TCFD REPORT 2023

The Barclays Bank UK Retirement Fund

BARCLAYS

Chair's foreword

On behalf of the Trustee, I am pleased to present our second Task Force on Climate-related Financial Disclosures ('TCFD') report. The report explains the work we have done with regards to climate change governance and decision making over the year to 30 September 2023, as well as the progress made to date in achieving our emissions reduction ambitions.

We see climate change as a key financial risk, which requires careful monitoring by the Trustee of the Barclays Bank UK Retirement Fund ('the UKRF' or 'the Fund'). We acknowledge that the wide-ranging impact of climate change – on the natural environment, on industry, and society – may impact the ability to invest the UKRF's assets optimally over the long-term. As a result, in 2021, we announced our ambition to align the Fund's investment strategy with the goals of the Paris Agreement. We set our ambition to reduce the carbon equivalent emissions of the Fund's assets to net zero by 2050 or sooner, with an interim ambition to reduce emissions intensity by 50% compared to our 2020 position and we continue to work with our investment managers to help achieve these goals.

We recognise the important role that data will play in monitoring progress against our ambitions and informing our investment and funding decisions. The reporting of greenhouse gas emissions is still a developing area for companies and investors and there remain challenges around the availability and quality of emissions data. This year, we have focussed on improving the data coverage of our climate metrics, including expanding our reporting to include Scope 3 data. Whilst expanding data coverage has led to an initial increase in reported emissions for some portfolios within the UKRF, it provides us with a greater understanding of the current position – the UKRF's exposure to climate-related risk and the actions required to achieve our ambitions. Improving data quality and coverage will remain priorities going forwards.

We support the requirement for mandatory climate governance and reporting (in line with TCFD recommendations). This framework should support us in assessing, monitoring, and mitigating climate-related risks on behalf of Fund members. We will continue to evolve our TCFD reporting as industry best practice evolves and data quality improves. We look forward to demonstrating continued progress in future years.

Introduction

This report was prepared by Barclays Pension Funds Trustees Limited ('BPFTL' or 'the Trustee') and covers the period from 1 October 2022 to 30 September 2023. It was prepared in accordance with 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 along with the subsequent statutory guidance released by the Department for Work and Pensions in 2022 (collectively 'the Regulations' in this document).

It details how the Trustee governed the UKRF in a manner consistent with the four elements set out in the Regulations and in line with the recommendations of TCFD. The report describes the approach taken by the Trustee to address climate change risks and the resultant opportunities in the context of its regulatory and fiduciary responsibilities. This is the Trustee's second TCFD report. For this second report, the Trustee has made changes based on feedback from the Pensions Regulator on the first wave of reporting. In addition, the Trustee has documented Scope 3 emissions where available (see Section 4 for further details) and has set out any changes in emissions reported compared to the previous year.

This report fits within the Trustee's wider Responsible Investment ('RI') approach and consideration of Environmental, Social, and Governance ('ESG') factors. The Trustee recognises climate change as an important long-term financial risk which could impact the Fund's investments, hence the considerable time and resource invested in the Trustee's governance of climate-related risks and related opportunities demonstrated within this report. Climate change was the subject of specific risk management, measurement, stewardship, and collaborative efforts as part of the Trustee's overall approach to risk management for the Defined Benefit ('DB') and Defined Contribution ('DC') sections of the Fund.

Given the complex and technical nature of climate change, there is a glossary of terms used throughout this report in Appendix A. The table overleaf sets out and links through to the main sections of this report.

Section	Description
1. Governance	This section describes the Trustee's governance of climate-related risks and opportunities. It describes how climate-related risks and opportunities were integrated into the UKRF's overall investment strategy.
2. Strategy	This section describes the estimated impact of three potential future climate scenarios on the investment and funding strategy of the DB section and the Default Lifestyle ranges and popular self-select investment funds of the DC section of the UKRF. It also describes the estimated impact on the sponsor covenant relevant to the DB section.
3. Risk Management	This section describes the Trustee's approach to identifying, assessing, and managing risks specifically related to climate change. This includes the key processes and actions the Trustee undertook during the period.
4. Metrics and Targets	This section describes the metrics used by the Trustee to identify climate-related risks and monitor progress made against its emissions reduction ambitions.

Future considerations

The Trustee acknowledges that there remain data coverage challenges and methodology limitations for certain asset classes. The Trustee recognises that it is an industry-wide challenge to better understand the impact of climate-related risk, particularly the quality and extent of climate data. The Trustee also recognises the limitations of scenario analysis, with limited past data and likely non-linear impacts of climate change through the emergence of "tipping points" that are difficult to model.

As climate data becomes more robust, it is expected that climate-related risk and scenario analysis should become more accurate, enhancing the Trustee's governance and decision making in relation to climate-related risks and opportunities.

The Trustee is supportive of future industry developments to improve the scope and quality of analysis. Continuing to explore appropriate solutions to overcome these challenges is an area of focus.

1. Governance

This section outlines how the Trustee governed the Fund in relation to climate-related risks and opportunities. This includes how the Trustee oversaw, assessed, and managed climate-related risks and resultant opportunities, for the period from 1 October 2022 to 30 September 2023.

1.1 Governance of Climate-related Risks and Opportunities

The Trustee Board is responsible for managing the UKRF in the best interests of its members. It is aware that the wide-ranging impacts of ongoing climate change could have a long-term impact on the UKRF's funding and investment strategy. This includes the asset portfolio of both DB and DC sections of the Fund, as well as the liabilities and sponsor covenant (Barclays Bank PLC) associated with the DB section.

To ensure climate-related risks and resultant opportunities are integrated into the UKRF's overall investment strategy, the Trustee has adopted a set of climate-related investment principles which were recorded within its Climate Change Risk Management Policy ('CCRMP'), which is available to members upon request.

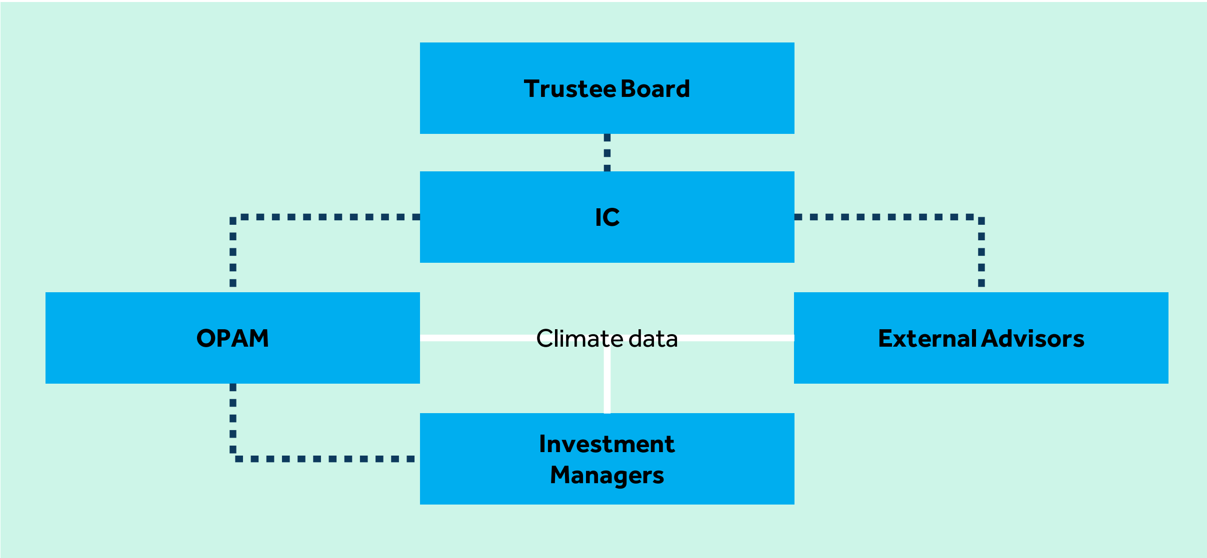
This policy was integrated within the Fund's existing risk management framework and outlines the climate-related governance structure adopted by the Trustee. This included the roles and responsibilities of the Trustee Board and the Investment Committee as well as Oak Pensions Asset Management ('OPAM'), and the Fund's external advisors.

The following graphic lists the Trustee's five climate-related investment principles.

01	Climate-related risks should be managed in line with the Fund's overall risk management and included in its risk management framework.
02	The Fund is exposed to climate-related financial risks over the short, medium, and long-term.
03	Climate-related factors will likely create investment opportunities that the Trustee should consider taking advantage of as appropriate within its wider investment objectives.
04	The Fund should invest in a way that is measurably aligned with achieving the goals of the **Paris Agreement** to the extent that is possible and in the financial interests of members to do so.
05	Engagement, collaboration and using voting rights as appropriate are a few of a number of effective tools to manage climate-related risks.

Overview of Climate-related Investment Governance Structure

The climate-related investment governance structure adopted by the Trustee is illustrated in the following graphic. In keeping with this governance structure, this report was produced with input from OPAM and the Trustee's external advisors and was reviewed and approved by the Investment Committee and the Chair of the Trustee Board.



Details of the roles and responsibilities of each party are summarised in the tables overleaf. Where relevant, the Trustee was satisfied that the responsible parties carried out their delegated responsibilities during the period.

1.2a Roles and Responsibilities of the Trustee Board

Responsibility	Description	Related Activity over the year to 30 September 2023
Oversee the identification, assessment and management of climate-related risks and opportunities as they apply to the Fund's funding strategy.	The Trustee is ultimately responsible for overseeing the identification, assessment and management of climate-related risks and opportunities as they apply to the Fund's funding strategy. The Trustee has delegated the day-to-day responsibilities of monitoring these risks to OPAM, with the assistance of the Fund's external advisers. The Board receives, and reviews annually, a report produced by OPAM on the Fund's progress on all RI activity. The report is based on internal review and external benchmarking.	The Board reviewed the OPAM RI report over the year. The report prompted discussion on the Trustee's interim ambitions. To enhance the Trustee's understanding of climate-related risks and opportunities, training was held at the Board meeting on 26 September 2023 (see Section 1.4 for further details). Over the year, climate change was discussed by the Trustee at six of its seven Trustee Board meetings.
Set the Fund's climate-related objectives, including risk appetite, and approve metrics and climate scenario analysis to measure progress towards these objectives.	The Trustee is responsible for setting the Fund's climate-related objectives, including risk appetite, and approving metrics to measure progress towards these objectives. Specifically, the Trustee has stated an ambition to support the goals of the Paris Agreement by transitioning to a net zero investment portfolio by 2050 at the latest, with emissions intensity halved by 2030.	At the February 2023 Board meeting, the Trustee discussed and approved a Climate Action Plan, which considers the Trustee's ambition to achieve net zero by 2050.

1.2b Roles and Responsibilities of the Investment Committee

The Investment Committee was established with effect from 1 January 2023 and replaced the Investment Advisory Group ('IAG') under new Terms of Reference and Delegated Authority from the Trustee. The Investment Committee took on the responsibilities of the IAG in relation to climate change and has delegated decision making powers. Further references to the Investment Committee in this report may also represent its predecessor, the IAG.

Responsibility	Description	Related Activity over the year to 30 September 2023
Review proposed climate-related objectives and policy recommendations before they are presented to the Trustee Board.	The Investment Committee reviews the Fund's proposed climate-related objectives before they are presented to the Trustee Board for approval to ensure they are robust and fit for the Fund.	During the year to 30 September 2023, climate-related objectives and associated matters were covered in all but one of the Investment Committee meetings. This included review of the RI annual review and Climate Action Plan prior to Trustee Board approval.
Approve climate-related metrics and climate scenario analysis and support the Board in considering climate-related risks and opportunities when setting the Fund's funding and investment strategy.	The Investment Committee is responsible for recommending climate metrics and scenario analysis to support the Trustee Board to oversee and monitor the climate-related risks and opportunities facing the Fund when setting the funding and investment strategy. This includes at a top-down level for strategic purposes, and at a portfolio-level for more granular risk management.	Over the year to 30 September 2023, the Investment Committee discussed and provided feedback on proposed scenario analysis and metrics for use in the prior year's TCFD report. This discussion was held at the November 2022 IAG meeting and reflected in the 2022 TCFD report.
Oversee the Fund's stewardship activity in relation to climate-related risks and opportunities.	The Trustee has delegated responsibility for the delivery of stewardship on ESG-related matters, including climate change, to the Fund's third-party investment managers and other service providers. The Investment Committee oversees the monitoring steps taken by OPAM in relation to the investment managers' and service providers' stewardship activity to ensure they are in alignment with the Fund's climate-related objectives.	The Investment Committee discussed engagement activity undertaken by OPAM. This was presented as part of the RI annual review. The Investment Committee monitored stewardship activity, carried out by the investment managers in the year, including voting activities to encourage investee companies to take a long-term, responsible approach to business strategy. Significant votes in the year included voting in favour of approving the Shell Energy Transition Progress (vote passed) and against rescinding Chevron's Scope 3 greenhouse gas ('GHG') reduction proposal (vote not passed).

1.2c Roles and Responsibilities of Oak Pensions Asset Management

The Trustee has appointed OPAM to act in a fiduciary capacity with regards to investing the assets of the Fund. This means that OPAM has responsibility for managing the assets of the UKRF on behalf of the Trustee with a view to achieving the Trustee's investment objectives. The roles and responsibilities of OPAM are set out in more detail below.

Responsibility	Description	Related Activity over the year to 30 September 2023
Consider climate-related risks and opportunities in all investment management activities	The Trustee delegates investment management responsibilities to OPAM. OPAM advises the Trustee on investment strategy and policy, assesses performance, takes asset allocation and risk management decisions within agreed parameters, and appoints, monitors, and removes investment managers and investment suppliers to the Trustee. The consideration of climate-related risks and opportunities is incorporated in all elements of OPAM's investment approach.	OPAM updated the Trustee on its activities and how they comply with the Trustee's climate-related objectives as part of the RI annual review. To identify and assess climate-related risks, OPAM conducted Portfolio Review Meetings monthly which served as a forum for reviewing the Fund's climate-related risks. More information can be found in Section 3.2. Over the year, OPAM engaged with the Fund's appointed ESG analytics provider to improve coverage and data quality where possible.
Carry out climate-related risk analysis and reporting to monitor progress against the Trustee Board's climate-related objectives	OPAM's duties include the day-to-day management and implementation of the Trustee's policies in relation to climate-change. This includes performing detailed climate-related risk analysis to ensure the Fund's alignment with the Board's objectives.	OPAM performed climate-related risk analysis of the Fund's alignment versus the Trustee's objectives and provided the Investment Committee and the Trustee with reporting on this matter in the form of the RI annual review.

Responsibility	Description	Related Activity over the year to 30 September 2023
Monitor managers' identification, assessment and management of climate-related risks and opportunities and carry out manager engagement as appropriate	In selecting investment managers, the managers' policy on and approach to ESG issues (including climate change) is an important factor. This is set out in more detail in the Fund's RI policy. Investment managers are required to report annually on how climate-related risks and opportunities have been incorporated into their investment process, where appropriate. OPAM will engage with investment managers who appear not to have implemented the Board's policies. Should persistent engagement attempts fail to correct an investment manager's misalignment with the Board's objectives, OPAM will consider changes to manager appointment and/or investment strategy.	OPAM updated the Trustee on its activities as part of the RI annual review. Throughout the year, all investment managers have reported to OPAM on how they have incorporated climate-related risks and opportunities into their investment process. OPAM has reviewed the disclosures and specific supporting evidence. OPAM has carried out due diligence and engaged with the Fund's listed credit managers to explore further opportunities for investment in climate solutions, in particular, considering the characteristics and dynamics of the green bonds' universe. Any opportunities identified are considered in the context of the UKRF's broader funding and investment strategy. OPAM also monitored the engagement steps taken by Equity Ownership Services Ltd at Federated Hermes ('EOS) in relation to climate-related risks and opportunities.

1.2d Roles and Responsibilities of the External Advisors

Responsibility	Description	Related Activity over the year to 30 September 2023
Advise on climate-related risks and opportunities.	The Trustee requires the Fund's external advisors (namely the Investment Advisor, the Scheme Actuary, and the Covenant Advisor) to advise on climate-related risks and opportunities, including but not limited to, the provision of relevant training, information concerning market developments, and integrating climate-related considerations into advice for setting the Fund's funding and investment strategy. The external advisors are also responsible for supporting the Fund in updating the CCRMP as and when required.	Over the year to 30 September 2023, the Trustee's Investment Advisor provided guidance to the Trustee on revisions to the Fund's baseline emissions, against which progress towards net zero can be monitored ('the baseline'). In addition, the Covenant Advisor included new climate-related metrics into its ongoing covenant monitoring to highlight new or changing climate-related risks. This is shared with the Trustee.
Provide climate scenario analysis and climate-related risk metrics	The external advisors are responsible for assisting the Trustee in carrying out climate scenario analysis on the Fund's funding and investment strategy and summarising the analysis for this report. The external advisors are also required to recommend and regularly calculate relevant climate metrics that facilitate total UKRF-level climate-related risk analysis and that meet the regulatory requirements for the Trustee to monitor.	Over the year to 30 September 2023, OPAM provided the Trustee with a Climate Action Plan and the Trustee's Investment Advisor prepared a 'Baseline Net Zero Metric' paper, which have helped the Trustee in further developing its net zero emissions ambition, including developing practical steps to help achieve its ambitions. The Investment Advisor also provided specific Trustee training at the September 2023 Trustee Board meeting, further details of which can be found in Section 1.4.
Advise on TCFD drafting	The Trustee is supported by an external advisor in relation to updating and drafting its annual TCFD report.	The Trustee's advisor supported the Trustee with the drafting of its annual TCFD report. The Trustee assessed the external advisor in relation to climate-related knowledge and experience.

1.3 Trustee Oversight and Assessment

The Trustee Board delegated responsibility to OPAM and the external advisors to assist in assessing, managing, and monitoring climate-related risks and opportunities. To ensure the Fund remained on track against its climate-related objectives, the Trustee assessed the performance and delivery of advice of these parties as set out in the table below.

Party	Description of Process Followed
OPAM	The Trustee monitors the performance of OPAM in relation to Responsible Investment. The Trustee does this by using relevant comparators. It discusses and reviews the climate-related investment activity carried out on its behalf on at least an annual basis. To assist with this discussion, OPAM prepares an RI annual review. In addition, the UKRF's responsible investment activity was externally reviewed, and peer benchmarking was performed. The Trustee was satisfied that OPAM had the appropriate skills and knowledge, as well as access to relevant data and materials from external advisors, to factor climate-related risks and opportunities into investment decision making.
External Advisors	Climate-related considerations are included in the Investment Advisor's annual objectives. This ensures the Trustee's Investment Advisor takes adequate steps to identify and assess climate-related risks and opportunities. In the year, the Trustee reviewed the Investment Advisor's objectives and assessed the delivery of advice using the Competition Market Authority's Investment Consultant Objectives framework and confirmed that objectives had been met.

1.4 Trustee Knowledge and Understanding of Climate Change

Trustee knowledge and understanding of climate change is a rapidly developing area and training for the Trustee will be an ongoing requirement. The Trustee training programme to date has been consistent with the Pension Regulator's ('tPR's') trustee knowledge and understanding requirements (Code of Practice 7). Training on specific climate-related risks and opportunities was part of the broader training programme of ongoing Trustee knowledge and understanding activity. This included induction activities for any new Trustee Directors. The Trustee secretariat supported the Trustee Board and worked with respective parties to ensure the Trustee had the appropriate training and that policy and documentation reviews were conducted in line with tPR requirements to identify, assess and manage climate-related risks.

Throughout the year, the Trustee received the following training in relation to climate change:

- Setting a net zero baseline, data challenges and how changing data availability may impact baseline emissions/emissions intensity comparisons going forward.
- UKRF Stewardship Policy – an introduction to the policy, how this policy will feed through into the Statement of Investment Principles, practical implications given the UKRF structure and wider market practice.
- Further market developments, in particular future regulatory developments, including consideration of practical action the Trustee could take.

This training aimed to support the Trustee Board to have the relevant knowledge and understanding of climate-related issues, to aid its decision making. The Trustee continues to consider skills gaps and undertakes training accordingly.

Collaborative Initiatives

One of the guiding principles of the UKRF's RI Policy is that the Trustee believes collaborative initiatives can affect positive change regarding climate change. Collaborative initiatives are also an effective method of staying informed of industry developments that could impact the Fund. The UKRF is, therefore, a participant in select initiatives. See Section 3.3b in the Risk Management Section for further details. Currently the Trustee is associated with the following organisations:

- A member of the Institutional Investors Group on Climate Change ('IIGCC')
- A signatory to the Principles for Responsible Investment ('PRI')
- A signatory of the 2020 UK Stewardship Code, overseen by the Financial Reporting Council ('FRC')
- A member of the A4S Asset Owners Network, founded by HM King Charles III in 2004 when he was the Prince of Wales.

The Trustee will review its participation in external groups periodically.

2. Strategy

This section considers the climate-related risks and resultant opportunities that could impact the Fund to help assess the resilience of the investment and funding strategies and inform the Trustee's strategic decision making. It includes a summary of the scenario analysis carried out in the 2022 TCFD report and consideration of any improvements that could be made in the next phase of scenario analysis.

2.1 Scenario Analysis – Description of Scenarios Examined

Scenario analysis is a process for identifying possible outcomes based on a hypothetical development of events. It doesn't predict the future, but helps the Trustee understand the possible impact on the value of the Fund's assets (applicable to both the DB and DC sections) and liabilities (applicable to the DB section only) if certain events were to play out. This helps to inform Trustee decision making.

In advance of the first TCFD report last year, the Trustee completed scenario analysis, supported by the Fund's Investment Advisor and the Scheme Actuary, using available data and modelling capabilities, to assess the actual and potential impact of climate-related risks and opportunities on the DB and DC sections of the Fund. Under the TCFD Regulations, the Trustee is required to undertake scenario analysis at least every three years. Following the completion of the 2022 Actuarial Valuation, the Trustee considered the need to perform new scenario analysis for this year of reporting. Whilst there have been some changes in asset allocation as a result of market movements since the scenario analysis was carried out, there has not been a significant change to the investment or funding strategy or a significant increase in the availability of data against which to assess the position of the Fund under different scenarios. The Trustee is not aware of any new scenarios or modelling capabilities or events that might reasonably be thought to impact the key assumptions underlying the scenarios or any changes in industry practice or trends in scenario analysis. The Trustee does not believe updating the analysis this year would meaningfully change the outcome of the analysis. As such, the Trustee has chosen not to perform new scenario analysis for this second year of reporting. The scenario analysis will be fully revisited in 2024 as required by the Regulations. The Trustee will continue to monitor the need for more regular scenario analysis for future TCFD reports.

The approach taken, for the scenario analysis prepared for the Trustee's first TCFD report, was consistent with the Prudential Regulation Authority's ('PRA') Life Insurance Stress Tests. This is recommended by the Pensions Climate Risk Industry Group.

The analysis was developed using three scenarios with narratives compiled by the Intergovernmental Panel on Climate Change. The scenarios were chosen to include a sudden disorderly transition to a decarbonised economy (Scenario A), a measured, orderly transition (Scenario B) and no transition (Scenario C) to reflect the breadth of different possible outcomes depending on how aspects, such as policy, develop. This is described in more detail in the table below.

Climate Scenario	Scenario Description
Scenario A: Fast Transition	Abrupt transition, ensuing from rapid global actions and policies to the Paris-aligned goal, occurring in 2025 (temperature increase kept well below 2 degrees Celsius relative to pre-industrial levels). Downside risk arises almost entirely from transition risk (see Section 2.3).
Scenario B: Slow Transition	A long-term orderly transition to meet the Paris-aligned goal in 2050 (temperature increase kept well below 2 degrees Celsius relative to pre-industrial levels). Downside risk arises from a mix of transition risk and physical risk. Consistent with the Trustee's Paris-aligned net zero ambition.
Scenario C: No Transition	A no-transition scenario with impacts assessed at 2100 (temperature increase in excess of 4 degrees Celsius relative to pre-industrial levels). Downside risk is entirely physical risk.

To enable equivalent comparisons, under each scenario the estimated impacts are discounted back to determine the effect on current investment and liability values. The magnitude of each of the physical and transition shocks is expected to vary across industries. This means some assets may be more or less resilient to a shock under one scenario compared to another.

2.2 Time Horizons

The emergence and impact of climate-related risks and opportunities will vary depending on the time horizon in question. It is not possible to be too precise on the exact timeframe over which risks could materialise. The Trustee has assessed climate-related risks and opportunities over short, medium, and long-term horizons as set out below.

Time Horizons	Period	Description
Short-term	1-3 years	This relatively short period allows the Trustee to consider short-term climate-related impacts on the Fund. It is aligned with the Trustee's primary funding objective for the UKRF DB section.
Medium-term	4-10 years	This medium-term period is aligned with the Trustee's interim Paris-aligned target. This is applicable to both the DB and DC sections of the UKRF.
Long-term	10+ years	This long-term period allows the Trustee to consider longer-term climate-related impacts. Most assets in the UKRF DC section are invested in the UKRF Default Lifestyle range which has a multi-decade investment horizon. Similarly, the UKRF DB section has members with multi-decade investment horizons.

For the DC section, the Trustee has elected to consider climate-related risks and opportunities over the same short, medium, and long-term time horizons by considering the Default Lifestyle Fund and popular arrangements (i.e., arrangements with £100m or more of the Fund's assets invested, or which account for 10% or more of the assets used to provide money purchase benefits) in line with the Regulations. The medium and long-term time horizons are of particular relevance to the DC section. The medium-term time horizon was aligned with members in the glidepath stage of the DC retirement journey that were within 10 of years of their retirement date from the date the analysis was carried out. The long-term time horizon reflected the fact that the majority of members in the UKRF DC section are more than 10 years from their target retirement date and are therefore invested in the UKRF Default Lifestyle range which has a multi-decade investment horizon.

2.3 Identification of Climate-related Risks and Opportunities

The consideration of climate-related risks and opportunities was incorporated into the Trustee's investment and funding strategy, including the strategic asset allocation process, investment manager selection, and ongoing portfolio monitoring. This ensured that both asset and liability risk and return assumptions took these factors into account appropriately. Please see Sections 3.2 and 3.3 for further details on the climate-related opportunities identified during the period.

The Trustee considered that the long-term sustainability of the Fund's funding and investment strategy, including the impact on the sponsor covenant relevant to the DB section, was of primary importance. It also evaluated the implications of short and medium-term climate-related risks when making strategic investment decisions.

Given the diverse nature of the Fund's investment portfolio, the Trustee is aware that climate-related risks may have a variety of impacts on the Fund. To account for these impacts, the Trustee decided to evaluate climate-related risks through two primary lenses, set out in the table overleaf.

Risk Type	Explanation
Transition Risk	Risks that could arise from the adjustment towards a decarbonised economy. The severity of any impact will depend on whether the transition to a carbon neutral economy is orderly or disorderly.
Physical Risk	Acute risks from events, such as storms, floods, droughts, and sea-level rises, or chronic risks from longer-term shifts in climate patterns. These risks could give rise to direct impacts resulting from weather-related events, such as damage to property, or indirect impacts through subsequent events, such as the disruption of global supply chains.

In addition to the scenario analysis, which is carried out at least every three years, the Trustee considers the possible impact of climate-related risks on the Fund's investment and funding strategy on an ongoing basis at Investment Committee and Board meetings. For the DB section this involves consideration of the possible impact on assets, liabilities, and sponsor covenant throughout the year. For the DC section, the Trustee considers the resilience of the assets across the Default Lifestyle Fund ranges and relevant Popular Arrangements, in line with the Regulations. Please see Sections 2.4 and 2.5 for further details.

2.4a DB Section – Overview of Investment Strategy

The Trustee's primary objective agreed at the 2022 Actuarial Valuation was to have sufficient funds to meet the UKRF's obligation to pay pensions as they fall due. The Trustee's policy in the period was to seek to achieve its primary objective through investing in a diverse range of assets. These assets were expected to deliver a sufficient investment return, which would enable the Fund to meet its pension obligations.

The UKRF is a mature scheme, and the Trustee intends to gradually transition the UKRF DB section toward a lower-risk investment portfolio with the aim of reaching a low level of reliance on the sponsor during the 2030s. As this transition takes place, the ultimate investment portfolio is expected to be more resilient to the impacts of climate-related risks than the current portfolio. This is due to the lower-risk investment portfolio being primarily comprised of UK government bonds ('gilts') and investment grade corporate bonds. This is expected to result in a reduction in the emissions intensity of the UKRF's portfolio, thereby significantly contributing to the Trustee's Paris-aligned ambition.

Nonetheless, the Trustee recognises climate-related risks may materialise over varying time horizons. It is therefore taking specific steps to accelerate and improve the climate-related resilience of the UKRF DB section over and above the expected changes to the portfolio over the medium to long-term. Further details are provided in the Risk Management Section of this report.

2.4bi DB Section – Scenario Analysis Modelling and Assumptions – Assets

The scenario analysis, prepared for the 2022 TCFD report by the Fund's Investment Advisor, was applied to all assets across the UKRF DB portfolio in accordance with the stress tests outlined by the PRA. The PRA defines the impact of each scenario relative to different economic sectors. For the analysis in this section, the assets within the UKRF DB section were mapped to these broad sector definitions. The associated shocks were applied to the respective asset values as at 30 September 2021. The values shown for the fall in asset values represent a discounted estimate of the impact of climate change over the time periods associated with each of the scenarios described in Section 2.1 above. The Trustee is aware that there are inherent uncertainties in climate modelling concerning the timing, time horizon, and sequence of financial impacts. For simplicity, where an asset could be subject to both physical and transition risk, the shocks were applied consecutively, with the physical shock applied second.

The Trustee recognised that the scenario analysis was applied to a fixed asset allocation, in this case 30 September 2021, and it therefore did not account for future changes to the investment strategy. Given the UKRF DB section will transition towards a lower-risk portfolio over time, the scenario analysis results described in Section 2.4c are unlikely to be truly reflective of the long-term impact on the UKRF.

The scenario analysis did not incorporate quantitative impacts from potential opportunities that may arise. Instead, climate-related opportunities were addressed qualitatively.

2.4bii DB Section – Scenario Analysis Modelling and Assumptions – Liabilities

To estimate the impact on the Fund's liabilities, with advice from the Scheme Actuary, the Trustee assigned the UKRF membership differing mortality and longevity assumptions across each climate scenario, relative to the Trustee's 2019 Actuarial Valuation assumptions. The estimated mortality and longevity changes were then used to estimate an increase or decrease in liabilities depending on the climate scenario. The Trustee notes that mortality outcomes from climate change scenarios are impossible to accurately predict and will depend on complex interactions between various factors.

2.4biii DB Section – Scenario Analysis Approach – Covenant

The covenant provided by the Fund's sponsoring employer ('the sponsor', 'Barclays Bank PLC') is exposed to transition and physical risks, and potential climate-related opportunity, in relation to its own operations and its business. As UKRF's funding level increases over time, its dependency on the sponsor covenant to underwrite the Fund's risks decreases. The UKRF's funding level means its reliance on the sponsor covenant is currently low, but some reliance is expected to remain over the short, medium, and long-term under the current funding strategy.

Given this ongoing element of future reliance, the Trustee's Covenant Advisor has prepared a high-level view of how climate-related risks and opportunities could impact the sponsor and, therefore, how the strength of the covenant, offered by the sponsor, could develop over the expected lifetime of the Fund under different climate scenarios. The analysis was updated for this second year of reporting. The Covenant Advisor has additionally included new climate-related metrics into its ongoing covenant monitoring, which is shared with the Trustee.

Based, in part, upon the sponsor's own TCFD report, which details the potential impact of climate-related risks on the sponsor, the Trustee's Covenant Adviser has commented upon:

- The climate-related risks and opportunities that could potentially impact upon the sponsor's business under similar climate scenarios to those used to assess the Fund's own risks.
- How those climate-related risks and opportunities could impact on the strength of the sponsor covenant supporting the Fund.
- The resulting resilience of UKRF's funding strategy over short, medium, and long-term time horizons under Fast Transition, Slow Transition and No Transition climate scenarios.

2.4c DB Section – Scenario Analysis Results

The Trustee is aware that there is considerable uncertainty and inherent limitations when conducting climate scenario analysis. Due to the underlying modelling assumptions, the accuracy of the estimated impact is likely to reduce the longer the time horizon under examination. The scenario analysis results were therefore used as one input, among others, to inform the Trustee's decision making.

The Trustee notes that climate scenario analysis of the Fund's liabilities is a developing area of work that is subject to considerable uncertainty. Drawing robust conclusions from the results of this analysis remains a challenge. The Trustee is also likely to have more influence on the climate-related impact on the Fund's assets than liabilities. Therefore, when the analysis was carried out, the Trustee opted to assess the impact on the Fund's assets and liabilities separately, and then set out the possible combined funding level impacts.

2.4ci DB Section – Scenario Analysis Results – Assets

The Trustee, supported by its Investment Advisor, concluded that the Fund's assets were exposed to climate-related risks over the short, medium, and long term. An overview of the possible risks that could arise under the scenarios modelled is set out below.

The faster and more disorderly the transition, the greater the exposure to transition risks. In both a Fast and Slow Transition scenario, transition risks identified included changes in climate policy, technology, and market sentiment, which could prompt a reassessment of the value of the UKRF's assets. Asset classes identified as subject to more significant risk under Transition scenarios included real estate assets. The Trustee anticipated this risk to be of greatest prevalence for its short-term time horizon under a Fast Transition Scenario and medium-term time horizon under a Slow Transition Scenario.

In a No Transition scenario, the analysis indicated the Fund was more exposed to physical risks. Physical risks could have financial implications for assets and organisations the UKRF is invested in. Financial implications could be direct (e.g. physical damage to assets) or indirect (e.g. wider economic disruption through disruption of global supply chains). Within the Fund's investment portfolio, the elements most exposed in the No Transition Scenario were the Fund's illiquid credit holdings. The risks associated with a No Transition Scenario were anticipated to be of greater consideration for the Trustee's long-term time horizons, when more frequent and severe weather events are expected to materialise. However, the Trustee recognises that the impact of physical risks could be felt sooner if there is no progress towards the Paris Agreement or if progress is slow. The Trustee will continue to monitor the possibility of physical risks emerging earlier than anticipated.

The results of the asset scenario analysis are presented in the table below.

Scenario	Change in Portfolio Value
Scenario A: Fast Transition	-1.2%
Scenario B: Slow Transition	-1.5%
Scenario C: No Transition	-2.0%

The analysis indicated that the Fund's assets were estimated to suffer a loss in value under all three scenarios, with the largest loss under the No Transition Scenario. This is due to the adverse impact of realised transition and physical climate-related risks over each respective time horizon. The Trustee, therefore, concluded that it was prudent to take mitigating steps to reduce the climate-related risk exposure of the Fund's assets.

As noted previously, the Trustee intends to gradually transition the UKRF toward a lower-risk portfolio over time. This is expected to improve the resilience of the Fund to adverse climate-related risks. Additionally, the Trustee has already taken several steps to improve the climate-related risk profile of the UKRF. This includes action to limit the risk exposure of the existing portfolio as well as seeking to invest in climate-related opportunities. Please see the Section 3.3d for details.

2.4cii DB Section – Scenario Analysis Results – Liabilities

In the UK, it is considered unlikely that the direct effects of climate change will have a significant impact on life expectancies. However, the disruption and impact of transition risks on economic activity could have a more significant effect. Under some scenarios, climate change might lead to longer life expectancies (i.e. higher liabilities) and other scenarios might lead to lower life expectancies (i.e. lower liabilities).

The results of the liability scenario analysis, carried out by the Scheme Actuary as at 30 September 2021, are presented in the table below. It should be noted that the Trustee entered into a £5bn longevity swap in December 2020 to hedge approximately a quarter of the UKRF's pensioners as at that date, which the scenario analysis has taken into account. In December 2022, the Fund entered into a further £7bn longevity swap to hedge approximately half of the Fund's pensioner membership as at that date. This second longevity swap is not reflected in the impacts shown below.

Scenario	Change in Liability Value
Scenario A: Fast Transition	-1.5%
Scenario B: Slow Transition	+2.5%
Scenario C: No Transition	-5.8%

The analysis indicated that the liabilities are expected to be lower under the Fast Transition and No Transition Scenarios. In these scenarios, the average life expectancies assumed were shorter than those used in the Trustee's 2019 actuarial valuation.

Under a Fast Transition, ensuing from rapid global action and policies, it was noted that resources may be diverted in the short to medium-term from health and public services, which could lead to a reduction in life expectancy, and therefore liabilities.

In scenarios where there is assumed to be more significant warming, such as a No Transition Scenario, whilst climate change is expected to lead to warmer winters in the UK, which could reduce cold-related deaths, economic losses from the physical risks of climate change could reduce wealth, and therefore life expectancy.

By contrast, the liabilities are expected to be higher under the Slow Transition scenario that is consistent with the Trustee's net zero ambition. In this scenario, the Scheme Actuary considered that an improvement in living standards and behavioural changes may lead to increased life expectancy.

The Trustee notes that further hedging of longevity risks, including the most recent longevity swap, could reduce the magnitude of the estimated liability impacts for the Fund. The resilience of insurers to climate-related risks has not been considered as part of this analysis.

2.4ciii DB Section – Scenario Analysis Results – Net Funding Impact

The estimated net funding impacts, combining the relative impacts on the assets and liabilities under each scenario, are set out in the table below.

Scenario	Change in Funding Level
Scenario A: Fast Transition	+0.3%
Scenario B: Slow Transition	-4.0%
Scenario C: No Transition	+3.8%

Under the analysis carried out for the 2022 TCFD report, the Slow Transition Scenario had the most material adverse impact on the funding position, with asset values reducing at the same time as liabilities increased. The increase in liabilities reflected assumed improvements in member life expectancies compared to the current funding assumptions.

By contrast, the Fast Transition and the No Transition Scenarios showed an improvement in the funding position. The modelled reduction in asset values in each scenario was offset by a greater reduction in liabilities, which was driven by assumptions around lower life expectancies. As mentioned above, further hedging of longevity risks could reduce the magnitude of the estimated liability impacts. This analysis will be revisited in the Trustee's next TCFD report.

2.4civ DB Section – Covenant Analysis Results

The sponsor has, over a number of years, invested in its climate-related risk modelling capability and expertise and has undertaken extensive work to understand how different climate scenarios could impact, particularly on the bank's corporate and retail customers.

Risks identified by the Fund's Covenant Advisor include transition risks, which are expected to impact over the Fund's short and medium-term time horizons to varying degrees under the Slow Transition and Fast Transition scenarios. Transition risks include the impact of action to mitigate climate change on the bank's customers and assets underpinning its lending, such as increased default rates from high carbon taxes or production shift, or 'stranded assets' becoming worthless due to legislative changes. The sponsor could also be exposed to reputational risk as a result of climate change, impacting customer and client flows.

Physical risks are also relevant to the covenant. Over the longer term, a No Transition Scenario, leading to higher levels of global warming, is expected to create substantial acceleration in existing physical risk. Physical risks could impact the sponsor's own operations, for example through extreme weather events, business continuity and mass migration, and the creditworthiness of its customers, increasing stress on customers and impacts on value of collateral assets. Such physical risks could also be relevant in a transition scenario, particularly over the longer term, if transition measures are inadequate.

In addition to the risks, transition scenarios represent opportunities for the sponsor to participate in funding transition technologies and net zero plans.

Whilst evaluation of climate-related risk continues to evolve and develop in sophistication, there is nothing emerging from the sponsor's own work that indicates a significant risk to the ability of the sponsor covenant to support the Fund, and the sponsor has a number of processes and actions in place to identify and mitigate the potential impact of climate-related risk. The Trustee concluded that the qualitative analysis carried out by the Fund's Covenant Advisor did not identify any specific threat to the resilience of the UKRF funding strategy.

2.5a DC Section – Overview of Investment Strategy

The Trustee's primary objective, at the time of the analysis, was to make available at a reasonable cost a number of investment options that provide members with access to a range of different asset classes that differ in their level of investment risk and liquidity.

DC members who did not make an active investment decision on joining the UKRF had their contributions invested in the UKRF Lifestyle Fund ranges. Lifestyle ranges are a series of funds that offer members flexibility to target the year in which they expect to access their pension savings. These were the "default investment funds" for the UKRF over the reporting period. There were two UKRF Lifestyle Fund ranges in place, both of which are classed as default investment funds.

- **The UKRF Lifestyle Fund range** – This default investment fund was launched in February 2017 and remains open to all members. The investment objective is to generate capital growth over the long term with increasing levels of capital and retirement income protection as a member approaches their target retirement date. Members many years from retirement are invested in a diversified mixture of assets. The aim is to generate capital growth ahead of inflation over the long term. Members at their target retirement date are invested in a range of investments with the aim of being broadly aligned to the wider range of options now available when accessing retirement savings. During the 10-year period before a member's target retirement date, members' investments are phased between these two allocations (this is known as the glide path).
- **The UKRF Lifestyle (Closed) Fund range** – This default investment fund closed to new investors in February 2017. The investment objective is to provide a broad compromise between capital protection and tracking movements in annuity prices. Members at their target retirement date are invested predominantly in UK gilts and cash. This fund range only comprises the UKRF Lifestyle (Closed) Mature Fund.

The table below outlines the various stages of the UKRF Lifestyle Fund ranges as a member approaches their target retirement date.

Name of Fund	Relevant Period for Fund	Assets in the Fund	Aim of the Fund
UKRF Lifestyle (year of maturity) Fund e.g. UKRF Lifestyle 2040 Fund	Prior to target date	More than 10 years from target date: Diversified Growth Fund, which contains a diversified mixture of assets Within 10 years of target date: Gilts and cash funds are steadily introduced as members approach their target retirement date	Over the longer term this fund offers the potential for growth in excess of inflation while preparing members' savings to broadly align with the wide range of retirement options that are available
UKRF Lifestyle Mature Fund	After reaching target date	45% Diversified Growth Fund, 30% Over 15 Years UK Gilt Index Fund, 25% Cash Fund	To be broadly aligned with the wide range of retirement options available to members
UKRF Lifestyle (Closed) Mature Fund	After reaching target date	75% Over 15 Years UK Gilt Index Fund, 25% Cash Fund	To be broadly aligned with taking a 25% cash lump sum and buying an annuity

The table below provides further detail on the three funds that members invested in the UKRF Lifestyle Fund range could be invested in over their retirement journey.

Name of Fund	What does the Fund Invest in?	Long-term Growth/Stability
Diversified Growth Fund	A range of asset classes including equities, bonds, and property. There is additional focus on the RI characteristics of the company or country issuing the equity or bond when buying and selling these investments. The fund has specific risk and return objectives and the fund investment manager decides how much is invested in each asset class to meet these goals.	Over the long-term, this fund targets rates of return in excess of inflation, but through diversification, the fund aims to reduce risk and provide more stability relative to equities.
Over 15 Years UK Gilt Index Fund	UK gilts that have a maturity period of 15 years or longer and which pay interest at a fixed rate.	A small level of expected growth. Historically this fund has moved in a similar way to the cost of annuities that do not have inflationary increases.
Cash Fund	Short-term money market instruments and overnight deposits.	Very little expected growth. This fund offers stability and short-term protection for any cash lump sum to be taken from DC retirement savings.

The Trustee also made a range of other DC investment options available. Members were able to choose to invest in these options known as the self-select range. Consistent with the Regulations, the Trustee has only included in this report the self-select funds that were classified as popular arrangements as at 30 September 2022 i.e. at the time the scenario analysis was carried out. This comprised the Global (ex-UK) Equity Index Fund only and will be revisited for the next phase of scenario analysis. Details of the investment characteristics of this fund are shown in the table below.

Name of Fund	What does the Fund Invest in?	Long-term Growth/Stability
Global (ex-UK) Equity Index Fund	Shares of overseas companies listed in markets around the world.	Over the long-term, this fund offers the potential for rates of return in excess of inflation. It offers less stability and is more volatile than certain other funds. In addition, as it invests in foreign countries, this fund is exposed to changes in foreign exchange rates.

Since the scenario analysis was carried out, assets invested in the UK Equity Index Fund have exceeded £100m and it is, therefore, now classified as a popular arrangement. If the assets invested continue to exceed £100m at the time of the next scenario analysis, the UK Equity Index Fund will be included in the analysis.

The Trustee has also made available to members the UKRF Sustainable Equity Fund as a self-select option. This fund invests in shares of companies around the world which demonstrate a positive commitment to the long-term protection of the environment. As of 30 September 2023, 1.5% of total DC assets were invested in this fund. It does not currently classify as a popular arrangement.

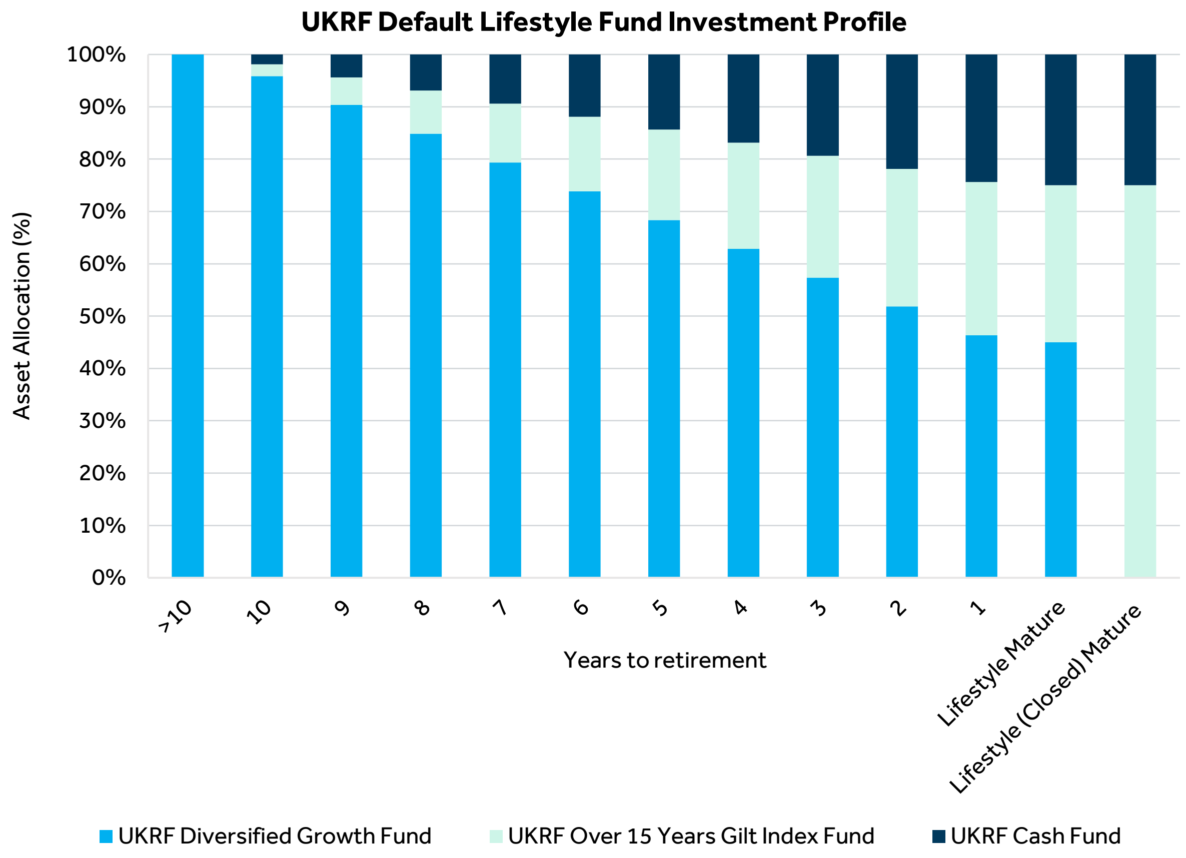
2.5b DC Section – Scenario Analysis Modelling and Assumptions

The underlying methodology used to complete the scenario analysis for the DC section of the UKRF was consistent with the approach taken for the DB section (i.e., using the PRA stress tests and the same time horizons, given the relevance of short, medium, and long-term risks due to the varied ages of the membership within the DC section). However, given the nature of the DC section, an asset-only assessment was used under each climate scenario.

The Trustee completed climate scenario analysis using the PRA stress test scenarios on the UKRF Lifestyle Fund ranges. It also completed analysis on the Global (ex-UK) Equity Index Fund from the self-select fund range that classified as a popular arrangement as at 30 September 2022.

UKRF Lifestyle Fund Ranges

The chart below shows the investment allocation of a more typical member invested in the UKRF Lifestyle Fund ranges over their journey to retirement.



To assess the potential impact on the Lifestyle Funds, the Trustee completed scenario analysis that illustrates the expected impact of the three climate scenarios on members' pension pots over their journey to retirement. This was completed on the investment allocation of members that:

i) Were more than 10 years from their target retirement date.

ii) Were in the glide path stage (i.e., within 10 years of their target retirement date).

iii) Had reached their target retirement date and were invested in either the UKRF Lifestyle Mature Fund or the UKRF Lifestyle (Closed) Mature Fund, for members that reached their retirement date prior to February 2017.

As noted above, the investment allocation of members within the UKRF Lifestyle Fund ranges were comprised of a combination of three funds:

1. The Diversified Growth Fund
2. The Over 15 Years UK Gilt Index Fund
3. The Cash Fund

The scenario analysis completed for the Diversified Growth Fund was based on the asset allocation of the fund, comprising a range of different asset classes, as at 30 September 2022. It did not assume any further developments. The scenario analysis impact was calculated as the sum of the portfolio-value weighted individual asset impacts. There was no assumed diversification of climate-related physical or transition risks.

Consistent with the assumptions of the PRA, the estimated impact on the value of UK gilts and cash under each scenario was zero. Therefore, the estimated impact on the Over 15 Years UK Gilt Index Fund and Cash Fund was calculated as zero. The Trustee noted that this is an area where scenario analysis methodologies are developing. Consistent with evolving industry guidance and contemporary best practice, the Trustee will review, and potentially update, the methodology employed to assess the impact on these assets in the future and may consider qualitative analysis to supplement the next iteration of scenario analysis completed.

Global (ex-UK) Equity Index Fund

For the UKRF's self-select popular arrangement – the Global (ex-UK) Equity Index Fund – the Trustee applied a suitable asset class proxy. It then estimated the expected portfolio value impact under the three scenarios.

Limitations

The Trustee noted that the three chosen scenarios assumed the entire climate change impact was applied to the values of the DC assets as an instantaneous shock at varying singular points in the future dependent on the scenario. In reality, the impacts are likely to be gradually felt over several years.

The Trustee noted that the scenario analysis was applied to a fixed asset allocation, as mentioned above, and it therefore did not account for any future changes to the investment strategy, which could affect the long-term impact of climate change on the UKRF.

The scenario analysis did not incorporate quantitative impacts from potential opportunities that may arise. Instead, climate-related opportunities were addressed qualitatively.

The Trustee was also aware that the chosen scenarios considered only a narrow lens of potential climate change outcomes and therefore did not represent the full range of potential impacts on the economy. Nor did they necessarily capture the most adverse possible scenario. There are likely to be limitations associated with the scenario analysis as a result.

Nonetheless, the Trustee believed the analysis provided a useful indication of the potential behaviour of the different portfolios under scenarios covering potential temperature pathways. The Trustee will continue to develop and evolve this area in partnership with advisors.

2.5c DC Section – Scenario Analysis Results – Lifestyle Fund Ranges

To estimate the impact of each climate scenario on different retirement pension pots, the Trustee conducted analysis on the relevant asset allocations for three indicative member cohorts, the UKRF Lifestyle Mature Fund and the UKRF Lifestyle Mature (Closed) Fund. These cohorts related to three intervals along a member's journey to retirement: 10+ years away from retirement, 7 years away from retirement, and 3 years away from retirement to broadly assess how pension pots could be impacted as members approach retirement. The Trustee noted that the results of the scenario analysis ignored certain factors, such as mortality, for simplicity reasons. The results of the analysis are presented in the table below.

Climate Scenario	UKRF Lifestyle Fund				UKRF Lifestyle Mature (Closed) Fund
	10+ Years to Retirement	7 Years to Retirement	3 Years to Retirement	Lifestyle Mature Fund	
	Change (%) in Portfolio Value				
Scenario A: Fast Transition	-6.9%	-5.5%	-3.9%	-3.1%	0.0%
Scenario B: Slow Transition	-6.8%	-5.4%	-3.9%	-3.1%	0.0%
Scenario C: No Transition	-5.6%	-4.5%	-3.2%	-2.5%	0.0%

Key Takeaway 1 – There is estimated to be an adverse impact on members' pension pots within the UKRF Lifestyle Fund.

The results showed that at all points along the retirement journey for members in the UKRF Lifestyle Fund, there was expected to be an adverse impact on the value of members' pension pots at retirement under the stress tests applied. As can be seen, the impact under each scenario was similar but does vary. This is due to the different magnitude of transition or physical climate-related risks under each scenario and the different sensitivities to those risks as the underlying asset allocation changes.

The Trustee remains committed to its ambition to align the UKRF to the goals of the Paris Agreement. This is expected to improve the UKRF's resilience to both climate-related transition and physical risks with the aim of mitigating the impact of these risks to members. The Trustee has already taken steps to improve the resilience of the Diversified Growth Fund and intends to consider further how this could be improved over time to reduce downside risks to members. Please see the Risk Management Section for details.

The Trustee was conscious of the considerable uncertainty and limitations inherent when conducting climate scenario analysis. It was also aware that the accuracy of the estimated impact is likely to reduce the longer the time-horizon under examination. This is a particular issue when it comes to estimating the impact of physical risks under a No Transition Scenario, which are expected to materialise more meaningfully over the medium to long-term.

Key Takeaway 2 – The estimated impact on members' pension pots varies with time to retirement.

The results showed that the magnitude of the impact on a member's pre-retirement pot size was likely to vary depending on their time to retirement. Younger members that have more than 10 years to retirement were likely to be more exposed to climate-related risks than members within 10 years of retirement.

This reflects the fact that at more than 10 years to retirement, members were fully invested in the Diversified Growth Fund. This fund invests in a range of asset classes including equities, bonds, property, and commodities. Some of the assets in this fund were expected to be exposed to climate-related risks. The type (i.e., transition or physical) and magnitude of climate-related risk was expected to vary across asset classes.

For example, the commodities allocation was expected to suffer a particularly large loss in value under the Fast Transition and Slow Transition scenarios according to the PRA scenarios. This was reflective of an assumed reduction in global consumption of fossil-fuel linked products. Conversely, the property allocation was expected to suffer a large loss in value under the No Transition scenario, where the physical impacts of climate change were assumed to be the most severe.

As members move closer to retirement, the allocation to the Diversified Growth Fund falls and the allocation to the Cash Fund and the Over 15 Years UK Gilt Index Fund increases. PRA guidance on scenario analysis stipulated there was no estimated impact under each climate scenario on UK Gilts and Cash. The magnitude of the estimated impact of the scenarios on members' retirement pots decreased as a result.

The Lifestyle (Closed) Mature Fund was solely invested in the Cash Fund and Over 15 Years UK Gilt Index Fund. The estimated change in value for this Lifestyle Fund was therefore 0%. Consistent with evolving industry guidance and contemporary best practice, the Trustee will look to update the scenario analysis used in the future so the impact on these assets can be assessed.

2.5d DC Section – Scenario Analysis Results – Global (ex-UK) Equity Index Fund

Climate Scenario	Change in Portfolio Value
Scenario A: Fast Transition	-6.4%
Scenario B: Slow Transition	-6.9%
Scenario C: No Transition	-8.2%

The Global (ex-UK) Equity Index Fund was projected to suffer the largest loss under a No Transition Scenario. This reflected the regional exposures of the benchmark index tracked by the fund. The index has larger regional allocations (predominantly US) expected to be most impacted by physical climate-related risks, according to the PRA.

2.6 Scenario Analysis – Concluding Remarks and Next Steps

For the DB section of the Fund, scenario analysis indicated that the assets, liabilities, and covenant of the UKRF were expected to be impacted by climate change under all three scenarios modelled. To the extent that any impact on the Fund's assets is not offset by an opposite impact on the Fund's liabilities, the Trustee recognises that there could be increased funding needs and therefore increased reliance on covenant.

Similarly, scenario analysis indicated that the assets of the UKRF Lifestyle Fund and the Global (ex-UK) Equity Index Fund were expected to be impacted by climate change under all three scenarios modelled.

It remains uncertain, however, how the climate change impacts will materialise and over what timeframe. The Trustee recognised that the accuracy of the estimated impact is likely to weaken as longer time periods are assessed. This means the estimated impact on the investment and funding strategy may appear more, or less, favourable than the true, realised impact.

Recognising these limitations, the Trustee will look to evolve its methodology over time in line with emerging best-practice. In the meantime, the Trustee continues to implement and research measures by which to mitigate the impact of climate change in the best interests of the UKRF's members. Please see the Risk Management Section of this report for details of the mitigating actions undertaken by the Trustee during the reporting period.

The consideration of climate-related risks and opportunities will continue to be incorporated into all elements of the Trustee's investment and funding strategy, including the strategic asset allocation process, investment manager selection, and ongoing portfolio monitoring.

3. Risk Management

This section describes how the Trustee identified, assessed, and managed climate-related risks, and how these processes were integrated into the Fund's overall risk management for the period from 1 October 2022 to 30 September 2023.

3.1 Integration of Climate-related Risks into the Fund's Overall Risk Management

Climate change was the subject of specific risk management, measurement, and stewardship efforts as part of the UKRF's wider investment and RI activities over the year to 30 September 2023. The Trustees' approach to climate change was set in the context of the overall RI strategy. One of the principles was: "Climate-related risks should be managed in line with the Fund's overall risk management and included in its risk management framework".

As noted in the Governance Section, the Trustee maintained a Climate Change Risk Management Policy. This policy further integrated the Trustee's processes for managing climate-related risks into its overall risk management processes including the UKRF risk register. It documented the Trustee's approach to identifying, assessing, and managing risks specifically related to climate change. The CCRMP was reviewed by the Trustee during the period and updated to reflect changes to its climate governance processes.

3.2 Identifying and Assessing Climate-related Risks

The Trustee expected the identification and assessment of climate-related risks and opportunities to be incorporated into all elements of the Fund's investment approach. This included strategic asset allocation, through investment manager selection and portfolio monitoring. As part of the strategic asset allocation process, ESG factors (including climate-related risks and opportunities) were considered. This ensured that asset and liability risk-return assumptions took these issues into account appropriately.

The Trustee considered the long-term sustainability of the Fund's investment strategy to be of primary importance. Scenario analysis was used to stress test the portfolio under different conditions, including those driven by ESG factors.

When selecting the Fund's underlying third-party investment managers, the investment managers' policy towards and approach to identifying climate-related issues were important factors in the process.

Investment managers were required to report to OPAM on how climate-related risks and opportunities were incorporated into their investment processes, where appropriate.

To identify and assess climate-related risks, OPAM conducted Portfolio Review Meetings monthly which served as a forum for reviewing the Fund's climate-related risks. At each meeting, OPAM typically reviewed climate analytics that encapsulated portfolio-level climate metrics and stress test analysis intended to track the evolution of the UKRF's investments over time. On an ad-hoc basis, it also included deep-dive analysis on specific areas and metrics of interest to the Trustee. Where OPAM defined a climate-related risk as significant following their analysis, they conducted further assessments. This included, for example, analysing trends in a portfolio's net zero pathway based on Science Based Targets or its emissions intensity over time. If deemed necessary, OPAM conducted more granular analysis involving detailed discussion and challenge over specific holdings with the portfolio investment manager. Where appropriate, OPAM made clear what corrective steps the investment manager was expected to follow.

The Trustee received reporting from its external advisors that identified and assessed the magnitude of climate-related risks from a top-down perspective (i.e., identifying strategic risks to the UKRF as a whole). As part of its first TCFD report, the Trustee also conducted climate scenario analysis of the Fund-level impact of a reduction in the emissions intensity of certain portfolios. The aim of this exercise was to support the Trustee in identifying and prioritising the key sources of climate-related risk within the Fund and how the Fund could best mitigate these risks. Some of the resulting actions from this exercise are described in Section 3.3.

For this TCFD report, the Trustee has approved the use of climate metric data provided by the Fund's respective investment managers. This is discussed in more detail in the Metrics Section.

3.3a Mitigation of Climate-related Risks Through Stewardship

The Trustee delegated responsibility for risk management to OPAM. Risks were managed and mitigated through stewardship and strategic decision making, which the following section will address in turn.

Effective stewardship was important to protect and enhance the value of investments. In selecting investment managers, the investment managers' policy on and approach to stewardship was an important factor in the process. The Trustee expected its investment managers to adhere to the principles within the UK Stewardship Code and encouraged its investment managers to apply the principles of the Stewardship Code to both UK and overseas holdings where possible.

Cognisant of the positive impact it can have on the UKRF's investments, the Trustee proactively engaged with entities (such as company management, industry groups, and investment managers) through Hermes EOS (the Trustee's appointed stewardship service provider) who provide targeted engagement on behalf of all their clients, including the UKRF.

OPAM was responsible for monitoring the engagement steps taken by EOS in relation to climate-related risks and opportunities. OPAM would also directly engage with investment managers who appeared not to have implemented the Trustee's policies.

Further details on the UKRF's climate-related stewardship, voting activity and subsequent outcomes can be found within the annual UK Stewardship Code report and SIP Implementation Statement.

3.3b Mitigation of Climate-related Risks Through Industry Collaboration

As outlined in the Governance Section, the Trustee believed that collaborative initiatives could be a powerful tool to remain abreast of industry developments and to achieve its climate ambitions. Where an appropriate opportunity arose to contribute to ongoing research or participate in collaborative working groups the Trustee looked to do so.

During the reporting period, the Trustee, via OPAM, contributed to the research being carried out by the IIGCC. In particular, the Trustee, via OPAM participated in the IIGCC Asset Owner Alignment Working Group. Involvement by OPAM has included contributing to the now published Asset Owner Stewardship Questionnaire, which aims to support asset owners, investment consultants and investment managers with a consistent approach to the incorporation of climate stewardship.

3.3c Mitigation of Climate-related Risks Through Targeted Engagement

Listed Credit

The Trustee invests in listed credit via both its Buy & Maintain Credit and Corporate Credit portfolios. The two investment managers of the Buy & Maintain Credit portfolios invest in credit assets, such as corporate bonds, with a relatively long (10+ years) time horizon that are rated as Investment Grade by recognised credit rating agencies. The bonds in this portfolio are typically held until maturity. These two mandates had assets under management of c£4.2bn as at September 2023, and constituted 77.3% of the listed credit mandates.

The investment managers of the Corporate Credit portfolios also invest in credit assets, such as corporate bonds. The difference for the Corporate Credit investment managers compared to the Buy & Maintain Credit investment managers was that there was more scope for the underlying investment managers to hold short-dated assets and to actively buy and sell the assets in the portfolio, rather than hold them until they mature. The four mandates making up the Corporate Credit portfolio had assets under management of £1.2bn as at September 2023, and constituted the remaining 22.7% of the listed credit mandates.

Over the year to 30 September 2023, OPAM engaged with the Fund's listed credit mandates (both the Buy & Maintain Credit and Corporate Credit portfolios referenced in the Metrics Section) to improve reporting and continuous monitoring of stewardship and engagement initiatives with underlying issuers.

Property Portfolio

The investment managers of the property portfolios invest in commercial and industrial real estate for the UKRF across the UK and Europe. As of September 2023, the value of these portfolios was c.£1.3bn.

During 2022, the Trustee engaged with both investment managers of the Fund's property portfolios. The UKRF previously submitted its property portfolios to the Global Real Estate Sustainability Benchmark ('GRESB') framework and worked with the respective investment managers to help score their assets' emissions intensity. As part of the ongoing investment monitoring, the property investment managers are now working to improve their annual GRESB score. This is now included within each investment manager's annual objectives. Since engagement in 2022, the Trustee has noted reductions in the Scope 1 and 2 emissions intensity of its property portfolio for which data is available.

As of March 2022, OPAM and the Fund's property investment managers completed analysis of the Fund's property portfolios using the European Union's Carbon Risk Real Estate Monitor ('CRREM') tool. This analysis aimed to understand the portfolios' alignment with the UKRF's net zero ambition. The aim of this analysis was also to identify the risk of stranded assets occurring in the portfolio due to climate change and possible mitigation steps the investment managers could take. In this context, stranded assets refer to properties which do not meet future market expectations for climate resilience and therefore may be exposed to devaluations unless action is taken to implement climate-related risk reduction initiatives. OPAM continued to engage with the property managers on the utilization of the CRREM tool over the year to 30 September 2023 with the aim to improve the assessment of the portfolios' energy-efficiency and to help inform actions relating to energy-efficiency decisions.

Infrastructure Debt Portfolio

The investment managers of the infrastructure debt portfolios invest in credit assets linked directly to infrastructure projects for the UKRF. As of September 2023, the value of these portfolios was c.£823m.

During 2023, OPAM engaged with the UKRF's infrastructure debt managers to understand engagement initiatives with underlying companies and further improve reporting in relation to engagement progress, key milestones, and performance indicators.

3.3d Mitigation of Climate-related Risks and Exploration of Climate-related Opportunities through Investment Action

The Trustee, with support from OPAM and its investment advisors, also maintained investments in assets that have positive RI and climate characteristics (for example Green Gilts). These assets can help reduce the UKRF's exposure to significant physical and transition climate-related risks, but also offer opportunities to contribute to the transition to a more sustainable world. The collective aim of these investments is to provide capital growth with the prospect of income over the long term without affecting return.

An example of investment action over the period includes:

Buy & Maintain Credit: During 2022, the Trustee engaged with its two Buy & Maintain Credit managers to incorporate additional manager guidelines that better manage climate-related risks. The revised guidelines also incorporated climate-related considerations that are consistent with the UKRF's net zero ambition. Over the year to 30 September 2023, the managers have undertaken work to incorporate these revised guidelines into the investment portfolios that they manage on behalf of the UKRF.

4. Metrics and Targets

This section details the metrics used by the Trustee to identify climate-related risks and monitors progress made against the Trustee's emissions reduction ambitions during the period from 1 October 2022 to 30 September 2023.

Section 4	Metrics and Targets: What does this Section Cover?
4.1	Details of the Climate Metrics Used by the Trustee
4.2	Methodological Considerations
4.3	The Trustee's Climate Target
4.4a	DB Section – Climate Metrics Results
4.4b	DB Section – Performance Against Targets
4.5a	DC Section – Climate Metrics Results
4.5b	DC Section – Performance Against Targets
4.6	Climate Metrics Concluding Remarks

4.1 Details of the Climate Metrics Used by the Trustee

As noted in the Risk Management Section, OPAM, on behalf of the Trustee, made use of climate metrics to quantitatively identify and manage the Fund's exposure to climate-related risks and resultant opportunities. In developing and calculating the metrics, the Trustee has aligned its approach with the Regulations, and with emerging best practice.

In developing metrics, the Trustee recognised the many challenges with data availability and consistency of methodology. The table overleaf details the Trustee's chosen metrics and the calculation methodologies. The metrics are unchanged from last year's report. The Trustee will continue to consider the suitability of each metric to assess the climate-related risks and opportunities faced by the UKRF as part of its ongoing monitoring.

Metric Type	Metric	Answers the Question	Methodology
Metric 1 – Absolute Emissions*	Total Emissions – (tCO_2e)	What are the total absolute carbon equivalent emissions that are attributable to the investment portfolio?	Measures the total absolute emissions (Scope 1, 2 and 3 – see Section 4.2) associated with a portfolio. The emissions attributable to the UKRF are based on its equity or fixed income ownership share across the total capital structure of an underlying issuer.
Metric 2 – Emissions Intensity*	Emissions intensity – (tCO_2e / £m invested)	How carbon efficient is the investment portfolio per million pounds invested?	Measures the total emissions of the UKRF's investments, normalised by the total value of the portfolio.
Metric 3 – Non-emissions-based Metric	Data Quality – % of portfolio for which Scope 1, 2 and 3 carbon equivalent emissions are reported	What proportion of the investment portfolio has emissions data to determine the absolute emissions and emissions intensity metrics and, where data is available, what proportion is reported vs estimated?	Based on the percentage of underlying holdings that have carbon equivalent emissions data. It aims to serve as a proxy for the quality of the overall data.
Metric 4 – Portfolio Alignment Metric	Science-Based Targets initiative ('SBTi') Alignment Score – % Issuers classified as SBTi[1] approved	What proportion of the investment portfolio is invested in companies that have an approved science-based emissions reductions target?	Identifies companies which have an SBTi approved pathway to reduce their GHG emissions consistent with the goals of the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels.

*Consistent with the GHG Protocol, measured as total carbon equivalent GHG emissions.
1) For more details, please visit: https://sciencebasedtargets.org/how-it-work

4.2 Methodological Considerations

Emissions data

The absolute emissions and emissions intensity metrics in this report cover the Scope 1, 2 and 3 emissions of the assets held in the UKRF's portfolio. The emissions are defined as:

- Scope 1 – direct GHG emissions from owned or controlled sources. For example, from combustion in furnaces within a company's facilities or company-owned vehicles.
- Scope 2 – indirect emissions from the generation of purchased energy. For example, from the electricity consumed by a company but generated elsewhere.
- Scope 3 – all indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions. For example, the emissions associated with air travel would represent Scope 3 emissions for the oil and gas company that provides the aircraft's fuel.

Please see the UKRF website for further information on GHG emission scopes.

Last year, due to concerns surrounding the robustness of Scope 3 emissions data and in line with regulatory requirements, the Trustee elected not to report on Scope 3 emissions in the TCFD report. For this year's report, the Trustee has included the Scope 3 emissions of its underlying investments where available. To allow appropriate comparison against the prior year, and in accordance with the Regulations, Scope 3 absolute emissions, emissions intensity and data coverage are presented separately to Scope 1 and Scope 2 emissions.

Emissions data was sourced directly from the investment managers. However, absolute emissions were recalculated by the Trustee's advisors to apply further checks to the data and, where applicable, it is the recalculated emissions that have been reported.

Data coverage

Data is not yet available for all assets within the UKRF. Data coverage for the emissions of the UKRF's assets as at 30 September 2023 is set out in the table below.

Section of the UKRF	Scope 1 and 2 Emissions Data Coverage	Scope 3 Emissions Data Coverage
DB	42.4%	29.1%
DC	84.6%	62.8%

The Trustee is committed to maximising the coverage of its reporting over time and comparisons to 2022 are given in Sections 4.4a and 4.5a covering the DB and DC sections respectively.

The Trustee's Portfolio Alignment metric – SBTi Alignment Score – made use of a methodology determined by the Science Based Target Initiative. This metric was applicable to financial institutions and companies from all sectors. However, the metric was not applicable to assets issued by non-corporate entities, such as public-sector institutions and governments. It has also not been applied to private or physical assets, such as real estate and infrastructure. The table overleaf sets out the proportion of assets in the UKRF, for which the Trustee was able to consider its SBTi Alignment metric.

Section of the UKRF	SBTi Alignment Data Coverage 2022	SBTi Alignment Data Coverage 2023
DB	23.2%	49.3%
DC	71.7%	87.6%

There remain challenges around the robustness of climate data. To help improve this, the Trustee, supported by OPAM and its advisors, has carried out several checks and raised queries with investment managers where there were material differences between source data, unexplained gaps in data, or there was not a clear explanation for data trends.

The Trustee expects data quality and availability to improve over time as public disclosures and industry consensus on appropriate methodologies develop. The Trustee will therefore continue to review its approach to calculating climate metrics to align the UKRF with industry best-practice as it evolves.

4.3 The Trustee's Climate Target

The Trustee acknowledges that the wide-ranging impact of climate change – on the natural environment, on industry, and society – may impact its ability to invest the UKRF's assets optimally over the long-term. As a result, in 2021, the Trustee announced its ambition to align the Fund's investment strategy with the goals of the Paris Agreement. The ambition is to reduce the carbon equivalent emissions of the Fund's assets to net zero by 2050 or sooner, with a 50% reduction in emissions intensity by 2030.

The Trustee considered this appropriate in the context of its fiduciary duty to run the UKRF in the best interests of its members. With input from OPAM and the Trustee's external advisors, the Trustee assessed the feasibility of this ambition in the context of planned changes to the Fund's asset allocation over time and the "passive decarbonisation" of the UKRF's portfolio that could result from changes to the global economy.

Over the year to 30 September 2023, the Trustee commissioned a report from its advisors to recalculate a baseline absolute emissions metric for the 2050 ambition and a baseline emissions intensity metric for the 2030 ambition for both the DB and DC sections of the Fund, using updated methodologies to reflect emerging industry practice. Both baselines were calculated as at 31 December 2020.

The 2050 ambition applies to all assets in the UKRF. The 2030 ambition is set against a baseline that includes listed credit assets only for the DB section of the Fund and the Default Lifestyle ranges for the DC section of the Fund. The applicable funds accounted for 21.5% of DB assets and 65.3% of DC assets as at 30 September 2023. The baseline excludes other asset classes for DB due to data availability and reliability at the time the baseline was calculated, and it excludes the self-select funds for DC as the Trustee is less able to influence the carbon emissions trajectory of the self-select funds, given the allocation to these funds relies on member choices. As data quality, coverage and methodology evolve, the Trustee will consider including further asset classes within the 2020 baselines.

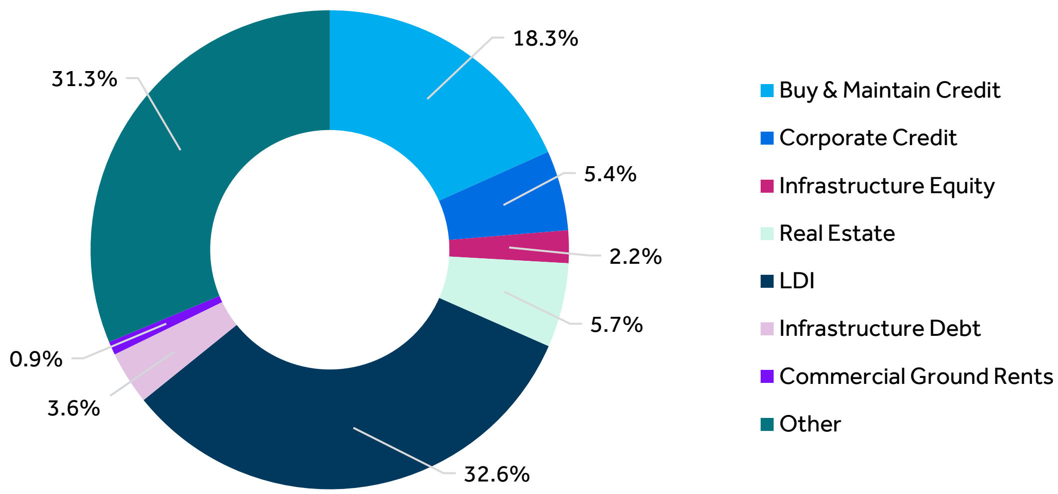
To calculate performance against its ambitions, the Trustee will continue to measure the Fund's absolute emissions and emissions intensity metrics and track its progress. The revised baselines and progress to 30 September 2023 are included in Sections 4.4b and 4.5b for the DB and DC sections respectively.

4.4a DB Section – Climate Metrics Results

DB Investment Portfolio Asset Allocation

The figure below outlines the UKRF DB section asset allocation as at 30 September 2023. The total asset value was £22.7bn.

UKRF DB Asset allocation (30 September 2023)



DB Investment Portfolio Description

The table below sets out the level at which the Trustee has aggregated its assets to report on its four metrics. The Trustee is reporting separately on each portfolio within the DB section of the UKRF and the table below provides more detail on the asset classes that sit within each portfolio.

Portfolio	What does it Invest in?	Asset Categorisation
Public Equity*	Equity issued by publicly listed companies that traded on recognised exchange	Liquid assets
Buy & Maintain Credit	Credit assets, such as corporate bonds, with a relatively long (10+ years) time horizon that were rated as Investment Grade by recognised credit rating agencies. The assets in this portfolio are typically held until they mature	Liquid assets
Corporate Credit	Credit assets, but with more scope for the underlying investment managers to hold short-dated assets and to actively buy and sell the assets in the portfolio, rather than hold them until they mature. Assets representing 40.4% of the Corporate Credit portfolio were moved to LDI in the year and are therefore reported separately (as Corporate Credit 2) in this report	Liquid assets
Infrastructure Equity	Renewable energy infrastructure assets which generate electricity from renewable energy sources	Illiquid assets
Real Estate	Portfolios of commercial and industrial real estate across the UK and Europe	Illiquid assets
Liability Driven Investment (LDI)	Predominantly in UK gilts, cash, and derivatives. This includes assets for which it was not possible to estimate all the Trustee's chosen metrics, such as derivatives.	LDI
Infrastructure Debt	Credit assets linked directly to infrastructure projects, including UK and core European renewable energy generation and social housing	Illiquid assets
Commercial Ground Rents	Portfolio of long dated leases based on the freehold of an operational real estate asset	Illiquid assets
Other	This refers to assets for which it was not possible to estimate the Trustee's chosen metrics. This included Private Equity and other illiquid assets and assets held for longevity hedging purposes.	Illiquid assets

*Note there are no longer assets in the Public Equity portfolio, which was included in the 2022 report. It is included to show year on year comparisons in the metrics throughout this section of the report.

Summary of DB results

The results of the analysis as at 30 September 2023 for the Trustee's chosen climate metrics for the DB section of the Fund are summarised on the following pages. Output has evolved this year as additional data has become available, and the Trustee has been able to consider changes in emissions from one year to the next. The Trustee expects the output to further evolve over time as data availability improves and industry consensus is reached on appropriate methodologies.

The Trustee has obtained all emissions data available from investment managers this year. This is a change from the previous year when a split approach was used. Emissions data for listed credit assets (covering the Trustee's investments in Buy & Maintain Credit and Corporate Credit) was previously calculated by the Trustee's advisors using line-by-line data provided by OPAM. Data was requested for all other mandates from the relevant investment managers. Adopting the revised approach of obtaining all emissions data directly from the investment managers has enabled both OPAM and the Trustee's advisors to perform reasonableness checks on the data provided by the managers (including OPAM calculating emissions intensity in the same way as the previous year for liquid assets by considering line-by-line data) and raise queries where appropriate. Additional details and information on the methodologies applied are provided in Appendix D.

Metric 1 (Absolute Emissions), Metric 2 (Emissions Intensity) – Scope 1 and 2

Portfolio	Absolute Emissions (tCO2e) 2022	Absolute Emissions (tCO2e) 2023	Percentage Change in Absolute Emissions	Emissions Intensity (tCO2e/£m) 2022	Emissions Intensity (tCO2e/£m) 2023	Percentage Change in Emissions Intensity
Public Equity portfolio	5,384	Not applicable	Not applicable	56.5	Not applicable	Not applicable
Buy & Maintain Credit portfolio	217,671	177,081	-18.6%	51.2[1]	54.2[2]	5.8%
Corporate Credit portfolio 1	77,404	25,877	-66.6%	57.7	47.9[2]	-17.1%
Corporate Credit portfolio 2	Not available	1,446	Not applicable	Not available	Not available	Not applicable
Infrastructure Equity Fund 1*	Not available	3,984	Not applicable	Not available	Not available	Not applicable
Infrastructure Equity Fund 2**	302	268	-11.1%	1.1	1.0	-9.1%
Real Estate Fund 1	856	686	-19.9%	0.8	0.7	-8.8%
Real Estate Fund 2	358[1]	256	-28.6%	2.7[1]	2.5	-6.7%
LDI Portfolio 1	Not available	Not available	Not applicable	200.9	197.8	-1.5%
LDI Portfolio 2	Not available	1,996	Not applicable	165.4	2.1[2]	-98.7%
Infrastructure Debt Fund 1	Not available	150	Not applicable	Not available	6.0	Not applicable
Infrastructure Debt Fund 2*	Not available	80,479	Not applicable	Not available	103.5[3]	Not applicable

1) Prior year restated, noting Real Estate Fund 2 numbers are best estimates at the time of reporting
2) Emissions intensity has been converted (in full or in part) from USD to GBP using the rate $1.2197: £1 as at 30 September 2023
3) Emissions intensity has been converted from EUR to GBP using the rate €1.1640: £1 as at 30 September 2023
* Latest available data reported, which is as at 31 December 2022
** Latest available data reported, which is as at 30 June 2023

Metric 1 (Absolute Emissions), Metric 2 (Emissions Intensity) – Scope 3

Portfolio	Absolute Emissions (tCO2e) 2023	Emissions Intensity (tCO2e/£m) 2023
Public Equity portfolio	Not applicable	Not applicable
Buy & Maintain Credit portfolio	1,158,248	354.9[1]
Corporate Credit portfolio 1	198,968	390.1[1]
Corporate Credit portfolio 2	Not available	Not available
Infrastructure Equity Fund 1*	6,415	Not available
Infrastructure Equity Fund 2**	1,879	7.0
Real Estate Fund 1*	4,914	10.8
Real Estate Fund 2	4,418	16.7
LDI Portfolio 1	Not available	Not available
LDI Portfolio 2	88,712	117.7[1]
Infrastructure Debt Fund 1	3,793	152.0
Infrastructure Debt Fund 2*	61,265	78.8[2]
Commercial Ground Rents*	2,570	12.3

1) Emissions intensity has been converted (in full or in part) from USD to GBP using the rate $1.2197: £1 as at 30 September 2023
2) Emissions intensity has been converted from EUR to GBP using the rate €1.1640: £1 as at 30 September 2023
* Latest available data reported, which is as at 31 December 2022
** Latest available data reported, which is as at 30 June 2023

Metric 3: Non-emissions-based metric – Data Quality

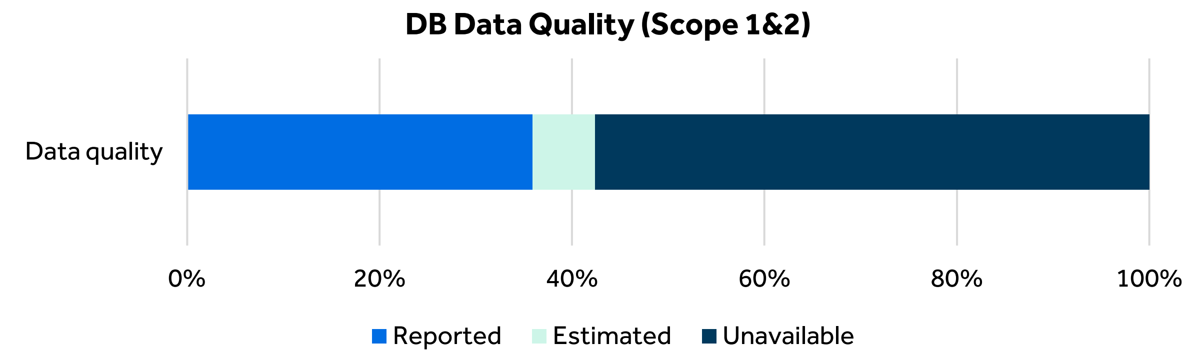
The table overleaf shows the breakdown of data availability for the emissions metrics for the portfolios in the DB section of the UKRF as at 30 September 2023. Improving data quality and increasing metric coverage to include Scope 3 data were important areas of focus for the Trustee for the year to 30 September 2023.

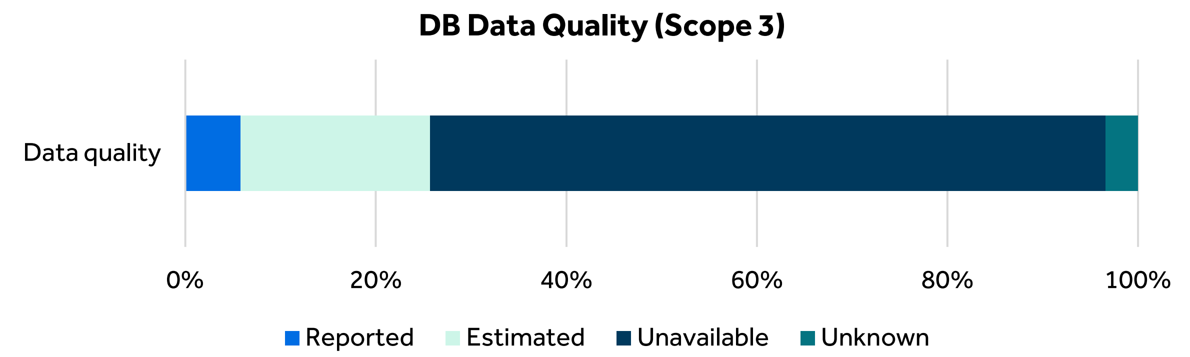
Emissions-based Metrics Coverage

Portfolio	Scope 1 and 2 Emissions-based Data Coverage 2022	Scope 1 and 2 Emissions-based Data Coverage 2023	Change in Emissions-based Data Coverage (% points ('ppts'))	Scope 3 Emissions-based Data Coverage 2023
Public Equity portfolio	99.7%	Not applicable	Not applicable	Not applicable
Buy & Maintain Credit portfolio	94.2%	80.0%	-14.2	78.4%
Corporate Credit portfolio 1	83.3%	74.4%	-8.9	57.6%
Corporate Credit portfolio 2	Not available	100.0%	Not applicable	Not available
Infrastructure Equity Fund 1*	Not available	100.0%	Not applicable	100.0%
Infrastructure Equity Fund 2**	Not available	100.0%	Not applicable	100.0%
Real Estate Fund 1*	Not available	100.0%	Not applicable	48.4%
Real Estate Fund 2	Not available	27.7%	Not applicable	72.3%
LDI Portfolio 1	Not available	100.0%	Not applicable	Not available
LDI Portfolio 2	Not available	19.4%	Not applicable	12.3%
Infrastructure Debt Fund 1	Not available	55.1%	Not applicable	55.1%
Infrastructure Debt Fund 2*	Not available	100.0%	Not applicable	100.0%
Commercial Ground Rents*	Not available	100.0%	Not applicable	100.0%
Other	Not available	Not available	Not applicable	Not available

* Latest available data reported, which is as at 31 December 2022
** Latest available data reported, which is as at 30 June 2023

The figures below show the breakdown of emissions-based data quality for the DB section of the UKRF as at 30 September 2023. This considers what proportion of emissions data received from the investment managers was reported vs estimated as well as what proportion
of data was unavailable.





Data quality for Scope 1 and 2 emissions data was 42.4%, which comprised of 35.9% reported data and 6.5% estimated data. This was sourced from investment managers and represents a 15.7ppts improvement when compared with last year. The 57.6% of assets for which data was unavailable included the Fund's investments in Private Equity and other illiquid assets, and assets held specifically for longevity hedging purposes.

Scope 3 emissions data quality was lower, with data unavailable for some of the liquid assets. The investment manager of two portfolios provided data on Scope 3 emissions, covering 3.4% of the DB assets, but was unable to provide a breakdown of the split of data between reported and estimated data. The portfolios have therefore been included separately in the data quality chart above, categorised as 'unknown.'

Metric 4 (Portfolio Alignment)

Portfolio alignment scores were only calculated for assets issued by corporate entities as shown in the table below.

Portfolio	Portfolio Alignment (SBTi Score %) 2022	Portfolio Alignment (SBTi Score %) 2023	Change in Portfolio Alignment Score (ppts)
Public Equity portfolio	34.4%	Not applicable	Not applicable
Buy & Maintain Credit portfolio	34.5%	37.5%	3.0
Corporate Credit portfolio 1	38.4%	22.7%	-15.7
Corporate Credit portfolio 2	Not available	100%	Not applicable
LDI Portfolio 2	Not available	2.0%	Not applicable

Commentary on Findings by Asset Type

Liquid Assets (Listed Credit: Buy & Maintain Credit and Corporate Credit)

The Trustee defines liquid assets as those that can be converted into cash in very short timeframes (e.g. one month maximum).

The Trustee noted the following:

- Similarly to last year, the Buy & Maintain Credit portfolio had the largest absolute emissions. This reflected the relative size of the portfolio. The portfolio has seen a reduction in Scope 1 and 2 absolute emissions over the year, reflecting both a decrease in the value of assets under management and decarbonisation activities undertaken by the investment managers and the underlying issuers in the period.
- Emissions intensity increased for the Buy & Maintain Credit portfolio, driven largely by exchange rate movements. Emissions intensity fell absent exchange rate movements.
- The Corporate Credit portfolio 1 saw a reduction in both absolute emissions and in emissions intensity. Drivers for these changes included a reduction in assets under management and decarbonisation activities of the investment managers and underlying issuers in the period. The reduction in assets under management was largely driven by a transfer of assets from the Corporate Credit portfolio 1 to LDI in the year. These assets are reported under Corporate Credit portfolio 2 for the purposes of this report.
- Scope 3 absolute emissions and Scope 3 emissions intensity from both portfolios were significantly higher than those reported for Scope 1 and 2 emissions. Given the definition of Scope 3 emissions, this was expected.
- Approximately 37.5% of the issuers in the Buy & Maintain portfolio were assessed as Paris-aligned, an improvement of 3 ppts from last year.

Illiquid Assets

The Trustee defines illiquid assets as those that cannot be converted quickly into cash for their fair market value. This includes Infrastructure Equity, Infrastructure Debt, Real Estate and Commercial Ground Rents. Investment managers took different approaches to estimating the absolute emissions and emissions intensity metrics across the illiquid assets held.

The Trustee noted the following observations:

- Absolute emissions and emission intensity were generally lower than the liquid asset portfolios.
- There were reductions in absolute emissions (measured on Scope 1 and 2) for all its mandates for which there were year on year comparisons, for example the Real Estate funds.
- Scope 1 and 2 emissions intensity metrics remained relatively stable year on year, noting emissions intensity is impacted by a variety of factors including changes in market valuations.
- Data was available for an increased number of mandates, including Infrastructure Debt. This will allow greater monitoring of individual managers as the Fund looks to decarbonise going forward.
- Similarly to the liquid assets, the size of Scope 3 emissions for most of the illiquid mandates were larger than the Scope 1 and 2 emissions. As noted in Section 4.2, the Trustee was unable to apply the portfolio alignment metric to these assets.

LDI

LDI serves as a risk management tool that allows the Trustee to manage interest rate and inflation volatility. There is a lack of market consensus on reporting an investor's absolute emissions or emissions intensity for the derivatives and challenges around estimating UK government bonds (e.g. double counting corporate emissions within sovereign emissions). Derivatives and UK government bonds make up the majority of the LDI portfolios and, as such, the LDI portfolios were not included within the UKRF's emissions intensity ambition.

4.4b DB Section – Performance Against Targets

To measure progress against its 2030 ambition, the Trustee calculated the weighted average emissions intensity of its listed credit assets using Scope 1 and 2 emissions data. This approach is in line with the baseline methodology. Listed credit assets made up 21.5% of total DB assets as at 30 September 2023. The Trustee will look to expand the range of assets included in its 2030 ambition in line with the emergence of more robust and comparable methodologies.

To measure progress against its 2050 ambition, the Trustee calculated absolute emissions for all DB assets for which Scope 1 and 2 data was available. The baseline for the 2050 ambition included estimated emissions for all DB assets so progress against this ambition may be overstated as emissions data coverage as at 30 September 2023 was not 100%. The position for the covered assets as at 30 September 2023 is shown in the table overleaf.

Progress Against the Trustee's Ambitions

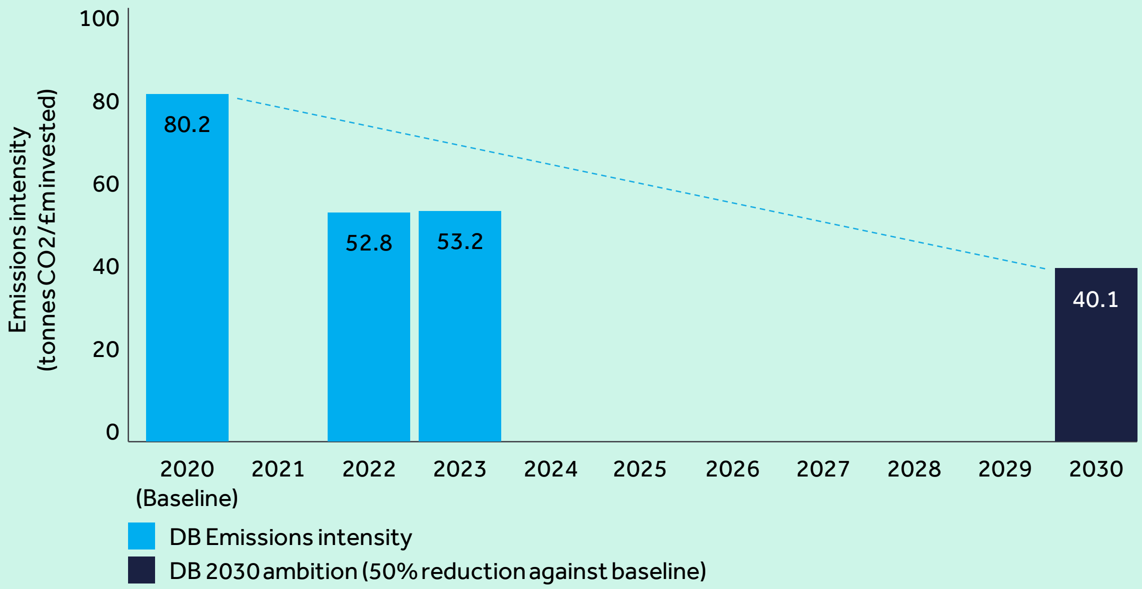
Metric	Measurement	Target Year	31/12/2020 Baseline	30/09/2022	30/09/2023
Emissions Intensity	tCO2e / £m	2030	80.2	52.8	53.2
Absolute emissions	tCO2e	2050	1,030,452	301,975	292,222

The updated baseline emissions intensity as at 31 December 2020 was 80.2tCO2e/£m. This was calculated using individual security holdings data for the listed credit assets. The Trustee noted a 33.6% reduction against the baseline emissions intensity as at 30 September 2023. This compares to the 2030 ambition of a 50% reduction.

Whilst emissions intensity did increase slightly year on year for the applicable portfolios, this was primarily driven by the impact of exchange rate movements. There may be some volatility in emissions intensity as the Trustee continues to monitor this metric as emissions intensity can be impacted by various factors, including changes in absolute emissions, market valuations and interest and exchange rate movements.

Progress made to date towards the Trustee's 2030 ambition is set out below.

Trajectory to the Trustee's 2023 ambition (DB)



Trajectory to the Trustee's 2030 ambitions (DB)

↓ 33.6%

DB reduction from 2020-2023

The updated baseline absolute emissions as at 31 December 2020 was 1,030,452 tCO_2e. This was calculated using individual security holdings data for the listed credit assets and asset class proxies for the remaining DB assets. In the year to 30 September 2023, absolute emissions were 71.6% lower than the baseline. However, Scope 1 and 2 emissions data was not available for all DB assets so absolute emissions are likely to be understated relative to the baseline. In the future, the UKRF's reported carbon emissions may increase, as data coverage and reporting improve, before they decrease, reflecting the actions the Trustee is taking.

The Trustee is taking the following steps to achieve its ambitions:

- Applying targeted engagement with the Fund's investment managers, focussed on decarbonisation amongst high emitting assets;
- Further integrating climate considerations into investment decision making;
- Collaboration with other industry participants to support decarbonisation efforts (see Governance Section for more details);
- Exploring low-carbon alternative investment options; and
- Monitoring the Fund's investment managers to ensure they are taking necessary action to align their portfolios with the Trustee's climate-related objectives.

4.5a DC Section – Climate Metrics Results

The results of the analysis of the Trustee's chosen climate metrics as at 30 September 2023 for the funds that make up the UKRF Lifestyle Fund ranges and the Global (ex-UK) Equity Index Fund and the UK Equity Index Fund, that classify as popular arrangements, are shown in the following section. As noted in Section 2.5a, assets in the UK Equity Index Fund surpassed £100m in the year and it is therefore classified as a popular arrangement and included in the metrics analysis. It was not included for the year ending 30 September 2022 when assets were less than £100m.

The absolute emissions, emissions intensity, data quality metrics and portfolio alignment metrics were calculated by BlackRock, the UKRF's DC investment manager. Further information on each of the DC funds is included below.

DC Investment Portfolio Description

The table below describes the assets invested in each of the default Lifestyle ranges and popular arrangements in the DC section of the Fund.

Fund	What does it Invest in?
Diversified Growth Fund	Invests in a range of asset classes including equities, bonds, and property. There is an additional focus on RI characteristics.
Over 15 Years UK Gilt Index Fund	UK government fixed income bonds (gilts) that have a maturity period of 15 years or longer and pay interest at a fixed rate.
Cash Fund	Short-term money market instruments and overnight deposits.
Global (ex-UK) Equity Index Fund	Shares of overseas companies listed in markets around the world.
UK Equity Index Fund	Shares of companies listed in the UK.

Summary of DC Results

Metric 1 (Absolute Emissions), Metric 2 (Emissions Intensity) – Scope 1 and 2

Portfolio	Absolute Emissions (tCO2e) 2022	Absolute Emissions (tCO2e) 2023	Percentage Change in Absolute Emissions	Emissions Intensity (tCO2e/£m) 2022	Emissions Intensity (tCO2e/£m) 2023[1]	Percentage Change in Emissions Intensity
Diversified Growth Fund	9,193	22,615[2]	146.0%	36.3	41.2	13.6%
Over 15 Years UK Gilt Index Fund[3]	Not available	Not available	Not applicable	165.4	160.7[4]	-2.9%
Cash Fund	10[5]	70	603.3%	0.3	0.9	196.8%
Global (ex-UK) Equity Index Fund	15,823	19,506	23.3%	52.1	58.8	12.9%
UK Equity Index Fund	Not available	8,465	Not applicable	86.3	83.8	-2.9%

1) Emissions intensity has been converted (in full or in part) from USD to GBP using the rate $1.219727: £1 as at 30 September 2023
2) Emissions figures for the Diversified Growth Fund provided relate to 50.4% of the fund's holdings (including equities, bonds, and property assets), adjusted to 100%. In 2022, these holdings represented 23.3% of the overall portfolio and covered the equity holdings only
3) The investment manager for this portfolio was unable to provide an estimate of the absolute emissions attributable to the UKRF's investment
4) This figure represented the greenhouse gas intensity of an economy (in tonnes per GBP million GDP nominal)
5) The figure reported for 2022 related to 20% of the Cash Fund's holdings. The figure for 2023 relates to 90% of the Cash Fund's holdings

The increases in absolute emissions reflect the significant increase in data availability for the Diversified Growth Fund and Cash Fund. See the footnotes on the previous page and Commentary on Findings for more information.

Metric 1 (Absolute Emissions), Metric 2 (Emissions Intensity) – Scope 3

Portfolio	Absolute Emissions (tCO2e) 2023	Emissions Intensity (tCO2e/£m) 2023[1]
Diversified Growth Fund	222,822[2]	433.4
Over 15 Years UK Gilt Index Fund	Not available	Not available
Cash Fund	6,984	110.8
Global (ex-UK) Equity Index Fund	140,722	440.9
UK Equity Index Fund	94,616	983.8

1) Emissions intensity has been converted (in full or in part) from USD to GBP using the rate $1.219727: £1 as at 30 September 2023
2) Emissions figures for the Diversified Growth Fund provided relate to 50.4% of the fund's holdings (including equities, bonds, and property assets), adjusted to 100%.
Note: DC analysis provided by BlackRock. Please refer to the data disclaimer in Appendix D.

Metric 3: Non-emissions-based Metric – Data Quality (%)

The data used to calculate the emissions-based metrics for the DC section of the Fund was completed using a line-by-line format by BlackRock, the UKRF's DC investment manager. As for the 2022 report, the Trustee noted that it was not possible to achieve 100% coverage of the assets within these funds. A summary of data coverage for the DC section of the Fund is set out in the table below. This is at an aggregate level covering the applicable funds (Default Lifestyle ranges and popular arrangements) and shows an increase in data coverage for the year to 30 September 2023. Improving data coverage was, and continues to be, a key area of focus for the Trustee.

Emissions Data	Data Coverage 2022	Data Coverage 2023
Scope 1 and 2	58.5%	84.6%
Scope 3	Not available	62.8%

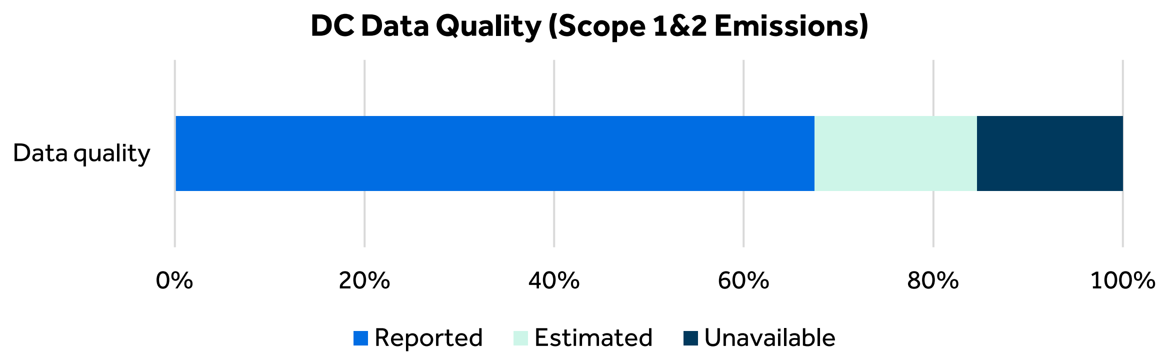
The table overleaf shows the breakdown of data availability for the emissions metrics at a portfolio level for the applicable funds in the DC section of the UKRF as at 30 September 2023.

Scope 1, 2 and 3 Emissions-based Data Coverage

Portfolio	Scope 1 and 2 Emissions-based Data Coverage 2022	Scope 1 and 2 Emissions-based Data Coverage 2023	Change in Emissions-based Data Coverage (ppts)	Scope 3 Emissions-based Data Coverage 2023
Diversified Growth Fund[1]	71.7%	96.6%	24.9	61.2%
Over 15 Years UK Gilt Index Fund	Not available	Not available	Not applicable	Not available
Cash Fund[2]	77.0%	89.8%	12.8	71.8%
Global (ex-UK) Equity Index Fund	86.0%	99.3%	13.3	99.4%
UK Equity Index Fund	Not available	95.2%	Not applicable	93.1%

1) For the Diversified Growth Fund, the coverage is reported for 50.4% of the fund's holdings (including equities, bonds, and property assets), compared to 23.3% in 2022
2) For the Cash Fund, the coverage is reported for all assets in the Cash Fund in 2023, but only the self-select portion of assets in 2022, which accounted for 26% of the assets in the Cash Fund

The figure below shows the breakdown of emissions-based data quality for the DC section of the UKRF as at 30 September 2023 for Scope 1 and 2 emissions data. Data quality information was not available for the Scope 3 data this year.



Metric 4 (Portfolio Alignment)

Portfolio	Portfolio Alignment (SBTi Score %) 2022	Portfolio Alignment (SBTi Score %) 2023	Change in Portfolio Alignment Score (ppts)
Diversified Growth Fund	4.9%	37.0%	32.1
Over 15 Years UK Gilt Index Fund	Not available	Not available	Not applicable
Cash Fund	Not available	6.6%	Not applicable
Global (ex-UK) Equity Index Fund	35.3%	40.4%	5.1
UK Equity Index Fund	Not available	45.6%	Not applicable

Commentary on Findings

The Trustee noted the following:

- The Diversified Growth Fund had the largest absolute emissions of the DC funds and had the largest assets under management. The increase in absolute emissions and emissions intensity year on year reflects the fact that a greater proportion of assets within the Diversified Growth Fund were incorporated into the metric analysis (50.4% of assets, up from 23.3%). The type of assets covered has also been expanded from equities to include bonds and property assets. Diversified Growth Fund data coverage and portfolio alignment both improved.
- The Over 15 Years UK Gilt Index Fund was the most emissions intensive fund. The fund is made up of UK gilts. The approach to calculating emissions intensity is different to the other DC funds and considers the fund's exposure to the UK economy rather than specific assets.
- Absolute emissions and emissions intensity are small for the UK Cash Fund relative to the other DC funds and, as such, an increase in either metric results in a material percentage change. Changes in asset allocation and improved data coverage have given rise to increases in both absolute emissions and emissions intensity for the year to 30 September 2023.
- Absolute emissions increased in the year to 30 September 2023 for the Global (ex-UK) Equity Index Fund as a result of increasing assets under management. Emissions intensity also increased in the year, largely driven by exchange rate movements. Data coverage improved year on year.
- This is the first year of reporting on the Equity Index Fund as it qualified as a popular arrangement in the year to 30 September 2023. The portfolio alignment score for this fund was higher than any other UKRF DC fund considered at 45.6%.

4.5b DC Section – Performance Against Targets

To measure progress against its 2030 ambition, the Trustee calculated the weighted average emissions intensity of its Default Lifestyle ranges using Scope 1 and 2 emissions data. This approach is in line with the baseline methodology. The Default Lifestyle ranges include the Diversified Growth Fund, the Over 15 Years UK Gilt Index Fund, and the Cash Fund. The Default Lifestyle component of these funds made up 65.3% of total DC assets as at 30 September 2023.

To measure progress against its 2050 ambition, the Trustee calculated absolute emissions for all DC assets for which Scope 1 and 2 data was available (i.e. the Default Lifestyle ranges and popular arrangements). The baseline for the 2050 ambition included estimated emissions for all DC assets so progress against this ambition may be overstated as emissions data coverage as at 30 September 2023 was not 100%.

The position for the covered assets as at 30 September 2023 is shown in the table below.

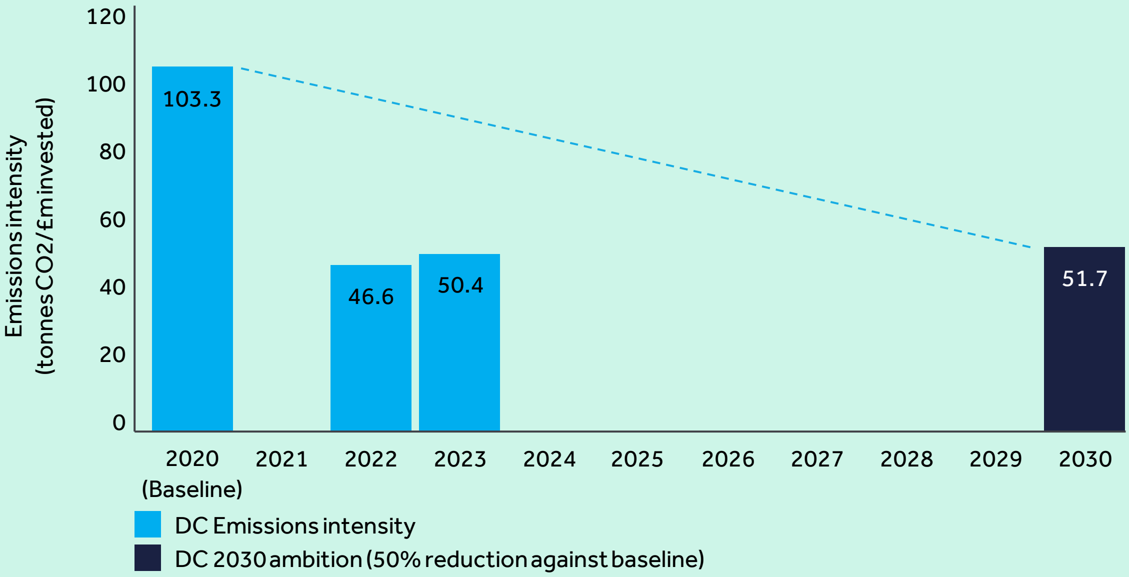
Progress Against the Trustee's Ambitions

Metric	Measurement	Target Year	31/12/2020 Baseline	30/09/2022	30/09/2023
Emissions Intensity	tCO_2e / £m	2030	103.3	46.6	50.4
Absolute emissions	tCO_2e	2050	104,292	25,026	50,656

The updated baseline emissions intensity as at 31 December 2020 was 103.3tCO_2e/£m. This was calculated using the weighted average emissions intensity of the Default Lifestyle ranges. The Trustee noted an overall 51.2% reduction against the baseline emissions intensity as at 30 September 2023. This compares to the 2030 ambition of a 50% reduction. Whilst the position at the reporting date marginally exceeds the 2030 ambition, there may be some volatility in emissions intensity as it can be impacted by various factors, including changes in absolute emissions, market valuations and interest and exchange rate movements. The Trustee will continue to monitor the trajectory of this metric over the coming years to ensure emissions remain aligned or better than the 2030 ambition.

The chart below shows progress made against the Trustee's 2030 ambition.

Trajectory to the Trustee's 2030 ambitions (DC)



Trajectory to the Trustee's 2030 ambitions (DC)

↓ 51.2%

DC reduction from 2020-2023

The updated baseline absolute emissions as at 31 December 2020 was 104,292tCO2e. This was calculated for all DC assets. In the year to 30 September 2023, absolute emissions were 51.4% lower than the baseline. However, Scope 1 and 2 emissions data wasn't available for all DC assets so absolute emissions may be understated relative to the baseline. In the future, the UKRF's reported carbon emissions may increase, as data coverage and reporting improve, before they decrease, reflecting the actions the Trustee is taking. The Trustee is taking the following steps to achieve its ambitions:

- Applying targeted engagement with the Fund's investment managers focussed on decarbonisation amongst high emitting assets;
- Further integrating climate considerations into investment decision making;
- Collaborating with other industry participants to support decarbonisation efforts (see Governance Section for more details);
- Exploring low-carbon alternative investment options;
- Monitoring the Fund's investment managers of all portfolios to ensure they are taking necessary action to align their portfolios with the Trustee's climate-related objectives; and
- Monitoring voting activities, carried out by the investment managers, to encourage investee companies to take a long-term, responsible approach to business strategy.

4.6 – Climate Metrics Concluding Remarks

To be able to make well-informed decisions, the Trustee requires accurate data that covers a sizeable proportion of its assets across both the DB and DC sections of the UKRF. The Trustee identified some data coverage issues that constrained its investment decision making in relation to climate-related risks and opportunities. The Trustee will continue to work with its investment managers and is supportive of future industry developments to improve the scope and quality of analysis as a result.

The Trustee notes that the metrics and analysis included within this report are subject to change as industry best practice and methodologies evolve. It is also taking action to improve data availability, quality, and coverage over time, facilitating broader coverage of asset classes. The Trustee will endeavour to clearly signpost any changes to the metrics in future reports.

Appendices

Appendix A: Glossary of Technical Terms

Technical Term	Description/ Definition
Baseline	The position as at 31 December 2020 against which progress is measured when considering the Trustee's climate ambitions
BFTL	Barclays Pension Funds Trustees Limited
CCRMP	The Trustee's Climate Change Risk Management Policy, which sets out the climate-related investment principles of the Barclays Bank UK Retirement Fund
CRREM	The European Union's Carbon Risk Real Estate Monitor tool. See Appendix B
Defined Benefit (DB)	A type of pension scheme in which an employer promises a specified schedule of pension payments during retirement that is predetermined by a formula based on the employee's earnings history, tenure of service and age, rather than depending directly on individual investment returns
Defined Contribution (DC)	A type of pension scheme, also known as a money purchase scheme, that provides retirement savings from the fund built up from contributions paid and investment returns achieved. Contributions may be made by the employer and/or employee and include any contributions made via salary sacrifice
EOS	Hermes Equity Ownership Services Limited
ESG	Environmental, Social, Governance
Federates Hermes	Hermes Equity Ownership Services Limited
Financial Services Compensation Scheme (FSCS)	The UK's compensation scheme that protects customers when authorised financial services firms fail
Greenhouse gas (GHG)	Gases that trap heat in the Earth's atmosphere
Gilts	UK Government Bonds
GRESB	The Global Real Estate Sustainability Benchmark. GRESB is an independent organisation providing validated Environmental, Social and Governance performance data and peer benchmarks
IAG	Investment Advisory Group. The IAG was formed of Trustee Directors and advisers to consider investment matters. It was a predecessor to the Investment Committee

Technical Term	Description/ Definition
IAMA	Investment Advisory Management Agreement. This is the document that governs the delegation of investment management activity by the Trustee to Oak Pensions Asset Management (OPAM)
IIGCC	Institutional Investors Group on Climate Change, a European membership body for the investment community
FRC	Financial Reporting Council, an independent regulator in the United Kingdom (UK) and Ireland, responsible for regulating auditors, accountants and actuaries and setting the UK's Corporate Governance and Stewardship Codes
OPAM	Oak Pensions Asset Management. The Trustee appointed OPAM to act in a fiduciary capacity with regards to investing the assets of the Fund. This means that OPAM has responsibility for managing the assets of the UKRF on behalf of the Trustee with a view to achieving the Trustee's investment objectives
ppts	Percentage points
PRI	Principles for Responsible Investment. The United Nations supported Principles for Responsible Investment describe six principles covering Environmental, Social and Governance issues and how these impact the investment decision process. The Trustee is a signatory to those principles
PRA	Prudential Regulation Authority. The PRA is regulatory body for financial services in the United Kingdom
RI	Responsible Investment
SBTi	Science-Based Targets initiative, which defines and promotes best practice in science-based target setting
TCFD	Task Force on Climate-related Financial Disclosures. The Task Force was created in 2015 to improve and increase reporting of climate-related financial information
The Fund	The Barclays Bank UK Retirement Fund
The Regulations	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
tPR	The Pensions Regulator. TPR regulates work-based pension schemes in the United Kingdom
Trustee	Barclays Pension Funds Trustees Limited
UKRF	The Barclays Bank UK Retirement Fund

Appendix B: Carbon Risk Real Estate Monitor ('CRREM') tool

The CRREM Risk Assessment Tool to identify stranded assets is designed for asset owners and investors to understand the climate risks inherent in their real estate portfolio. CRREM has derived decarbonisation pathways by breaking down the global anthropogenic GHG emissions budget that is consistent with the Paris Climate Agreement towards individual countries, the commercial real estate sector, property types and individual assets. The CRREM tool offers the possibility to evaluate the progress of a portfolio's carbon reduction performance against reduction targets (the developed "pathways") in line with the Paris Agreement.

The CRREM tool helps to identify which properties will be at risk of stranding due to the expected increase in stringent building codes, regulation, and carbon prices. It also enables an analysis of the effects of refurbishing single properties on the total carbon performance of a company, including by assessing emissions related to the embodied carbon of the energetic retrofit itself. Further details can be found in the Carbon Risk Real Estate Monitor document.

Appendix C: European Union's Climate Transition Benchmark

The European Union's Climate Transition Benchmark aims to assist in meeting the decarbonisation objectives set by the European Union's Sustainable Finance Action Plan. It incorporates specific objectives related to GHG emission reductions and the transition to a low-carbon economy through the selection and weighting of underlying constituents.

Further details can be found in the Commission Delegated Regulation (EU) 2020/1816 of 17 July 2020.

Appendix D: Data Disclaimer

- This report was prepared by Barclays Pension Funds Trustees Limited in accordance with 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 along with the subsequent statutory guidance released by the Department for Work and Pensions in 2022 (collectively 'the Regulations' in this document). As stated within the report, there are inherent limitations in the provision and quality of the data provided by investment managers. Whilst the Trustee has sought to perform checks of the data where possible, the data has not been fully audited.
- All absolute emissions, emissions intensity, data quality and portfolio alignment metrics have been obtained from the appointed investment managers. Whilst the Trustee's advisors and OPAM have undertaken some checks on the figures provided, the Trustee cannot be held responsible for errors in the emissions data.
- The emissions data for the Buy & Maintain mandate, Corporate Credit mandates, Infrastructure Equity, Real Estate Fund 1, Real Estate Fund 2, Infrastructure Debt Fund 1, Infrastructure Debt Fund 2, and Commercial Ground Rents were calculated and provided by the UKRF's respective investment managers.
- The emissions data for the LDI Fund 1 was calculated by Insight Investment Management. The following inputs and assumptions apply:

To calculate the emissions attributable to Gilts, Insight have used the latest annual Scope 1 and Scope 2 CO2e emissions data produced by the Department for Business, Energy & Industrial Strategy ('BEIS') and apportioned these figures to the total market value of Gilts and in issuance as at 30 September 2023. Gilts posted out as collateral by the UKRF 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. Scope 3 emissions are not included.

- The emissions data for part of the Corporate Credit mandate, LDI Fund 2, Diversified Growth Fund, Global (ex-UK) Equity Index Fund, Cash Fund, UK Equity Index Fund and Over 15 Years UK Gilt Index Fund were calculated by Blackrock Investment Management (UK) Limited. The emissions data for these assets is from MSCI. Please see MSCI data disclosure below:

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