG Working Group also received training on the Trustee's fiduciary duty in the context of ESG considerations, as well as an introduction to sensitive topics (e.g. controversial weapons, tobacco) and exclusions policies.

Section 3

Strategy



This section outlines how potential future climate warming scenarios could impact the Scheme, and covers the following:



Following this analysis the Trustee noted a number of key conclusions, which are set out at the end of this section. These findings have supported and informed subsequent Trustee thinking and discussions in this area, such as understanding current exposures and prioritising areas of focus for engagement, and will continue to do so going forward. The Trustee previously undertook climate scenario analysis in April 2021, which supported investment in the UBS Climate Aware World Equity Fund.

Summary of Scheme's assets

This section sets out the Scheme's assets covered as part of the climate scenario and metrics analysis presented within this report, in accordance with the climate change related reporting requirements.

DC Section

For the purposes of the climate scenario analysis, the Trustee considered the DC Section's Popular Arrangements. A Popular Arrangement is defined in the statutory guidance as a fund or lifestyle strategy in which £100m or more of the Scheme's DC assets are invested, or which accounts for 10% or more of the assets used to provide money purchase benefits (excluding assets which are solely attributable to Additional Voluntary Contributions).

The following funds and strategies are thus defined as Popular Arrangements of the DC Section and were considered as part of the climate scenario analysis:

- Growth Fund
- Global Blended Equity Fund
- Pre-Annuity Fund
- Global Equity Fund
- Lifestyle Targeting Income Drawdown Strategy
- Lifestyle Targeting Annuity Strategy

The table below illustrates the DC Section asset allocations modelled in the climate scenario analysis as at 31 December 2022, the results and findings of which are shown in this report.

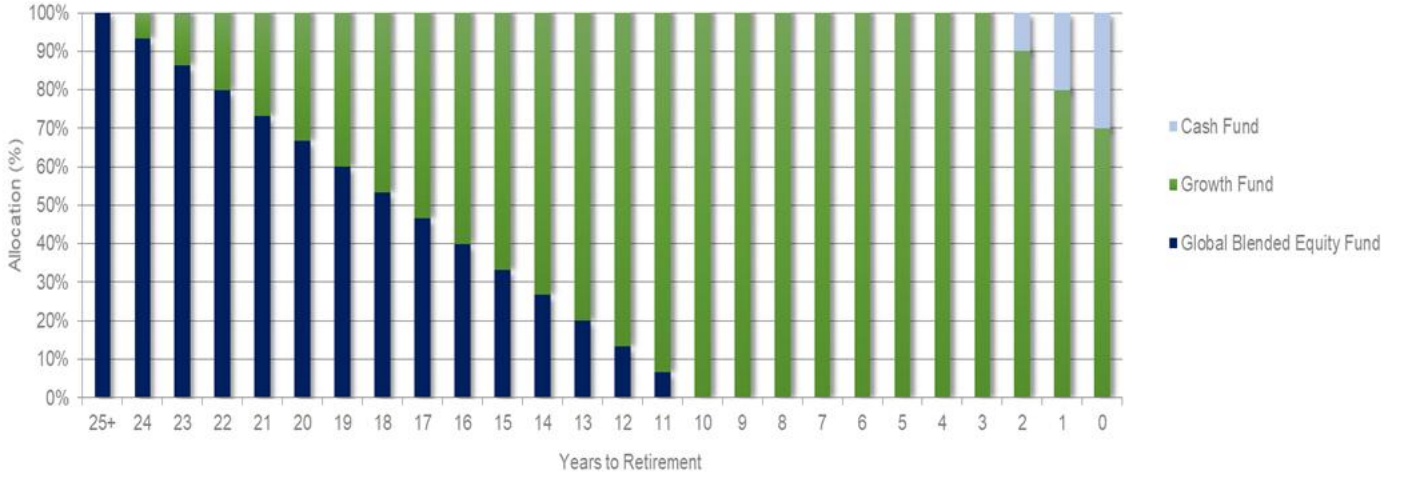
Modelling Asset Class	Growth Fund	Global Blended Equity Fund	Pre-Annuity Fund	Global Equity
MSCI ACWI Equity	8.7%	14.8%*	-	-
US Equity	-	-	-	51.3%
UK Equity	-	-	-	-
Europe Equity	-	-	-	24.4%
Japan Equity	-	-	-	1.3%
Developed Asia ex Japan Equity	-	-	-	0.8%
Emerging Markets Equity	6.1%	10.4%	-	20.6%
MSCI Paris Aligned Equity	44.0%	74.9%	-	-
UK Investment Grade Credit	25.2%	-	29.3%	-
US Investment Grade Credit	-	-	2.9%	-
Global Investment Grade Credit	-	-	16.9%	-
UK Sovereign Bonds	-	-	42.5%	-
EMD Local Currency	10.5%	-	-	-
Cash	-	-	8.4%	1.6%
UK Real Estate	5.5%	-	-	-

Numbers may not add up to 100% due to rounding.

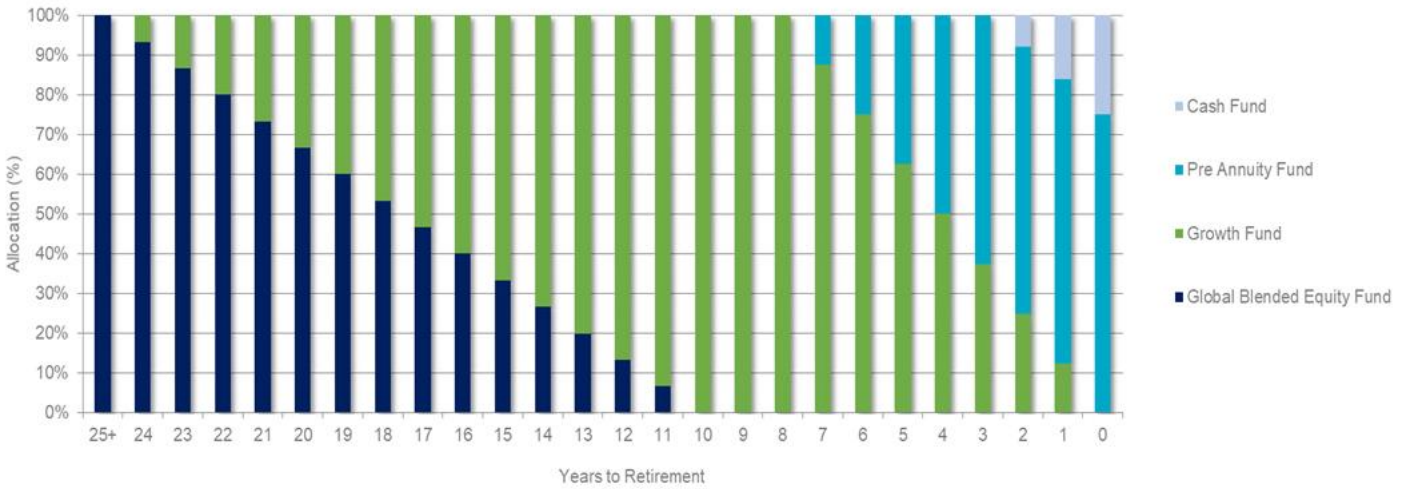
* Represents the Fund's allocation to the Smaller Companies Equity Fund, which has been modelled as MSCI ACWI Equity for the purpose of this analysis.

The Lifestyle Strategies considered in the climate scenario analysis are made up of the Growth Fund, Global Blended Equity Fund, Pre-Annuity Fund and the Cash Fund. The Lifestyle Strategies' glidepaths that gradually switch Members' investments as they approach their target retirement date are shown in the following charts.

Lifestyle Targeting Income Drawdown



Lifestyle Targeting Annuity



DB Section

For the purposes of the climate scenario analysis, the Trustee has considered the DB Section strategic asset allocation, as set out in the Statement of Investment Principles dated December 2022, shown in the following table.

Asset Class	Benchmark (%)	Rebalancing Range (%)
Equities ²	18.5	+/- 2.0
Alternatives	16.0	+/- 4.0
Bonds ³	65.5	+/- 2.0
Total	100.0	-

The following table illustrates the DB Section strategy modelled in the climate scenario analysis, the results and findings of which are shown in this report. The allocation has been modelled as static. Climate change impact on longevity/mortality has not been modelled in this analysis.

Modelling Asset Class	Current Allocation (%)
Equities	18.5
MSCI World Equity - Synthetic Equities	14.0
MSCI Paris-Aligned Equity – UBS Climate Aware Equities	4.5
Alternatives	16.0
Global Senior Private Debt/Private Debt – Secured Finance	9.0
Emerging Market Debt (Local Currency)	3.5
UK Real Estate – Property	3.5
Bonds	65.5
UK Investment Grade Credit – Buy and Maintain Credit	24.0
Private Infrastructure Debt Europe – Infrastructure Debt	3.0
Cash – LDI and Cash	38.5
Total	100.0

² The Scheme uses a combination of physical and synthetic equities in order to achieve overall exposure to this asset class. The benchmark weight is the exposure weight and rebalancing ranges apply to the exposure weight, rather than the capital allocation.

³ The bond portfolio is comprised of a number of sub-portfolios including a dedicated LDI mandate, which is permitted to use leverage. The aggregate bond figure represents the capital allocation to which the rebalancing range is applied.

Climate-related risks and opportunities identified by the Scheme over the short, medium and long term

The Trustee recognises that long-term sustainability issues, particularly climate change, present risks and opportunities that increasingly require explicit consideration. In relation to climate-related risks, the Trustee believes it is important to understand how the Scheme's exposure to these risks may change over time, when the risk exposure may be greatest and what actions can be taken now, or in the future, to avoid those risks becoming financially material to the Scheme. To help with this assessment, the Trustee has taken into account the Scheme's liabilities and obligations and defined short, medium and long-term time horizons for the DB and DC Sections of the Scheme.

DC Section

Short-Term	Medium-Term	Long-Term
To 2027; 5 year projection	To 2042; 20 year projection	To 2062; 40 year projection
This period reflects the shortest timeframe and primarily focuses on transition risks	This period aligns with the expected future lifetime of an average aged Member in the DC Section	This period aligns with the expected future lifetime of a new joiner in the DC Section (c. 45 years) reduced slightly as the Investment Adviser's model can project for a maximum of 40 years

DB Section

Short-Term	Medium-Term	Long-Term
To 2027; 5 year projection	To 2032; 10 year projection	To 2047; 25 year projection
This period reflects the shortest timeframe and primarily focuses on transition risks	This period aligns closely with the current journey plan target date to be fully funded by 2033	This period aligns with the expected peak of the liability cashflows and is consistent with the longest period available for funding level projections

The Trustee has considered, and continues to assess on an ongoing basis, the following short, medium and long-term drivers of risk in relation to climate change:

- Over the **short term** (out to 5 years), risks may present themselves through rapid market re-pricing relating to climate transition as:
 - Scenario pathways become clearer. For example, a change in the likelihood of a well-below 2°C scenario occurring (i.e. an increase in probability would be expected to drive additional transition risk).
 - Market awareness grows. For example, the cost and impacts of the transition suddenly influence market pricing.
 - Policy changes unexpectedly surprise markets. For example, if a carbon price or significant regulatory requirement was introduced across key markets to which the portfolio is exposed, at a sufficiently high price to impact behaviour.
 - Market sentiment is shocked. For example, falls in markets could create a downward spiral where economic sentiment worsens and asset values fall.
 - Perceived or real increased pricing of greenhouse gas emissions/carbon.
 - Substitution of existing products and services with lower emission alternatives may impact part of the portfolio.
 - Litigation risk relating to dangerous warming becoming more prevalent.

- Increases in the energy/heat efficiency of buildings and infrastructure.

As well as risks associated with these drivers, there could also be opportunities. For example, investing in climate solutions as policy support strengthens.

The Trustee's ability to understand these short-term changes can position the Scheme favourably, for example, taking advantage of the climate transition by avoiding and reducing investment in high-emitting carbon sensitive businesses/assets that do not have a business plan that supports the transition to a low carbon economy.

- Over the **medium term** (out to 10 – 20 years), risks are likely to be more balanced reflecting both transition and physical risk. Over this time period, the transition pathway will unfold and the level of anticipated physical damage will become much clearer. While the full extent of the physical damage is unlikely to have occurred, markets are likely to be allowing for it to a larger degree in asset pricing.

The Trustee's ability to understand these changes and evolve the portfolio as the pathway develops should help to control risk and potentially enhance returns. The Trustee seeks to select managers and choose indices that can identify potential emergence of low carbon opportunities and the decline of some traditional sectors.

- Over the **long term** (25 – 40 years), physical risks are expected to come to the fore. This includes the impact of natural catastrophes leading to physical damage through extreme weather events. Availability of resources is expected to become more important if changes in weather patterns (e.g. temperature or precipitation) affect the availability of natural resources such as water. The impact of global warming on productivity, particularly in areas closer to the equator, will also be a key driver.

Risks considered

Transition risks

This covers the potential risks and opportunities from the transition to a low-carbon economy (i.e. one that has a low or no reliance on fossil fuels), in areas such as:

- Policy and legislation
- Market
- Technology
- Reputation.

These risks include the possibility of future restrictions, or increased costs, associated with high carbon activities and products. There are also opportunities, which may come from the development and implementation of low-carbon technologies.

In order to make a meaningful impact on reducing the extent of global warming, most transition activities need to take place over the next decade and certainly in the first half of this century.

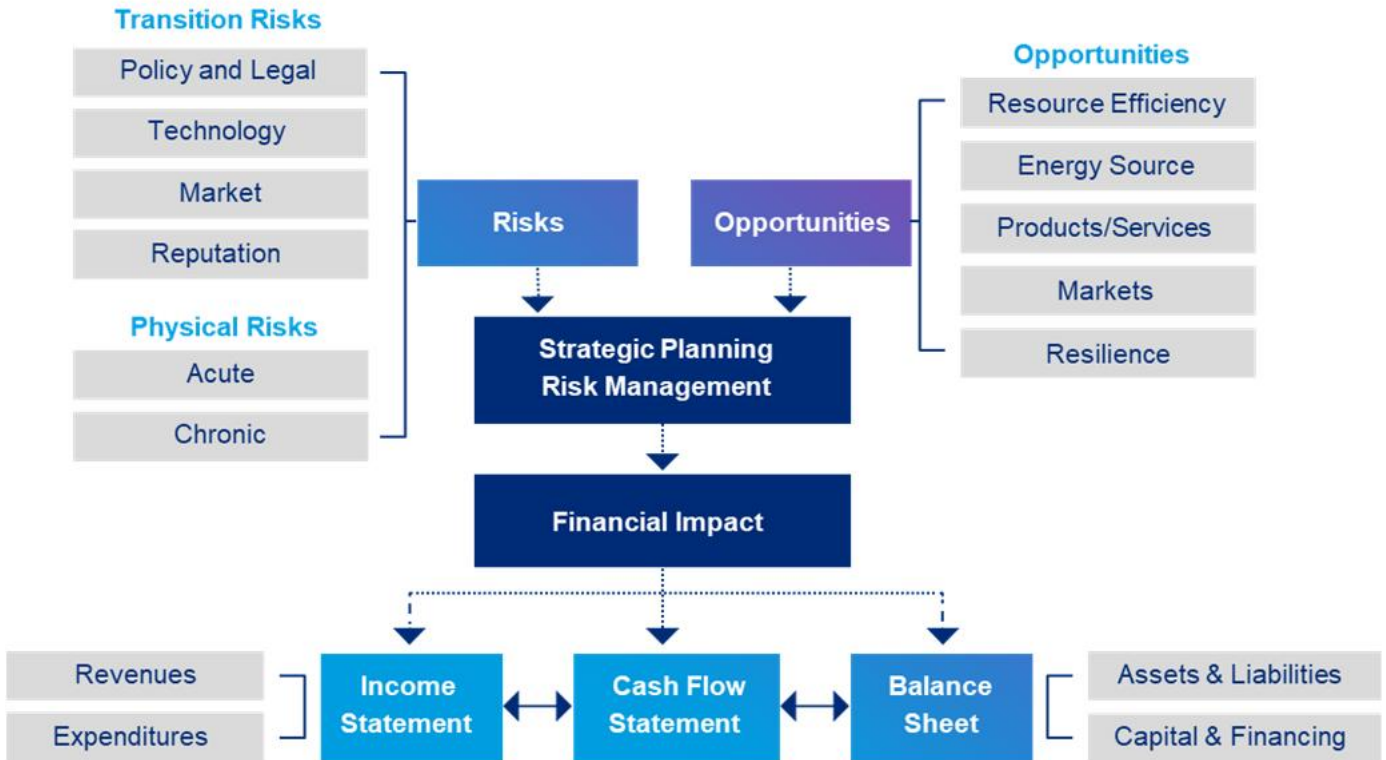
Physical risks

The higher the future level of global warming, the greater physical risks will be in frequency and magnitude. Physical risks cover:

- Physical damage (storms; wildfires; droughts; floods);
- Resource scarcity (water; food; materials; biodiversity loss).

Physical risks are expected to be felt more as the century progresses, although the extent of the risks is highly dependent on whether global net zero greenhouse gas emissions are achieved by 2050. There are investment opportunities, for example, in newly constructed infrastructure and real estate that are designed to be resilient to the physical impacts of climate change, as well as being constructed and

operated in a way that has low or no net carbon emissions. There are also opportunities for investment in those companies or industries that focus on energy conservation and resource efficiency.



Source: TCFD Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures, October 2021

Climate-related risks and opportunities relevant to the Scheme

Having taken into account the Scheme’s DC Popular Arrangements and the DB strategic asset allocation, as well as the climate-related metrics outlined in Section 5, the following risks and opportunities have been identified:

- Over the **short term**, the Trustee has identified the inter-related risk of climate transition risk and asset repricing risk as being most relevant to the DC Popular Arrangements and DB investment strategy. Over this time period, opportunities are most likely to occur in transition-related investment such as climate solutions.
- Over the **medium term**, the Trustee has concluded that both transition risk and physical risk (particularly in the form of asset repricing to allow for future physical damage) could be material.
- Over the **long term**, the Trustee has identified physical risk as the key driver of climate-related risk.

The Trustee has investigated the potential impacts of these risks and opportunities in the scenario analysis that follows and will continue to assess the opportunities and risk related to climate change.

Testing the resilience of the investment and funding strategy

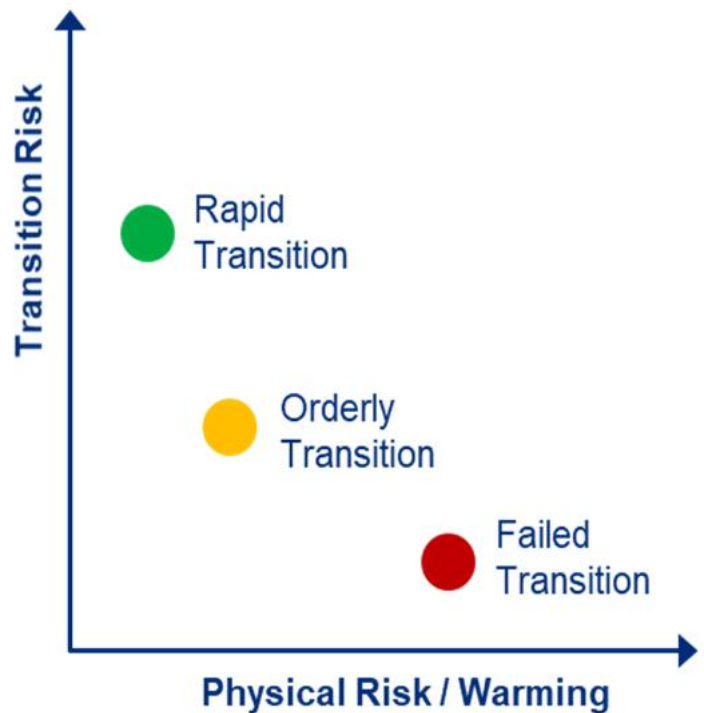
Scenario analysis

Climate scenario analysis forms an important part of the toolkit used by institutional investors looking to bring the financially material aspects of climate change into investment decision making. Specifically, climate scenario analysis allows investors to test the resilience of their investment portfolios to future climate outcomes, with implications for how climate change is reflected in investment policy, strategic asset allocation, mandate selection, risk management, target setting and approach to engagement.

Climate scenario analysis remains an evolving area and the results in this report should be interpreted in light of the modelling limitations. Further detail on the limitations associated with climate scenario analysis and understanding results relative to the baseline are set out in Appendix B.

The Trustee has undertaken climate scenario analysis to test the resilience of the investment and funding strategy adopted by the Trustee. Quantitative climate change scenario analysis has been undertaken on the Scheme’s DC Popular Arrangements and DB strategic asset allocation to assess the potential implications of climate change under three modelled scenarios: a Rapid Transition (1.5°C), an Orderly Transition (between 1.5°C and 2°C) and a Failed Transition (greater than 4°C). The analysis is based on scenarios developed by Mercer working with Ortec Finance.

- **Rapid Transition** – Average temperature increase of 1.5°C by 2100 (relative to pre-industrial average). This scenario assumes sudden downward re-pricing across assets in 2026. This could be driven by changes in policy, consideration of stranded assets or expected costs. The shock is partially sentiment-driven and so is followed by a partial recovery. Physical damages are most limited under this scenario.
- **Orderly Transition** – Average temperature increase of between 1.5°C and 2.0°C by 2100. Governments and wider society act in a co-ordinated way to decarbonise and to limit global warming to well below 2°C. Transition impacts do occur but are relatively muted.
- **Failed Transition** – Average temperature increase above 4°C by 2100. The world fails to co-ordinate a transition to a low carbon economy. Physical climate impacts significantly reduce economic productivity and have increasingly negative impacts, including from extreme weather events. These are reflected in re-pricing events in the late 2020s and late 2030s.



Source: Mercer

In designing this scenario analysis a fundamental decision is whether to assume that any climate impacts are priced-in today. The analysis in this report is expressed relative to a ‘climate-informed’ baseline⁴; the implication is that all return impacts are presented in terms of how they are different to what we are assuming is priced-in today.

Further detail on climate scenario narratives, including modelling limitations, is included in Appendix B of this report. Scenario analysis will be undertaken at least every three years and following any major changes in the Scheme’s position (such as a significant or material change to the investment and/or funding strategy). On an annual basis, the Trustee will review whether it is appropriate to carry out

⁴ The baseline represents what we are assuming the market is currently pricing in. The baseline includes a 10% weight to a **Failed Transition**, 40% weight to an **Orderly Transition**, 10% to a **Rapid Transition** and 40% to a range of **low impact scenarios**.

scenario analysis in years when it is not required because it has been carried out within the previous two years.

Scenario Analysis Results for DC section

The tables below and overleaf represent the output of the Trustee's quantitative analysis of the DC Section's Popular Arrangements, as defined earlier. The table represent projections of asset values and annualised returns from an analysis date of 31 December 2022 (such that the analysis is undertaken within the Scheme year) over periods of 5, 20 and 40 years. Projections assume a starting value of £100m and ignore the impact of future contributions; the Lifestyle projections assume a member who is 40 years from retirement at outset. Further detail on the limitations associated with climate scenario analysis are set out in Appendix B.

DC Popular Arrangements - Single Funds - Impact on Asset Value

Asset Value % Impact*	Rapid Transition			Orderly Transition			Failed Transaction		
	Year 5	Year 20	Year 40	Year 5	Year 20	Year 40	Year 5	Year 20	Year 40
Growth Fund	-5.3%	-2.2%	-0.9%	-1.7%	-0.7%	-5.2%	1.2%	-19.2%	-26.7%
Global Blended Equity Fund	-6.7%	-2.6%	-0.3%	-2.6%	-2.0%	-7.8%	1.7%	-27.3%	-37.6%
Pre-Annuity Fund	-0.8%	-0.5%	-0.6%	-0.2%	1.1%	-0.6%	0.2%	-1.4%	-1.5%
Global Equity Fund	-10.8%	-7.8%	-6.0%	-2.7%	-3.1%	-9.4%	2.6%	-26.5%	-36.5%

*Relative to baseline.

DC Popular Arrangements - Single Funds - Impact on Annualised Returns

Annualised Return % Impact *	Rapid Transition			Orderly Transition			Failed Transaction		
	Year 5	Year 20	Year 40	Year 5	Year 20	Year 40	Year 5	Year 20	Year 40
Growth Fund	-1.2%	-0.1%	0.0%	-0.4%	0.0%	-0.1%	0.3%	-1.1%	-0.8%
Global Blended Equity Fund	-1.5%	-0.1%	0.0%	-0.6%	-0.1%	-0.2%	0.4%	-1.7%	-1.3%
Pre-Annuity Fund	-0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.0%
Global Equity Fund	-2.5%	-0.4%	-0.2%	-0.6%	-0.2%	-0.3%	0.6%	-1.7%	-1.2%

*Relative to baseline.

Lifestyle Targeting Income Drawdown – Impact on Annualised Returns and Asset Values

	Annualised Returns (% p.a.)		Asset Values	
	Expected Return (Baseline)	Climate Impact*	Impact *	Absolute Impact **
Rapid Transition				
Impact at 5 years	9.1%	-1.5%	-6.7%	-£10m
Impact at 20 years	9.6%	-0.1%	-2.6%	-£17m
Impact at 40 years	8.2%	0.0%	-1.4%	-£32m
Orderly Transition				
Impact at 5 years	9.1%	-0.6%	-2.6%	-£4m
Impact at 20 years	9.6%	-0.1%	-1.9%	-£12m
Impact at 40 years	8.2%	-0.2%	-6.6%	-£158m
Failed Transition				
Impact at 5 years	9.1%	0.4%	1.7%	£3m
Impact at 20 years	9.6%	-1.7%	-26.4%	-£166m
Impact at 40 years	8.2%	-1.1%	-33.5%	-£793m

*Relative to baseline.

**Represents the impact on the projected asset value under each scenario at the corresponding point in time, relative to the baseline projection (which assumes a starting asset value of £100m as at 31 December 2022).

Lifestyle Targeting Annuity – Impact on Annualised Returns and Asset Values

	Annualised Returns (% p.a.)		Asset Values	
	Expected Return (Baseline)	Climate Impact	Impact *	Absolute Impact **
Rapid Transition				
Impact at 5 years	9.1%	-1.5%	-6.7%	-£10m
Impact at 20 years	9.6%	-0.1%	-2.6%	-£17m
Impact at 40 years	8.0%	-0.1%	-1.9%	-£40m
Orderly Transition				
Impact at 5 years	9.1%	-0.6%	-2.6%	-£4m
Impact at 20 years	9.6%	-0.1%	-1.9%	-£12m
Impact at 40 years	8.0%	-0.2%	-6.2%	-£133m
Failed Transition				
Impact at 5 years	9.1%	0.4%	1.7%	£3m
Impact at 20 years	9.6%	-1.7%	-26.4%	-£166m
Impact at 40 years	8.0%	-1.0%	-31.8%	-£684m

*Relative to baseline.

**Represents the impact on the projected asset value under each scenario at the corresponding point in time, relative to the baseline projection (which assumes a starting asset value of £100m as at 31 December 2022).

The DC Section's Popular Arrangements have a large allocation to "growth assets", which are generally more exposed to transition and physical risks than the fixed income assets. Allocations to the Climate Aware World Equity Fund (modelled as MSCI Paris-Aligned Equity) in the Growth Fund and Global Blended Equity Fund provide some protection under the Rapid Transition in the short term. These funds are utilised by the Lifestyle Targeting Income Drawdown and Lifestyle Targeting Annuity strategies as well as being offered on a Freestyle basis.

The Scheme's greatest climate-related exposures are through listed equities, with emerging markets equity open to the most exposure, and real estate which is materially exposed to physical risks under a Failed Transition scenario over the longer term. Investment in the Climate Aware World Equity Fund provides some protection as mentioned above while the exposure to UK Sovereign bonds provides protection under the Rapid and Orderly Transition scenarios.

The Trustee will continue to monitor trends and what is driving the transition over time and how investment managers are progressing with existing net zero commitments and approaches to managing climate risks.

The Trustee will keep under review how the market for sustainable indices and portfolios is evolving to ensure the Scheme is making use of the most appropriate available solutions and how this can better position the Scheme in light of the analysis above. The Trustee will use its influence as an investor to ensure strategies such as climate aware equities are evolving in line with best practice.

The climate metrics analysis outlined later in this report helps the Trustee to understand which sectors within the DC section are most exposed to climate-related risks and which are best positioned for the transition to a low carbon economy.

Scenario Analysis Results for DB Section

The table below represents the output of the Trustee’s quantitative analysis of the investment and funding strategy (excluding potential mortality impacts). The table represents projections of funding level and annualised returns from an analysis date of 31 December 2022 (such that the analysis is undertaken within the Scheme year) over periods of 5, 10 and 25 years, relative to the ‘baseline’. The baseline represents what we are assuming is priced in today by the market, namely a 10% weight to a Rapid Transition, 40% weight to an Orderly Transition, 10% to a Failed Transition and 40% to a range of low impact scenarios. Projections assume a static asset allocation that does not allow for future expected de-risking.

Climate scenario analysis forms an important part of the toolkit used by institutional investors looking to bring the financially material aspects of climate change into investment decision making. Specifically, climate scenario analysis allows investors to test the resilience of their investment portfolios to future climate outcomes, with implications for how climate change is reflected in investment policy, strategic asset allocation, mandate selection, risk management, target setting and approach to engagement. Climate scenario analysis remains an evolving area and the results in this report should be interpreted in light of the modelling limitations. Further detail on the limitations associated with climate scenario analysis and understanding results relative to the baseline are set out in Appendix B.

	Funding Level		Annualised Returns	
	Baseline	Funding Level Impact (relative to baseline)	Expected Return (Baseline)	Climate Impact
Rapid Transition				
Impact at 5 years	<u>104%</u>	-3.2%	<u>6.6%</u>	-0.6%
Impact at 10 years	<u>119%</u>	-3.6%	<u>6.3%</u>	-0.3%
Impact at 25 years	<u>213%</u>	-2.7%	<u>6.5%</u>	-0.1%
Orderly Transition				
Impact at 5 years	<u>104%</u>	-0.9%	<u>6.6%</u>	-0.1%
Impact at 10 years	<u>119%</u>	-0.4%	<u>6.3%</u>	0.0%
Impact at 25 years	<u>213%</u>	1.0%	<u>6.5%</u>	0.0%
Failed Transition				
Impact at 5 years	<u>104%</u>	0.8%	<u>6.6%</u>	0.1%
Impact at 10 years	<u>119%</u>	-1.2%	<u>6.3%</u>	-0.2%
Impact at 25 years	<u>213%</u>	-17.5%	<u>6.5%</u>	-0.4%

Key points at different time frames:

- 5** **5 Years** – Over this period, transition risk dominates. The Rapid Transition is the most impactful scenario, with the funding level reduced by 3.2% and annualised returns by 0.6% relative to baseline. The Failed Transition is marginally positive due to transition costs not materialising.
- 10** **10 Years** – The Rapid Transition has impacts of slightly higher magnitude than the Failed Transition, meaning transition risks and physical risks are becoming similarly important. The Rapid Transition reduces the funding level by 3.6% and annualised returns by 0.3%, compared to 1.2% and 0.2% for the Failed Transition. The impact of the Orderly Transition is small on the basis that transition costs and impacts are smaller and largely priced-in.
- 25** **25 Years** – As longer-term physical damages begin to be priced-in, the Failed Transition becomes the most impactful scenario. The Failed Transition reduces the funding level to 195% from 213% in the baseline scenario, and causes a reduction in annualised return of 0.4%.

The DB Section's "growth assets" are generally more exposed to transition and physical risks than its fixed income assets, although the relatively low allocation to "growth assets" helps to mitigate some of the impact of the various climate change scenarios. The Trustee's ability to understand these changes and evolve the portfolio as the transition pathway develops will help it to control risk and potentially enhance returns by, for example, taking advantage of the climate transition by avoiding or reducing investment in high-emitting carbon sensitive businesses that do not have a business plan that supports the transition to a low carbon economy.

The Scheme's greatest climate-related exposures are through the equity portfolio and buy and maintain credit portfolios. Investment in the UBS Climate Aware equity portfolio (modelled as MSCI Paris-Aligned Equity) provides some protection against transition risk under the Rapid Transition in the short-term scenario. The Trustee will keep under review how the market for sustainable indices and portfolios is evolving and how this can better position the Scheme in light of the analysis above. The climate metrics analysis outlined later in this report helps the Trustee to understand which sectors within the buy and maintain credit portfolios are most exposed to climate-related risks and which are best positioned for the transition to a low carbon economy.

Riskier assets such as property, secured finance, emerging market debt and private/infrastructure debt are likely to experience negative, albeit muted, return impacts, particularly under higher warming scenarios, as physical risks detract from returns. In practice, however, it is unlikely these mandates would be retained over the longer term given the well-funded position of the Scheme.

The funding level analysis above takes into account the impact of interest rates and inflation expectations upon the value of the liabilities. Of note, realised inflation is expected to be elevated under the Failed Transition, resulting from damages to agriculture and change in food prices, increasing the value of benefits with inflation-linked increases. These impacts are partly hedged by the Scheme's Liability Driven Investment strategy. It does not, however, explicitly take into account the impact of changes to mortality, which is considered separately in the section below.

Further information on the analysis undertaken can be found in Appendix A.

Climate change in respect of mortality

The Trustee has carried out an analysis of potential mortality impacts from climate-related scenarios, including:

- **Transition risks** – risks from policy changes, reputational impacts and shifts in market preferences, norms and technology. For example, these may impact on GDP, with consequent impact on well-being and longevity.
- **Physical risks** – dangers or perils related to the physical or natural environment that pose a threat to people. This includes the direct impact on changes to heat/cold related deaths.

The balance between transition and physical risks will vary over different time horizons. In modelling scenarios for mortality impacts, the Scheme's Actuarial Adviser has made use of:

- Representative Concentration Pathways (RCPs) and Shared Socioeconomic Pathways (SSPs) as defined by the UN Intergovernmental Panel on Climate Change (IPCC), including estimated projected temperatures.
- Relationships between each SSP and a range of socioeconomic and other variables as published by the UK Climate Resilience Program, and modelling of how changes to those variables would affect UK mortality rates.
- UK-based climate projections from the Met Office, with correlations between past climate data and mortality rates being used to predict future influences.

The Actuarial Adviser's modelling indicates the following scenario outcomes, each compared to mortality assumptions constructed with no explicit allowance for climate-related risks:

- A temperature rise of 1.5-2°C from pre-industrial levels might mean 1.9% higher Scheme liabilities and 22 months higher life expectancy for older generations. The improvement in life expectancy within this scenario is a result of strong projected GDP growth resulting in educational and health investments and consequently positive early impact on mortality rates.*
- A temperature rise of around 3.5-4°C from pre-industrial levels might mean 1.1% lower Scheme liabilities and over 5 years' lower life expectancy for younger generations.*

The liability estimates reflect the protection provided by the Scheme's "longevity swaps".

Based on this analysis, mortality changes arising from the direct and indirect impact of climate change are not currently expected to have a material impact on the funding strategy, largely due to the longevity swaps that are already in place, but the Trustee will keep this under review.

** It is important to note that these "Results" are based on longevity projection models and third-party data which may produce outputs that differ materially from actual outcomes. The Results are set out for information purposes only and should not be used for any other purpose. In particular, the Results should not be relied upon and they are not suitable for repurposing, copying, redistributing or modifying. The model provider disclaims all liability and makes no representations about the suitability for any purpose of the Results and such content is supplied on an as is basis, without any warranty of any kind.*

Climate change in respect of the Sponsoring Employer

The Trustee has considered the Sponsor's climate disclosures, with the key climate consideration in the financial services sector being counterparty risk. UBS has identified sustainability and climate as key business risks, driven by the global shift to "net zero".

UBS has adopted a pragmatic approach to assessing climate-related risks and has developed a toolkit to monitor them on an ongoing basis. UBS has established a sustainability and climate risk ("SCR") framework, embedded within the risk, compliance, and operations. Four sustainability and climate risk categories have been identified (Credit Risk, Non-financial Risk, Market Risk and Reputational Risk) which could be materially affected by climate change. UBS has an end goal of fully integrating climate risk into its "traditional" risk management frameworks and stress capacity.

An extensive analysis has been taken of UBS' loan portfolio (c.\$450bn as at 31 December 2022) to understand its exposure to climate sensitivities split by sector, with financial services and real estate sectors making up c.60% of the portfolio. UBS' analysis indicated 5% - 7% of its total loan portfolio, which equates to c.\$30bn, is exposed to climate risk, with the majority of UBS' loan portfolio rated "low" or "moderately low" risk. Potential material climate-related risks identified relate to legal and regulatory risks which could end in fines, litigation, or reputational damage, a potential example of this could be due to failure to meet net-zero financed emission targets.

UBS was a founding member of the TCFD, Net Zero Asset Managers initiative (NZAMi), and the Net-Zero Banking Alliance (NZBA). Its position was externally validated by the Climate Disclosure Project (CDP) who provided an A rating, the highest on its scale, one of only 300 companies to achieve this grading out of over 15,000 scored.

Recognising the Scheme's low level of covenant reliance, UBS' low exposure to climate-related risks and the extensive work it has undertaken in this area, covenant related climate risks are considered low in the short- to medium-term. Long-term, however, the impacts of climate change are more challenging to assess and may have widespread adverse impacts on financial markets, creditworthiness, and consumers. Based on the heightened level of risk and uncertainty, UBS' long-term exposure to climate risks is considered "moderate".

This high-level assessment relates to UBS' business at end 2022 and has therefore not considered the impacts of the Credit Suisse acquisition on UBS' climate-related risks.

Key conclusions

As noted earlier, the Trustee undertook climate scenario analysis in April 2021, which supported investment in the climate aware equity fund. The key conclusions from the latest analysis are as follows:

Conclusion 1 – A successful transition is an imperative

Over the long term, for nearly all investors, a successful transition leads to enhanced projected returns when compared to scenarios associated with higher temperature outcomes, due to lower physical damages under a successful transition scenario.

The quantitative analysis in this report highlights the negative financial impact associated with the Failed Transition scenario. For both DC and DB Sections, the Failed Transition scenario leads to the most significant negative impact on annualised returns and asset projections over the longer term. For the DB Section, although the Failed Transition leads to the most significant negative impact on the funding level over the longer term, in the short to medium term a Rapid Transition scenario is the most impactful.

As noted earlier, the Trustee has adopted a climate change policy which sets out its support of the Paris Agreement by limiting global warming to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C within the context of its fiduciary responsibilities. The Trustee is also a member of the Institutional Investors Group on Climate Change (“IIGCC”).

Conclusion 2 – Sustainable allocations reduce transition risk, growth assets are highly vulnerable to physical risk

Asset class returns vary significantly by scenario depending on their respective exposure to transition and physical risks.

Both the DC Section and, to a lesser extent, the DB Section have allocations to growth assets, which are generally more exposed to transition and physical risks. The UBS climate aware equity allocations (modelled as MSCI Paris-Aligned Equity) provide some protection against transition risk under the Rapid Transition in the short term however. Fixed income asset classes are less sensitive. Listed equities and real estate are materially exposed to physical risks under a Failed Transition over the longer term. For the DC Section, Emerging Markets Equity is open to the most exposure.

The tables in Appendix B set out the cumulative return impacts relative to the baseline across the three scenarios by asset class.

Conclusion 3 – Sector exposure is key

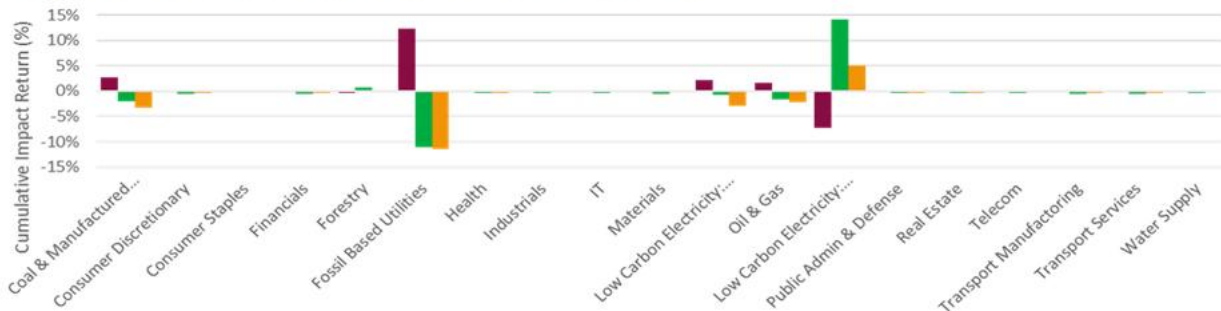
Climate impacts are naturally industry sector-specific.

Supporting the quantitative analysis in this report, the sector level analysis on the following pages highlights that differences in return impact are most visible at an industry sector level, with significant divergence between scenarios.

As return impacts in this modelling are expressed relative to a climate-informed baseline, sector-specific impacts are driven both by what happens under the scenarios, but also by what does not happen (but was priced in). For example, there is a positive impact on the low carbon electricity sector under the Rapid Transition, which is an intuitive outcome given a supportive policy environment. Alternatively, there is a positive impact on the oil and gas sector under the Failed Transition, which is a result of the sector performing better than expected in this scenario (i.e. more revenue than expected for underlying companies).

The following charts show the cumulative impact on different sectors within the DB Section’s Investment Grade Credit portfolio over a 5 and 40 year period.

5 Years – Investment Grade Credit - For Illustration



40 Years – Investment Grade Credit - For Illustration



Failed Transition Rapid Transition Orderly Transition

This finding will support and inform future Trustee thinking and discussions regarding portfolio construction in a number of ways:

- Consider tilting portfolios or benchmarks to vary sector exposures, as is currently implemented via the UBS Climate Aware World Equity Fund, which is an underlying fund of the Growth, Global Blended Equity and Climate Aware funds;
- Discuss with current (especially with UBS AM as the manager with most of the Scheme’s equity exposure) or potential investment managers the sector exposures and how they account for sector-specific climate risk;
- Understanding key risk exposures in order to prioritise areas of focus for engagement or decarbonisation planning.

Conclusion 4 – Investors should be aware of future pricing shocks

Investors, and therefore “the market”, look to predict future events / impacts and allow for them in asset prices. As particular events become more likely, market pricing will change before the events occur. This means that longer-term impacts, including transition impacts and particularly physical damage, could impact portfolios earlier than they occur.

The quantitative analysis in this report seeks to demonstrate the likely impacts of such shocks. The Rapid Transition scenario includes a shock around 2026 pricing in (and initially overreacting to a degree) to transition costs. The Failed Transition scenario includes shocks towards the end of the 2020s and 2030s pricing in future damage. While the exact timing of such shocks is unknowable, considering such shocks is important to risk analysis.

This finding will support and inform Trustee thinking and discussions in relation to managing climate-related risks.

Section 4

Risk Management



A key part of the Trustee’s role is to understand and manage risks that could have a financially material impact on both the Scheme’s investments, and the wider funding position in respect of the DB Section. Climate change is one of the risks that the Trustee considers alongside other financially material risks that may impact outcomes for Members.

This section summarises the primary climate-related risk management processes and activities of the Trustee. These help the Trustee understand the materiality of climate-related risks, both in absolute terms and relative to other risks that the Scheme is exposed to. The Trustee prioritises the management of risks primarily based on their potential impact on the security of Members’ benefits/prospective investment returns.



Governance

The Trustee believes that climate change risks and opportunities are not independent of other risks and opportunities that the Scheme faces. As such, from a governance perspective, climate change has been integrated into the Trustee's overall governance framework. It is the Trustee's policy to review the Trustee's Statement of Investment Principles (SIP) at least on an annual basis. Within the SIP, it is set out how investment climate-related risks are managed and monitored. The "*Trustee Climate Governance Statement on the Oversight of Climate Change Risks and Opportunities*" documents the governance processes the Trustee has put in place to ensure that it meets its statutory and fiduciary obligations in respect of climate-related risks and opportunities, as well as the Trustee's Climate Change Policy. Further detail on how the Trustee manages climate-related risks can be found in Section 2 (Governance) of this report.

Strategy

The Scheme's advisers take climate-related risks and opportunities into account as part of the wider strategic investment advice provided to the Trustee and its committees. This includes highlighting the expected change in climate-risk exposure through proposed asset allocation changes, both from the top-down level (via climate scenario analysis) and bottom-up (via climate-related metrics). The Trustee monitors its appointed investment managers to ensure that they are managing climate-related risks and opportunities with regards to the assets for which they are responsible and that they have sufficient expertise and resources to do so.

The Trustee believes that ESG factors may have a material impact on investment risk and return outcomes, and that good stewardship can create and preserve value for companies and markets as a whole. The Trustee also recognises that long-term sustainability issues, particularly climate change, present risks and opportunities that increasingly require explicit consideration. The Trustee has taken into account the expected time-horizon of the Scheme when considering how to integrate these issues into the investment decision-making process.

The Trustee has adopted a separate Climate Change Policy, which sets out its support of the Paris Agreement in order to avoid the worst impacts of climate change by limiting global warming to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C within the context of its fiduciary responsibilities. In addition the Trustee is a member of the Institutional Investors Group on Climate Change.

Climate scenario analysis for the investment and funding strategy of the Scheme will be reviewed at least triennially. Key findings from the Trustee's latest climate scenario analysis are set out in the previous section. Climate scenario analysis is a tool to help the Trustee understand the materiality of climate-related risks that could impact the Scheme over time.

Reporting

The Trustee receives annual reports of climate-related metrics and progress against targets in respect of the assets held in the Scheme from their respective third-party managers. The Trustee may use the information to engage with the investment managers. Investment managers are expected to report on how climate change risks and opportunities have been incorporated into their investment processes at least once a year, as part of manager monitoring meetings.

The Trustee receives a voting and engagement activity summary on an annual basis from each relevant investment manager as part of the preparation of the Implementation Statement. The statement summarises how the investment managers voted and engaged on climate-related issues aligned with the Trustee's key engagement priorities. The Implementation Statement is available at <https://epa.towerswatson.com/accounts/UBS/public/scheme-information/>.

The Trustee expects that investment managers evaluate ESG factors, including climate change considerations, exercising voting rights and stewardship obligations attached to investments, in accordance with their own corporate governance policies taking account of current best practice including the UK Corporate Governance Code and the UK Stewardship Code. The Trustee expects that ESG considerations are embedded into each investment manager's investment decision making process and the extent of integration as well as a review of each manager's policies is considered annually.

Manager Selection and Retention

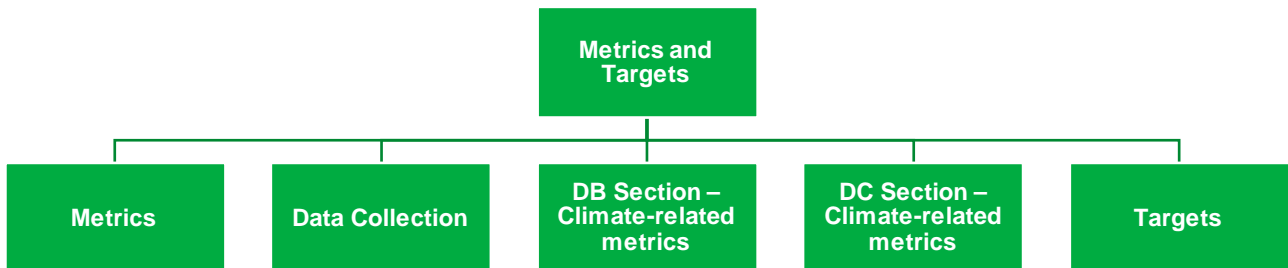
The Trustee's policies on manager selection and retention, including topics such as engagement, monitoring, appropriateness and effectiveness, can be found within Section 2 (Governance) of this report.

Section 5

Metrics and Targets



This section covers how the Trustee measures and monitors progress against different climate-related indicators known as metrics and is split as follows:



Metrics

The Trustee has chosen to present climate-related metrics across four different categories (absolute emissions, emissions intensity, portfolio alignment and non-emissions (data quality)) in this report. The climate-related metrics help the Trustee to understand the climate-related risk exposures and opportunities associated with the Scheme’s investment portfolio (including those outlined in Section 3) and identify areas for further risk management, including investment manager portfolio monitoring, voting and engagement activity and priorities. The metrics in this report relate to the Scheme’s financed emissions only (i.e. the emissions that are linked to the Scheme’s investments) and exclude emissions associated with the operation of the Scheme. The metrics in this report are listed below and where metrics relate to emissions, these cover Scope 1 and 2 only. The Trustee intends to begin reporting on Scope 3 emissions from its next report. An explanation of Scope 1, 2 and 3 emissions can be found in Appendix B.

Listed assets (equities and corporate bonds)		
Emissions Metrics	Overview	Description
Absolute GHG emissions	Total greenhouse gas (GHG) emissions: tons of CO2 equivalent (tCO2e)	Calculates an investor's share of the total emissions for each company/holding. It seeks to answer what emissions the investor is responsible for.
Carbon footprint	tCO2e / \$million invested	Total GHG Emissions figure normalised to take account of the size of the investment made. It seeks to answer how carbon intensive the portfolio is.
Weighted Average Carbon Intensity (WACI)	tCO2e / \$million revenue	Average exposure (weighted by portfolio allocation) to GHG emissions normalised by revenue. It seeks to answer how carbon intensive the companies in the portfolio are.
Non-Emissions Metrics	Overview	Description
% of portfolio with SBTi targets	Alignment metric	A measure of how many companies in a portfolio have submitted climate transition plans that have been approved by the Science Based Targets Initiative (SBTi).
Data Quality	Non-emissions metric	Classifies each mandate's company/holding data as one of the following three categories: Reported, Estimated, and Not Reported. A fourth category accounts for the remainder of the fund that is not included in the asset class being analysed.
Sovereign bonds		
Emissions Metrics	Overview	Description
Sovereign PCAF Methodology	Tons of CO2 equivalent (tCO2e) & tCO2e/\$million PPP-adjusted GDP	<p>Absolute emissions are calculated as follows: Market Value of exposure / PPP-adjusted GDP x Sovereign Production Emissions. Production emissions are sourced from the EDGAR database and PPP-adjusted GDP is sourced from the World Bank.</p> <p>Intensity numbers are calculated as follows: Sovereign Production Emissions / PPP-adjusted GDP (\$Million).</p>

The metrics presented in this report are as at 31 December 2022, the latest date for which a useable range of data is available. While the Scheme year end is 30 June, the majority of listed companies report to 31 December. The metrics are based on the Scheme's actual asset allocation at that date. Appendix B of this report includes further explanation of these metrics.

The Trustee recognises the challenges associated with various metrics, tools and modelling techniques used to assess climate change risks. The Trustee aims to work with its investment advisers and investment managers to continuously improve the approach to assessing and managing risks over time as more data becomes available. Appendix B of this report sets out the data limitations and assumptions used in collating these metrics.

Data collection and data quality reporting

The Trustee has collected from the investment managers the various portfolios' and funds' holdings as at 31 December 2022. However, many of the mandates do not have complete coverage of emissions data; this may be because some companies do not yet measure and report their emissions. The portion of the portfolio for which there is coverage is scaled up, to estimate an absolute emissions figure to cover 100% of the portfolio. This methodology avoids assuming zero emissions for the portion of the portfolio for which there is no coverage.

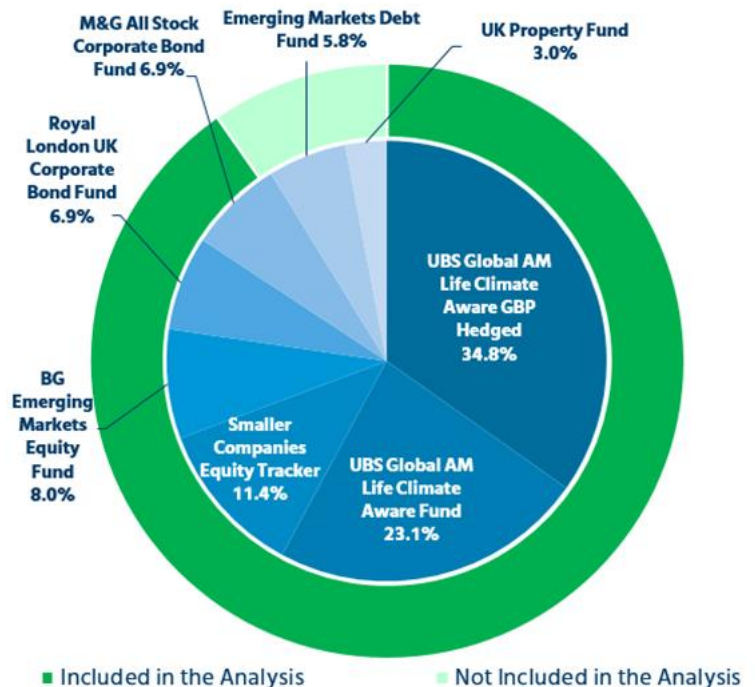
The stocklist received from each manager is analysed, and only the equity, corporate bonds, and/or sovereign bond portions are kept. The remaining asset classes, such as cash and derivatives (excluding the BlackRock synthetic equity portfolio) are removed from the analysis. The resulting stocklist is cross referenced versus MSCI's emissions database to obtain data for the holdings. Not all positions are covered by the tool at this time.

The charts in Appendix A illustrate the data quality of the DB Section and DC Section (Lifestyle Growth Phase and Freestyle funds) assets considered in the analysis. The DC Section Lifestyle Growth Phase utilises the Growth Fund and Global Blended Equity Fund, which between them invest in the five underlying funds shown in the charts.

DC Section – Climate-related metrics

This analysis focuses on the Lifestyle Growth Phase, which utilises the Growth Fund and Global Blended Equity Fund, which in turn invest in five underlying funds between them. The analysis covers the assets in the Growth Fund and Global Blended Equity Fund as at 31 December 2022 attributable to Lifestyle investors (i.e. excluding the assets in the Growth Fund and Global Blended Equity Fund attributable to Freestyle investors).

- 3 listed equities funds* (UBS Life Climate Aware World Equity Fund – hedged and unhedged, LGIM Life FTSE Global Developed Small Cap, Baillie Gifford Emerging Markets Leading Companies);
- 2 corporate bonds funds (Royal London Life UK Corporate Bond, M&G All Stocks Corporate Bond).



*The UBS Life Climate Aware World Equity Fund is composed of two mandates: (1) hedged and (2) unhedged. For presentation purposes, both mandates are displayed as a single one.

At 31 December 2022, the funds included in the analysis (the only exclusions being Emerging Markets Debt Fund and UK Property Fund) corresponded to 91.2% of the Lifestyle Growth Phase total assets. An analysis of a wider set of Freestyle funds not included in the Lifestyle Growth Phase is shown in Appendix A of this report.

Key:

Green (significantly below index)

Amber (in line with the index, or within 10% below index)

Grey (no benchmark)

Red (has contributed negatively with above index performance)

Lifestyle Growth Phase – Growth Fund

Asset Class	Manager/ Mandate	Benchmark	WACI (tons CO2e / \$M revenue) / Sovereign Carbon Intensity (tCO2e / \$M PPP GDP)			Carbon Footprint (tons CO2e / \$M invested)			Percentage Allocation within Growth Fund (%)
			Coverage (%)	Fund	Bench- mark	Coverage (%)	Fund	Bench- mark	
Listed Equity	Baillie Gifford Emerging Markets Leading Companies	MSCI Emerging Markets	97.0%	242.2	321.5	96.7%	95.8	134.2	6.1%
	LGIM FTSE Global Developed Small Cap	MSCI World Global Small Cap Index*	90.9%	174.8		90.3%	77.7		8.7%
	UBS Life Climate Aware World Equity	FTSE AW Developed	99.5%	63.3	135.0	99.5%	29.4	51.3	44.0%
Total Listed Equity			98.1%	98.4	155.3***	97.9%	43.4	58.7***	58.8%
Corporate Bonds	M&G All Stocks Corporate Bond	iBoxx Sterling Non-Gilts Index	86.0%**	103.5	81.1	55.2%**	43.5	42.7	11.1%**
	Royal London UK Corporate Bond		73.0%**	49.8		47.3%**	25.0		12.5%**
Total Corporate Bonds			79.1%	75.1	-	51.0%	33.7	-	23.6%
Total Equity & Corporate Bonds			92.7%	91.7	-	84.5%	40.6	-	82.4%
Sovereigns	M&G All Stocks Corporate Bond	-	100.0%**	153.9	-	-	-	-	1.0%**

Asset Class	Manager/ Mandate	Absolute Emissions coverage (%)	Absolute Emissions	SBTi (%)	Allocation within Growth Fund (%)
			(tons CO2e)		
Listed Equity	Baillie Gifford Emerging Markets Leading Companies	96.7%	4,336	3.6%	6.1%
	LGIM FTSE Global Developed Small Cap	90.3%	5,006	7.0%	8.7%
	UBS Life Climate Aware World Equity Fund	99.5%	9,596	39.3%	44.0%
Total Listed Equity		97.9%	18,938	30.8%	58.8%
Corporate Bonds	M&G All Stocks Corporate Bond	55.5%**	3,559	21.5%**	11.1%**
	Royal London UK Corporate Bond	48.1%**	2,281	12.0%**	12.5%**
Total Corporate Bonds		51.6%	5,840	16.5%	23.6%
Total Equity & Corporate Bonds		84.7%	24,779	26.7%	82.4%
Sovereigns	M&G All Stocks Corporate Bond	100.0%**	1,126	-	1.0%**

Scope 1+2 only. % of fund directly analysed reflects coverage under the MSCI tool used in this analysis. Lifestyle Growth Phase numbers do not include Self-Select assets. Sovereign analysis has been conducted in line with the recommended methodology set out by PCAF.

*Passive Benchmark.

**Percentages considering the respective asset class allocation. For M&G All Stocks, these represent an 88.1% and a 7.8% fund allocation to corporate bonds and sovereign bonds, respectively. For Royal London Life UK, corporate bonds represent 99.2%. The remainder of the funds is allocated to asset classes not covered by the analysis.

***Total listed equity benchmark figures come from MSCI ACWI.

Key:

Green (significantly below index)

Amber (in line with the index, or within 10% below index)

Grey (no benchmark)

Red (has contributed negatively with above index performance)

Lifestyle Growth Phase – Global Blended Equity Fund

Asset Class	Manager/ Mandate	Benchmark	WACI (tons CO2e / \$M revenue) / Sovereign Carbon Intensity (tCO2e / \$M PPP GDP)			Carbon Footprint (tons CO2e / \$M invested)			Allocation within GBE Fund (%)
			Coverage (%)	Fund	Benchmark	Coverage (%)	Fund	Benchmark	
Listed Equity	Baillie Gifford Emerging Markets Leading Companies	MSCI Emerging Markets	97.0%	242.2	321.5	96.7%	95.8	134.2	10.4%
	L&G Life FTSE Global Developed Small Cap	MSCI World Global Small Cap Index*	90.9%	174.8		90.3%	77.7		14.8%
	UBS Life Climate Aware World Equity Fund	FTSE AW Developed	99.5%	63.3	135.0	99.5%	29.4	51.3	74.8%
Total Listed Equity			98.1%	98.4	155.3**	97.9%	43.4	58.7**	100.0%

Asset Class	Manager/ Mandate	Absolute Emissions coverage (%)	Absolute Emissions	SBTi (%)	Allocation within GBE Fund (%)
			(tons CO2e)		
Listed Equity	Baillie Gifford Emerging Markets Leading Companies	96.7%	6,027	3.6%	10.4%
	L&G Life FTSE Global Developed Small Cap	90.3%	6,960	7.0%	14.8%
	UBS Life Climate Aware World Equity Fund	99.5%	13,340	39.3%	74.8%
Total Listed Equity		97.9%	26,327	30.8%	100.0%

Scope 1+2 only. % of fund directly analysed reflects coverage under the MSCI tool used in this analysis. Lifestyle Growth Phase numbers do not include Self-Select assets.

*Passive Benchmark.

**Total listed equity benchmark figures come from MSCI ACWI.

DC Section – Absolute Emissions & Carbon Intensity – Evolution over Time

The charts below illustrate the evolution of the absolute emissions and carbon intensity metrics over time for the Lifestyle Growth Phase (Growth Fund and Global Blended Equity Fund) of the DC Section.

Absolute Emissions (tons of CO₂e) *



Carbon Footprint (tons of CO₂e / \$M Invested)



WACI (tons of CO₂e / \$M revenue) *



Notes: Absolute Emissions and Carbon Footprint data is available only for 2021 onwards. Percentage change numbers are expressed over longest available period.

Percentage key:

Green (positive performance)

Amber (in line with previous analysis, or within 10% below)

Red (negative performance)

The key findings from the analysis of the Lifestyle Growth Phase funds' climate-related metrics against their benchmarks and their evolution over time are:

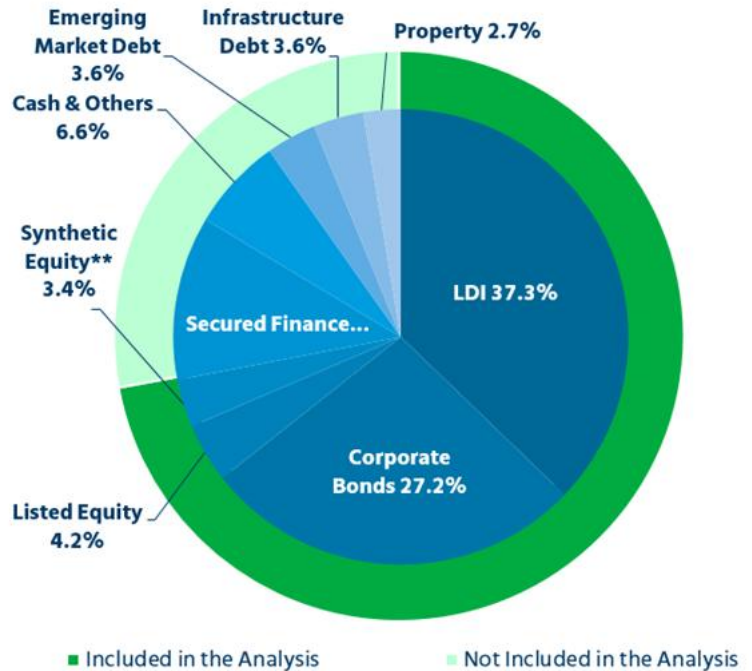
Metric	Commentary
Weighted Average Carbon Intensity (WACI) (tCO ₂ e/\$million revenue)	<p>The carbon intensity of the listed equity holdings decreased by c.41.8% compared to 30 June 2020, largely driven by the move to the climate aware equity fund. The equity portfolio has a c.36.7% lower carbon intensity than MSCI ACWI.</p> <p>The carbon intensity of the corporate bond holdings has decreased by c.8.1% compared to 30 June 2022, due to the decrease in intensity for both corporate bond funds. The portfolio is c.7.4% less intense than the iBoxx Sterling Non Gilt Index.</p>
Carbon Footprint (tCO ₂ e/\$million invested)	<p>The carbon footprint of the listed equity holdings is c.7.7% higher compared to 30 June 2021, with all equities mandates having seen their carbon footprint figure rise. However, it is c.26.0% lower than MSCI ACWI.</p> <p>The carbon footprint of the corporate bond portfolio is c.6.1% lower compared to 30 June 2022, and c.21.2% lower than the iBoxx Sterling Non Gilt Index, as a result of both mandates having slightly decarbonised over the period.</p>
Sovereign Carbon Intensity (tCO ₂ e/\$million PPP GDP)	The sovereign bonds portion of the M&G PP All Stocks fund has a carbon intensity of 153.9 tCO₂e per \$million PPP GDP, c.13.5% higher than at the previous analysis date.
Absolute emissions	<p>The absolute emissions of listed equities increased by c.5.3% since 30 June 2021.</p> <p>The absolute emissions of corporate bonds increased by c.4.4% since 30 June 2022, driven by the increase in the investment value under analysis.</p>
Sovereign absolute emissions	The absolute emissions of sovereign bonds were equivalent to 1,126 tCO ₂ e, which corresponds to a c.53.3% decrease in absolute emissions driven by a lower total value.
SBTi targets (% of portfolio)	<p>There is a wide range between funds of the percentage of companies with science-based targets (as low as 3.6% and as high as 39.3%).</p> <p>26.7% of the companies in the analysed funds have submitted climate transition plans that have been approved by the Science Based Targets Initiative (SBTi).</p>
Data Quality	Data quality also varies widely by fund with coverage for corporate bond mandates the most challenging.

The Absolute Emissions & Carbon Intensity evolution over time for the individual funds can be found in Appendix A.

DB Section – Climate-related metrics

The climate-related metrics shown in this report represent direct analysis of the following holdings of the DB Section, which equate to 72.1% of the DB Section as at 31 December 2022:

- 1 listed equities fund* (UBS Life Climate Aware World Equity);
- 3 corporate bond funds (BlackRock Buy and Maintain, Insight Buy and Maintain, Royal London Buy and Maintain);
- 1 synthetic equity portfolio** (BlackRock Synthetic Equities);
- 1 LDI portfolio (BlackRock Liability Driven Investments).



*The UBS Life Climate Aware World Equity Fund is composed of two mandates: (1) hedged to GBP and (2) unhedged. For presentation purposes, both mandates are displayed as a single one. **Synthetic Equity represents c.3.4% (£70M) of the total DB Section's investment value, though the analysis considers its total equity market exposure (£267M).

Asset Class	Manager/ Mandate	Benchmark	WACI (tCO2e / \$M revenue) Sovereign Carbon Intensity (tCO2e / \$M PPP GDP)			Carbon Footprint (tCO2e / \$M invested)			Portfolio Allocation for Asset Class (%)
			Coverage (%)	Fund	Benchmark	Coverage (%)	Fund	Benchmark	
Listed Equities	UBS Life Climate Aware World Equity	FTSE AW Developed Index	99.5%	63.3	135.0	99.5%	29.4	51.3	4.2%
Total Listed Equities			99.5%	63.3	155.3***	99.5%	29.4	58.7***	4.2%
Corporate Bonds	BlackRock Buy and Maintain	iBoxx Sterling Non Gilts Index	96.2%	218.1	81.1	79.4%	138.5	42.7	9.6%
	Insight Buy and Maintain		96.5%	82.5		76.9%	30.9		9.0%*
	Royal London Buy and Maintain		69.3%	106.6		41.7%	33.6		8.2%*
Total Corporate Bonds			88.0%	138.2	-	67.0%	70.1	-	26.8%
Total Listed Equities and Corporate Bonds			89.6%	128.0	-	71.4%	64.5	-	31.1%
Synthetic Equity	BlackRock Synthetic Equities**	MSCI World Developed Index (GBP hedged)	99.5%	134.1	-	99.4%	49.0	-	3.4%
Sovereigns	BlackRock Liability Driven Investments****	-	100.0%	136.1	-	-	-	-	37.3%

Scope 1+2 only (see Appendix B for definition). % of fund directly analysed reflects coverage under the MSCI tool used in this analysis.

Sovereign analysis has been conducted in line with the recommended methodology set out in the ongoing PCAF consultation.

*A residual sovereign % for both Insight and Royal London mandates has been excluded from the analysis. Only corporate bonds are considered.

It is assumed the fund replicates the benchmark. Synthetic Equity represents c.3.4% (£70M) of the total Scheme's investment value, though the analysis considers its total exposure (£267M). *Total listed equity benchmark figures come from MSCI ACWI.

****Including gilt holdings only. Non-gilt holdings are excluded from the analysis.

Key:

Green (significantly below index)

Amber (in line with the index, or within 10% below index)

Grey (no benchmark)

Red (has contributed negatively with above index performance)

Asset Class	Manager/ Mandate	Emissions coverage (%)	Absolute Emissions	SBTi	Portfolio Allocation for Asset Class
			(tCO2e)	(%)	(%)
Listed Equities	UBS Life Climate Aware World Equity Fund	99.5%	3,072	39.3%	4.2%
Total Listed Equities		99.5%	3,072	39.3%	4.2%
Corporate Bonds	BlackRock Buy and Maintain	80.1%	32,465	34.8%	9.6%
	Insight Buy and Maintain	77.3%	6,879	33.8%	9.0%
	Royal London Buy and Maintain	42.4%	6,733	14.4%	8.2%
Total Corporate Bonds		67.6%	46,077	28.2%	26.8%
Total Listed Equities and Corporate Bonds		71.9%	49,149	29.7%	31.1%
Synthetic Equity	BlackRock Synthetic Equities*	99.4%	15,764	39.4%	3.4%
Sovereigns	BlackRock Liability Driven Investments**	100.0%	305,646	-	37.3%

Scope 1+2 only. % of fund directly analysed reflects coverage under the MSCI tool used in this analysis. Sovereign analysis has been conducted in line with the recommended methodology set out by PCAF.

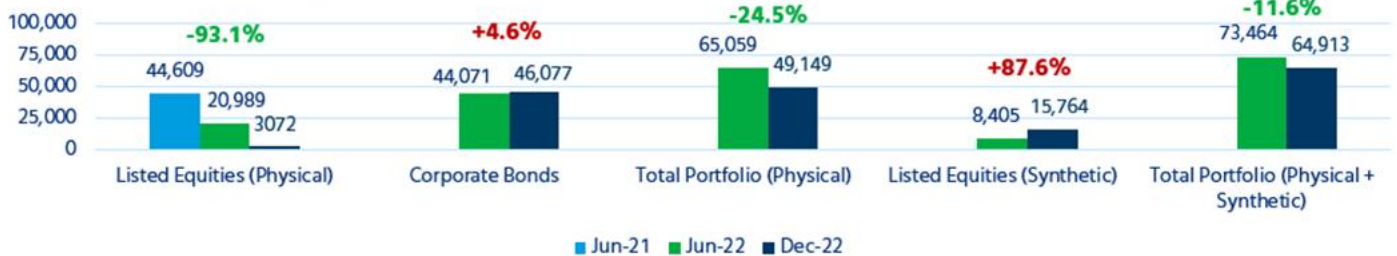
*It is assumed the fund replicates the benchmark. Synthetic Equity represents c.3.4% (£70M) of the total Scheme's investment value, although the analysis considers its total exposure (£267M).

**For LDI, absolute emissions in respect of funded gilt exposure (£1,225M) are 200,578 tCO2e, emissions from additional exposure achieved through repo to gilts (£582M) are 95,325tCO2e, and through TRS to gilts (£60M) are 9,743 tCO2e. Emissions from total exposure to gilts (£1,867M) is shown in the table above. The exposure to other bonds (£99M) and cash including derivative mark to market (-£45M) was not included in the analysis.

DB Section – Absolute Emissions & Carbon Intensity Evolution over Time

Percentage key:
Green (positive performance)
Amber (in line with previous analysis, or within 10% below)
Red (negative performance)

Absolute Emissions (tCO2e)



Carbon Footprint (tCO2e / \$M Invested)



WACI (tCO2e / \$M revenue)



Notes: Absolute Emissions and Carbon Footprint data is available only for 2021 onwards. Analysis excludes LDI portfolio. Percentage change numbers are expressed over longest available period.

The key findings from the analysis of the DB Section portfolios' climate-related metrics against their benchmarks and their evolution over time are:

Metric	Commentary
WACI (tCO ₂ e/\$million revenue)	<p>The carbon intensity of the physical listed equity portfolio has decreased by c.57.1% since 30 June 2020 and is c.59.2% lower than MSCI ACWI, driven by divestment of funds that were more carbon intensive within the portfolio. Lost equity exposure was replaced by synthetic equity holdings, which have decarbonised c.9.4% since 30 June 2022.</p> <p>The carbon intensity of the corporate bond portfolios has increased by c.5.8% since 30 June 2022 and is c.70.4% greater than the iBoxx Sterling Non Gilt Index, largely driven by the BlackRock Buy and Maintain Corporate Bond portfolio.</p>
Carbon Footprint (tCO ₂ e/\$million invested)	<p>The carbon footprint of the physical listed equity portfolio is c.47.2% lower compared to 30 June 2021, and c.49.9% lower than MSCI ACWI.</p> <p>The synthetic equity portfolio has increased in intensity by c.6.2% since 30 June 2022.</p> <p>The carbon footprint of the corporate bond portfolios is c.13.8% higher than as at 30 June 2022, and c.63.9% greater than the iBoxx Sterling Non Gilt Index, largely driven by the BlackRock Buy and Maintain Corporate Bond portfolio.</p>
Sovereign Carbon Intensity (tCO ₂ e/\$million PPP GDP)	<p>The carbon intensity of BlackRock LDI portfolio was equal to 136.1 tCO₂e per \$million PPP GDP.</p>
Absolute emissions	<p>The absolute emissions of the physical listed equities portfolio have decreased by c.93.1% since 30 June 2021, driven by disinvestment of two underlying funds.</p> <p>Conversely, absolute emissions for the synthetic listed equities portfolio have increased c.87.6% since 30 June 2022, following the replacement of the physical mandates with synthetic exposure and a subsequent increase in exposure.</p> <p>The absolute emissions of the corporate bond portfolios have increased c.4.6% since June 2022.</p>
Sovereign absolute emissions	<p>The absolute emissions of the LDI portfolio were equal to 305,646 tCO₂e. This corresponds to emissions from total exposure to gilts of £1,867M (physical and synthetic).</p>
SBTi targets (% of portfolio)	<p>There is a range between portfolios of the percentage of companies with SBTi targets (as low as 14.4% and as high as 39.4%).</p> <p>29.7% of the companies in the analysed portfolio have submitted climate transition plans that have been approved by the Science Based Targets Initiative (SBTi).</p>
Data Quality	<p>Data quality is generally good with the exception of the Royal London Buy and Maintain fund (30.6% not covered by MSCI).</p>

Targets

The Trustee has set the following targets for both the DC and DB Sections:

1. **An ambition of achieving net zero emissions at total Scheme level by 2050.** This is on the basis that supporting a successful transition to a low-carbon economy is compatible with long-term investors' best interests due to reduced physical climate risks.
2. **2030 interim targets for equity and corporate bond assets in the DC Lifestyle Growth Phase and DB Section:**
 - **50% reduction in WACI (Scope 1 and 2) for physical equity relative to a 30 June 2020 baseline.**
 - DC listed equity: in progress (41.8% reduction)
 - DB (physical) listed equity: achieved (57.1% reduction)
 - **20% reduction in WACI (Scope 1 and 2) for DC corporate bond holdings relative to a 30 June 2022 baseline.**
 - DC corporate bonds: in progress (8.1% reduction)

In order to achieve the proposed targets the Trustee will:

- Continue to monitor trends and what is driving the change to a low carbon economy over time;
- Continue to seek to understand and report on existing net zero commitments within the climate aware equities, impact fund and wider portfolio;
- Keep under review how the market for sustainable indices is evolving to ensure the Scheme is making use of the most appropriate solutions. This is more relevant for the DC section but also applies to the climate aware equities allocation of the DB section;
- Work with listed equity managers to understand how they are assessing, monitoring and mitigating key transition / physical risks within these sectors and taking advantage of the opportunities;
- Work with investment managers to understand their approach to adaptation/ physical risks;
- Give further considerations to longevity and covenant risk in the DB section in the context of the 2023 actuarial valuation.

The Trustee has considered the following factors when choosing the targets:

Practical considerations	Commentary
Preferred metric	The Trustee’s preference to use WACI rather than carbon footprint reflects the longer time period for which the Trustee has data, the better coverage for WACI and the fact that the credit managers generally prefer reporting and setting targets against WACI. The targets consider Scope 1 and 2 emissions only, Scope 3 will be incorporated once data quality improves.
Benchmark-relative or relative to fixed start point?	The Trustee has decided to set targets relative to a fixed-start point i.e. from a baseline at a point in time, instead of versus a broad market benchmark (i.e. remaining X% more efficient than a stated benchmark).
Baseline	The Trustee has set a 30 June 2020 baseline where available. This broadly aligns with IIGCC market best practice (31 December 2019) and allows targets to be a full 10 years to 2030. It also allows the Trustee to understand the evolution of its portfolios before setting interim targets to 2030. The baseline pre-dates the allocation to the UBS Climate Aware Funds across the DC Lifestyle strategies and DB Section.
Science-based net zero targets	The Trustee wished to set explicit net zero targets that seek to align with the latest science. The IPCC “Climate Change 2022: Mitigation of Climate Change” report states the need to decarbonise by 43% between 2020 and 2030 to limit warming to 1.5°C. Investors should consider their contributions to global emissions reduction when setting targets, with many adopting a 50% emissions reduction target.
2050 net zero target	A growing number of investors are setting total Scheme net zero target dates of 2050 or earlier. The Trustee is supportive of the Paris Agreement and its aim to limit global warming to well below 2°C above pre-industrial levels.
Asset class targets to 2030	A growing number of investors are introducing interim targets to meet regulatory requirements and ensure overall ambitions are met. The Trustee has chosen to set more granular emissions reduction targets covering listed equity and corporate bonds to 2030.

The Trustee will review its targets at least annually and aims to include Scope 3 emissions in the next report, when the available data has improved and there are suitable methodologies.

A wide range of factors will affect whether the Trustee achieves its targets, and the Trustee has varying degrees of control over these factors. For example, the quality and availability of data mean that the quoted greenhouse gas emissions are likely to change. For the LDI portfolio, the progress of the UK Government will have a significant influence over the timing of reaching net zero given the portfolio is predominantly invested in UK Government gilts.

Ultimately, achieving the desired level of decarbonisation will depend on global economies successfully decarbonising. Notwithstanding that there are factors outside of the Trustee’s control, the Trustee’s intention is to meet its targets and it engages with its investment managers to make clear its requirements.

Appendix A

Additional Analysis



Climate-Related Metrics – Additional Information

DC Additional Freestyle Funds – Climate-related metrics as at 31 December 2022

Asset Class	Fund / Manager	Benchmark	WACI (tons CO ₂ e / \$M revenue) / Sovereign Carbon Intensity (tCO ₂ e / \$M PPP GDP)			Carbon Footprint (tons CO ₂ e / \$M invested)			Allocation within Self-Select Funds
			Coverage (%)	Fund	Benchmark	Coverage (%)	Fund	Benchmark	(%)
Listed Equity	Emerging Markets Equity Fund – Baillie Gifford	MSCI EM	97.0%	242.2	321.5	96.7%	95.8	134.2	7.6%
	Global Equity Fund – Baillie Gifford	MSCI ACWI	91.2%	14.5	155.3	91.2%	1.8	58.7	6.9%
	Global Equity Fund – Dodge & Cox		97.2%	131.0		97.2%	72.9		7.3%
	Sharia Global Equity Tracker Fund – HSBC	Dow Jones Islamic Titan 100 Index	98.4%	60.5		98.4%	25.0		1.6%
	Smaller Companies Equity Tracker Fund – LGIM	MSCI World Small Cap	90.9%	174.8		90.3%	77.7		2.5%
	Climate Aware World Equity Fund – UBS AM	FTSE AW Developed	99.5%	63.3	135.0	99.5%	29.4	51.3	7.6%
	Europe (ex-UK) Equity Tracker Fund – UBS AM	FTSE W Europe (ex-UK) Index	99.4%	112.6		99.3%	69.8		7.0%
	Japan Equity Tracker Fund – UBS AM	FTSE Japan Index	97.2%	89.7		97.2%	67.0		2.1%
	Asia Pacific (ex-Japan) Equity Tracker Fund – UBS AM	FTSE AW Developed Asia AP (ex-Japan) Index	98.8%	188.3		98.8%	96.0		6.4%

Asset Class	Fund / Manager	Benchmark	WACI (tons CO2e / \$M revenue) / Sovereign Carbon Intensity (tCO2e / \$M PPP GDP)			Carbon Footprint (tons CO2e / \$M invested)			Allocation within Self-Select Funds
			Coverage (%)	Fund	Benchmark	Coverage (%)	Fund	Benchmark	(%)
	UK Equity Tracker Fund – UBS AM	FTSE All Share Index	92.8%	118.6		92.8%	81.0		14.4%
	World (ex-UK) Equity Tracker Fund – UBS AM	FTSE Developed (ex-UK) Index	99.5%	136.1		99.4%	49.7		12.4%
	North America Equity Tracker Fund – UBS AM	FTSE North America Index	99.8%	141.4		99.6%	40.4		15.0%
	World Equity Tracker GBP Hedged Fund – UBS AM	FTSE AW Developed Index GBP Hedged	99.0%	135.4		98.9%	51.3		1.4%
	Global Equity Impact Fund – Wellington	MSCI ACWI	96.1%	47.8	155.3	96.1%	14.9	58.7	0.01%
Total Listed Equity			97.1%	128.0	155.3****	97.0%	59.0	58.7****	92.2%
Alternatives	Global Listed Property Tracker – LGIM	FTSE EPRA/NAREIT Global Real Estate Index	99.3%	84.1		99.2%	6.4		0.9%
Corporate Bonds	Pre-Annuity Fund – BlackRock	Composite**	78.0%***	77.4	78.6*	36.0%	22.8	34.2*	0.5%***
	Sterling Corporate Bond Fund – M&G	iBoxx Sterling Non-Gilts	86.0%***	103.5	81.1	55.2%***	43.5	42.7	2.1%***
	UK Corporate Bond Fund – Royal London *****		73.0%***	49.8		47.3%***	25.0		1.4%***
Total Listed Equity, Corporate Bonds, Alternatives			96.5%	125.6	-	95.1%	57.5	-	97.1%
Sovereigns	Pre-Annuity Fund – BlackRock	Composite**	100.0%***	136.1	-				0.5%***
	Overseas Bond Tracker Fund – LGIM	J.P.Morgan Global Government (ex-UK) Bond Index	99.0%	246.8		-	-	-	2.0%
	Sterling Corporate Bond Fund – M&G	-	100.0%***	153.9	-				0.2%***

Notes: Scope 1+2 only. % of fund directly analysed reflects coverage under the MSCI tool used in this analysis. Sovereign analysis has been conducted in line with the recommended methodology set out by PCAF.

*Metrics provided by manager. **Composite made of: 32% ICE BofA 10+ Year AAA-A Sterling Non-Gilt Index; 27% FTSE UK Gilt 15-25 Year Index; 19% FTSE Actuaries UK Conventional Gilts 5-15 Years Index; 16% FTSE Actuaries UK Conventional Gilts up to 5 Years Index; 6% FTSE Actuaries UK Conventional Gilts over 25 Years Index.

***Percentages considering the respective asset class allocation. For BlackRock Pre-Retirement, these represent a 45.5% and a 46.2% fund allocation to corporate bonds and sovereign bonds, respectively. For M&G PP All Stocks, these represent an 88.1% and a 7.8% fund allocation to corporate bonds and sovereign bonds, respectively. For Royal London Life UK, corporate bonds represent 99.2%. The remainder of the funds is allocated to asset classes not covered by the analysis.

****Total listed equity benchmark figures come from MSCI ACWI.

***** The Royal London Life UK Corporate Bond Class S fund is included as a component of the Growth Fund which is also available as a self select fund.

Key:

Green (significantly below index)

Amber (in line with the index, or within 10% below index)

Grey (no benchmark)

Red (has contributed negatively with above index performance)

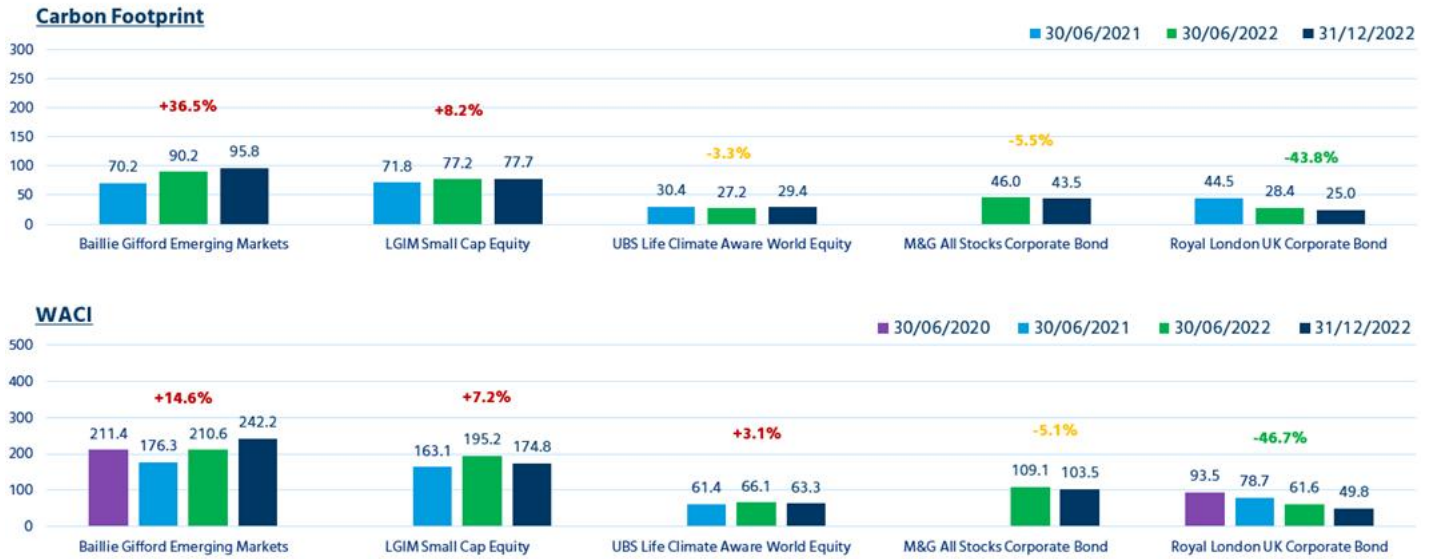
Asset Class	Fund / Manager **	Absolute Emissions coverage (%)	Absolute Emissions	SBTi (%)	Percentage Allocation within Self-Select Funds (%)
			(tons CO2e)		
Listed Equity	Emerging Markets Equity Fund – Baillie Gifford	96.7%	5,710	3.6%	7.6%
	Global Equity Fund – Baillie Gifford	91.2%	98	23.0%	6.9%
	Global Equity Fund – Dodge & Cox	97.2%	4,172	26.4%	7.3%
	Sharia Global Equity Tracker Fund – HSBC	98.4%	320	51.2%	1.6%
	Smaller Companies Equity Tracker Fund – LGIM	90.3%	1,539	7.0%	2.5%
	Climate Aware World Equity Fund – UBS AM	99.5%	1,767	39.3%	7.6%
	Europe (ex-UK) Equity Tracker Fund – UBS AM	99.3%	3,854	54.8%	7.0%
	Japan Equity Tracker Fund – UBS AM	97.2%	1,122	37.4%	2.1%
	Asia Pacific (ex-Japan) Equity Tracker Fund – UBS AM	98.8%	4,860	10.1%	6.4%
	UK Equity Tracker Fund – UBS AM	92.8%	9,199	44.4%	14.4%
	World (ex-UK) Equity Tracker Fund – UBS AM	99.4%	4,875	38.2%	12.4%
	North America Equity Tracker Fund – UBS AM	99.6%	4,757	37.2%	15.0%
	World Equity Tracker GBP Hedged Fund – UBS AM	98.9%	549	38.5%	1.4%
	Global Equity Impact Fund – Wellington	96.1%	1	24.7%	0.0%
Total Listed Equity		97.0%	42,824	32.9%	92.2%
Alternatives	Global Listed Property Tracker – LGIM	99.2%	45	36.0%	0.9%
Corporate Bonds	Pre-Annuity Fund – BlackRock	36.0%	95	18.1%	0.5%**
	Sterling Corporate Bond Fund – M&G	55.5%	719	21.5%	2.1%**
	UK Corporate Bond Fund – Royal London	48.1%	266	12.0%	1.4%**
Total Listed Equity, Corporate Bonds, Alternatives		95.1%	43,950	32.3%	97.1%
Sovereigns	Pre-Annuity Fund – BlackRock	100.0%	578	-	0.5%**
	Overseas Bond Tracker Fund – LGIM	99.0%	3,807		2.0%
	Sterling Corporate Bond Fund – M&G	100.0%	228		0.2%**

Notes: Scope 1+2 only. % of fund directly analysed reflects coverage under the MSCI tool used in this analysis. Sovereign analysis has been conducted in line with the recommended methodology set out by PCAF.

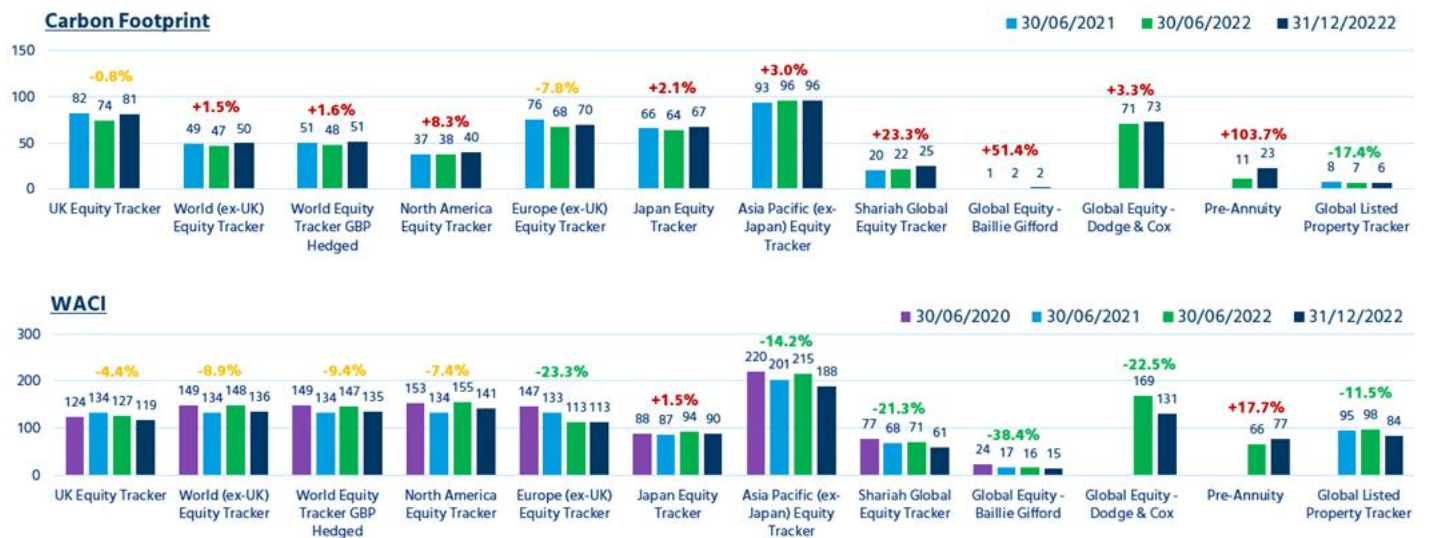
*Percentages considering the respective asset class allocation. For BlackRock Pre-Retirement, these represent a 45.5% and a 46.2% fund allocation to, respectively, corporate bonds and sovereign bonds. The remainder of the funds is allocated to asset classes not covered by the analysis.

** For the mandates which are a component of the Growth Fund and Global Blended Equity Fund it was also considered the AUM of these mandates invested via Growth Fund and Global Blended Equity Fund as self select funds.

DC Section – Absolute Emissions & Carbon Intensity – Evolution over Time (Lifestyle Growth Phase on a fund level)



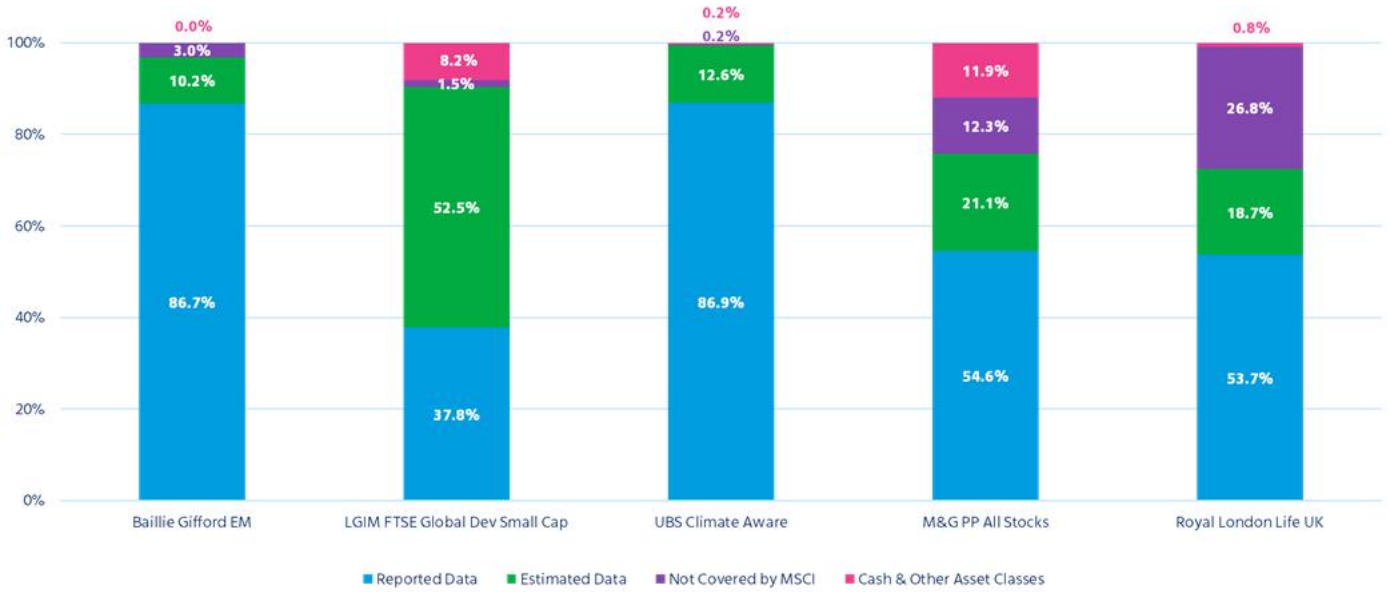
DC Section – Absolute Emissions & Carbon Intensity – Evolution over Time (Additional Freestyle Funds)



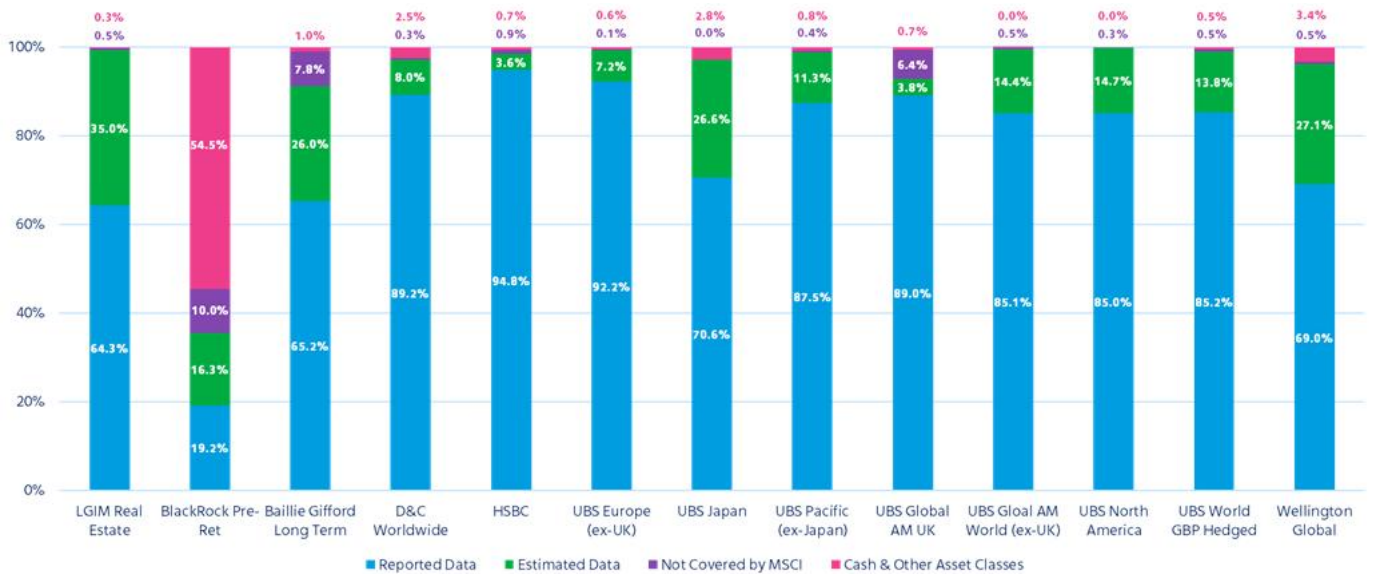
Note: Wellington Global Equity Impact Fund will be added in future analysis.

Data Quality

DC Section data coverage - Lifestyle Growth Phase – underlying funds

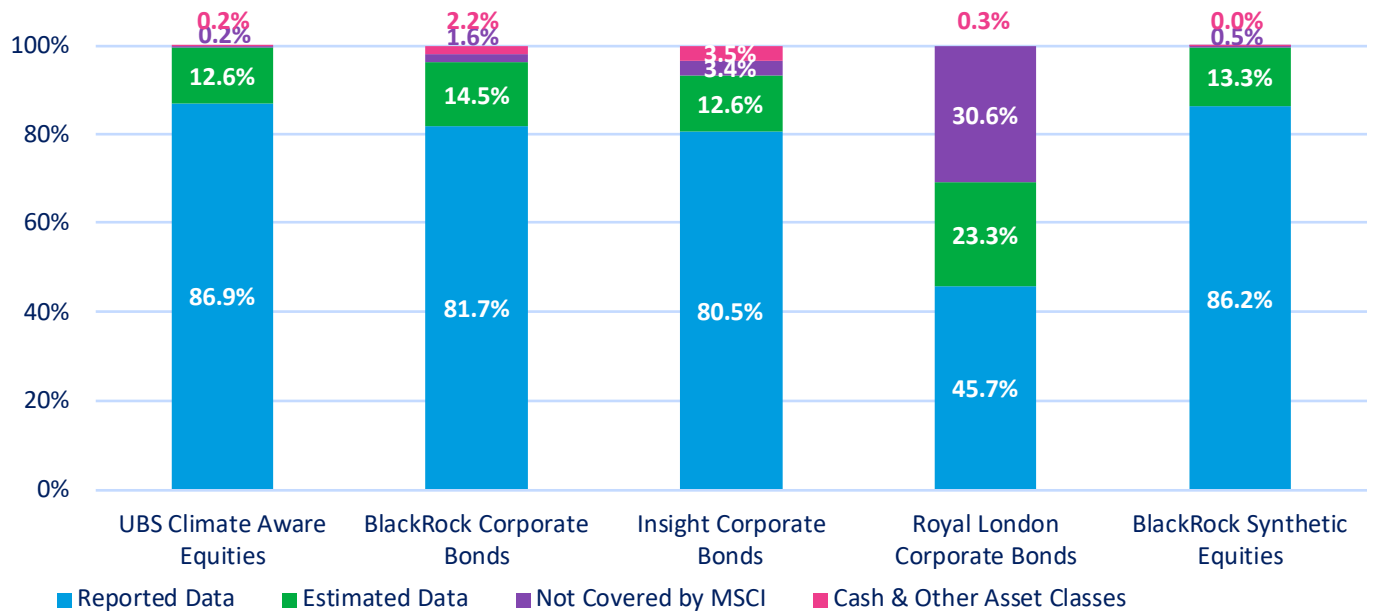


DC Section data coverage – Freestyle funds



Note: Only including the equity and corporate bond portions of each fund. The remainder is included in “Cash & Other Asset Classes”.

DB Section data coverage



Note: Only including the equity and corporate bond portions of each mandate. The remainder is included in "Cash & Other Asset Classes". Values may not sum up due to rounding.

Appendix B

Technical Appendix



Climate scenario modelling approach

Understanding Results Relative to the Baseline

The return impacts of the climate scenarios represented in this report are relative to the 'baseline'.

In designing scenario analysis, a fundamental decision is whether to assume that any climate impacts are priced in today. There is compelling academic evidence to suggest that climate impacts are being priced in to some extent.

The implication is that all return impacts within this report are presented in terms of how they are different to what we are assuming is priced in today.

Our baseline represents what we are assuming the market is currently pricing in, which is a 10% weight to a Failed Transition, 40% weight to an Orderly Transition, 10% to a Rapid Transition and 40% to a range of low impact scenarios.

This means that the impacts of the Orderly and Rapid Transition scenarios tend to be smaller (relative to a model that assumes nothing is priced in) as some of the impact is already priced in and the impact of a Failed Transition can be positive for sectors that the market is expecting to be negatively impacted by a transition.

Climate scenario narratives

	Failed transition	Rapid transition	Orderly transition
Summary	The world fails to meet the Paris Agreement goals and global warming reaches 4.3°C above pre-industrial levels by 2100. Physical climate impacts cause large reductions in economic productivity and increasing impacts from extreme weather events.	Sudden divestments in 2025 to align portfolios to the Paris Agreement goals have disruptive effects on financial markets with sudden repricing followed by stranded assets and a sentiment shock.	Political and social organisations act quickly and predictably to implement the recommendations of the Paris Agreement to limit global warming to below 2°C.
Temperature change	Average temperature increase of >4°C by 2100.	Average temperature increase stabilises at 1.5°C around 2050.	This scenario includes additional economic damage consistent with 1.8°C of average temperature rise – peaking in 2070.
Cumulative emissions	5,127 GtCO ₂ (2020-2100)	416 GtCO ₂ (2020-2100)	The additional damage under this scenario could be associated with further human emissions or greater impacts from feedback loops and tipping points.
Key policy & tech assumptions	Existing policy regimes are continued with the same level of ambition.	An ambitious policy regime is pursued to encourage greater decarbonisation of the electricity sector and to reduce emissions across all sectors of the economy. Higher carbon prices, larger investment in energy efficiency and faster phase out of coal-fired power generation. This is earlier and more effective under a Rapid Transition than the Orderly Transition, which allows for less investment in energy efficiency and bioenergy with carbon capture and storage.	
Financial climate modelling	Physical risks are priced in two different periods: 2026-2030 (risks of first 40 years) and 2036-2040 (risks of 40-80 years).	Pricing in of transition and physical risks of the coming 40 years occurs within one year in 2025. As a result of this aggressive market correction, a confidence shock to the financial system takes place in the same year.	Pricing in of transition and physical risks associated with 1.5°C up to 2050 takes place over the first 4 years. The additional damage, beyond 1.5°C, impacts asset performance on a year-by-year basis with no advance pricing in.
Physical risks considered	Physical risks are regionally differentiated, with considerable variation in expected temperature increase per region and are expected to increase dramatically with rising average global temperature. Physical risks are built up from: <ul style="list-style-type: none"> • Gradual physical impacts associated with rising temperature (agricultural, labour, and industrial productivity losses) • Economic impacts from climate-related extreme weather events Current modelling does not capture environmental tipping points or knock-on effects (e.g., migration and conflict).		

Source: Mercer and Ortec. Climate scenarios as at March 2023.

Climate Scenario Modelling Assumptions – Cumulative Climate Return Impacts

DC Section

Asset Class	Failed Transition			Rapid Transition			Orderly Transition		
	30 June 2022*								
	5 Years	20 Years	40 Years	5 Years	20 Years	40 Years	5 Years	20 Years	40 Years
MSCI ACWI Equity	2.9%	-28.9%	-39.7%	-11.6%	-7.8%	-5.7%	-3.2%	-3.6%	-10.4%
US Equity	3.6%	-27.7%	-38.8%	-11.8%	-9.0%	-6.8%	-4.1%	-5.4%	-12.9%
UK Equity	2.4%	-22.8%	-32.7%	-9.1%	-5.7%	-3.8%	-2.8%	-2.6%	-7.5%
Europe Equity	2.4%	-26.9%	-35.9%	-12.5%	-8.6%	-7.2%	-2.1%	-1.4%	-6.6%
Japan Equity	1.0%	-30.2%	-41.6%	-11.5%	-7.4%	-4.9%	-0.5%	0.4%	-4.6%
Developed Asia ex Japan Equity	2.5%	-33.7%	-43.9%	-12.8%	-9.3%	-7.9%	-2.6%	-2.5%	-9.4%
Emerging Markets Equity	1.6%	-34.9%	-45.7%	-11.8%	-8.1%	-6.3%	-1.5%	-1.4%	-8.2%
MSCI Paris Aligned Equity	1.6%	-29.2%	-39.8%	-5.9%	-1.1%	1.4%	-2.9%	-2.0%	-8.1%
UK Investment Grade Credit	0.3%	-2.5%	-1.1%	-2.3%	-2.3%	-2.6%	-0.4%	0.7%	-1.0%
UK Sovereign Bonds	0.3%	-0.4%	-0.8%	0.2%	0.5%	1.0%	-0.4%	0.9%	0.3%
EMD Local Currency	0.9%	-2.0%	-3.9%	-4.6%	-1.2%	-1.4%	0.1%	3.1%	-0.4%
Cash	-0.3%	-2.8%	-5.7%	0.2%	2.3%	2.0%	0.3%	2.1%	-0.9%
UK Real Estate	0.8%	-28.9%	-38.9%	-6.3%	-1.3%	0.9%	-1.7%	0.3%	-4.5%

* Latest available assumptions at the time the climate scenario analysis was undertaken

DB Section

Asset Class	Failed Transition			Rapid Transition			Orderly Transition		
	30 June 2022*								
	5 Years	10 Years	25 Years	5 Years	10 Years	25 Years	5 Years	10 Years	25 Years
MSCI World Equity	3.1%	-3.4%	-29.2%	-12.0%	-10.2%	-8.8%	-3.3%	-3.2%	-5.3%
MSCI Paris Aligned Equity	1.6%	-5.3%	-30.9%	-5.9%	-3.7%	-1.0%	-2.9%	-2.3%	-3.2%
UK Investment Grade Credit	0.3%	-0.4%	-0.4%	-2.3%	-2.8%	-2.2%	-0.4%	0.2%	0.6%
EMD Local Currency	0.9%	1.0%	-3.3%	-4.6%	-4.2%	-0.1%	0.1%	-0.1%	3.8%
Global Senior Private Debt	-0.4%	-1.2%	-1.7%	-2.1%	-2.2%	-1.9%	0.5%	1.4%	0.5%
Global Private Debt	0.1%	-1.2%	0.3%	-6.9%	-7.0%	-7.6%	0.3%	1.7%	-0.1%
Private Infrastructure Debt EU	0.1%	-0.1%	-1.7%	-1.1%	-1.2%	0.9%	-0.1%	-0.2%	0.9%
Cash	-0.3%	-1.3%	-3.0%	0.2%	1.0%	2.2%	0.3%	1.2%	1.4%
UK Real Estate	0.8%	-6.9%	-30.6%	-6.3%	-3.5%	-0.8%	-1.7%	-0.6%	-0.5%

* Latest available assumptions at the time the climate scenario analysis was undertaken

Capital Market Assumptions for Climate Scenario Analysis Purposes

DC Section

Asset Class	31 December 2022		
	5 Years	20 Years	40 Years
MSCI ACWI Equity	9.0%	10.4%	6.7%
US Equity	8.9%	10.5%	6.2%
UK Equity	9.1%	9.8%	8.0%
Europe Equity	7.7%	7.6%	8.5%
Japan Equity	5.6%	7.6%	7.9%
Developed Asia ex Japan Equity	9.8%	11.3%	6.5%
Emerging Markets Equity	11.0%	12.5%	8.0%
MSCI Paris Aligned Equity	9.0%	10.4%	6.7%
UK Investment Grade Credit	5.2%	6.1%	4.3%
UK Sovereign Bonds	4.0%	5.0%	3.4%
EMD Local Currency	7.8%	9.3%	4.3%
Cash	3.9%	6.0%	1.4%
UK Real Estate	7.2%	8.3%	6.4%

DB Section

Asset Class	31 December 2022		
	5 Years	10 Years	25 Years
MSCI World Equity	9.0%	10.4%	6.7%
MSCI Paris Aligned Equity	9.0%	10.4%	6.7%
UK Investment Grade Credit	5.2%	6.1%	4.3%
EMD Local Currency	7.8%	9.3%	4.3%
Global Senior Private Debt	7.9%	8.5%	6.3%
Global Private Debt	9.2%	9.9%	7.6%
Private Infrastructure Debt EU	7.8%	7.5%	8.1%
Cash	3.9%	6.0%	1.4%
UK Real Estate	7.2%	8.3%	6.4%

Limitations associated with climate modelling

Climate scenario modelling is a complex process, these models are used to help trustees in the process of decision making and are not meant to be used as reliable forecasts. The Trustee is aware of the modelling limitations. In particular:

1. The further into the future you go, the less reliable any quantitative modelling will be.
2. There is a reasonable likelihood that physical impacts are grossly underestimated. Feedback loops or 'tipping points', like permafrost melting, are challenging to model particularly around the timing of such an event and the speed at which it could accelerate.
3. Financial stability and insurance 'breakdown' is not modelled. A systemic failure may be caused by either an 'uninsurable' 4°C physical environment, or due to the scale of mitigation and adaptation required to avoid material warming of the planet.
4. Most adaptation costs and social factors are not priced into the models. These include population health and climate-related migration.

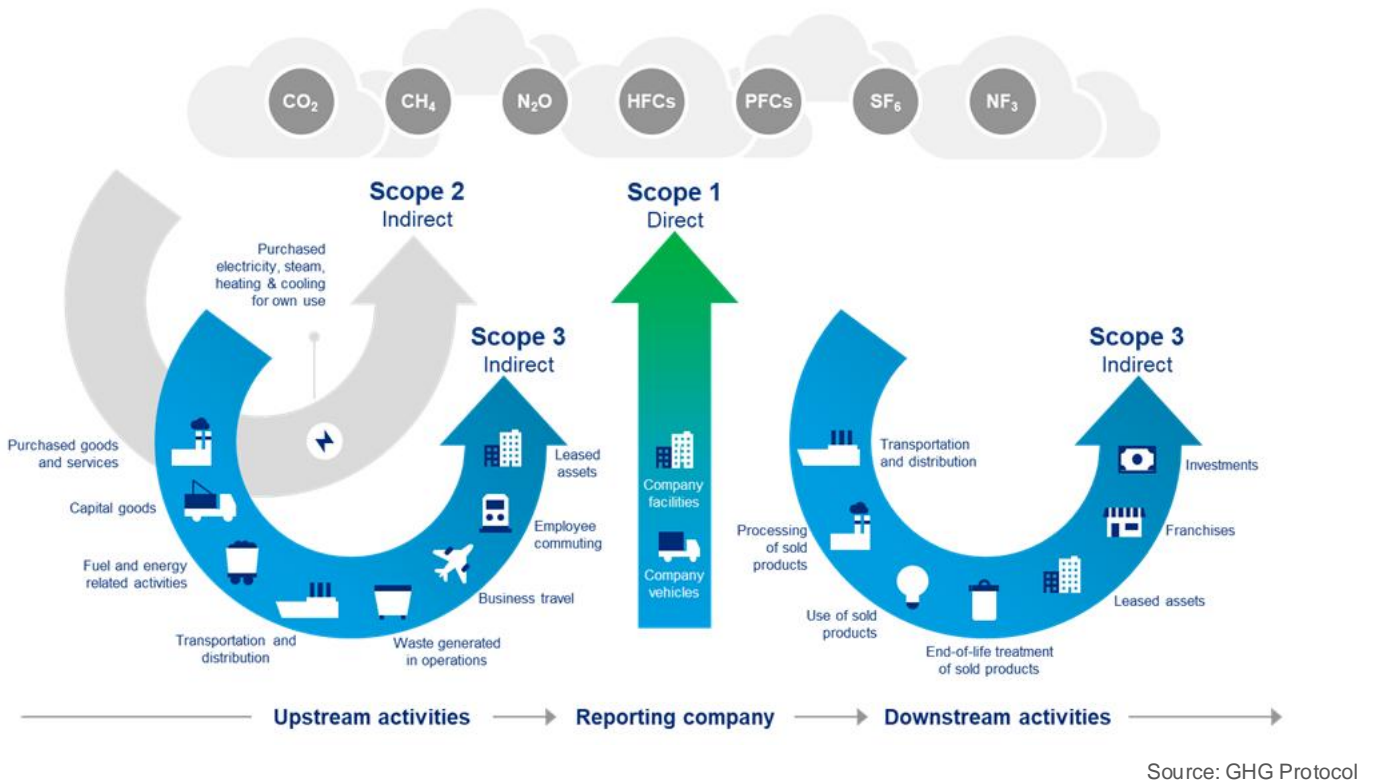
New and emerging risks, such as the impact of climate change on biodiversity loss, and vice versa, is expected to be integrated into climate scenario modelling over time once the supporting science and impact on econometrics and finance is better understood.

Metrics

Total Greenhouse Gas Emissions – Scopes 1, 2 and 3

This metric takes an ownership approach to answer what proportion of a company’s or asset’s emissions an investor owns and is therefore responsible for financing. It includes the seven types of greenhouse gas (“GHG”) (as defined in the Kyoto Protocol), across the three scopes of emissions, as summarised below. Note that this report excludes Scope 3 emissions, which is expected to be included from the Trustee’s next report.

Scopes 1, 2 & 3



Emissions of the seven greenhouse gases have different impacts on climate change. In order to simplify reporting, each greenhouse gas is calibrated relative to carbon dioxide and is reported as ‘carbon dioxide equivalent’ emissions (CO₂e). In this way the Trustee can compare companies that emit different amounts of different gases on a consistent basis.

In respect of sovereign debt investments, the Trustee follows the Partnership for Carbon Accounting of Financials (‘PCAF’) to derive absolute emissions. Recognising the different methodologies used to calculate absolute emissions for sovereigns and corporates, the Trustee reports sub totals at the corporate and sovereign levels.

The Trustee has chosen this metric to understand the absolute amount of emissions financed by the Scheme’s investments.

Carbon Footprint

Carbon Footprint is an intensity measure of emissions that takes the Scheme’s total GHG Emissions figure and normalises it to take account of the size of the investment.

Analysing an investment fund’s Carbon Footprint assists the Trustee in identifying carbon-intense sections of the Scheme’s portfolio. The Trustee has therefore chosen this metric to assist it in prioritising

carbon intense parts of the investment strategy for potential re-allocation or engagement as a means of mitigating associated climate-related risks.

Weighted Average Carbon Intensity

Weighted Average Carbon Intensity (WACI) is an alternative intensity measure of emissions that normalises a company's total GHG Emissions figure by its revenue. This metric is calculated by taking the total carbon emissions of the investment and dividing by annual company revenue. A different approach is taken for sovereign bonds, where the specified sovereign GHG Emissions are normalised by Purchasing Power Parity adjusted Gross Domestic Product (PPP-adjusted GDP). A portfolio level intensity metric is calculated as the weighted average of the underlying holdings' intensity metrics.

Analysing a fund's WACI assists the Trustee in identifying how carbon efficient the business models of the companies held within a portfolio are. Alongside Carbon Footprint, the Trustee has chosen this metric to assist it in prioritising carbon intense parts of the investment strategy for potential re-allocation or engagement as a means of mitigating associated climate-related risks.

% of portfolio companies with net zero targets approved by the Science Based Targets initiative (SBTi)

The Science Based Target initiative (SBTi) has established an industry standard methodology for companies setting long-term carbon emission reduction targets that are in line with climate science. Companies submit their net zero plans to SBTi, who then act as an independent assessor of the validity of the plans.

SBTi use either a sector decarbonisation approach (SDA) or an absolute contraction approach (ACA). Under the SDA approach, SBTi allocate the 2°C carbon budget to different sectors, taking into account differences between sectors today and mitigation potential going forwards (e.g. this takes into account the fact that power generation will likely be able to decarbonise faster than cement production). The ACA approach is a broad assumption that assumes that all companies should decarbonise at the same rate. The ACA approach is the most popular target that companies who submit their targets to the SBTi choose.

The Trustee has chosen this metric because it provides a measure of portfolio alignment with the goals of the Paris Agreement. Underlying funds with a low percentage of companies with SBTi-approved targets could indicate investment in companies or issuers that are not setting targets to align their businesses or activities with net zero, which is a forward-looking indication of climate transition risk.

The Trustee recognises that the SBTi does not currently cover every sector, however is cognisant that the Initiative's coverage across companies and sectors is expanding rapidly.

Data Quality

Data Quality aims to represent the proportions of the portfolio for which the Trustee has high quality data. The Trustee has considered whether the underlying emissions data has been verified by a third party, reported by the company, estimated by the data provider or unavailable, to determine how representative the analysis is of the Scheme's actual portfolio.

Data Quality also assists the Trustee in monitoring quality of reporting over time, as companies are expected to continually improve their reporting on climate-related metrics. As the quality of data improves, the decision usefulness of the climate metrics reported on the Scheme's portfolio increases. In addition, the Trustee is able to identify the companies in the portfolio that are not currently reporting emissions data and use this as the basis for engagement.

Climate metric analysis approach (Data limitations and assumptions)

Data sources

Climate-related metrics provided by Mercer have been sourced from MSCI using stock list data provided by the investment managers. Other data has been requested directly from the asset managers.

Scope of emissions

Only Scope 1 and 2 emissions data has been included in this report except where noted. This means that for some companies the assessment of their carbon footprint could be considered an understatement. Scope 3 emissions are currently excluded because Scope 3 disclosure remains insufficient to use reliably at present. Scope 1, 2 and 3 emissions are as defined by the GHG protocol.

Data coverage

Data coverage refers to the proportion of an asset in which the various climate-related metric data is available. There are gaps in the data as:

- Some public listed companies are not publishing climate-related data or are providing poor quality data. This is relevant to public equity and corporate bonds. Obtaining data for emerging market equity and debt can also be challenging due to general disclosure and transparency challenges.
- Many private companies do not currently produce climate-related data and coverage for private markets, such as private equity and private debt, will be low, or zero for mature funds.
- Sovereigns, or governments, may not publish climate-related data in the public domain. This is a particular challenge for emerging market debt. For UK government debt, data is available but there is a delay in the data being published.
- Short-term instruments, such as secured finance assets, have limited data available due to the short-term nature of the individual assets.
- For the long dated property portfolio, the occupiers of the buildings in the portfolio have full operational control and there are no Scope 1 or 2 emissions associated with the investments. The asset managers are looking to improve the collection of Scope 3 emissions data – this includes occupier activities where they have direct utility supplier contracts.

In this report, a pro rata approach is used to scale up each climate metric in order to present the data as if full coverage was available for each asset. This assumes that the part of an investment fund that does not have data available has the same climate metrics as the part where there is data.

The Trustee is working with the Investment Adviser and asset managers to address the data gaps, as far as it is able.

Asset class assumptions

Synthetic equity exposure

Some asset class exposures, like equity, are obtained via the use of derivative instruments. For the purposes of this report:

- The **DB Section** uses synthetic equity as a way to increase the exposure to equity markets in a capital efficient manner. The additional exposure to public equity markets has been allowed for in the climate scenario modelling and the climate metric data.

Liability Hedging Programme

The following assumptions have been made in the calculation of the climate-related metrics for the Liability Hedging Programme:

- Latest annual data for emissions produced in the UK (i.e. production emissions) as at 31 December 2021, published by the UK government, of 420m tonnes of CO₂e.
- Emissions associated with imports (energy and non-energy) have been excluded;
- Figures cannot sensibly be aggregated with emissions data for non gilt assets due to risk of double counting as UK emissions include corporate and household emissions.
- Scheme's asset position at 31 December 2022.
- The metrics cover the full economic exposure to UK gilts which will be from the physical gilt holdings and any exposure to "repo" contracts.
- Gilts posted out as collateral by the Scheme are included in the gilt valuations and gilts received as collateral are excluded.
- Interest rate swaps, inflation swaps, futures, cash and money market fund holdings have all been excluded.

Category	Market value of exposure (£m)	Absolute emissions tCO ₂ e
Funded gilts only	1,225	200,578
Gilts on repo	582	95,325
Gilts via TRS	60	9,743
Combined gilt exposure	1,867	305,646

Source: BlackRock, UK Government, DMO and IMF.

Important notices from data providers

Mercer

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MSCI

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Ortec Finance

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