United Utilities Pension Scheme (the “Scheme”)

Climate Change Report

Reporting period: 12 months to 31 March 2024

October 2024

Contents

Executive Summary

Dear Members,

Welcome to our second climate change report. While this report is now a regulatory requirement, the Trustee believes that climate risk management is about more than "compliance". The Trustee views climate change as a risk to society, the economy and the financial system, and we recognise that the transition to a lower carbon world presents investment opportunities. With these risks and opportunities in mind, the Trustee is pleased to present the report. We summarise below some highlights.

Managing Climate Risks and Opportunities – Governance and Risk Management Highlights

The Trustee has a robust framework for managing climate related risks and opportunities. Key elements of this activity are summarised below. You can find more on these topics in the Governance and Risk Management Sections of this report.

Climate-related risks and opportunities are reviewed regularly at Trustee Board and relevant Sub-Committee meetings, and feature as a substantive part of the agenda in meetings with our advisers, investment managers, and with the insurance company that provides the Scheme's "buy-in" policy.

The Scheme has implemented guidelines within a number of investment mandates that integrate climate risk considerations explicitly within how our investments are managed. This helps improve the resilience of the Scheme to long-term climate risks, as well as offering access to growth opportunities, such as in new technology and renewable energy.

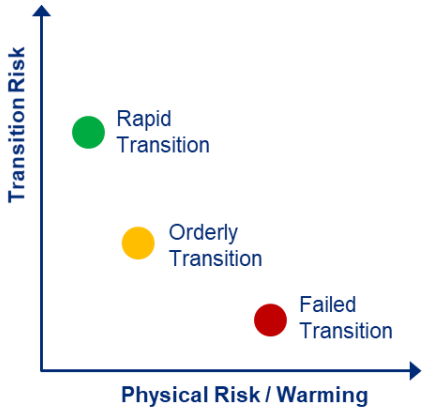
Whenever a new investment fund, investment manager, or insurance investment policy is selected, a thorough assessment of how the provider integrates consideration of environmental, social, and governance ("ESG") factors into their approach is made, including receipt of professional, independent advice on this matter.

The Trustee expects, and encourages, its investment managers to use stewardship (voting and engagement) to engage with investee companies on climate change and ESG topics. We report on this annually in the Implementation Statement, including details of significant votes on climate change.

Future Climate Scenarios – Potential Impact on the Scheme

Climate change is uncertain and complex. Government policies, technological developments, and the actions of companies and consumers will all influence future scenarios. To ensure that the Scheme is resilient to plausible scenarios, the Trustee has assessed three possible outcomes:

- **Rapid Transition:** Average temperature increase of 1.5°C by 2100 (relative to pre-industrial average). This could be driven by an acceleration of government policy changes, or unexpected developments in technology.
- **Orderly Transition:** Average temperature increase of less than 2.0°C by 2100. This assumes governments and wider society act in a co-ordinated way to decarbonise.
- **Failed Transition:** Average temperature increase above 4°C by 2100, as the world fails to co-ordinate a transition to a low carbon economy. Physical impacts significantly reduce economic growth and have increasingly negative impacts. For our Scheme, this is the most negative and damaging scenario over the long-term.



As there were no material changes to the overall risk and return objectives of the Scheme's investment strategy during the year, the Scheme's scenario analysis (detailed in our 2023 report) has not been repeated during the year covered by this report. However, the conclusions from the prior analysis remain relevant and a summary has been included in this report for reference, in the Strategy Section.

Climate Metrics

Climate metrics have two important roles.

- Firstly, by considering metrics for individual investment mandates and funds, they can help to identify climate risks and opportunities. For example, by highlighting funds that have a relatively high carbon footprint.
- Secondly, metrics are useful in charting the progress of the Scheme's investments over time.

The Trustee has selected the metrics in the table below. The metrics in the table, with the exception of sovereign carbon intensity, relate to assets in scope for the Trustee's climate-related target which includes listed equity and credit assets. Additional metrics for sovereign assets (those issued by states, such as government bonds) are shown in the Metrics and Targets Section of this report.

Over the year to 31 March 2024, the Trustee took further steps to provide benefit security for members through the purchase of a bulk annuity insurance ("buy in") policy in respect of a portion of the DB Section liabilities. The purchase of this policy was a key driver of the reduction in emissions over the year in the residual asset portfolio outside the buy-in. The insurer, Legal & General (L&G), manages the underlying assets "backing" the policy. The Trustee does however review and monitor climate metrics for the insurer's asset portfolio. Currently, these metrics are published at a different date and in a different format to the metrics of managers of the Scheme's investment portfolios. The metrics for the buy-in policy are included in full later in this report. L&G has committed to achieving net zero across its annuities book of business in aggregate by 2050 to align with the Paris Agreement on Climate Change. There is also an interim target to halve the portfolio carbon emission intensity by 2030.

Metric category	Metric	What does this represent?	Emissions Scope[1]	DB Section at 31 March 2024 (at 31 March 2023)	DC Section at 31 March 2024 (at 31 March 2023)
Absolute emissions	Total Greenhouse Gas Emissions	The tonnes of carbon dioxide and equivalents that the Scheme is responsible for financing.	1 and 2	9,000 tCO2e (66,661 tCO2e)	16,764 tCO2e (14,040 tCO2e)
			3	73,456 tCO2e	151,321 tCO2e
Emissions intensity	Carbon Footprint	The amount of carbon dioxide and equivalents (tCO2e) emitted per million US dollars of Scheme investments.	1 and 2	32.0 tCO2e/$m Invested (51.4 tCO2e/$m Invested)	39.0 tCO2e/$m Invested (42.9 tCO2e/$m Invested)
			3	253.0 tCO2e/$m Invested	352.0 tCO2e/$m Invested
	Sovereign carbon intensity	Sovereign assets are issued by governments. This metric divides a country's greenhouse gas emissions by its "purchasing power parity"- adjusted gross domestic product, to take into account the size of a country's economy.	Production (scope 1) and consumption (scopes 1,2 and 3 minus exported emissions)	Not available – see Metrics and Targets Section of report for more on data availability	227.4 tCO2e /$m PPP-adjusted GDP[2]
Portfolio Alignment	% of portfolio with targets approved by the Science Based Targets initiative (SBTi)	Assessment of the proportion of portfolio companies / issuers of securities with net-zero targets validated by the SBTi	Not applicable	40.4% (26.9%)	39.5% (32.2%)

Metric category	Metric	What does this represent?	Emissions Scope[1]	DB Section at 31 March 2024 (at 31 March 2023)	DC Section at 31 March 2024 (at 31 March 2023)
	Implied Temperature Rise (ITR)	A measure of how aligned the assets are relative to the goal of the Paris Agreement to limit the global temperature increase to 1.5°C. This is estimated based on the activities and targets of issuers, relative to what is needed to achieve 1.5°C.	Not applicable	1.8°C (2.2°C – 2.7°C)	2.1°C – 2.7°C (2.3°C – 2.9°C)
Additional	Data Quality	The proportion of the assets for which there is high quality data.	1 and 2	74.0% reported, 11.0% estimated (63.6% reported or Estimated)	77.7% reported, 7.8% estimated (70.8% reported, 10.8% estimated)
			3	88.0% estimated	25.6% reported, 59.6% estimated

[1] Emissions are categorised into 3 "scopes". Broadly speaking, scope 1 emissions are direct emissions arising from sources owned or controlled by a company. Scope 2 emissions are indirect emissions caused by the generation of energy bought by a Company. Finally, scope 3 emission are also "indirect", and represent emissions that occur in the value chain of the reporting company. More details can be found in the Metrics and Targets Section.
[2] Please note that the data providers have aggregated production and consumption emissions for this metric.

The metrics used all have their pros and cons, and data standards (and availability) are still developing. It is important to note that the metrics are limited by the available data. However, the Trustee has set out in the Metrics and Targets Section details of these metrics and actions being taken in this regard.

The Scheme's Climate Target

The Trustee has set a firm ambition given the significance of climate change risks, and with this in mind has set a "net zero" emissions target by 2050 for listed equity and credit assets. The Trustee has also set an interim target of achieving a 50% reduction in scope 1 and 2 emissions for listed equity and credit assets by 2030, as measured by the carbon footprint metric, relative to a baseline date of 31 March 2023. The rationale for this is:

Grounded in science

This target is considered necessary to reduce greenhouse gas emissions and keep global warming to 1.5°C, meeting the goals of the Paris Climate Agreement.

Clear plan with investment managers

The Scheme's investment managers are committed to net zero by 2050. Therefore, the assets are expected to get to net zero and the Trustee can objectively follow up against this goal with their managers.

Alignment with the sponsoring employer

United Utilities has also set a net zero target. While recognising that pension schemes and companies have different legal and financial duties, a joined-up approach can be an enabler of success.

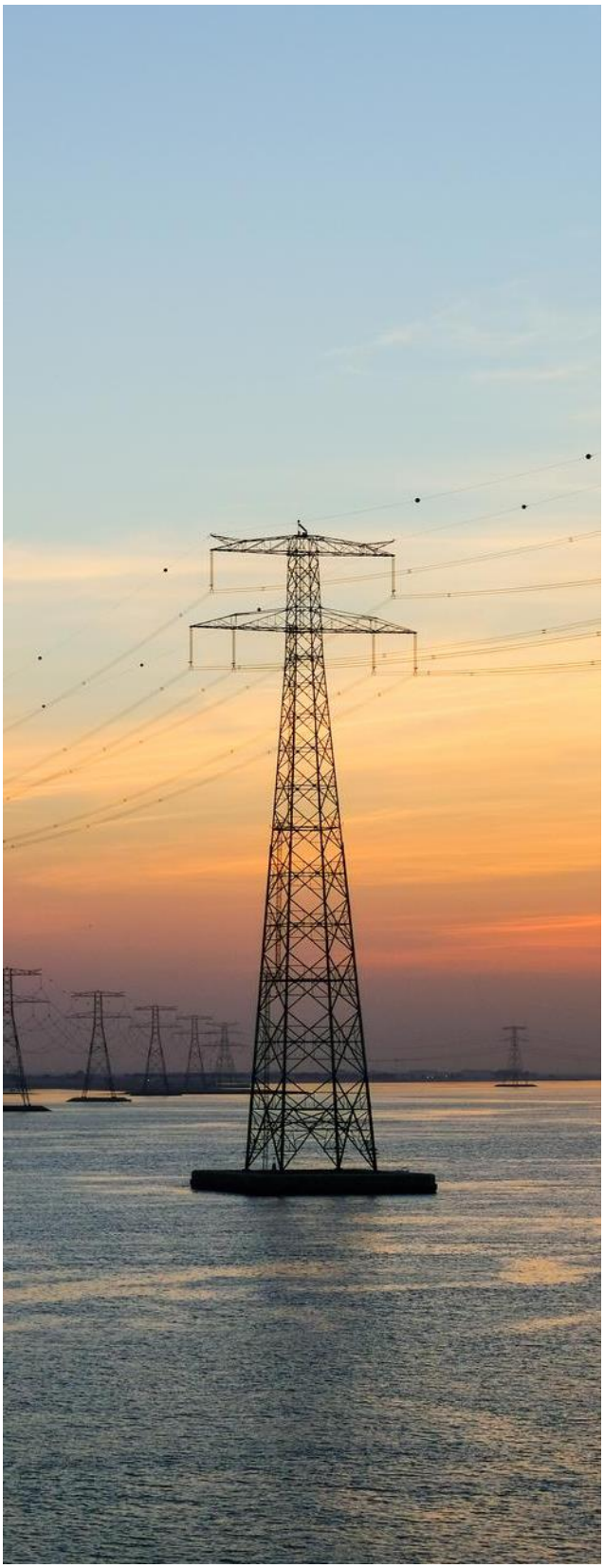
Over the year to 31 March 2024, the Scheme has achieved a 38% reduction in carbon footprint in the DB Section and a 9% reduction in the DC Section (in respect of the DC Section, the latest reduction follows a very large reduction in the prior reporting year). You can read more about the target, the reduction achieved over the year, and steps being taken to achieve the target, in the Metrics and Targets Section.

What's Next?

This report is prepared annually and published in the public domain. The Trustee welcomes feedback from members and looks forward to sharing ongoing reporting on climate risks and opportunities, alongside the range of other communications material available to members.

Section 1

Introduction



Dear Members,

Welcome to the Scheme's second climate change report, which has been prepared in line with the recommendations of the Task Force on Climate-related Financial Disclosures ("TCFD") and the statutory requirements prescribed by the Department of Work and Pensions[1].

The Trustee has a fiduciary duty to invest the Scheme's assets appropriately. As part of this duty, the Trustee recognises climate change as a risk that could impact the security of members' benefits if it is not properly measured and managed. The Trustee also recognises that climate change presents opportunities to invest in companies or assets that are expected to perform well in an economy that is positioned to address the challenges associated with climate change.

Climate change may also affect the Scheme's liabilities (for example, through how changes to the climate could impact how long we all live), and on the sponsoring employer. The Trustee looks to manage these risks through an integrated lens.

The Trustee's assessment of climate-related risks and opportunities has been carried out based on information that is currently available, both in terms of data, the assumptions made in the analysis, and in consideration of the different potential global warming outcomes. The Trustee keeps up-to-date on developments in this area through training and use of specialist advisers, in order to ensure that the Scheme's approach evolves over time.

Climate change is one risk among many that the Trustee measures, monitors and manages. Therefore, it is considered alongside other risks in a balanced and proportionate way. The Scheme will therefore continue to invest in companies where there is a sufficiently attractive investment case and the investment manager believes there is an opportunity to engage and influence change in the behaviour and actions of a company.

[1] The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 and the Occupational Pension Schemes (Climate Change Governance and Reporting) (Miscellaneous Provisions and Amendments) Regulations 2022

This report has been split into several sections:

Governance: How the Trustee incorporates climate change into its decision making.

Strategy: How potential climate warming scenarios could impact the Scheme, and how assessment of climate change has influenced Scheme strategy and policy.

Risk Management: How the Trustee incorporates climate-related risk in its risk management processes.

Metrics and Targets: How the Trustee measures and monitors progress against different climate-related indicators known as metrics.

The final section sets out the methodology and assumptions used to produce the information contained in this report.

The Scheme is a hybrid scheme consisting of Defined Benefit (DB) and Defined Contribution (DC) benefits. Both Sections of the Scheme are covered in this report.

Members are encouraged to contact us if there are comments you wish to raise. You can contact the Scheme administrator through a range of channels:

DB (including hybrid) members:

Email uups@wtwco.com

Telephone 0113 394 9309

Online: https://epa.towerswatson.com/accounts/uup/

DC members, including members with Additional Voluntary Contributions (AVCs):

Email mypensions@aegon.co.uk

Telephone 01733 353481

Online: https://lwp.aegon.co.uk/targetplanUI/login

Chair, United Utilities Pension Scheme

Section 2

Governance

Introduction

The Trustee has ultimate responsibility for ensuring effective governance of climate-related risks and opportunities. The Trustee maintains an Environmental, Social, and Governance (ESG) Policy which sets out our approach to climate change, along with other ESG considerations.

The Trustee's key beliefs on climate change, as stated in the ESG Policy, are:

- That a sustainable investment approach is more likely to create and preserve long-term value and, specifically, that climate change can have a material impact on long-term risk and return outcomes and should be integrated into the investment process and strategy.
- Good stewardship (voting and engagement) can create and preserve value for companies and markets, hence having the potential to benefit members in the long term.
- Climate change poses a systemic risk, and accordingly the Trustee will consider the potential financial impacts of both the associated transition to a low-carbon economy and the physical impacts of different climate outcomes.
- Climate change, and other ESG matters, will affect more than just the Scheme's assets. As such, the Trustee views these factors through an integrated risk management lens, including investment, funding, and covenant considerations.

The Trustee maintains a Statement of Investment Principles ("SIP"), which details the Scheme's investment objectives, policies, and our approach to risk management. The SIP also sets out how the Trustee considers ESG factors, including climate change, as part of its investment decision making. The SIP is reviewed annually or following a significant change in investment policy.

Roles of those undertaking Scheme governance activities

The Trustee

The Trustee maintains oversight of climate-related risks and opportunities by:

- Ensuring that the Trustee Board has sufficient knowledge and understanding of climate change to fulfil its statutory and fiduciary obligations and keeps this knowledge and understanding up to date.
- Putting in place climate governance arrangements, and ensuring they remain appropriate and effective. This includes the maintenance of the ESG Policy.
- Identifying and assessing climate-related risks and incorporating these in the Scheme's Risk Register, along with appropriate controls.
- In respect of the DB Section, considering how climate-related risks and opportunities might affect the Scheme's funding position over the short, medium and long term, and ensuring that climate factors are taken into account in any strategic decisions relating to the funding arrangements.
- Ensuring that the investment, actuarial, covenant, and legal advisers, and the bulk annuity insurer, have clearly defined responsibilities in respect of climate change, and that they have adequate expertise and resources, including time and staff, to carry these out.
- Setting strategic objectives for the investment adviser, and reviewing annually performance against these objectives. This activity takes place primarily through the Investment Sub-Committee and DC Sub-Committee (see below) but is also considered by the Trustee Board annually.
- Communicating with Scheme members and other stakeholders on climate change, including public reporting (for example, the publication of the Chair's Statement, Implementation Statement, and SIP).

The Trustee also considers the roles of others undertaking Scheme governance activities, in particular the Sub-Committees to the Trustee, and the advisers.

Investment Sub-Committee (ISC)

The ISC oversees the Scheme's DB investments. Its role includes the following in relation to climate change:

- Incorporating climate-related considerations into strategic decisions relating to the investments. This includes considering climate scenario analysis for the DB Section.
- Ensuring that the investment managers are managing climate-related risks and opportunities in relation to the Scheme's investments, and have appropriate processes, expertise and resources to do this effectively. This includes meeting at least annually with each investment manager to discuss the Scheme's investments. These meetings include discussions regarding the integration of climate change considerations in the investment manager's process and portfolio.
- Selecting and regularly reviewing metrics for the DB Section to inform the identification, assessment and management of climate-related risks and opportunities, and monitoring targets to track and seek to improve these metrics over time where appropriate (target setting responsibility sits with the full Trustee Board, supported by the Investment Sub-Committee).
- Working with advisers to identify new and emerging risks and opportunities in relation to climate change.

While the ISC is investment-focused, its work is undertaken within an integrated risk management framework where funding and covenant issues are also considered. The funding adviser inputs to ISC meetings as appropriate, to ensure a joined-up approach is taken.

DC Sub-Committee (DCSC)

The DCSC oversees all aspects of the Scheme's DC arrangements. Its role includes the following in relation to climate change:

- Incorporating climate-related considerations into strategic decisions relating to the investments, including both within the default investment option and the self-select fund range. This includes considering climate scenario analysis for relevant funds of the DC Section.
- Ensuring that the Scheme's investment managers are managing climate-related risks and opportunities in relation to the Scheme's investments, and have appropriate processes, expertise and resources to do this effectively. This includes meeting as deemed appropriate with each investment manager to discuss the Scheme's investments. These meetings include discussions regarding the integration of climate change considerations in the investment manager's process and portfolio.
- Selecting and regularly reviewing metrics for the DC Section to inform the identification, assessment and management of climate-related risks and opportunities, and monitoring targets to track and seek to improve these metrics over time where appropriate (target setting responsibility sits with the full Trustee Board, supported by the ISC and DCSC).
- Identifying and implementing the member communication and engagement strategy for the DC Section, including sustainability issues. This recognises that DC members have more choices to make regarding their investments and benefits, and therefore that a focused and engaging communication approach is necessary.
- Working with advisers to identify new and emerging risks and opportunities in relation to climate change.

Governance, Risk and Audit Sub-Committee (GRASC)

The GRASC's role in the context of climate change includes (but is not limited to):

- Reviewing the Trustee's annual report and financial statements prior to their approval by the Trustee Board, including consideration of the various statements included in the report and financial statements, such as the Implementation Statement (covering climate change and other ESG topics).
- Reporting to the Trustee on a quarterly basis on key risks and the internal controls in place, highlighting any areas for discussion or action. The Scheme's risk register is used to support this reporting and risk management (see later disclosures in the Risk Management Section).
- Reviewing the training plan for Trustee Directors, and making recommendations to the Trustee Board in this regard. This helps the Trustee ensure that training needs in relation to climate change are met.

Joint Working Group (JWG)

The primary role of the JWG is to facilitate collaboration and discussion between the Trustee and the sponsoring employer on strategic matters. While typically climate risk and opportunity management will sit with the ISC, the DCSC, and the Trustee Board, the JWG is a forum that plays a role in assisting with two-way communication between the Trustee and the sponsoring employer on climate matters.

The JWG will also identify and make recommendations on means of managing the Scheme's strategic position dynamically and proactively, by a structured consideration of risk and reward, market related issues, and any other relevant information, including climate change considerations.

ESG Sub-Group

The Trustee has put in place an ESG Sub-Group to assist the Trustee Board and its Sub-Committees in fulfilling its oversight duties relating to ESG matters, including climate change. Decision-making continues to sit with the Trustee Board and the relevant Sub-Committees. The ESG Sub-Group's remit includes:

- Overseeing the timeline and deadlines associated with climate change reporting.
- Co-ordinating the four strands of TCFD reporting (governance, strategy, risk management, metrics & targets) to ensure that each aspect is addressed by the appropriate Sub-Committee or the Board.
- Ensuring consistency, where appropriate, in the approach taken on ESG matters across various pension arrangements within the United Utilities Group.
- Maintaining a training and development programme relating to climate change and other ESG issues.
- Identifying risks, issues, opportunities, agenda points, training needs, and opportunities to be addressed by the Scheme's Sub-Committees or the Board.

For the avoidance of doubt, the ESG Sub-Group is not expected to make decisions on Scheme policies, investment strategy, or governance arrangements but will make recommendations to the appropriate executive committee from time to time.

Other Governance Bodies

From time to time, the Trustee establishes other working groups or project teams with a specific area of focus such as the triennial actuarial valuation. These are not permanent bodies but when operational, climate change issues may feature in the work of these groups.

Of particular note during the period covered by this report, the Trustee explored ways to further increase security for members, resulting in the purchase of an insurance "buy-in" policy covering a portion of the liabilities of the DB Section. A Project Board was established (a joint working group with the sponsoring employer) to oversee the buy-in project, with a Project Delivery Group then undertaking some of the more detailed work. These groups considered climate change and sustainability matters as part of their role, including within the insurer selection process.

In-house Pensions Team

The Trustee is supported in running the Scheme by the United Utilities in-house Pensions Team. This team provides secretarial, management, and governance services to the Trustee. The team's roles in relation to climate change are to:

- Ensure that meeting agendas and annual business plans are well structured to ensure that appropriate time and focus is given to climate matters.
- Undertake Scheme governance activities on behalf of the Trustee, such as assisting with the publication of required public disclosures.
- Maintain and monitor action logs, the risk register, Trustee training plans, and relevant project plans relating to ESG matters, including climate change, with support from the advisers as appropriate.

Roles of advisers and investment managers

The Trustee has appointed advisers to support the effective running of the Scheme. The advisers cover investment, funding, governance, legal, covenant, and communications matters. Most relevant in the context of climate change is the role of the investment adviser, details of which are summarised below.

Investment Adviser

The Trustee has appointed specialist investment advisers to cover the DB and DC Sections of the Scheme. In respect of both Sections, the DB Section and DC Section adviser:

- Advises on investment arrangements, taking into account climate risk, supported through the provision of climate scenario analysis.
- Advises on the choice of climate-related metrics and targets.
- Advises on investment manager selection, taking into account the Trustee's objectives, responsible investment beliefs, and climate-related considerations.
- Supports the Trustee with stewardship activities, which may be related to climate change, such as monitoring and reporting on voting and engagement activities of the invested assets, and assisting with the preparation of the annual Implementation Statement.
- Advises on the preparation of the SIP, including the policies that relate to climate change.
- Monitors investment managers through the use of ESG ratings provided by the investment adviser and relevant climate-related targets.
- Liaises with investment managers, the bulk annuity insurer, and other professional advisers to provide training to the Trustee and Sub-Committees on climate change, as appropriate.
- Assists the Trustee in producing the annual TCFD report.

In respect of the DB Section, the investment adviser also provides advice on whether to invest in insurance policies, and will provide input to the selection of insurers, where appropriate. This includes the consideration of climate change matters, such as the insurer's policies in this regard.

In respect of the DC Section, the investment adviser advises on both the default investment strategy and the self-select fund range, taking into account climate change considerations, and will assist with investment related member communications.

Investment Managers

The Trustee has delegated day-to-day management of the assets to investment managers, who operate under guidelines agreed with the Trustee (in the case of segregated mandates), or under pooled fund terms that have been considered by the Trustee (in the case of pooled funds). The managers have discretion, within the mandate terms, to evaluate climate change, and to exercise stewardship obligations attached to the assets. The Trustee expects its investment managers to undertake the following activities:

- Identify, assess, and manage climate-related risks and opportunities in relation to Scheme assets.
- Exercise rights (including any voting rights) attached to the investments, and to undertake engagement activities in respect of those investments, in relation to climate-related risks and opportunities that seeks to improve long-term financial outcomes.
- Report on stewardship activities and outcomes in relation to the investments.

- Provide information to the Trustee, the relevant Sub-Committees, and the Trustee's advisers on climate-related metrics, as agreed from time to time, and use its influence with investee companies and other parties to improve the quality and availability of these metrics over time.

Funding Adviser (DB Section)

- Advises on the funding position including an understanding of the potential funding impact resulting from changes to financial or demographic assumptions driven by climate change.
- Advises on the funding strategy's robustness to climate risk and provides input to enable strategic asset allocation decisions to be made considering the impact of risks.
- Provides input into scenario analysis and advises on funding implications, where appropriate.

Covenant Adviser

The covenant adviser assesses the sponsoring employer's ability and willingness to continue to support the Scheme. Climate-related exposures are considered alongside other factors that could have a positive or negative impact on the strength of the covenant.

Assessment of Advisers and Investment Managers

The Trustee expects its advisers, investment managers, the bulk annuity provider, and the in-house pensions team to act with integrity and diligence in fulfilling their objectives, and uses meetings with these parties to assess and challenge them. Where relevant, this includes discussion of steps taken to identify and assess any climate-related risks and opportunities.

How the investment adviser to both the DB Section and the DC Section approaches climate change, and how it is integrated into its advice and services, is assessed explicitly as part of the annual adviser monitoring process.

The Trustee sets specific DB and DC strategic objectives for the investment adviser to each Section, including objectives related to climate change. Performance is formally assessed against the objectives annually, and the objectives themselves are also reviewed each year.

The Trustee, via the ESG Sub-Group, carried out an assessment of the investment adviser against the climate competency framework set out by the Investment Consultants Sustainability Working Group in July 2023. This covered:

Firm-wide climate expertise and commitment | Individual consultant climate expertise | Tools and software | Thought leadership & policy advocacy | Asset manager assessment & engagement

In respect of other advisers, the Trustee formally reviews the performance of each adviser no less frequently than triennially. Where relevant, this includes a review of the adviser's performance in relation to climate risks and opportunities.

When tendering for new advisers, asset managers, or bulk annuity insurance policy providers, climate change knowledge, experience, and competency will be an explicit consideration in assessing potential providers.

The Trustee takes a proactive and inquisitive approach to working with its advisers and investment managers, and will challenge views presented in order to ensure that the advice provided to the Trustee and its Sub-Committees will facilitate effective and efficient decision-making.

Time and resources spent on climate change-related matters

The Chair of the Trustee Board, with support from the Chairs of the Sub-Committees, is responsible for ensuring that sufficient time is allocated for consideration and discussion of climate matters by the Trustee and its advisers. The Trustee Board and its Sub-Committees and working groups, as part of the regular meeting schedule, allocate agenda time to climate change topics, amongst other ESG matters.

Climate change forms an explicit agenda item at least annually for the Trustee and each relevant Sub-Committee when the Trustee's annual TCFD report is prepared. It is also covered as part of other agenda items and as part of a wider discussion of strategy, or as part of the investment manager selection and review discussions. The Trustee is satisfied that the amount of governance time spent is reasonable and will allocate more time at future meetings if any analysis or wider industry research requires additional Trustee review and consideration.

A number of activities are completed regularly in order for the Trustee to fulfil its responsibility for managing climate risks and opportunities. Many of these will cover wider ESG and investment risks other than just climate change risk, as the Trustee does not consider climate risks in isolation but holistically alongside the various other risks the Scheme faces. The activities are listed below as well as the frequency of the tasks:

- Climate change training session (minimum frequency = annual)
- Scenario analysis (minimum frequency = first year of TCFD reporting, and every 3 years thereafter. While this is the minimum, this work will also be carried out whenever the Trustee is considering significant strategy changes. The Trustee will also review the appropriateness of undertaking scenario analysis in light of material data availability changes and improvements in modelling)
- Metrics data collection (minimum frequency = annual)
- Climate-related target setting / target appropriateness review (minimum frequency = annual)
- Progress against climate-related target assessment (minimum frequency = annual)
- ESG beliefs (including climate change) update / review (minimum frequency = triennial)
- Review of investment manager ESG ratings provided by the investment adviser (minimum frequency = quarterly)
- Stewardship, as part of the annual Implementation Statement (minimum frequency = annual)
- Risk register review (minimum frequency = annual for full review, quarterly for monitoring existing risks and controls)
- Climate covenant assessment, within regular covenant review (minimum frequency = annual)
- Drafting annual TCFD report (minimum frequency = annual)

Spotlight on training

Alongside an element of training at every meeting whenever new topics are discussed, the Trustee sets aside a full day annually for training.

At the 19 September 2023 training day, the Trustee Board completed training on climate change, which included a focus on TCFD reporting, how climate risks (and opportunities) may impact the Scheme, and the role that stewardship can play. The Trustee Directors also received training on diversity, equity, and inclusion, which is another material ESG related theme.

The Trustee has in place a Training Policy which requires that Trustee Directors complete the Pensions Regulator's (tPR's) Trustee Toolkit training within six months of their appointment. The United Utilities Pensions Team also completes an annual review of tPR's Trustee Toolkit and will notify the Trustee Directors of any new training modules to be completed. Additionally, Trustee Directors undertake other training as identified in the annual Trustee Director Training Plan.

Governance activities carried out during the Scheme year

During the year to 31 March 2024, the Trustee continued to integrate consideration of climate change-related matters within the Scheme's governance arrangements, strategy, and in its approach to risk management. A summary of this work is provided in the following table.

Issue	Timing
ESG Sub-Group Meetings, including various policy / risk reviews: The ESG Sub-Group met three times during the year. Agenda items discussed included: - An in-depth review of ESG-related risks (and their documentation in the risk register) - The Trustee's first TCFD report - A review of the Trustee's ESG policy - Assessment of the investment adviser relative to the ICSWG (Investment Consultants Sustainability Working Group) framework - ESG Sub-Group training, for example on biodiversity and natural capital - Member communications on climate change issues, such as the development of a member infographic summarising the TCFD report - Preparation and maintenance of the Scheme's ESG workplan.	19 April 2023 26 July 2023 18 December 2023
Review of the Plan's first Climate Change report: This review by the full Trustee Board followed extensive work by the ISC, DCSC, and the ESG Sub-Group in relation to scenario analysis, metrics, targets, and stewardship.	12 September 2023
Stewardship: During the third quarter of 2023, the ISC, DCSC, and Trustee Board reviewed the annual Implementation Statement covering the period to 31 March 2023 and in particular considered the stewardship (voting and engagement) activities that had been carried out by the investment managers on the Trustee's behalf. The Trustee was satisfied that the stewardship activities were consistent with our policies in this area.	Q3 2023
DB Section Investment Manager meetings: The ISC met with two of the investment managers appointed to manage the DB Section assets. During the meetings the following topics were discussed, alongside broader investment updates: • For the **Liability Driven Investment (LDI)** portfolio, which invests primarily in UK Government bonds (gilts) and derivatives, the manager outlined how they consider climate change risk management in relation to gilts, and for counterparty banks in respect of derivatives. For example, this includes the manager using their proprietary ratings which integrate the manager's views on how trading counterparties score for various ESG issues, as well as details of engagement work with the Government's Debt Management Office on the framework for issuing green gilts. • In respect of **Buy & Maintain corporate bonds**, the manager discussed how they manage ESG risks and opportunities within their investment process, including the engagement approach to working with bond issuers. Case studies and examples of where ESG factors had influenced investment decisions were discussed. The manager also set out their priority themes for bond issuer engagement, which are climate change, water management, and diversity and inclusion. These themes align well with the Trustee's own priorities. • For the **Senior Private Debt** mandate, the manager has been open about the challenges in accessing good quality data in this market, where a detailed understanding of the underlying investment manager, borrowers, and loan structures is required. However, the manager discussed the allocation to infrastructure debt, which includes projects in renewable energy that play a role in the climate transition. The managers also discussed the metrics used to identify and manage ESG risks (see Metrics and Targets Section for details), as well as reviewing opportunities, such as "green bonds", which the managers have the freedom to invest in within their mandates.	9 May 2023 and 25 January 2024

Issue	Timing
DC Section Investment Manager meetings: The DCSC met two of the managers used within the range of funds available to members with DC benefits. • BlackRock presented on their **ESG Strategic Growth Fund**, used in the Scheme's DC default investment strategy. This Fund has a specific sustainable investment focus. Discussions included details of compelling investment opportunities that the Fund invests in, such as companies involved in clean energy infrastructure and new technologies. The manager also outlined their approach to tilting the equity allocation in the Fund towards companies with green patents and / or targets approved by the Science Based Targets Initiative, and provided an update on work to align the portfolio to the UN Sustainable Development Goals. • LGIM presented on two funds used by the Scheme, the **Diversified Fund** and the **Future World Global Equity Index Fund**. Discussions had a focus on stewardship and the use of voting and engagement within the investment process. The manager outlined their six stewardship "super-themes" (nature, climate, people, governance, digitisation, and health), which align closely with the Trustee's own priorities. As for the meetings with the DB Section managers, the investment managers to the DC Section also discussed the metrics used to identify and manage ESG risks.	6 September 2023 and 28 March 2024
ESG and engagement monitoring: The Scheme's investment performance reports are reviewed by the Trustee each quarter. These include ratings (both general and specific to ESG, including climate change) from the investment adviser, for each manager / mandate. Any deterioration in ESG ratings would be considered as a prompt to review an investment mandate. No such deterioration was experienced during the year, and the Trustee was pleased to note an upgrade to some ESG ratings. In early 2024, in an example of challenging the investment managers and advisers, the Trustee requested that more information be added to quarterly reports on stewardship activities, through the inclusion of case studies of the significant engagements carried out by the investment managers on the Trustee's behalf, aligned to the Trustee's three stewardship priorities (climate change, labour practices and standards, and corporate governance). This reporting allows us to monitor and assess how the investment managers are exercising their delegated responsibilities in relation to voting and engagement, and to check that activities align with the Trustee's policies and priorities.	Quarterly throughout the year

The Trustee continues to take an inquisitive approach to meetings with its advisers, investment managers, and the bulk annuity insurer. Individuals on the Trustee Board are able and willing to question and challenge these parties. A specific example during the year related to the selection of the insurer for the Scheme's bulk annuity purchase. Initial advice received from the buy-in adviser provided a good level of detail regarding the ESG policies of the insurers being considered, but did not explicitly compare the insurers' approaches against the Trustee's own policies and targets. Accordingly, additional advice was commissioned to ensure that this more Scheme-specific alignment could be considered by the Trustee prior to selecting the preferred insurer.

More detail on the regular monitoring of climate-related risks and opportunities for the Scheme is included in the Risk Management Section.

Section 3

Strategy

Introduction

As a long-term investor, the Trustee recognises the risks and opportunities arising from climate change are diverse and continuously evolving. In relation to climate-related risks, the Trustee believes it is important to understand how the Scheme's exposure to these risks may change over time, when the risk exposure may be greatest and what actions can be taken now, or in the future, to avoid those risks becoming financially material.

To help with this assessment, the Trustee has defined short, medium, and long-term time horizons for the Scheme as set out below.

Short Term	Medium Term	Long Term
Both Sections: 3 years	DB Section: 7 years DC Section: 10 years	DB Section: 15 years DC Section: 20 years
DB Section: Consistent with the length of the actuarial valuation cycle. **DC Section:** Consistent with the length of the triennial investment strategy review cycle.	**DB Section:** Aligned with expected changes in climate change data quality and climate regulations. **DC Section:** 10 years is the length of the default strategy's derisking phase.	**DB Section:** The Scheme is closed to new entrants, so a very long horizon would not be suitable. 15 years is broadly in line with the term to retirement of the average age non-pensioner, and not dissimilar to the duration of the overall liabilities. **DC Section:** Broadly in line with the term to retirement for the average age DC member.

The Trustee acknowledges that climate change risks include both **transition risks** (such as those relating to changes in government policies, and technology developments. These factors bring risks of investment market re-pricing) and **physical risks** (for example risks arising from both gradual changes in climate conditions and extreme weather events).

The Trustee has considered the following drivers of risk in relation to climate change:

Over the short term (out to 3 years), risks may present themselves through rapid investment market re-pricing relating to climate transition as:

- Market awareness grows. For example, the cost and impacts of the transition to a lower carbon economy suddenly influence market pricing.
- Scenario pathways become clearer, such as a change in the likelihood of a well below 2°C warming scenario (which would be expected to increase transition risk).
- Policy changes unexpectedly surprise markets. For example, if a carbon price or significant regulatory requirement was introduced across key markets to which the portfolio is exposed, at a sufficiently high price to impact behaviour.
- Market sentiment is shocked. For example, falls in markets could create a downward spiral where economic sentiment worsens and asset values fall.
- Perceived or real increased pricing of greenhouse gas emissions/carbon.
- Substitution of existing products and services with lower emission alternatives, which may impact part of investment portfolios.
- Litigation risk relating to dangerous warming becoming more prevalent.
- Increases in the energy / heat efficiency of buildings and infrastructure.

To the extent that this market re-pricing affects the market value of the investments, there could be a funding impact on the DB Section, and an impact on retirement outcomes for members with DC benefits. Demographic and longevity risks are not expected to dominate in the short term. The employer covenant could be impacted if shareholder support for the company wanes / the price of the Company's shares declines, and this has an eventual impact on the business.

However, in addition to the risks noted above, there could also be opportunities. For example, investing in climate solutions as policy support strengthens. The Trustee's ability to understand these short-term changes can position the Scheme favourably, for example taking advantage of the climate transition by avoiding or reducing investment in high-emitting entities, or those that do not have a business plan that supports the transition to a low carbon economy.

Over the medium term (out to 7 years for the DB Section, and 10 years for the DC Section), risks will likely start to reflect an increasing share of physical risk.

Over this period the transition pathway will unfold and the level of anticipated physical damage may become much clearer. While the full extent of the physical damage is unlikely to have occurred, markets are likely to be allowing for it to a large degree in asset pricing.

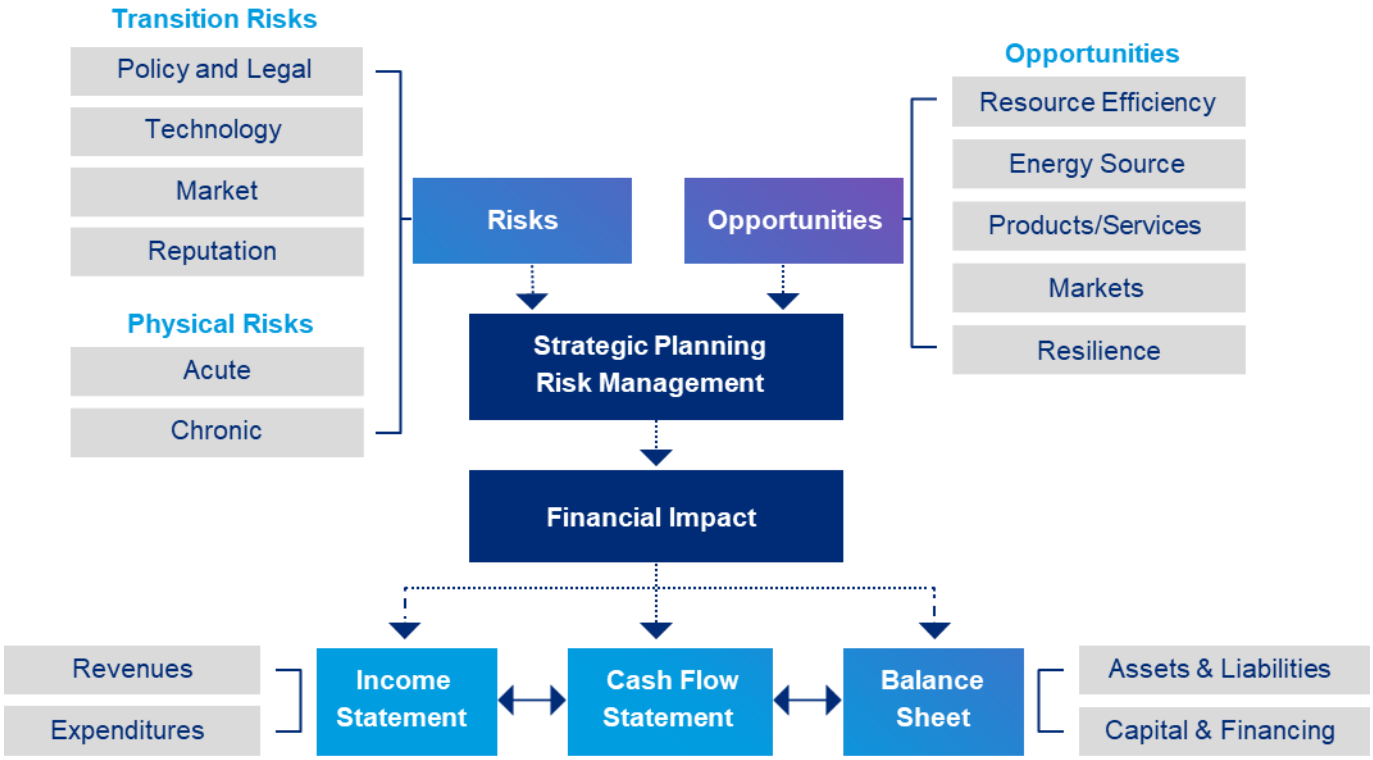
The Trustee's ability to understand these changes and evolve its approach as the pathway develops should help to control risk and could potentially enhance returns. The Trustee seeks to work with investment managers and have the flexibility to choose investments that can identify potential emergence of low carbon opportunities and the decline of some traditional sectors, where this is consistent with the overall risk and return appetite.

Over the long term (out to 15 years for the DB Section, and 20 years for the DC Section), physical risks are expected to come to the fore. This includes the impact of natural catastrophes leading to physical damages through extreme weather events.

Availability of resources is expected to become more important if changes in weather patterns (e.g. temperature, rainfall) affect the availability of natural resources such as water.

The impact of global heating on productivity, particularly in areas closer to the equator, will also be a key driver**.**

Summary of Climate Risk Types and Opportunities



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

Climate-related risks and opportunities relevant to the Scheme

Having taken into account the strategic asset allocation, the funding strategy (DB Section) and the Scheme's investments in "popular arrangements", as set out in the appendix (DC Section), the following risks and opportunities have been identified:

Over the short term, the Trustee has identified the inter-related risk of climate transition risk and asset repricing risk as being most relevant. Opportunities within this time period are most likely to occur in transition-related investment such as climate solutions.

- Over the medium term, the Trustee has concluded that both transition risk and physical risk (particularly in the form of asset repricing to allow for future physical damage) could be material.
- Over the long term, the Trustee has identified physical risk as the key driver of climate-related risk. Demographic impacts could come into play here, and the company covenant could be affected. For the Scheme, the investments of the younger members of the DC Section are most likely to be impacted – this was borne out in the scenario analysis conducted (see Appendix).

DB Section – Covenant Impacts

Climate change is expected to affect all companies in some way. For the Scheme, the impacts are particularly relevant given the nature of United Utilities PLC's business.

Therefore, the Trustee ensures that the covenant adviser, Penfida, sets out in its reporting to the Trustee the risks associated with climate change that may impact the sponsoring employer, alongside the controls in place. An excerpt from this reporting is provided below. In 2024, Penfida considers the potential impact from climate change risks on the covenant to be low due to the Scheme's funding levels and the scale of the sponsoring employer, United Utilities.

Penfida have set out the three risks with the highest estimated financial impact.

Risk	Description	Controls / Mitigation	Impact per 2024 annual report (net present value)
Water availability	Changing seasonal rainfall patterns impact water availability and warmer temperatures intensify supply challenges in dry periods because of evapo-transpiration.	• Produce a Water Resources Management Plan (WRMP) every 5 years which forecasts future demand and water availability under repeats of historic droughts, adjusted for climate change. • A Statutory Drought Plan is also developed every 5 years, setting out the actions UU will take in a drought situation.	£198m
Failure of wastewater network (sewer flooding)	More frequent and intense storms can overload the wastewater network and lead to severe sewer flooding. Urbanisation makes this worse due to quick runoff from hard surfaces.	• Preventative maintenance and inspection regimes, customer campaigns, sewer rehabilitation programme and Better Rivers Programme.	£198m
Recycling biosolids to agriculture	Water logging resulting from more persistent rainfall will limit options for recycling biosolids to land for a greater part of the year. Uncovered sludge stores and stockpiles will be more vulnerable in persistent wet, winter weather, increasing the risk of environmental pollution from runoff.	• Treatment, sampling and testing regimes to ensure that sludge meets acceptable standards for application with formal service level agreements between wastewater and bioresources. • Work closely with farmers, land owners and contractors to ensure regulations such as Farming Rules for Water and the standard operating procedures are met.	£515m

Source: Penfida, September 2024.

Testing the resilience of the Scheme – Scenario Analysis

The Trustee has investigated the potential impacts of climate related risks and opportunities using scenario analysis. In our report for the year to 31 March 2023, the Trustee set out the results of the quantitative climate scenario analysis considered during the year. This analysis helped to assess the potential implications of climate change under different scenarios for the Scheme. Further details of the analysis are included in the Appendix. The Trustee has reviewed the analysis and agreed not to conduct a further analysis in this reporting year**.** This is because:

- **In respect of the DB Section**, while the Trustee purchased a bulk annuity policy during the year, the Trustee concluded that the level of climate related risk under different scenarios would not be expected to be so materially different (given our low investment risk strategy) as to warrant additional analysis, so soon following the prior analysis. Further, the Trustee chose to focus on a more forward-looking assessment of the insurer's approach to managing climate change, based on policy

alignment, and climate-related targets. The Trustee has, however, via the ESG Sub-Group, reviewed the climate scenario analysis conducted by the bulk annuity insurance provider.

- **In respect of the DC Section,** there were no changes to the investment strategy or material developments in modelling that are expected to alter the conclusions of the last analysis.

Scenario analysis will be carried out triennially (next in 2026), or sooner should there be a significant change to the investment and / or funding strategy, or significant developments in modelling practices.

The analysis undertaken, as well as broader discussions with the Trustee's advisers, the sponsoring employer, the investment managers, and the bulk annuity insurer, has led to the following key findings and actions being taken forward:

1. **Over the long term, a successful transition is imperative:** a successful transition leads to enhanced projected returns when compared to scenarios associated with higher temperature outcomes. This is largely driven by lower physical damages. Accordingly, the Trustee will seek to align the investment strategy for both the DB Section and the DC Section to position for a successful transition to a lower carbon world.
2. **Sustainable investment allocations can protect against transition risks:** this reinforces the steps the Trustee has taken to integrate consideration of climate risk and opportunity management in the investment arrangements – for example, implementing exclusions on certain sectors and companies in a number of our DB and DC investment mandates, using lower carbon global equity funds and other sustainable funds within the DC default strategy and self-select range, and by considering the ESG ratings provided by the investment adviser when selecting and reviewing investment managers. The Trustee will continue to seek opportunities in this area, taking into account overall risk and return issues, and suitability for the Scheme's liabilities and membership.
3. **Sector exposure is important:** differences in return impact are most visible at an industry-sector level, with significant divergence between scenarios. Oil and gas, certain utilities, and renewable energy sectors are most impacted by the transition. This forms a useful discussion point for the Trustee when meeting with investment managers.
4. **Awareness of future shocks:** As markets react to new information because of the changing physical environment and government policies, investors may be vulnerable to short, sharp shocks. Understanding the potential impact that such repricing events can have ahead of time helps the Trustee to understand and manage this risk. Mindful of this risk, and other long term risks, the Trustee has taken further steps to provide benefit security for our members through the purchase of a bulk annuity insurance policy in respect of a portion of the DB Section liabilities. Further, the Trustee intends to continue to conduct scenario analysis at least triennially in order to ensure that the evolving nature of climate risks are understood and that a mitigation strategy can be maintained.

Section 4

Risk Management

Introduction

A key part of the Trustee's role is to understand and manage risks that could have a financially material impact on the Scheme. Climate change is one of the risks that the Trustee considers alongside other financially material risks that may impact outcomes for members.

This section summarises the primary climate-related risk management processes and activities of the Trustee. These help the Trustee to understand the materiality of climate-related risks, both in absolute terms and relative to other risks that the Scheme is exposed to. The Trustee prioritises the management of risks based on their potential impact on members' benefit outcomes.

Risk Governance

- The Trustee maintains a risk register which includes sustainability risks, with explicit consideration of climate risks, in order to monitor and mitigate financially material risks. The GRASC carries out an annual detailed review of the risk register, and the Board and Sub-Committees review the relevant risks at quarterly meetings.
- Within the GRASC's annual review of the risk register, there is an assessment of the coverage and resilience of the Scheme's controls. The results of the review are presented to the full Trustee Board and any updates to the risk register are incorporated.
- The Trustee has put in place an addendum to the risk register entirely focused on ESG and Climate Change, in order to ensure appropriate risk identification, monitoring, and management is in place.
- The Trustee's SIP is reviewed annually and sets out how investment climate-related risks are managed and monitored.
- As outlined in the Governance Section, the Trustee receives regular training on climate-related issues. The training allows the Trustee to challenge whether the risks and opportunities are effectively allowed for in its governance processes and wider activities, and to be able to challenge

its advisers to ensure the governance support and advice adequately covers the consideration of climate matters. This process also affords the Trustee an opportunity to identify new and emerging risks related to climate change.

- Analysis of the extent to which ESG factors are integrated into investment decision making at the portfolio level is undertaken by the Trustee by monitoring the ESG ratings provided by the investment adviser. This monitoring takes place on a quarterly basis, with more extensive annual reviews when each of the investment managers meets with the ISC (DB Section) or DCSC (DC Section), supported by briefing papers from the adviser.

Risk and Strategy

Advice and Tools

- The Scheme's investment adviser will take climate-related risks and opportunities into account as part of the wider strategic advice provided to the Trustee and its Sub-Committees. This includes highlighting any expected change in climate-risk exposure when asset allocation or investment manager changes are proposed, both from the top-down level (via climate scenario analysis) and bottom-up (via climate-related metrics and consideration of ESG ratings provided by the investment adviser, along with the provision of advice on ESG related guidelines that are appropriate for the Scheme's objectives).
- Recognising that for the DB Section, risks go beyond just investments, the Scheme's funding adviser will take climate-related risks into account within the advice provided to the Trustee and its Sub-Committees. For example, the triennial actuarial valuation reports highlight climate change risks as potentially material financial risks, and comments on the potential impact that climate change may have on the assumptions used in the actuarial valuation.
- Given the nature of United Utilities PLC's business, climate change is integral to how company management considers its strategy. The potential impact of climate change on the sponsor covenant is therefore considered by the Trustee, and the Trustee's covenant adviser explicitly comments on these risks. As a practical example (and as shown in the Strategy Section of this report), in the most recent reporting to the Trustee, the top climate related risks to the company were documented (including for example water sufficiency), along with controls the company has implemented to address these risks. This allows the Trustee to ensure that climate risks associated with the support received from the company can be incorporated into our integrated risk management approach.
- The Trustee believes that good stewardship and ESG issues may have a material impact on risk and return outcomes and will therefore be considered as part of the Scheme's investment process. The Trustee also recognises that long-term sustainability issues, particularly climate change, present risks and opportunities that require explicit consideration. When setting investment strategy, ESG factors, including climate change, are considered alongside a number of other factors that can influence investment strategy.
- Climate scenario analysis will be reviewed at least triennially, or sooner should material changes be considered for the investment and funding strategy, or should there be material changes in the climate modelling tools available. Scenario analysis is the primary tool to help the Trustee to understand the materiality of climate-related risks that could impact the Scheme over time.

Risk management activity during the year to 31 March 2024 – spotlight on the DB Section

The year marked a number of milestones for the DB Section of the Scheme, and climate change matters were considered as a key component of the following activities:

The Trustee took steps to provide benefit security for members through the purchase of a bulk annuity insurance policy in July 2023, in respect of a portion of the Scheme's liabilities. ESG factors, and specifically climate change, were considered as a key part of the insurer selection process. In particular, the insurer's management of climate change risks formed a crucial part of the decision-making criteria, and the Trustee commissioned professional advice on how each potential insurer's climate change policies aligned with those of the Scheme.

In tandem with the completion of the bulk annuity purchase, the Trustee reviewed the investment strategy to be adopted for the assets not invested in the bulk annuity. As the residual asset portfolio is substantially smaller in size, the Trustee consolidated its two corporate bond mandates, and for the one remaining manager appointed for this asset class, climate-related guidelines have been established. Under these guidelines, certain companies deemed to be failing to meet minimum standards on climate change planning are excluded. For example, this could be because they are highly carbon-intensive, do not have an operational greenhouse gas emissions target, or do not have plans for coal phase-out.

Activity during the year to 31 March 2024 – spotlight on the DC Section

Unlike the DB Section, where the investments are in liability matching assets, the DC Section's investment strategy includes global equities and other "growth" assets, in order to provide long term return opportunities for DC savers. This means there is more scope for accessing equity-based opportunities and alternative investments.

Over a series of strategy reviews, the Trustee, via the DCSC, has put in place allocations to sustainable investment opportunities, taking appropriate investment advice throughout. Following implementation of revised arrangements in the prior Scheme years, the DCSC's activity during this reporting year focused on monitoring and stewardship, as well as commencing a programme of work on the self-select fund range. Activity during the year included:

The DCSC put in place a series of meetings with the investment managers to the DC Section, to manage risks associated with climate change, along with other material risks. For the first time this year, the meetings have been scheduled outside of the main DCSC meetings in order to ensure there is time and focus given to the discussions. The full Trustee board is invited to attend.

In relation to the self-select fund range, the Trustee has started work to explore whether more of these funds could be replaced by versions that have a more explicit ESG focus. This work involves looking at the risk and return implications, as well as liaising with the platform provider to identify funds available on the platform that would meet the Scheme's requirements.

The DCSC completed training on illiquid assets such as private markets, which may include "impact" investments, and established a policy on these assets for inclusion in the SIP. The DCSC intends to explore these investments further as part of the triennial strategy review in 2025.

The role of Stewardship in Managing Risks and Opportunities

While stewardship (voting and engagement) activities in respect of individual securities are delegated to the investment managers, the Trustee expects the investment managers to engage with investee companies on climate-related (and other) matters, and to use the voting rights attached to the investments in order to manage climate-related risks and opportunities.

The Trustee has selected priority themes to provide a focus for stewardship activities. The Trustee reviews these priorities at least annually, as part of the preparation of the Implementation Statement. No changes were made during the year. The Trustee's current stewardship priorities are:

Climate Change

Labour Practices and Standards

Corporate Governance

The Trustee has communicated these priorities to the investment managers, who have acknowledged the Trustee's expectations. The Trustee uses these priorities to hep focus engagement activity, for example when meeting with the investment managers, and in our reporting.

During the year, the Trustee reviewed the voting and engagement records of the investment managers. This allowed the Trustee to identify significant votes that are aligned with the Scheme's priorities, and to disclose these in the annual Implementation Statement. Two case studies of climate change-related significant votes are included here. Note that voting rights do not typically arise in respect of the DB Section's investments, as the Scheme does not invest in equities within this portfolio.

Fund	LGIM Diversified (used in the DC Section's default investment strategy
Company / Issue	Shell - Approval of the Shell Energy Transition Progress, 23 May 2023
Rationale	LGIM voted against Shell's proposed Energy Transition Progress, "though not without reservations". LGIM acknowledge the substantial progress made by this company in meeting its previously communicated 2021 climate commitments and welcome Shell's leadership in pursuing low carbon products. However, LGIM remain concerned by the lack of disclosure surrounding future oil and gas production plans and targets associated with the upstream and downstream operations; both of these are key areas to demonstrate alignment with a 1.5°C climate warming trajectory. LGIM continues to undertake extensive engagement with Shell on its climate transition plans. While the vote passed in favour of management, 20% of votes cast were against, an important signal to the company of investor views.

Fund	BlackRock UK Equity Index
Company / issue	Glencore - Approval of Climate Change Report, 26 May 2023
Rationale	BlackRock was among a number of investors who rejected Glencore's climate progress report at its annual meeting. As a material shareholder, BlackRock's vote against management boosted dissident shareholders and helped the total votes in opposition to the company's climate plan to pass 30% for the first time. The manager notes that although Glencore has improved its public disclosures on climate-related risks and opportunities, concerns remain that aspects of the report, as well as recent developments, have pointed to inconsistencies in the company's stated strategy. Accordingly, they voted against management.

Risk Reporting

- The Trustee receives annual reports of climate-related metrics and monitors progress against targets established for the Scheme. The ISC and DCSC also use this information to engage with the investment managers and other relevant providers, such as the insurer for the DB-Section's buy-in policy.
- The Trustee receives a voting and engagement activity summary on an annual basis as part of the preparation of the Implementation Statement. The Statement summarises how the investment managers vote and engage on climate-related issues (among other key engagement priorities), referencing the Trustee's stewardship priorities. The Statement is available on the Scheme's website.

Investment Manager Risk, Selection and Retention

- The Trustee, with advice from Mercer in its role as investment adviser, will consider an investment manager's firm-wide and strategy-specific approach to managing climate-related risks and opportunities when either appointing a new manager, in the ongoing review of a manager's appointment, or as a factor when considering the termination of a manager's appointment.
- Mercer rates investment managers on the extent of integration of ESG factors (including climate change) into their processes. A manager's stewardship process forms part of the rating assessment. This is considered at the firm level and at the investment strategy/fund level. The ratings are presented in quarterly investment performance reports and are reviewed by the Trustee.

Section 5

Metrics and Targets

Metrics – Introduction

The Trustee has chosen to present climate-related metrics across four categories. Metrics help the Trustee to understand the Scheme's climate-related risk exposures and opportunities, and to identify areas for further risk management, including investment manager portfolio reviews, monitoring, and stewardship activity. The metrics in this report relate to the Scheme's financed emissions and exclude emissions associated with the operation of the Scheme.

Following improvements in data availability, the Trustee has included Sovereign Carbon Intensity as a new metric for the DC Section of the Scheme in this year's report. This will provide a more comprehensive picture of the carbon intensity in relation to sovereign investments, i.e. UK government bonds. The DB Section invests in UK government bonds via a liability-driven investment portfolio and all metrics for this portfolio are reported separately.

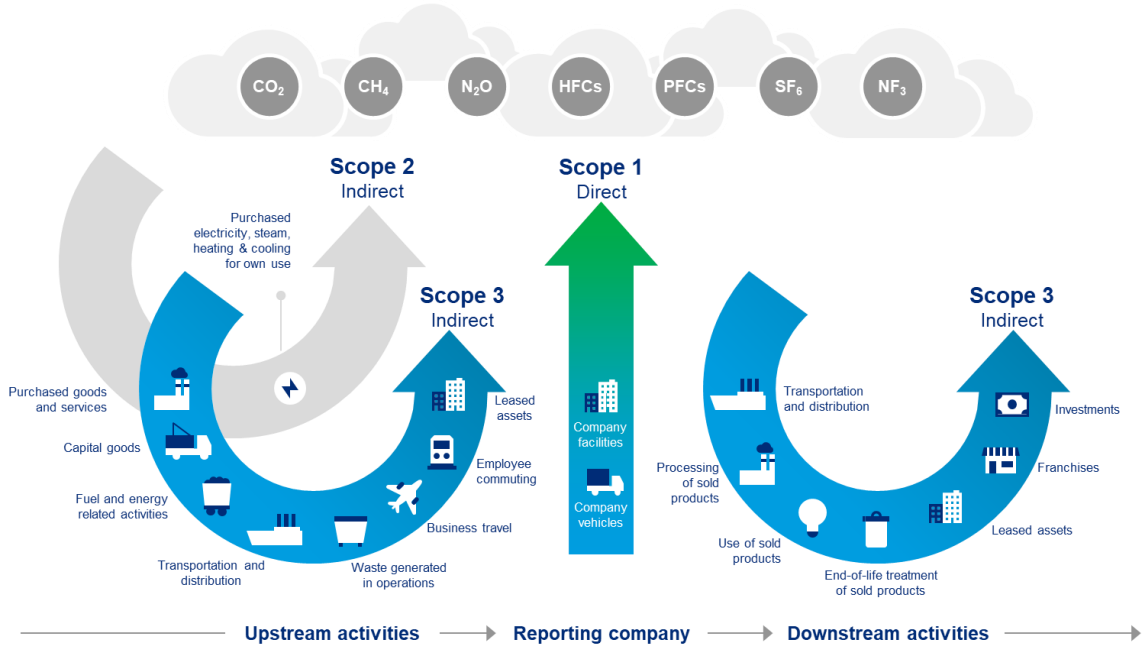
Metric category	Selected metric	Further detail
Absolute emissions	Total Greenhouse Gas Emissions	Tonnes of carbon dioxide and equivalents (tCO2e) that the Scheme is responsible for financing.
Emissions intensity	Carbon Footprint	The amount of carbon dioxide and equivalents (tCO2e) emitted per million US dollars of Scheme investments.
	Sovereign Carbon Intensity	Measures how carbon intensive the countries that issue bonds held in the portfolio are. Sovereign emissions are normalised by Purchasing Power Parity (PPP)-adjusted Gross Domestic Product (GDP) to allow for the size of a country's economy.
Portfolio Alignment	% of portfolio companies with targets approved by the Science Based Targets initiative (SBTi)	Assessment of the proportion of portfolio companies/issuers that have set net-zero targets that have been validated by SBTi.

Metric category	Selected metric	Further detail
	Implied Temperature Rise (ITR)	A forward-looking assessment of how aligned the Scheme's portfolios are relative to the Paris Agreement's 1.5°C target. This is estimated based on the activities and decarbonisation targets of portfolio companies / issuers, relative to what global decarbonisation needs to be to achieve 1.5°C.
Additional	Data Quality	Represents the proportions of the portfolio for which there is high quality data.

The metrics shown in this report are as at 31 March 2022, 31 March 2023 and 31 March 2024 and are based on the actual asset allocations at that date, taking into account the quality of data that is available (for example, there are some asset classes where there is limited coverage, such as certain bond investments).

Where metrics relate to corporate emissions, these cover scope 1, 2 and 3, defined as follows:

- **Scope 1 "direct" emissions**: those from sources owned or controlled by the Company (e.g. direct combustion of fuel from vehicles); and
- **Scope 2 "indirect" emissions**: those caused by the generation of energy (e.g. electricity) purchased by the Company.
- **Scope 3 "indirect" emissions**: In this category go all the emissions associated, not with the company itself, but that occur in the value chain of the reporting company.



Source: GHG Protocol

For sovereign emissions, the emissions are defined in line with the PCAF guidance. They include:

- **Production emissions:** those attributable to emissions produced domestically and include domestic consumption and exports; and
- **Consumption emissions:** these include production emissions, minus exported emissions, plus imported emissions (emissions related to energy and non-energy imports from goods or services from outside the country territory as a result of activities taken place in the country territory).

Metrics – Important Limitations and Context

The Trustee notes that the availability of accurate data for some asset classes is an industry-wide issue and standards are still developing. The following points should also be noted:

- **Absolute emissions** are a function of a fund's total asset value. Therefore, for the Scheme, portfolios and funds with relatively high levels of assets invested in them will generally have higher absolute emissions than smaller mandates.

- **Carbon Footprint** "normalises" emissions by size of the investment, so a fall in market prices can make the denominator lower and therefore carbon footprint may be "pushed up". However, it still provides a better idea of the carbon intensity of each portfolio (when compared with absolute emissions).

- For some funds, the **data coverage** has improved over the year. This means that reported emissions and related measures such as carbon footprint may increase simply as there is more of the portfolio where emissions are reported.

- There can be a **time lag** in the provision of climate data from individual companies to data providers, and then from data providers to investment managers. For example, for the 2022 reporting year, investment managers may have received climate data at different times, some of which may be based on disclosures at the company level over the course of past periods. With a reporting date of 31 March 2023, this means that the metrics presented in this report are likely to be subject to time lags. The Trustee recognises that this leads to a certain amount of uncertainty regarding the drivers of changes in carbon emissions from year-to-year.

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

Metrics – Definitions

Total Greenhouse Gas Emissions

This metric takes an ownership approach to answer what proportion of a company's or asset's emissions an investor owns and is therefore responsible for financing. It includes seven types of greenhouse gas ("GHG") (as defined in the Kyoto Protocol), across the three scopes of emissions. Emissions of the seven greenhouse gases have different impacts on climate change. In order to simplify reporting, each greenhouse gas is calibrated relative to carbon dioxide and is reported as 'carbon dioxide equivalent' emissions (CO_2e). In this way the Trustee can compare companies that emit different amounts of different gases on a consistent basis. The Trustee has chosen this metric to understand the absolute amount of emissions financed by the Scheme's investments.

Carbon Footprint

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

Analysing Carbon Footprint assists the Trustee in identifying carbon-intense assets.

The Trustee has therefore chosen this metric to assist in prioritising carbon intense parts of the investment strategy for potential re-allocation or engagement as a means of mitigating associated climate-related risks.

Sovereign Carbon Intensity

Sovereign Carbon Intensity is an intensity measure of emissions for an investment issued by a sovereign entity, such as a state or municipality, which takes the total GHG Emissions figure and normalises it to take account of the size of the investment.

Due to the different nature of sovereign entities, sovereign carbon intensity normalised emissions by Purchasing Power Parity (PPP)-adjusted Gross Domestic Product (GDP) to take into account the size of the country's or municipality's economy. Sovereign carbon intensity and carbon footprint cannot be easily compared due to the different derivation of each metric.

Proportion of portfolio companies with net zero targets approved by the Science Based Targets initiative

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

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

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

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

Implied Temperature Rise

This is a forward-looking metric that considers the pledges, commitments and business strategy changes that underlying investee companies/issuers have made. It provides a prediction of the potential temperature rise over the rest of the century based on the activities of those companies and issuers. The metric illustrates the degree of portfolio alignment with the goals of the Paris Agreement.

The calculation of the level of warming is determined by mapping a given company's/issuer's level of over/undershoot (relative to its carbon budget) to a temperature outcome.

The Trustee has chosen this metric to include in this report because of its simplicity in presentation and a useful way to see, at a glance, the positioning of a fund relative to 1.5°C economy. This is also a measure of climate transition risk with greater transition risk highlighted in asset allocations with a higher Implied Temperature Rise.

Data Quality

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

Data Quality also assists with monitoring the quality of reporting over time, as companies are expected to continually improve their reporting on climate-related metrics. As the quality of data improves, the decision usefulness of the climate metrics reported on the Scheme's portfolio increases.

DB Section Metrics

During the year to 31 March 2024, the Trustee took the decision to further increase retirement benefit security for members through the purchase of an insurance ("buy-in") policy covering a significant portion of the liabilities. ESG factors, and specifically climate change, were considered as part of this decision-making process, and insurer management of climate change risks formed a key part of the insurer selection exercise. Therefore, the DB Section's investment portfolio has changed significantly. The metrics detailed at 31 March 2023 are based on the asset allocation prior to the buy-in, whereas the metrics at the current reporting date of 31 March 2024 are based on the asset allocation for the residual investments, excluding the insurance policy.

As well as traditional investments, the Trustee invests in the insurance policy which covers a share of the DB Section's liabilities. The insurer is responsible for the management of the underlying investment portfolio "backing" the policy. The Trustee therefore has to rely on the insurer's reporting of climate metrics which does not fully align with the Scheme's reporting date and the reporting provided by the managers of the DB Section's other investment portfolios. The insurance policy metrics are only available at 31 December 2023 and published in a different format to the Scheme's metrics on the broader asset portfolio. For completeness, these metrics are also detailed in this section, albeit separately from the metrics for the residual DB Section invested assets. While they are not directly comparable with metrics on the main asset portfolio, they are useful in shaping the discussions the Trustee has with the insurer on climate change risk management, including the path to net zero.

Data Availability

In relation to the assets outside of the Scheme's "buy-in" insurance policy, the Trustee can provide climate metrics for its Buy and Maintain corporate bond portfolios, as well as its liability-driven investment ("LDI") portfolio. Metrics are not currently available for cash in the Trustee bank account, or for private debt and derivatives.

DB Section	Is data available?	31 March 2022		31 March 2023		31 March 2024	
		£m	%	£m	%	£m	%
Insight Buy and Maintain	Yes	730.1	*20.7*	644.9	*25.3*	261.7	*28.7*
Insight Interest Rate Hedge	No	14.3	*0.4*	30.9	*1.2*	2.9	*0.3*
LGIM Buy and Maintain	Yes	772.7	*21.9*	406.4	*16.0*		
Insight LDI and Collateral	Yes	1,451.9	*41.1*	961.7	*37.8*	427.5	*46.9*
Insight Secured Finance	No	266.0	*7.5*	262.3	*10.3*		
Mercer Senior Private Debt	No	271.7	*7.7*	216.4	*8.5*	206.0	*22.6*
Cash	No	26.6	*0.8*	24.8	*1.0*	12.5	*1.4*
Total with available data		**2,954.7**	***83.6***	**2,013.0**	***79.0***	**689.2**	***75.7***
Total with unavailable data		**578.7**	***16.4***	**534.5**	***21.0***	**221.4**	***24.3***

Source: Investment Managers and Mercer. Insight and LGIM values are priced at bid. The Mercer Senior Private Debt valuation was estimated by Mercer using latest unaudited valuations and capital calls and distributions. Cash denotes the money held in the Trustee bank account and by the custodian, BNY Mellon. The table excludes assets held in the Scheme's "buy-in" policy.

Although the Trustee is only able to report on certain portfolios, it is able to cover the majority of DB Section assets (excluding the insurance "buy-in" policy in 2024) at all reporting dates (c. 84% of DB Section assets at 31 March 2022, c. 79% at 31 March 2023 and c. 76% of residual assets at 31 March 2024). Please note that quality of data varies for the mandates the Trustee is able to report on. Information on this is provided in the Data Quality Section below and in the appendix.

Total Greenhouse Gas Emissions

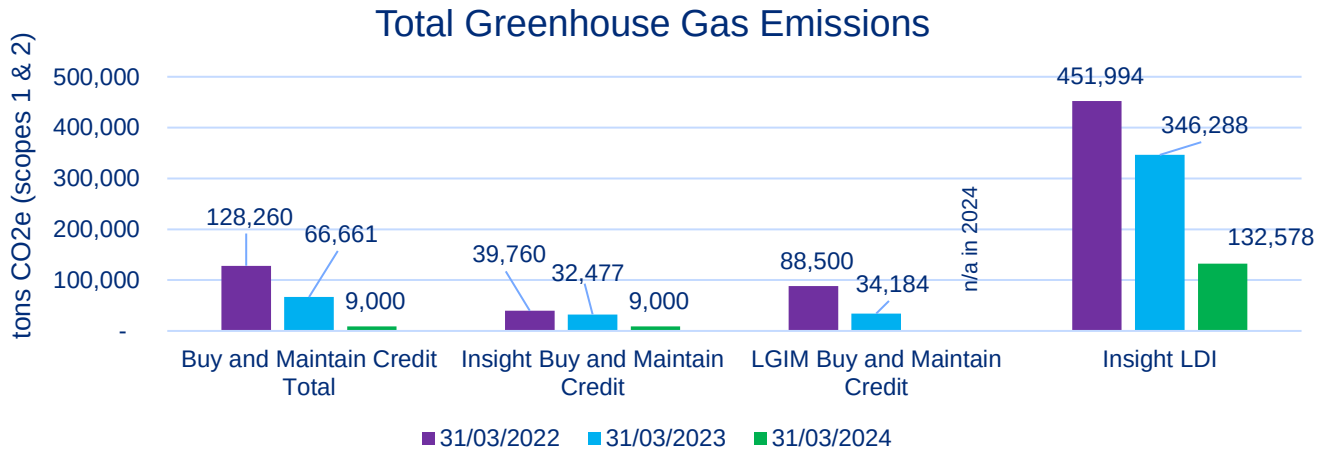
The following chart shows the total greenhouse gas emissions (scopes 1 and 2) for the portfolios at 31 March 2022, 31 March 2023 and 31 March 2024. The Buy and Maintain Credit total shows the aggregated greenhouse gas emissions for the two Buy and Maintain portfolios in 2022 and 2023. Insight managed the only remaining Buy and Maintain Credit portfolio in 2024.

Total emissions for the Insight LDI portfolio relate to sovereign assets and have therefore been derived using a methodology that differs from the Buy and Maintain Credit emissions. Whereas direct and indirect company emissions are reported for the Buy and Maintain Credit portfolio, the LDI portfolio emissions encompass production and consumption emissions at a state level. Although they are shown in the same graph, the total greenhouse gas emissions of the Insight LDI are therefore not a perfect like-for-like measurement in comparison to the Buy and Maintain Credit portfolios.

In the following chart, a green bar for the total greenhouse gas emissions at 31 March 2024 denotes a decrease over the year, amber indicates no change, and red indicates increasing emissions. Over the reporting period, total greenhouse gas emissions have decreased for each of the portfolios. This is not surprising, as total emissions are closely related to the value owned by the Scheme. The invested asset values for all portfolios shown have reduced over the period due to the purchase of the insurance policy.

The Trustee needs to report on scope 3 emissions from 31 March 2024. These metrics are currently only available for the Insight Buy and Maintain mandate. Total scope 3 emissions were 73,456 tCO2e. This is significantly higher than the total scope 1 and 2 emissions of the mandate (9,000 tCO2e). The Trustee is not able to track scope 3 emissions year-on-year at the current reporting date but will do so in the future.

In view of the Scheme's net-zero target, it is important to be cautious about total greenhouse gas emissions. The c. 86% decrease for the Buy and Maintain Credit portfolios and c. 62% reduction of emissions for the LDI portfolio have been achieved following significant strategic investment changes.



Source: LGIM and Insight, 31 March 2022, 31 March 2023 and 31 March 2024. Buy and Maintain Credit totals calculated by Mercer. Insight LDI total emissions show the combined emissions from funded gilts and derivatives, provided by Insight. Funded gilts accounted for 169,104 tCO2e at 31 March 2022, 152,973 tCO2e at 31 March 2023 and 65,670 tCO2e at 31 March 2024 for the LDI portfolio. Gilts on repo and/or total return swaps accounted for 282,891 tCO2e, 191,315 tCO2e and 66,908 tCO2e respectively. Insight has derived total emissions for the LDI portfolio following the PCAF method. This means the market value of UK sovereign bonds held is scaled as a proportion of the UK's PPP-adjusted GDP, and this factor is then applied to the UK's total emissions to calculate the share that the Scheme finances.

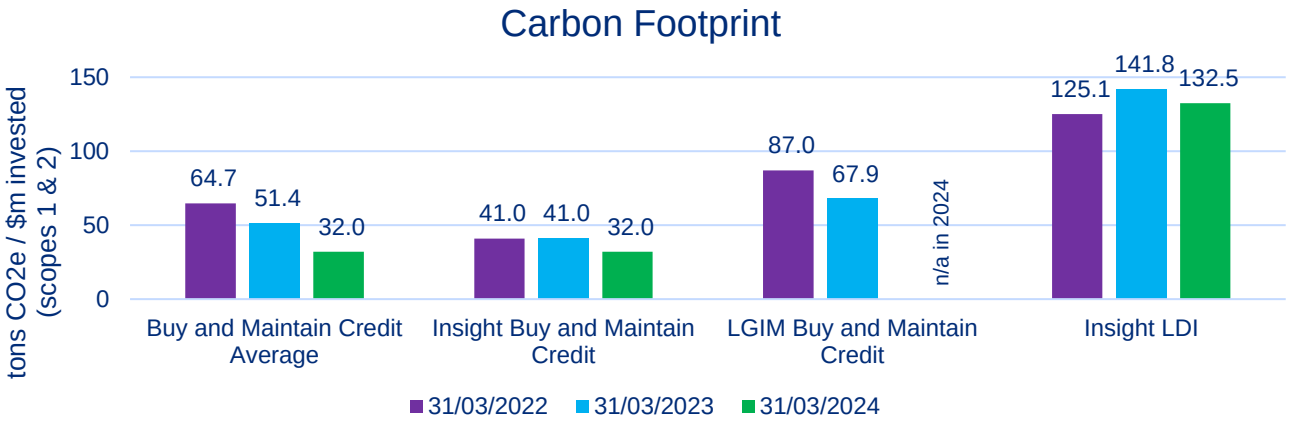
Carbon footprint

The following chart shows the carbon footprint for the portfolios with available data at both reporting dates. The carbon footprint metric normalises absolute emissions by the amount invested in each portfolio and it therefore allows for better comparison of the actual carbon intensity per unit of investment held between different portfolios.

In the following chart, a green bar for the carbon footprint at 31 March 2024 denotes a decrease, whereas amber indicates no change, and red indicates an increasing carbon footprint over the year. The chart shows that the carbon footprint of the Insight Buy and Maintain portfolio has decreased. The LGIM Buy and Maintain portfolio was more carbon intensive at both reporting dates than the Insight Buy and Maintain portfolio, explained by the higher underlying allocation to companies in the industrial sector. As the Trustee disinvested from this portfolio over the year, the overall carbon footprint attributable to credit assets has decreased from 51.4 tCO2e/$m invested to 32.0 tCO2e/$m invested, a decrease of 38%.

The Insight LDI carbon footprint increased between 31 March 2022 and 31 March 2023, but decreased to 31 March 2024, albeit to a higher carbon footprint than in 2022. Insight's LDI carbon footprint is not directly comparable to that of the credit mandates. The LDI portfolio invests in UK Government bonds (gilts), both directly and indirectly, using derivative contracts. In contrast, the credit mandates invest in bonds issued by companies. The LDI's carbon footprint relates to sovereign assets and it is calculated by scaling the UK's total greenhouse gas emissions by the market value of UK government bonds in issuance. It is therefore not comparable. The decrease in carbon footprint over the year to 31 March 2024 was largely driven by a decrease in the UK's emissions.

The Trustee needs to report on scope 3 carbon emission metrics from 31 March 2024. Scope 3 metrics are only available for the Insight Buy and Maintain mandate. The scope 3 carbon footprint was 253 tCO2e/$m invested. Again, this figure is significantly higher than the scope 1 and 2 carbon footprint and the Trustee will track this metric year-on-year from the next reporting period onwards.

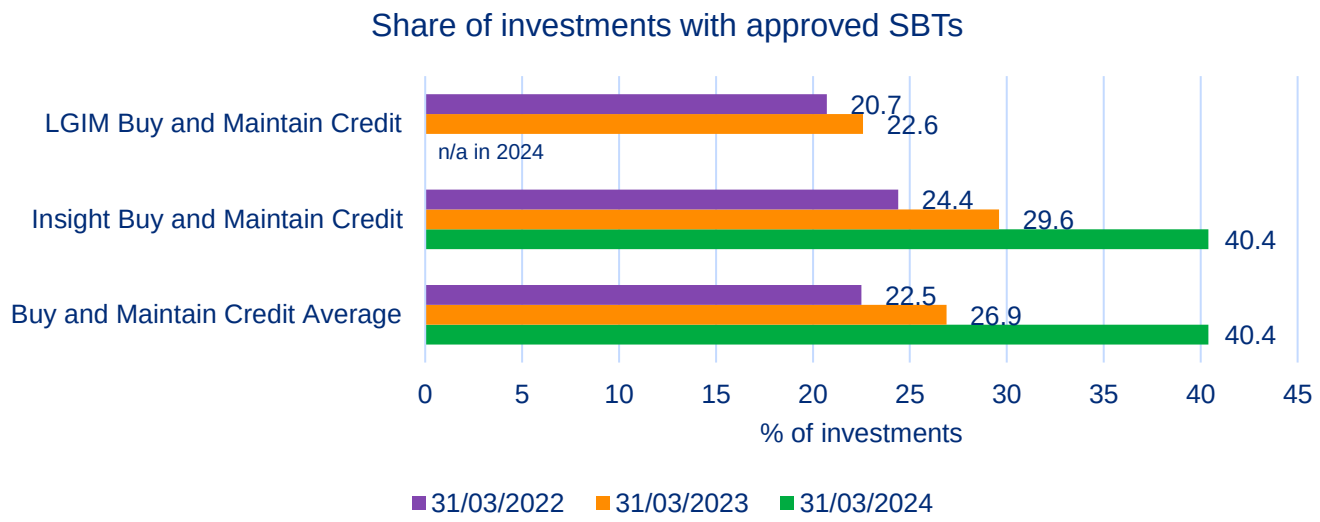


Source: LGIM and Insight. Buy and Maintain Credit average calculated by Mercer.
Note: An aggregated carbon footprint figure is shown for the Buy and Maintain Credit portfolios in 2022 and 2023 as both invested in corporate bonds. The carbon footprint of the Insight LDI portfolio is derived in a different way as it holds sovereign bonds. Due to the different underlying derivation, corporate and sovereign carbon footprint figures cannot be sensibly aggregated. Please note that Insight has derived total greenhouse gas emissions for the LDI portfolio following the PCAF method. This means that the market value of UK sovereign bonds held is scaled as a proportion of the UK's PPP-adjusted GDP, and this factor is then applied to the UK's total emissions to calculate the share thereof that the Scheme finances.

Share of investments with approved Science-based Targets (SBTs)

This metric is only available for the corporate credit portfolios as only companies may sign up to the Science-based Targets Initiative, as opposed to governments issuing sovereign bonds. Holdings within the Insight Buy and Maintain portfolio have increased their share of targets approved by the SBTi over

the year to 31 March 2024. The relative increase in the share of assets with SBTI-approved targets was more than 36% for the Insight portfolio.



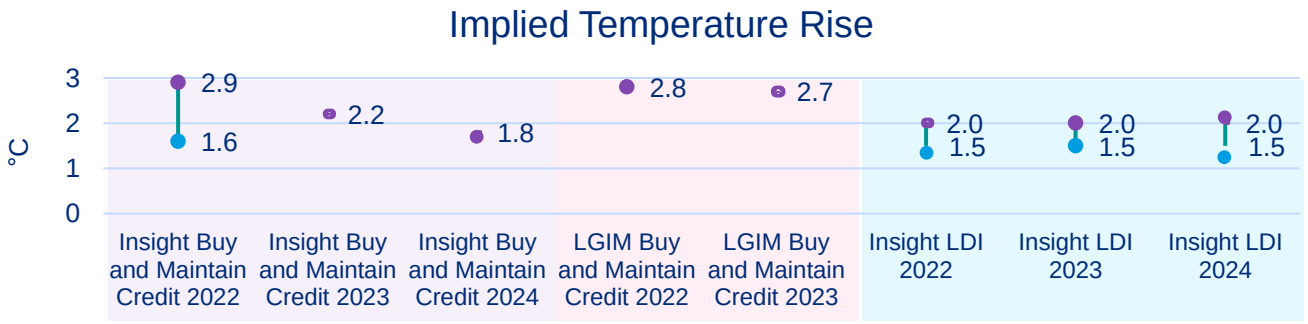
Source: LGIM and Insight. Buy and Maintain Credit average calculated by Mercer.

Implied Temperature Rise

The Implied Temperature Rise ("ITR") figures for portfolios with available ITR metrics are shown below. Note that Insight provide ITR ranges for the Buy and Maintain Credit mandate at 31 March 2022, and for the LDI portfolio.

The LGIM Buy and Maintain portfolio's ITR decreased between 31 March 2023 and 31 March 2024. The ITR of the Insight LDI largely depends on the aggregate decarbonisation efforts of the UK. It is not possible to make a reasonable comparison for the Insight Buy and Maintain portfolio due to the different way of presenting the metric at both reporting dates.

The Paris Agreement's specified goal is to limit global warming by "well below 2°C above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels". The Insight LDI and Buy and Maintain Credit portfolios fall into the range envisaged by the Paris Agreement, although achieving an ITR of 1.5°C or lower would be most beneficial..



Source: LGIM and Insight, 31 March 2022, 31 March 2023. Insight provide ITR ranges rather than a point value for LDI.

Data Quality

As previously noted, we cannot measure climate metrics equally across all portfolios. The proportion of assets that climate metrics cover may differ by the type of portfolio, and some estimation may be involved. The chart below shows the data quality for scopes 1 and 2 corporate metrics shown in this

report at the three reporting dates. For the Insight LDI mandate, the graph shows the data quality for emissions data derived following the PCAF metric for sovereign assets.

LGIM were unable to differentiate between reported and estimated data in 2022 and 2023, therefore the data for their Buy and Maintain Credit mandate is laid out in a different format. The Scheme does not invest in this portfolio anymore in 2024.

The data quality for the Insight Buy and Maintain Credit mandate has increased over the year with the share of reported and estimated data increasing between 31 March 2023 and 31 March 2024. The 100% reported coverage for the Insight LDI portfolio is explained by the fact that it only invests in UK gilts, reflecting the reporting of greenhouse gas emissions at a national level.

The Trustee has to report on scope 3 data going forward. Insight confirmed that they were able to report on 88% of the Buy and Maintain Credit mandate at 31 March 2024 and all of this data was estimated.

Source: LGIM and Insight.
Please note: LGIM are unable to break down data quality in the same way as Insight. LGIM provide "data coverage", a figure which includes both reported and estimated data. Insight have complete data coverage for the LDI portfolio, but the data is unverified.

Climate metrics for the Legal & General Bulk Annuity Policy

The Trustee invests in a bulk annuity insurance policy (a “buy-in” policy) which covers a share of the DB Section's liabilities. Legal & General (“L&G”) is responsible for the management of the underlying investment portfolio "backing" the policy. The Trustee has obtained climate metrics for the insurer’s asset portfolio. However, these metrics do not cover all four metrics categories the Trustee reports on. They also do not fully align with the Scheme’s reporting date and the reporting provided by the managers of the DB Section’s other investment portfolios.

L&G has confirmed that the bulk annuity portfolio’s carbon emissions intensity (defined as tonnes CO2e/£m on an EVIC basis) at 31 December 2023 as 57 tonnes CO2e/£m. As at 31 December 2022, this figure stood at 64 tonnes CO2e/£m and the contract had thereby seen a decrease in carbon intensity of 11%. The Trustee expects that the reporting framework will converge in the future to create greater comparability with the Scheme’s other investments. All climate-related metrics available are included in the table below.

Metric	Definition	31 December 2023	31 December 2022
Carbon Emissions Intensity	The amount of carbon dioxide and equivalents (tCO2e) emitted per million Pounds Sterling of Scheme investments.	57 tCO2e/£m EVIC	64 tCO2e/£m EVIC
Carbon Emissions Intensity – Data coverage	The proportion of the assets for which the data point is available.	39% reported 61% estimated	unavailable
Implied Temperature Rise	A forward-looking measure of how aligned the assets are relative to the goal of the Paris Agreement to limit the global temperature increase to 1.5°C above pre-industrial levels. This is estimated based on the activities and targets of portfolio companies / issuers, relative to what is needed to achieve 1.5°C.	2.5°C	unavailable
Implied Temperature Rise – Data coverage	The proportion of the assets for which the data point is available.	41% reported or estimated	unavailable

Source: L&G, 31 December 2023.

L&G has committed to achieving carbon net zero across its annuities book of business in aggregate by 2050 to align with the Paris Agreement on Climate Change. There is also an interim target to halve the portfolio carbon emission intensity by 2030. As part of L&G’s strategic asset allocation review process, climate-related risk is assessed in terms of physical, transition and litigation risks.

DC Section Metrics

Popular Arrangements and Lifestyle Strategies

The Scheme has DC investment strategies qualifying as "popular arrangements." Such arrangements are defined in the statutory guidance as a fund or lifestyle strategy in which £100m or more of the Scheme's assets are invested, or which accounts for 10% or more of the assets used to provide money purchase benefits. The Scheme's default, the Retirement Flexible Income Lifestyle, and the alternative Retirement Cash Lifestyle qualify as popular arrangements. A table with asset values for the popular arrangements is available in the appendix.

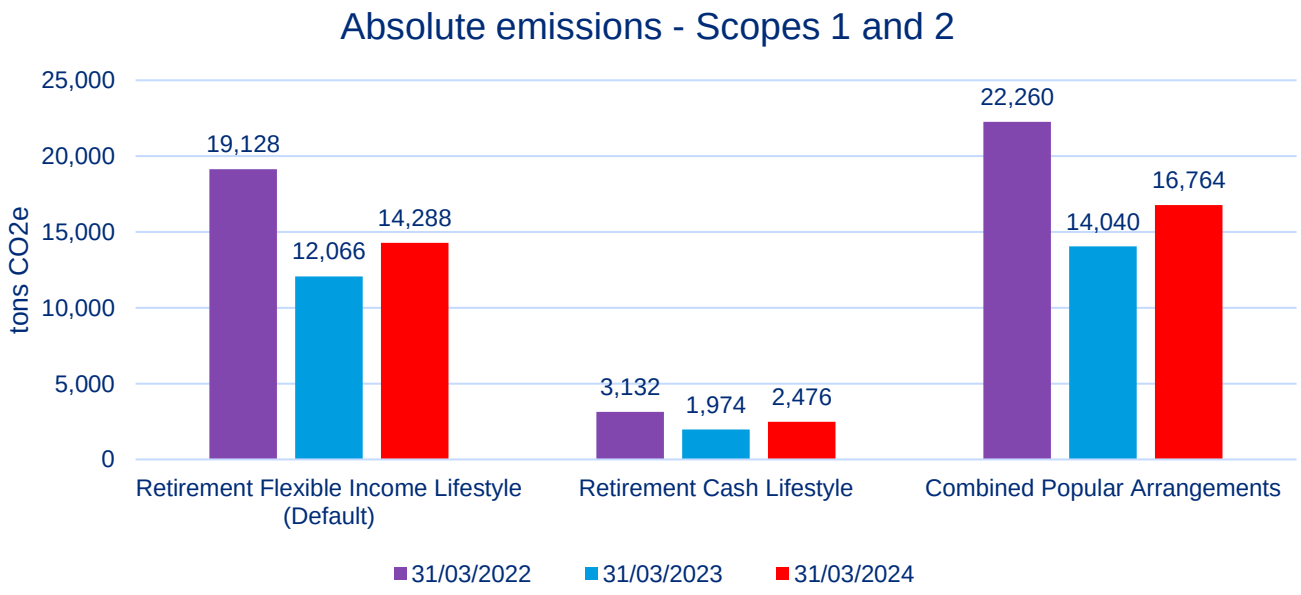
The Scheme's two popular arrangements cover between 83% and 84% of all DC Section assets at the reporting dates. Hence, while some assets are excluded, the metrics shown in this section provide a good representation of the DC Section's carbon emissions exposures overall.

Total Greenhouse Gas Emissions

The following chart shows the total greenhouse gas emissions for the popular arrangements at 31 March 2022, 31 March 2023 and 31 March 2024. The total emissions have increased over the year to 31 March 2024 for the Retirement Flexible Income Lifestyle and the Retirement Cash Lifestyle.

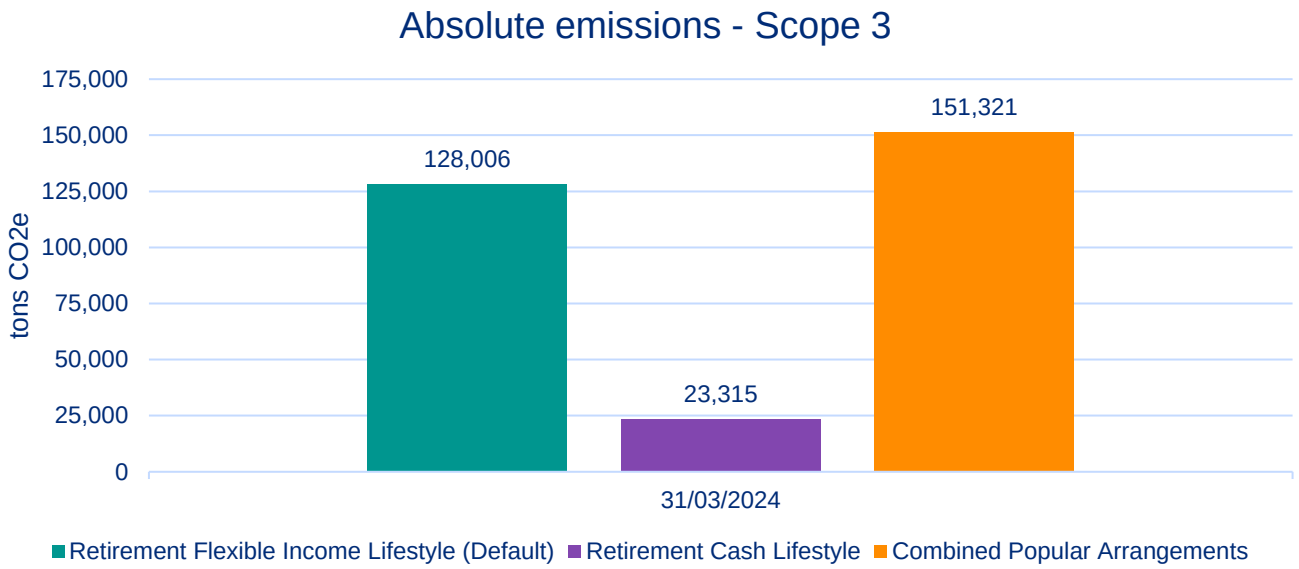
The underlying investment value for both lifestyles increased from 31 March 2023 to 31 March 2024, from c.£230.4m to c.£279.6m and from c.£57.2m to c.£71.8m respectively. At the same time, total greenhouse gas emissions increased by approximately 19% for both lifestyles, but this was not driven by a net increase in carbon intensity of the underlying funds. More information is provided in the following subsection on carbon footprint.

In the following chart, a green bar for the total greenhouse gas emissions at 31 March 2024 denotes a decrease over the year, whereas amber indicates a stagnant and red indicates increasing emissions.



Source: Aegon (the DC platform provider) and Investment Managers, 31 March 2022, 31 March 2023 and 31 March 2024. Mercer has calculated aggregated metrics based on the underlying holdings at the reporting dates.
Please note: Absolute emissions have been approximated by multiplying the carbon footprint (in tons CO2e / $m invested) of each lifestyle's underlying investment funds with their respective investment values at each reporting date (in $m, converted from £m at the following exchange rates: 1.3167 USD/GBP at 31 March 2022, 1.2365 USD/GBP at 31 March 2023, 1.2633 USD/GBP at 31 March 2024).

From 31 March 2024, the Trustee is required to report on scope 3 emissions. The absolute scope 3 emissions are detailed in the chart below. The Trustee will be able to track year-on-year movements in this metric from the next reporting period.



Source: Aegon (the DC platform provider) and Investment Managers, 31 March 2024. Mercer has calculated aggregated metrics based on the underlying holdings.
Please note: Absolute emissions have been approximated by multiplying the carbon footprint (in tons CO2e / $m invested) of each lifestyle's underlying investment funds with their respective investment values at each reporting date (in $m, converted from £m at the following exchange rates: 1.3167 USD/GBP at 31 March 2022, 1.2365 USD/GBP at 31 March 2023, 1.2633 USD/GBP at 31 March 2024).

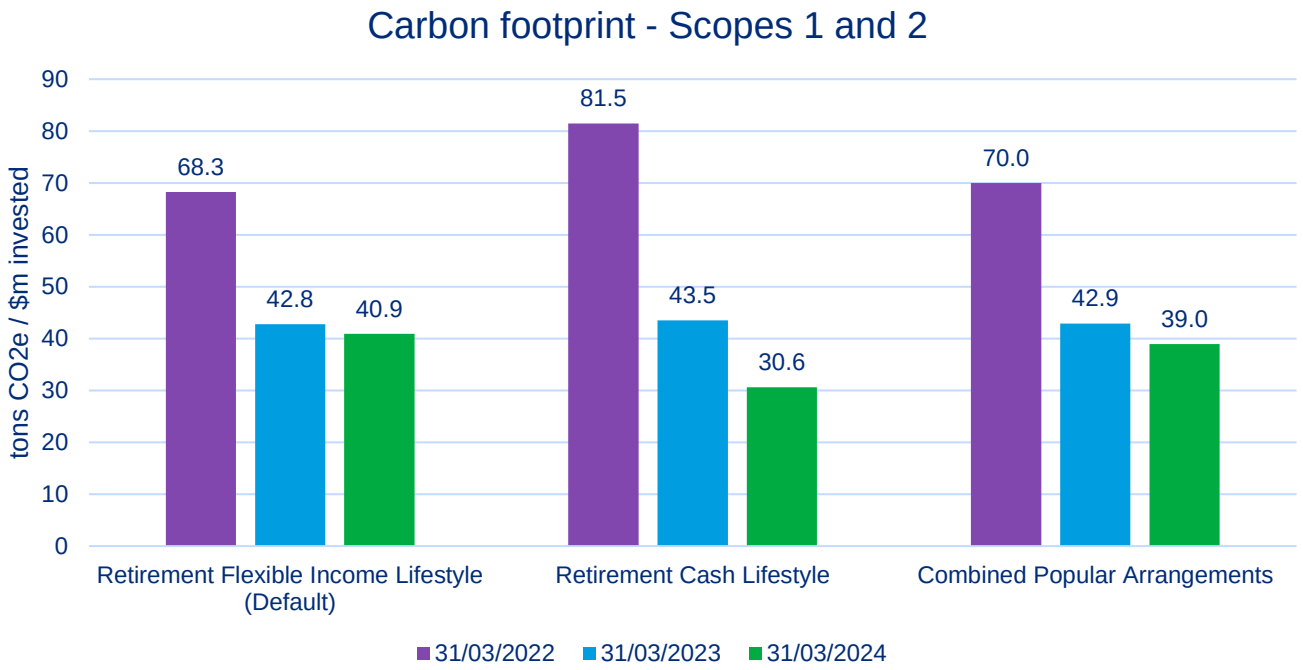
Carbon footprint

The lifestyle strategies have different climate metric exposures at different points of the savings journey. For example, a member investing in either popular arrangement is 100% invested in the Medium Growth Fund up to 10 years before their target retirement date. This allocation would gradually de-risk over the 10 years prior to retirement, towards a flexible allocation for default members, and towards an allocation invested 100% in cash for a Cash Lifestyle member.

In order to account for this, last year's report included charts to illustrate the progression of climate metrics exposures across the retirement savings journey. Following feedback from the Pensions Regulator regarding the length of many schemes' TCFD reports, the Trustee has decided to show only "point in time" comparisons in this section as required by the TCFD guidance.

The chart below sets out this "point in time" assessment. The carbon footprint for both popular arrangements has decreased by 9% between 31 March 2023 and 31 March 2024. The decrease in carbon footprint was relatively stronger for the Retirement Cash Lifestyle than for the default Retirement Flexible Income Lifestyle.

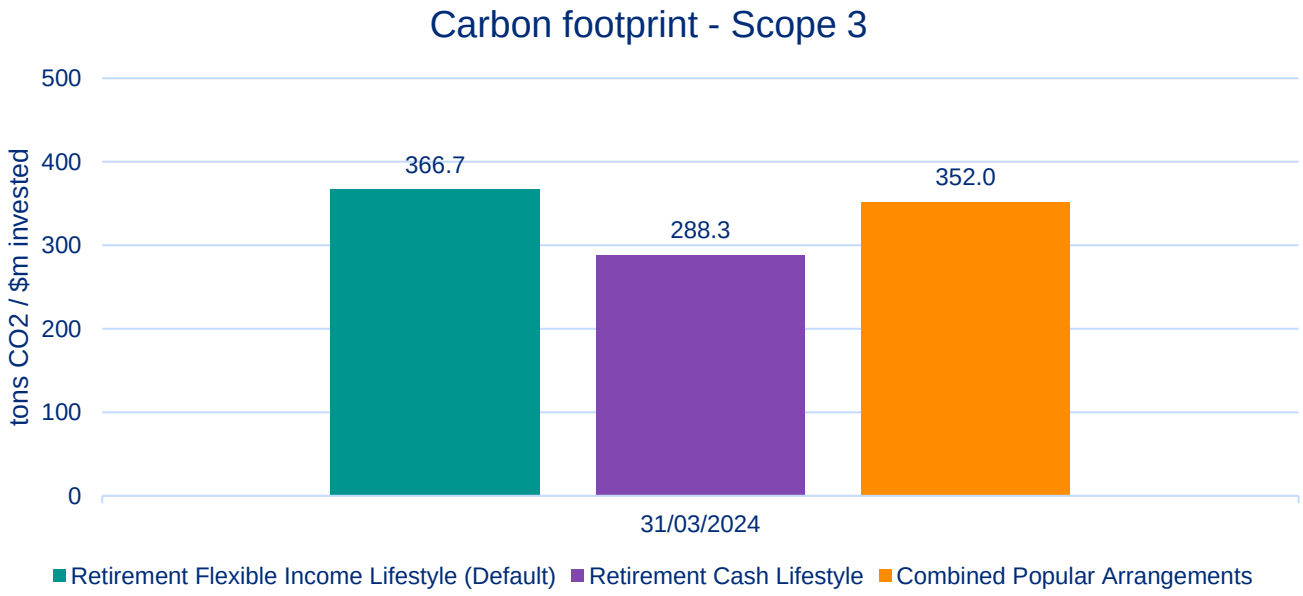
It is important to note that the DC Section saw a more pronounced decrease in carbon footprint between 2022 and 2023. However, the baseline date for the Trustee's goal to halve carbon footprint by 2030 is 31 March 2023.



Source: Aegon and Investment Managers, 31 March 2022, 31 March 2023 and 31 March 2024. Mercer has calculated aggregated metrics.

Note: No carbon footprint data is available for the BlackRock Up to 5 years Index Linked Gilt Index which is a part of both lifestyle arrangements shown. BlackRock disclose sovereign carbon intensity metrics for this fund which are shown in the following section.

From 31 March 2024, the Trustee is required to report on scope 3 emissions. The carbon footprint on scope 3 emissions is detailed in the chart below. The Trustee will be able to track year-on-year movements in this metric from the next reporting period.



Source: Aegon and Investment Managers, 31 March 2022, 31 March 2023 and 31 March 2024. Mercer has calculated aggregated metrics.

Note: No carbon footprint data is available for the BlackRock Up to 5 years Index Linked Gilt Index which is a part of both lifestyle arrangements shown. BlackRock disclose sovereign carbon intensity metrics for this fund which are shown in the following section.

Sovereign Carbon Intensity

Following improvements in data availability, the Trustee has included Sovereign Carbon Intensity as a new metric for the DC Section of the Scheme in this year's report.

In the DC Section, the carbon footprint metric provides a sense of the carbon emissions intensity of the corporate assets for both popular arrangements. To supplement this data with a sense of the carbon emissions intensity from underlying sovereign assets, the Trustee will include sovereign carbon intensity going forward in this report. The metrics and data quality percentages are shown in the table below. Please note that c. 1.1% of assets in the default Retirement Flexible Income Fund are sovereign assets as at 31 March 2024. The share of sovereign assets in the alternative Retirement Cash Fund was c. 17.0%.

Sovereign carbon intensity is not relevant in relation to the Trustee's interim climate target which is set in reference to listed credit and equity investments. Nevertheless, sovereign carbon intensity helps the Trustee to understand the decarbonisation of the investment portfolio from different angles and is therefore a useful additional metric in the same way as Implied Temperature Rise, the share of assets with climate-related targets approved by the SBTi and data quality.

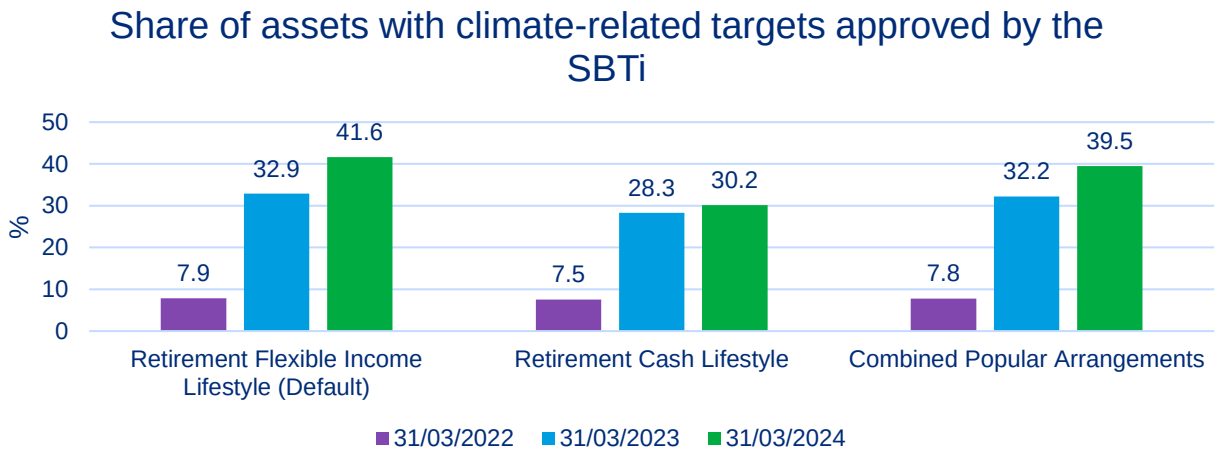
Popular Arrangement	**Sovereign carbon intensity**	**Sovereign data quality**			
	tCO2e/$m PPP-adjusted GDP	% reported	estimated	% not reported	% cash and other assets
Retirement Flexible Income Fund (Default Lifestyle)	138.9	100.0	0.0	0.0	0.0
Retirement Cash Fund (Alternative Lifestyle)	242.9	100.0	0.0	0.0	0.0
Combined Popular Arrangements	227.4	100.0	0.0	0.0	0.0

Source: Investment managers, 31 March 2024. Mercer has calculated aggregated metrics. Please note that the underlying managers who provide the sovereign carbon intensity metric (BlackRock and LGIM) do not split the metric between production and consumption emissions. BlackRock obtains the metric directly from MSCI and LGIM obtains it from ISS. The Trustee will look to address this in future reports.

Share of investments with approved Science-based Targets (SBTs)

This metric is only available for the corporate portfolios as only companies may sign up to the Science-based Targets Initiative, as opposed to governments issuing sovereign bonds.

It should be noted that both lifestyles have nevertheless increased their share of science-based targets both between 2022 and 2023 and between 2023 and 2024. Whereas the steep increase between 2022 and 2023 was driven by changes to the investment strategy, specifically the replacement of Abrdn GARS with the BlackRock ESG Strategic Growth Fund, the increase over the year to 31 March 2024 was driven by a greater share of companies in the underlying funds receiving target approvals from the SBTi.



Source: Aegon and Investment Managers. Mercer has calculated aggregated metrics. At each year to target retirement date, the metric shown is a weighted average of the underlying fund metrics and the funds' relative allocations.

Please note: SBT data is only available for corporate assets, so the SBTi proportion for all underlying sovereign asset funds is 0%. Underlying allocations for all funds used in the lifestyle arrangements are shown in the appendix.

Implied Temperature Rise

The Implied Temperature Rise ("ITR") data for the two popular arrangements is limited, but improving gradually in some areas. As at 31 March 2022, the only available ITR data was for abrdn Global Absolute Return Strategies (GARS). This fund constituted c. 17% of the Medium Growth Fund at the reporting date.

Similarly, at 31 March 2023 and 31 March 2024, the metric was only available for some of the underlying funds of the Medium Growth Fund managed by LGIM and Schroder. Over the year, all ITR figures had decreased although all were above the global temperature rise aim of the Paris Agreement.

BlackRock do not currently provide this metric, although this position may change in the future. The ITR for these funds, alongside their relative weights within the Medium Growth Fund, are shown in the table below.

Please note that the ITR provided by the fund managers cannot be aggregated easily. There is no standard approach for calculating ITR and the investment managers used different methodologies (as described in the appendix). As such, the ITR data cannot be aggregated across managers/mandates.

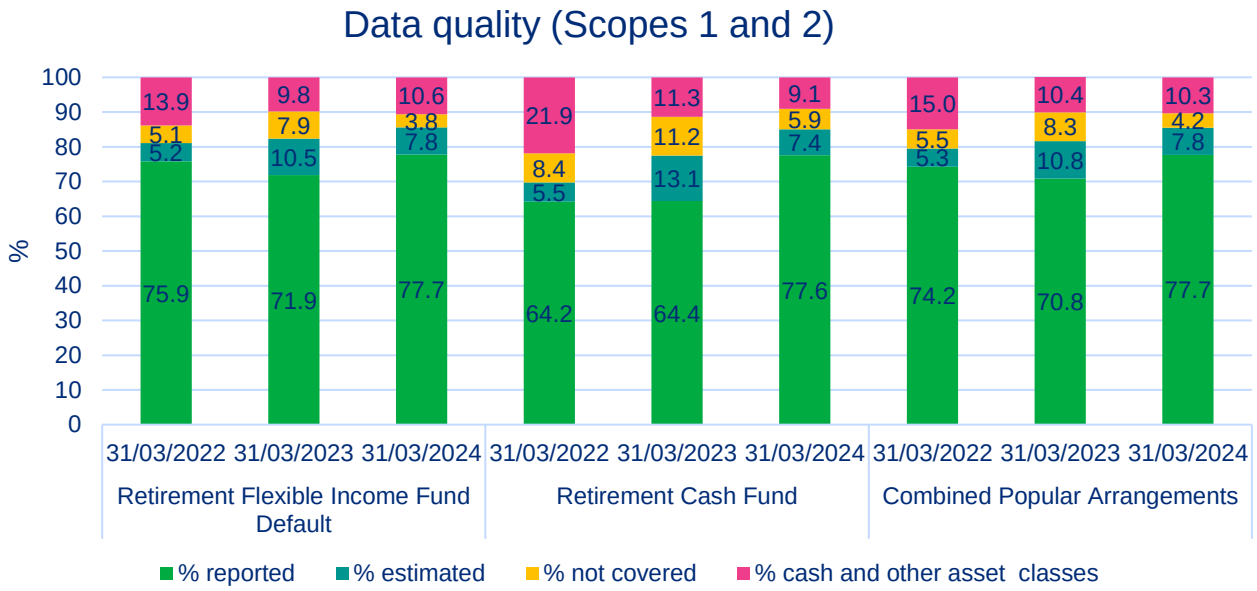
The ITR figures in the table below are for the funds underlying the lifestyle strategies, *where data is available*, and have been provided by the investment managers. The underlying allocations for the DC Section's mixed investment funds and popular arrangements can be found in the appendix.

Underlying Fund	31 March 2022	31 March 2023	31 March 2024
LGIM Future World Global Equity Fund (GBP Hedged)		2.8	**2.7**
LGIM Future World Global Equity Fund		2.8	**2.7**
Schroder Sustainable Future Multi-Asset		2.3	**2.1**
LGIM Diversified Fund		2.9	**2.7**
Abrdn Global Absolute Return Strategies	3.1		

Source: Investment managers.

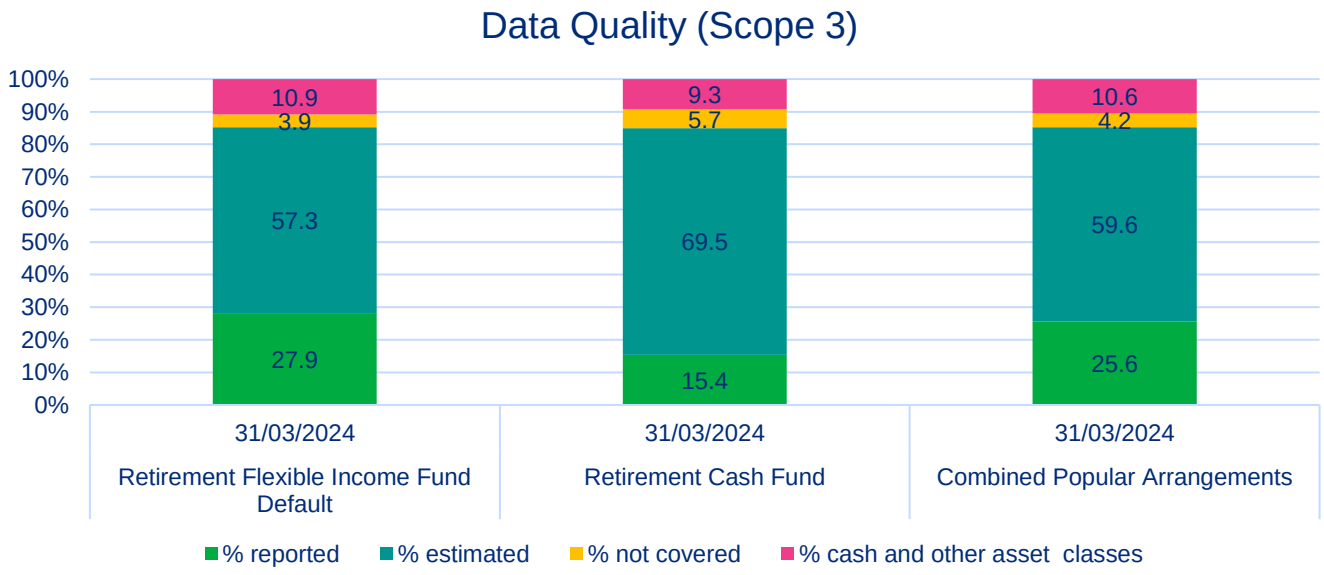
Data Quality

In the following chart, the movement of data quality for both popular arrangements is presented between the reporting dates. Whereas movements in data quality were somewhat spurious between 2022 and 2023, there is a general improvement in quality, notably data that is either reported or estimated in 2024.



Source: Aegon and Investment Managers. Mercer has calculated aggregated metrics. At each year to target retirement date, the metric shown is a weighted average of the underlying fund metrics and the funds' relative allocations.

The Trustee also has to report on scope 3 data but cannot track this data yet over time.



Source: Aegon and Investment Managers. Mercer has calculated aggregated metrics. At each year to target retirement date, the metric shown is a weighted average of the underlying fund metrics and the funds' relative allocations.

Targets

The Scheme invests with a number of investment managers, through both “segregated” (Scheme-specific) mandates and “pooled” funds (where the Scheme invests alongside other schemes in a shared investment vehicle). Additionally, in the DC Section members can choose their individual investments. As such, the Trustee does not directly control the climate-related metrics at the Scheme level.

However, the Trustee has set a firm ambition given the significance of climate change risks, and with this in mind has set a “net zero” carbon emissions target by 2050 for listed equity and credit assets, scopes 1 and 2.

The Trustee has also set an interim target of achieving a 50% reduction in scope 1 and 2 emissions for listed equity and credit assets by 2030 as measured by the carbon footprint metric, relative to a baseline date of 31 March 2023. Information for the year ending 2022 has been included in this report again to provide additional context around how metrics can change over time. Carbon footprint is used for the 2030 target metric rather than absolute emissions as the absolute emissions figures will be impacted by market movements and changes in the value of the asset portfolios.

The rationale for the Scheme’s target is:

Grounded in science

This target is considered necessary to reduce greenhouse gas emissions and keep global warming to 1.5°C, meeting the goals of the Paris Climate Agreement.

Clear plan with investment managers

The Scheme’s investment managers are committed to net zero by 2050. Therefore, the assets are expected to get to net zero and the Trustee can objectively follow up against this goal with their managers.

Alignment with the sponsoring employer

United Utilities has also set a net zero target. While recognising that pension schemes and companies have different legal and financial duties, a joined-up approach can be an enabler of success.

Between 31 March 2023 and 31 March 2024, the decrease in carbon emissions intensity has been 38% for the DB Section and 9% for the DC Section.

For the DB Section, this decrease is driven by the completion of the purchase of an insurance policy in July 2023, as well as by changes to the residual investment strategy, in particular disinvestment from the LGIM Buy and Maintain Credit mandate which had higher carbon intensity than the Insight mandate. Excluding the insurance policy, this leaves the Insight Buy and Maintain Credit as the only mandate with listed corporate credit assets. The mandate’s own carbon footprint reduced from 41 to 32 tCO2e / $m invested over the year to (i.e. 22%).

In relation to the DC Section, there have been no changes to the investment strategy over the year. However, given the setup of DC investments, the composition of the popular arrangements is subject to constant change as members move through their retirement savings journey, make changes to their investments, retire or transfer out. The 9% reduction in carbon footprint is due to decreasing carbon footprint metrics for virtually all underlying funds (except cash and emerging market holdings). The decrease over the year also follows a 39% reduction between 31 March 2022 and 31 March 2023.

The Trustee will continue to work closely with its investment managers to monitor and track progress over time. Discussions with each investment manager will take place at least annually.

A wide range of factors will affect whether the Scheme achieves its targets, and the Trustee has varying degrees of control over these factors.

Ultimately achieving the desired level of decarbonisation will depend on global economies overall successfully decarbonising. Notwithstanding that there are factors outside of the Trustee’s control, the intention is to meet the target set.

Appendix

Climate scenario modelling approach

The results of the climate scenarios represented in this appendix are relative to a "baseline", which represents what it is assumed that the market is already pricing in. The baseline includes a 10% weight to a **Failed Transition**, 40% to an **Orderly Transition**, 10% to a **Rapid Transition** and 40% to a range of **low impact scenarios**.

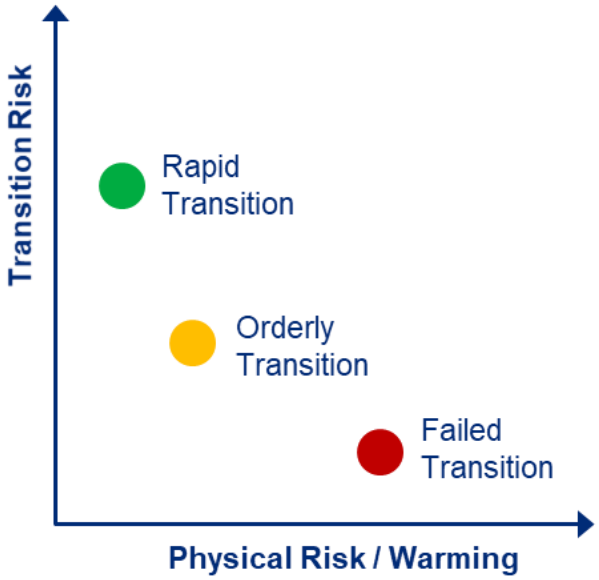
Climate scenario narratives and assumptions

	Rapid Transition	Orderly Transition	Failed Transition
Summary	Sudden divestments in 2025 to align portfolios to the Paris Agreement goals have disruptive effects on financial markets with sudden repricing followed by stranded assets and a sentiment shock.	Political and social organisations act quickly and predictably to implement the Paris Agreement goals to limit global warming to below 2°C above pre-industrial levels by 2100.	The world fails to meet the Paris Agreement goals and warming reaches 4.3°C above pre-industrial levels by 2100. Physical impacts cause large reductions in economic productivity and increasing impacts from extreme weather.
Cumulative emissions to 2100	416 GtCO2e	810 GtCO2e	5,127 GtCO2e
Key policy and technology assumptions	An ambitious policy regime is pursued to encourage greater decarbonisation of the electricity sector and to reduce emissions across all sectors of the economy. This leads to higher carbon prices, larger investments in energy efficiency and faster phase out of coal-fired power generation (particularly under a Rapid transition).		Existing policy regimes are continued with the same level of ambition.
Financial climate modelling	Pricing in of transition and physical risks of the coming 40 years occurs within a year in 2025. As a result of a market correction, a confidence shock to the financial system takes place in the same year.	Pricing in of transition and physical risks until 2050 takes place over the first 4 years.	Physical risks are priced in two different periods: 2026-2030 (risks of first 40 years) and 2036-2040 (risks of 40-80 years).
Physical risk impact on GDP	Physical risks are regionally differentiated, consider variation in expected temperature increase per region and increase dramatically with rising average global temperature. Physical risks are built up from: Gradual physical impacts associated with rising temperature (agricultural, labour, and industrial productivity losses) Economic impacts from climate-related extreme weather events Current modelling does not capture environmental tipping points or knock-on effects (e.g., migration and conflict).		
Physical risk impact on inflation	Gradual physical impact (supply shocks) on inflation included through damages to agriculture and change in food prices. Total impact on a Global CPI Index is +2% in 2100.	No explicit modelling of physical risk impact on inflation (supply-side shocks). Impact on inflation follows historical relationship between GDP and CPI.	Severe gradual physical impact (supply shocks) on inflation included through damages to agriculture and change in food prices. Total impact on a Global CPI Index is +15% in 2100.

Source: Mercer and Ortec. Climate scenario analysis for the Scheme conducted as at 31 December 2022.

Summary of Scenarios Considered (temperature rises expressed relative to pre-industrial average)

- **Rapid Transition:** Average temperature increase of 1.5°C by 2100. This assumes sudden downward re-pricing across assets by 2025. This could be driven by a change in policy, consideration of stranded assets or expected costs. The shock is partially sentiment-driven and so is followed by a partial recovery. Physical damages are most limited in this scenario.
- **Orderly Transition:** Average temperature increase of less than 2.0°C by 2100. Governments and wider society act in a co-ordinated way. As such, transition impacts do occur but are relatively muted.
- **Failed Transition:** Average temperature increase above 4°C by 2100. The world fails to co-ordinate a transition to a low carbon economy. Physical climate impacts significantly reduce economic productivity and have increasingly negative impacts including from extreme weather. These are reflected in re-pricing events in the late 2020s and late 2030s.



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

Scenario Analysis Results

In our report for the year to 31 March 2023, the Trustee set out the results of the quantitative climate scenario analysis considered during the year. This analysis helped to assess the potential implications of climate change under different scenarios for the Scheme. The Trustee has reviewed the analysis and agreed not to undertake updated analysis this year, for the reasons described in the Strategy Section of this report. However, the analysis carried out in the prior year remains relevant and is summarised here.

The Trustee carried out quantitative climate scenario analysis to test the resilience of the investment strategy of both the DB Section and the DC Section, and the funding strategy of the DB Section.

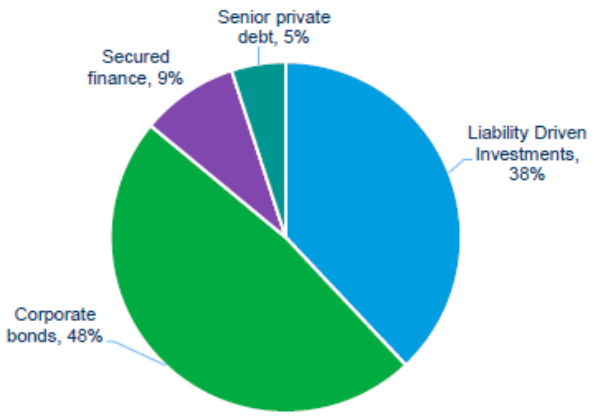
Quantitative scenario analysis was undertaken in order to assess the potential implications of climate change under three possible scenarios; a Rapid Transition to a lower carbon world, an Orderly Transition, and a Failed Transition. The analysis is based on scenarios developed by Mercer working with Ortec Finance.

DB Section Introduction

The following charts show projections of the estimated impact on future investment returns, from an analysis date of 31 March 2021 (to be consistent with the date of the Scheme's last triennial actuarial valuation at the time of the analysis), under the different possible climate scenarios. The analysis assumed a static asset allocation in line with

the low risk investment strategy that was in place at the time of the analysis. The chart shows the “climate impact” which represents the difference in returns relative to the baseline position, under the various scenarios.

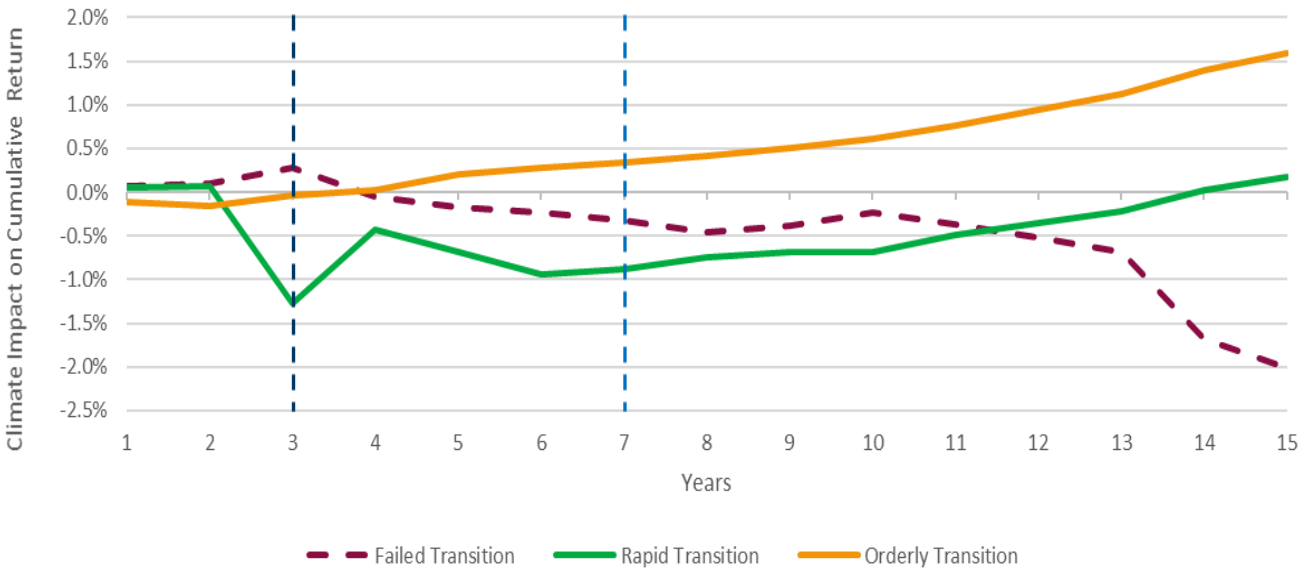
DB Section asset allocation modelled in analysis considered in 2023



Each asset class was modelled based on the typical portfolio of underlying holdings. In some cases, approximations are made where there is no widely acceptable “perfect match” for a portfolio. For example, secured finance is assumed to behave in a similar way to high yield bonds, as there is no secured finance category in climate models. Further, a portion of the corporate bond allocation is assumed to be in “green” bonds, to reflect the fact that the Scheme has implemented ESG based exclusions.

Note that since the last analysis, the Scheme’s investment portfolio has changed – but it is the allocation shown to the left that is relevant to the results of the analysis that follows.

DB Section Results – Investment Strategy and Returns (results expressed relative to baseline)



Key points at different time frames

3 **Short term – 3 years:** Transition risk dominates. A rapid transition is the most impactful scenario, and drives a short term shock to returns followed by a recovery. The failed transition is very marginally positive due to transition costs that are currently assumed to be priced in to markets for example, those associated with businesses changing the way they operate) not materialising to the same extent.

7 **Medium term – 7 years:** Transition risks are still the most significant. However, the failed transition has started to become more negative as future physical damages start to be priced in. The orderly transition to a lower carbon world is the most positive scenario.

15 **Long term – 15 years:** The failed transition is the most negative, reducing returns when compared with the orderly or rapid transitions. This is because the economic cost of more extreme weather events and physical damage start to impinge on companies and governments, and hence the price of the securities they issue. The orderly transition is positive on the basis that transition costs and impacts are smaller and largely priced in, and long term physical impacts are expected to be more modest.

Why does the impact seem relatively small?

While there are clear differences in estimated projected returns under the different scenarios, one reason why effect on returns may seem small (though still impactful) is that the Scheme's low risk investment approach protects the Scheme from some of the more damaging market impacts that would apply to equities, infrastructure, and other growth assets.

That said, even on a low risk strategy, at much longer term periods, the failed transition becomes increasingly negative.

DB Section Results – Funding and Longevity Impacts

The Trustee has also considered the potential impact on Scheme funding of different climate change scenarios. This was carried out using Scheme funding information (including liability cashflows) as at 31 March 2021 (consistent with the triennial valuation date), rolled forward for market conditions and updated assumptions for capital market returns, and based on the investment and funding strategy that was in place at the time of the analysis, which involved:

- Investing in a low risk portfolio of corporate bonds, liability driven investments, and a small allocation to private market debt.
- Fully hedging inflation and interest rate risk.
- Adopting a low risk, prudent funding strategy, with a stable and strong funding position.

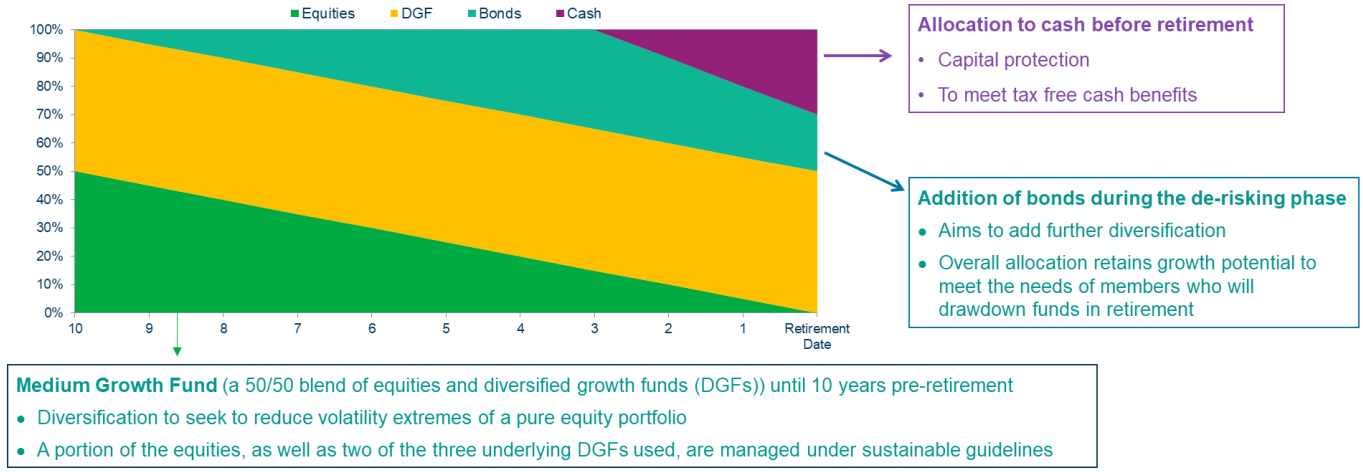
As noted elsewhere in this report, the Trustee has now carried out further de-risking, securing a bulk annuity policy that covers a significant proportion of the liabilities. Clearly, this marks a key milestone for the Scheme's DB Section de-risking journey. As such, the Trustee and its advisers consider that relying on funding level projections based on older information may be less relevant. However, within the Strategy Section, and later in this Appendix, we set out the key conclusions from the analysis, and how these have been integrated in the Trustee's approach to climate risk and opportunity management whilst also recognising the bulk annuity transaction.

DC Section Introduction

DC Section asset allocation modelled in analysis considered in 2023

The Scheme has DC investment strategies qualifying as "popular arrangements." Such arrangements are defined in the statutory guidance as a fund or lifestyle strategy in which £100m or more of the DC Section assets are invested, or which accounts for 10% or more of the assets used to provide money purchase benefits. At the time of the last scenario analysis, the Scheme's default option, the Retirement Flexible Income Lifestyle, qualified as a popular arrangement. The default investment strategy is a "lifestyle" approach whereby assets are gradually de-risked as each member approaches their target retirement date.

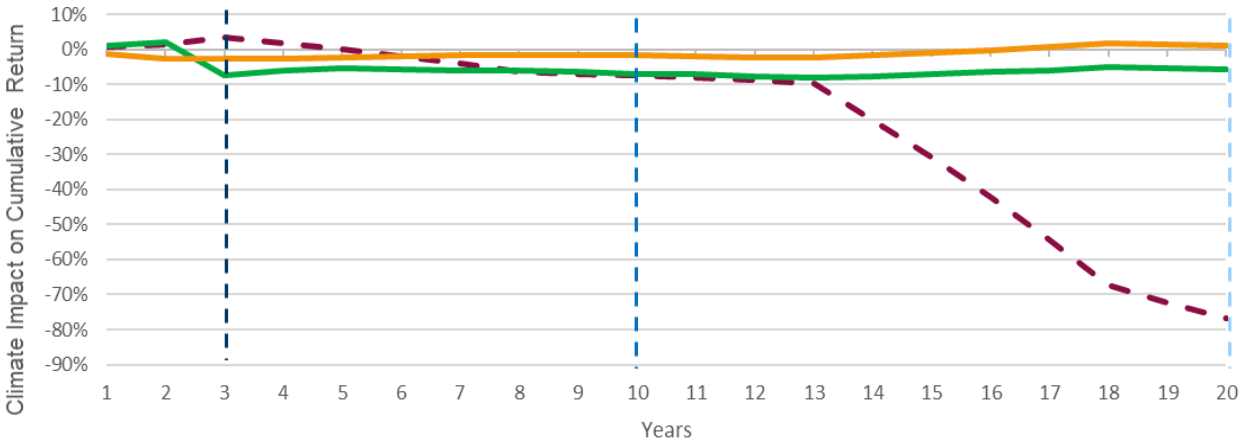
The analysis on the following pages considers climate scenarios for a member in the Scheme's default lifestyle strategy, the "Retirement Flexible Income" option. Before setting out the results we summarise the lifestyle strategy for ease of reference.



Subsequent to the end of the reporting period, Scheme data highlighted that the Cash Lifestyle strategy also qualified as a popular arrangement. This lifestyle strategy has an identical "growth phase" to the Retirement Flexible Income Lifestyle, up until 10 years before retirement, and there is relatively high overlap in the asset allocation through the de-risking phase (see later tables for details).

DC Section Default Strategy – Retirement Flexible Income Lifestyle

The chart shows the estimated impact on cumulative investment returns of different climate scenarios, relative to the baseline.



Key points at different time frames

3 **Short term – 3 years:** Transition risk dominates. A rapid transition is the most impactful (and negative) scenario, leading to a shock to returns as the market prices in the cost of transition to a lower carbon world. This is however followed by a partial recovery. A failed transition is perhaps surprisingly marginally positive due to transition costs to economies not materialising. While we estimate that a rapid transition would impact materially in year 3, in practice there is likely to be a window around this.

10 **Medium term - 10 Years:** The impact of an orderly transition is small relatively to the baseline axis on the basis that transition costs / impacts are smaller and largely priced in. The failed transition starts to become more negative, as investment markets price in the financial impact of future physical damages.

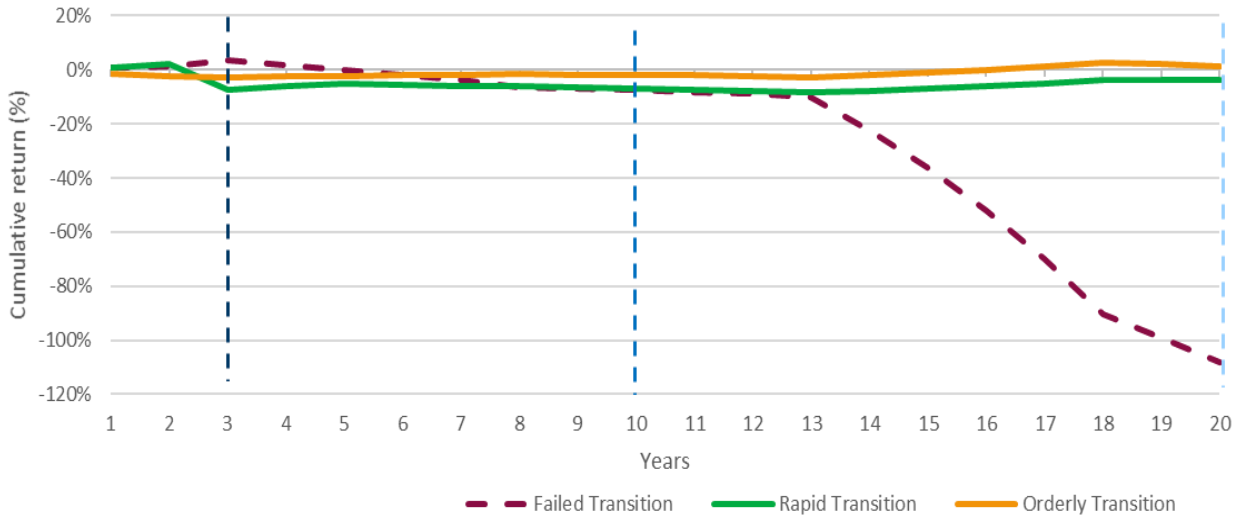
20 **Long term – 20 years:** Physical damage impacts become much more negative, highlighting that a failure of the world to move to a lower carbon future will have a material negative effect on economies and investment markets.

In respect of the Cash Lifestyle, which also qualifies as a popular arrangement, the impacts are identical for the first 10 years. Closer to retirement, the impacts are expected to be smaller due to the higher allocation to cash in this strategy. The most significant impacts for both Lifestyles comes through the investment in the Medium Growth Fund during the growth phase. Whilst the Medium Growth Fund is not in itself a “popular arrangement” as defined in the regulations, investment levels in this fund are high (albeit via the default Lifestyle strategy), and the Trustee has therefore considered scenario analysis for this fund on a stand-alone basis, as shown overleaf.

Medium Growth Fund

The Medium Growth Fund is the “growth” phase of the Scheme’s default investment strategy and the two other lifestyle strategies (Cash Lifestyle and Annuity Lifestyle), and approximately 75% of the assets of the DC Section are invested in this fund.

The chart below is presented in a similar format as that shown for the default strategy as a whole. It shows the estimated impact on cumulative investment returns of different climate scenarios, relative to the baseline.



Key points at different time frames

3 **Short term – 3 years:** We see a similar pattern to that seen for the default lifestyle strategy. Transition risk dominates, and again a rapid transition is the most impactful, followed by a partial recovery the following year. The similarity to the lifestyle strategy is as expected given that in the early lifestyle de-risking phase, a member is nearly fully invested in the Medium Growth Fund.

10 **Medium term - 10 Years:** The orderly transition is the most positive scenario, albeit the impact is relatively small on the basis that transition costs and impacts are largely priced in.

20 **Long term – 20 years:** The failed transition is by far the most negative scenario, and is estimated to cause a material reduction in cumulative returns. This is larger than for the lifestyle strategy on the previous page as the Medium Growth Fund is more exposed to equities, where sectoral risks are higher, relative to the lifestyle strategy which includes cash and bonds as the allocation de-risks.

Scenario Analysis Findings

In light of the above quantitative analysis, the Trustee notes the following findings:

Short Term	In the short term, transition risk dominates with a Rapid Transition having the biggest impact. An initial fall in asset returns (relative to baseline) and the funding level for the DB Section is driven by a transition shock impacting the economy and investment markets. This could be driven by unprecedented policy action, with markets initially overreacting before partially recovering. The actual timing of any shock or recovery is uncertain. **DB Section:** While short term risk is "visible" mainly in investment returns, market data also feeds into the valuation of the liabilities (in particular, through bond yields and inflation metrics). Therefore the market impact has the potential to affect both the assets and the liabilities. The Scheme has taken a number of steps to de-risk the investment strategy over time, and has a prudent funding approach. As such, the level of exposure to higher risk assets such as equities (which tend to be more at risk of the impact of climate change, particularly over short periods) is nil. The Trustee has also engaged with the covenant adviser and the company to understand and mitigate risks to the covenant – primarily through putting in place a very low risk investment strategy and prudent funding basis. **DC Section:** Given the short term nature of transition risks, members closer to retirement and intending to divest their Scheme savings may be expected to be more exposed to these risks than those further from retirement.
Medium Term	Over the medium term, transition risk and physical risk are both factors. The impact of transition risks under a Rapid Transition and physical risks under a Failed Transition are broadly similar. **DB Section:** The impact on both asset returns and the estimated funding level is relatively modest under all scenarios (and positive in the case of an Orderly Transition), given the low risk investment strategy adopted. However, the failed transition scenario becomes more impactful as future long term physical damages start to be priced in to financial markets. Under the failed transition the funding level was estimated to reduce by c.0.3% over this period, all else being equal. The timing of any shock or recovery is uncertain. It is worth noting that the transition shock impacts credit markets via a widening of credit spreads followed by a rebound as these spreads normalise without a material increase in downgrades or defaults. It is possible that additional downgrades and defaults could limit the rebound. Given the Scheme's bond-based investment strategy, it is credit defaults that represent one of the more significant financial risks. **DC Section:** Members in the de-risking phase may be particularly affected by these risks, given the 10 year de-risking phase aligns with the medium term time horizon of the analysis. This is why the Trustee has sought to integrate climate change risk and opportunity management within the default strategy, to improve the resilience of the arrangements.
Long Term	Over the long term, physical impacts become significant, with a Failed Transition being the most impactful. **DB Section:** The most negative outcome is the Failed Transition, representing a risk to the future funding position. Over the long term, there may also be impacts on longevity and other demographic features of our membership. Mindful of this risk, and other long term risks, the Trustee has taken further steps to provide benefit security for our members through the purchase of an insurance policy. **DC Section:** Members who are further from retirement, with a longer investment horizon, are expected to be the most exposed to these risks, along with being potentially able to benefit from the long term investment opportunities associated with technology developments, new climate solutions, and renewable energy.

Limitations associated with climate modelling

Climate scenario modelling is a complex process. The Trustee is aware of its limitations. In particular:

1. The further into the future you go, the less reliable any quantitative modelling will be.
2. There is a reasonable likelihood that physical impacts are grossly underestimated. Feedback loops or 'tipping points', like permafrost melting, are challenging to model particularly around the timing of such an event and the speed at which it could accelerate.
3. Financial stability and insurance 'breakdown' is not modelled. A systemic failure may be caused by either an 'uninsurable' 4°C physical environment, or due to the scale of mitigation and adaption required to avoid material warming of the planet.
4. Most adaptation costs and social factors are not priced into the models. These include population health and climate-related migration.
5. New and emerging risks, such as the impact of climate change on biodiversity loss, and vice versa, is expected to be integrated into climate scenario modelling over time once the supporting science and impact on econometrics and finance is better understood.

Climate metric analysis approach

Data sources

Data for the climate metric analysis has been obtained from the investment managers. These managers may use third parties for the metrics, as summarised below:

Fund Manager	Data Provider
Abrdn	Trucost for emissions data; Planetrics and abrdn for Implied Temperature Rise; MSCI ESG Manager for SBT coverage
BlackRock	MSCI
Insight	Insight (in-house) and MSCI for corporate bond metrics; Insight (in-house), UK Government, DMO, IMF, Germanwatch CCPI, Climate Action Tracker for sovereign bond metrics
LGIM	Institutional Shareholder Services (ISS)
Schroder	MSCI

Scope of emissions

Scope 1, 2 and 3 emissions data has been included in this report, except where noted. The data coverage for Scope 3 emissions data is improving but the assessment of an invested company's carbon footprint could be considered an understatement. Scope 1, 2 and 3 emissions are as defined by the GHG protocol.

Data coverage

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

- Some public listed companies are not publishing climate-related data or are providing poor quality data. This is relevant to public equity and corporate bonds. Obtaining data for emerging market equity and debt can also be challenging due to general disclosure and transparency challenges.
- Many private companies do not currently produce climate-related data and coverage for private markets, such as private equity and private debt, will be low, or zero for mature funds.
- Sovereigns, or governments, may not publish climate-related data in the public domain. This is a particular challenge for emerging market debt. For UK government debt, data is available but there is a delay in the data being published.

- Short-term instruments, such as secured finance assets, have limited data available due to the short-term nature of the individual assets.
- For property, the occupiers of the buildings in a portfolio have full operational control and there are no Scope 1 or 2 emissions associated with the assets. The relevant investment managers are looking to improve the collection of Scope 3 data – this includes occupier activities where they have direct utility supplier contracts.

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

DB Section

DB Portfolio	Data Coverage (Sum of Reported and Estimated Data) in %		
	31 March 2022	31 March 2023	31 March 2024
Insight Buy and Maintain	61.0	61.0	85.0
LGIM Buy and Maintain	66.0	67.7	n/a
LGIM LDI	100.0	100.0	100.0

DC Section

DC Portfolio	Data Coverage (Sum of Reported and Estimated Data) in %		
	31 March 2022	31 March 2023	31 March 2023
Retirement Flexible Income Fund (Default)	80.6	81.7	85.5
Retirement Cash Fund	65.8	69.3	85.0

Additional Disclaimers – Implied Temperature Rise

Many managers do not capture Implied Temperature Rise ("ITR"), due to the lack of a standardised methodology. Abrdn, Insight, LGIM and Schroder have provided this data for relevant funds and notes regarding their methodology are shown below. BlackRock do not currently provided ITR.

Abrdn (mandate now terminated, but relevant for 2022)

Abrdn use a carbon budget approach to calculate ITR, and have provided the following explanations:

We have chosen a "Budget approach".
- *By "budget", we mean that our first step is to forecast a carbon "budget", which aligns to "Below 2°C Scenario", as described by the Network for Greening the Financial System (NGFS)*
- *Based on a forecast of company emissions using our bespoke climate scenario modelling framework, which produces pathways for absolute carbon (+ equivalent) emissions, we can evaluate how far above or below the "budget" they are. This over- or under-shooting of the budget allows us to establish the implied temperature rise for a given corporation; going over budget implies a warming above that dictated in the "Below 2C Scenario"*
- *One consideration often highlighted is the importance of corporate targets. As a standard output we do not incorporate corporate targets given the difficulty in assessing their credibility. However we have established a robust framework for assessing credibility, which we can apply to a small subset of corporations.*

Why have we chosen this method?
- *A Budget approach most closely aligns to Glasgow Financial Alliance for Net Zero and TCFD recommendations.*

- *Some methods use only "point-in-time" emissions measures (what are a given company's emissions expected to be in 2050) in assessing their temperature alignment. However this completely ignores the path of their emissions up to that point. After all, global temperature rise will be a function of cumulative increases in anthropogenic GHG emissions*
- *We use forecasts for absolute emissions (tonnes of CO2e) as opposed to an emissions intensity (tCO2e/Revenue) metric; the introduction of a revenue denominator can create unwarranted fluctuations that are not necessarily consistent with the direction of absolute emissions rising or falling.*
- *The Budget approach has a single method of portfolio aggregation which we deem to be conceptually superior to the three options in the Pathways approach. This metric allows sensible calculations of benchmark divergence, a key component of portfolio alignment.*

Insight

In relation to the LDI portfolio, Insight's ITR assumption is based on analysis conducted by Germanwatch and the Climate Action Tracker. For corporate assets, such as the Scheme's Insight Buy and Maintain portfolio, Insight use MSCI's methodology to derive ITR. This method calculates the ITR (in the year 2100 or later), "if the whole economy had the same over-/undershoot level of greenhouse gas emissions to the company analysed, based on its most recent Scope 1, 2 and 3 projected emissions."

LGIM

ITR is calculated by projecting forward expected emissions intensity/absolute emissions (dependent on sector) of an issuer to 2030 and comparing this projection to temperature-aligned sectoral decarbonisation pathways. The projection integrates backward-looking trend analysis and probability-adjusted forward-looking targets. The scenarios used to calibrate the sectoral decarbonisation pathways are all 'orderly' scenarios which require smooth and coordinated action towards decarbonisation. The carbon intensity used includes all GHGs adjusted to tonnes of carbon dioxide equivalents using the IPCC AR4 GWP (Global Warming Potential) factors in line with GHG protocol guidance.

Implied temperature alignment is a function of two mappings: first, global emissions onto global temperatures, and second, a company's projected emissions onto global emissions pathways. In aggregate, a company is then mapped to a temperature. For more details, please refer to Net zero - A practical guide.

Schroder

The Implied Temperature score is calculated using the SBTi method for companies based on valid targets set for scope 1 and scope 2 carbon emissions reductions over the mid-term horizon (5 -15 years).

Asset Allocations Modelled

DC Section Popular Arrangements and Lifestyle Allocations

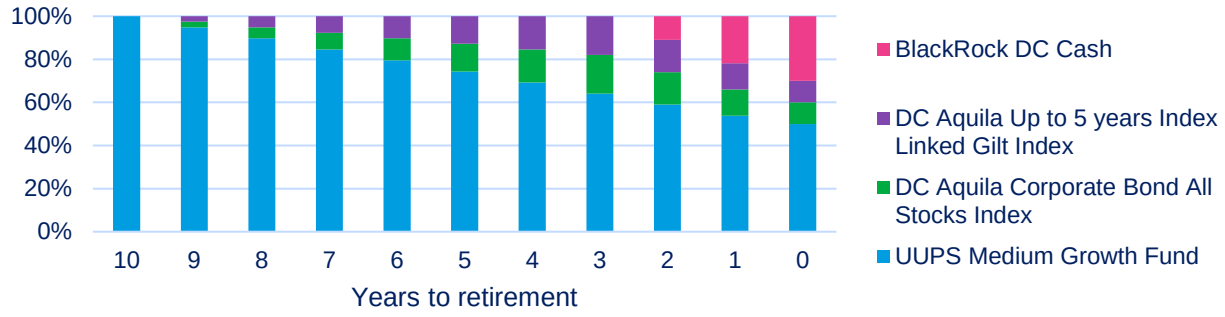
A popular arrangement is defined in the statutory guidance as a fund or lifestyle strategy which £100m or more of Scheme assets are invested, or which accounts for 10% or more of the assets used to provide money purchase benefits (excluding assets solely attributable to Additional Voluntary Contributions). For the purpose of identifying popular arrangements, lifestyle strategies are regarded as one unit. This means that any assets held by lifestyle members are attributed to the relevant lifestyle arrangements rather than the underlying funds. In practice, this means that a popular underlying fund may not count as a popular arrangement. This is because once the assets invested in the fund that pertain to lifestyle arrangements are accounted for, the remaining self-select assets may not exceed the threshold test.

The following strategies are defined as popular arrangements. Below, we are showing the asset values and "glidepaths" for each lifestyle strategy. Please note that prior to 10 years before retirement, each lifestyle strategy invests fully in the Medium Growth Fund.

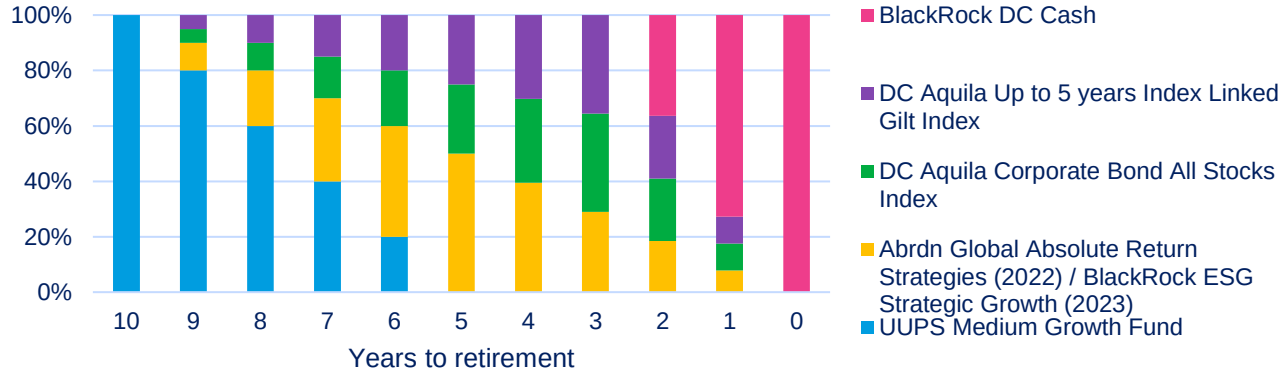
1. Asset Values (*and Percentage Shares of Total DC Assets*)

	31 March 2022		31 March 2023		31 March 2024	
DC Section Total	£317.6m	*100.0%*	£342.1m	*100.0%*	£351.4m	*100.0%*
Retirement Flexible Income Lifestyle	£214.8m	*67.6%*	£230.4m	*67.3%*	£279.6m	*79.6%*
Cash Lifestyle	£48.7m	*15.3%*	£57.2m	*16.7%*	£71.8m	*20.4%*

2. Retirement Flexible Income Lifestyle (default arrangement)



3. Cash Lifestyle



The underlying allocations for the Medium Growth Fund and the Diversified Growth Fund are shown below.

Medium Growth (default growth phase fund)	16% LGIM Future World Global Equity Fund (GBP Hedged)
	16% LGIM Future World Global Equity Fund
	16% BlackRock Global Minimum Volatility Index
	2% BlackRock Emerging Markets Equity Index
	50% United Utilities Diversified Growth Fund

United Utilities Diversified Growth Fund	33.3% Schroder Sustainable Future Multi-Asset
	33.3% LGIM Diversified
	33.4% Abrdn Global Absolute Return (2022) / BlackRock ESG Strategic Growth (from 2023)

Climate metrics for the funds underlying the popular arrangement

31 March 2022

All data is shown as provided by the underlying managers at the reporting date. An “n/a” insertion indicates where data is not available.

Funds used in the popular lifestyle arrangements

Type of Metric	Metric	UUPS Medium Growth Fund	Abrdn Global Absolute Return Strategies	DC Aquila Corporate Bond All Stocks Index	DC Aquila Up to 5 years Index Linked Gilt Index	BlackRock DC Cash
Intensity	Carbon footprint	68.4	198.1	44.5	n/a	0.5
Data Quality[1]	Reported (%)	75.9	2.2	62.8	0.0	80.8
	Estimated (%)	5.1	3.1	24.2	0.0	7.3
	Not covered (%)	5.0	5.7	13.0	100.0	11.9
	Cash and other asset classes (%)	13.9	89.0	0.0	0.0	0.0
Portfolio Alignment	Implied Temperature Rise (°C)	n/a	3.1	n/a	n/a	n/a
	Proportion with SBT (%)	7.8	1.0	23.5	0.0	0.2

[1] *Please note that the sum of reported and estimated data equals data coverage, i.e. the portion of the fund data emissions data is available for.*

Underlying funds of the UUPS Medium Growth Fund

Type of Metric	Metric	LGIM Future World Global Equity (GBP Hedged)	LGIM Future World Global Equity	BlackRock Global Minimum Volatility Index	UUPS Diversified Growth	BlackRock Emerging Markets Equity Index
Intensity	Carbon footprint	28.6	28.7	51.1	111.5	135.5
Data Quality[1]	Reported (%)	97.0	95.8	77.2	55.5	71.6
	Estimated (%)	0.0	0.0	22.3	0.4	27.0
	Not covered (%)	2.8	2.8	0.5	9.6	1.2
	Cash and other asset classes (%)	0.2	1.4	0.0	34.4	0.2
Portfolio Alignment	Implied Temperature Rise (°C)	n/a	n/a	n/a	n/a	n/a
	Proportion with SBT (%)	n/a	n/a	37.4	1.0	7.3

[1] *Please note that the sum of reported and estimated data equals data coverage, i.e. the portion of the fund data emissions data is available for.*

Underlying funds of the UUPS Diversified Growth Fund

Type of Metric	Metric	Schroder Dynamic Multi-Asset	LGIM Diversified	Abrdn Global Absolute Return Strategies
Intensity	Carbon footprint	n/a	98.5	198.1
Data Quality[1]	Reported (%)	n/a	63.5	2.2
	Estimated (%)	n/a	0.0	3.1
	Not covered (%)	n/a	10.2	5.7
	Cash and other asset classes (%)	n/a	26.3	89.0
Portfolio Alignment	Implied Temperature Rise (°C)	n/a	n/a	3.1
	Proportion with SBT (%)	n/a	n/a	1.0

[1] *Please note that the sum of reported and estimated data equals data coverage, i.e. the portion of the fund data emissions data is available for.*

31 March 2023

All data is shown as provided by the underlying managers at the reporting date. An “n/a” insertion indicates where data is not available.

Funds used in the popular lifestyle arrangements

Type of Metric	Metric	UUPS Medium Growth	BlackRock ESG Strategic Growth	DC Aquila Corporate Bond All Stocks Index	DC Aquila Up to 5 years Index Linked Gilt Index	BlackRock DC Cash
Intensity	Carbon footprint	42.8	30.1	40.5	n/a	0.5
Data Quality[1]	Reported (%)	71.9	56.9	63.5	0.0	81.6
	Estimated (%)	10.3	7.0	25.8	0.0	3.3
	Not covered (%)	7.9	28.3	10.5	100.0	15.0
	Cash and other asset classes (%)	9.9	7.8	0.2	0.0	0.0
Portfolio Alignment	Implied Temperature Rise (°C)	n/a	n/a	n/a	n/a	n/a
	Proportion with SBT (%)	33.0	21.8	24.3	0.0	1.3

[1] *Please note that the sum of reported and estimated data equals data coverage, i.e. the portion of the fund data emissions data is available for.*

Underlying funds of the UUPS Medium Growth Fund

Type of Metric	Metric	LGIM Future World Global Equity (GBP Hedged)	LGIM Future World Global Equity	BlackRock Global Minimum Volatility Index	UUPS Diversified Growth	BlackRock Emerging Markets Equity Index
Intensity	Carbon footprint	24.1	24.0	56.9	47.7	133.4
Data Quality[1]	Reported (%)	89.0	90.9	84.0	52.0	78.8
	Estimated (%)	7.8	8.0	15.5	9.7	20.5
	Not covered (%)	0.8	0.7	0.1	17.1	0.6
	Cash and other asset classes (%)	2.4	0.4	0.4	21.1	0.1
Portfolio Alignment	Implied Temperature Rise (°C)	2.8	2.8	n/a	n/a	n/a
	Proportion with SBT (%)	41.6	42.6	42.8	22.8	8.0

[1] *Please note that the sum of reported and estimated data equals data coverage, i.e. the portion of the fund data emissions data is available for.*

Underlying funds of the UUPS Diversified Growth Fund

Type of Metric	Metric	Schroder Dynamic Multi-Asset	LGIM Diversified	BlackRock ESG Strategic Growth
Intensity	Carbon footprint	38.6	78.6	30.1
Data Quality[1]	Reported (%)	37.4	57.5	56.9
	Estimated (%)	17.0	7.3	7.0
	Not covered (%)	6.9	10.7	28.3
	Cash and other asset classes (%)	38.7	24.6	7.8
Portfolio Alignment	Implied Temperature Rise (°C)	2.3	2.9	n/a
	Proportion with SBT (%)	27.0	20.8	21.8

[1] *Please note that the sum of reported and estimated data equals data coverage, i.e. the portion of the fund data emissions data is available for.*

31 March 2024

All data is shown as provided by the underlying managers at the reporting date. An “n/a” insertion indicates where data is not available.

Funds used in the popular lifestyle arrangements

Type of Metric	Metric	UUPS Medium Growth	BlackRock ESG Strategic Growth	DC Aquila Corporate Bond All Stocks Index	DC Aquila Up to 5 years Index Linked Gilt Index	BlackRock DC Cash
Intensity	Carbon footprint (1 and 2)	41.1	25.1	33.1	n/a	0.9
	Carbon footprint (3)	368.4	220.8	275.0	n/a	96.7
	Sovereign Carbon Intensity	n/a	380.3	n/a	138.9	90.6
Data Quality (Scopes 1 and 2) [1]	Reported (%)	77.8	66.9	69.7	n/a	0.3
	Estimated (%)	7.7	5.4	22.4	n/a	9.1
	Not covered (%)	3.8	5.4	5.5	n/a	0.0
	Cash and other asset classes (%)	10.8	22.4	2.4	n/a	0.0
Data Quality (Scope 3) [1]	Reported (%)	28.3	0.0	0.0	n/a	92.5
	Estimated (%)	56.8	72.4	90.8	n/a	7.6
	Not covered (%)	3.8	5.2	6.8	n/a	0.0
	Cash and other asset classes (%)	11.0	22.4	2.4	n/a	n/a
Data Quality (Sovereign carbon intensity) [1]	Reported (%)	n/a	66.9	n/a	100.0	n/a
	Estimated (%)	n/a	5.4	n/a	0.0	n/a
	Not covered (%)	n/a	27.8	n/a	0.0	n/a
	Cash and other asset classes (%)	n/a	0.0	n/a	0.0	n/a
Portfolio Alignment	Implied Temperature Rise (°C)	not aggregated	not provided	not provided	not provided	not provided
	Proportion with SBT (%)	41.9	26.7	27.0	n/a	6.0

[1] *Please note that the sum of reported and estimated data equals data coverage, i.e. the portion of the fund data emissions data is available for.*

Underlying funds of the UUPS Medium Growth Fund

Type of Metric	Metric	LGIM Future World Global Equity (GBP Hedged)	LGIM Future World Global Equity	BlackRock Global Minimum Volatility Index	UUPS Diversified Growth	BlackRock Emerging Markets Equity Index
Intensity	Carbon footprint (1 and 2)	24.0	24.0	54.4	44.1	148.7
	Carbon footprint (3)	435.4	435.7	234.9	359.0	552.2
	Sovereign Carbon Intensity	n/a	n/a	n/a	327.1	n/a
Data Quality (Scopes 1 and 2) [1]	Reported (%)	89.7	89.9	90.7	61.8	86.4
	Estimated (%)	8.6	8.6	8.9	6.2	12.4
	Not covered (%)	0.7	0.6	0.4	7.9	1.0
	Cash and other asset classes (%)	1.0	0.9	0.0	24.0	0.2
Data Quality (Scope 3) [1]	Reported (%)	63.8	64.1	0.0	12.1	0.0
	Estimated (%)	34.4	34.4	99.6	55.3	98.6
	Not covered (%)	0.7	0.6	0.4	8.1	1.2
	Cash and other asset classes (%)	1.1	0.9	0.0	24.6	0.2
Data Quality (Sovereign carbon intensity) [1]	Reported (%)	n/a	n/a	n/a	30.2	n/a
	Estimated (%)	n/a	n/a	n/a	4.2	n/a
	Not covered (%)	n/a	n/a	n/a	11.2	n/a
	Cash and other asset classes (%)	n/a	n/a	n/a	26.4	n/a
Portfolio Alignment	Implied Temperature Rise (°C)	2.7	2.7	not provided	not aggregated	not provided
	Proportion with SBT (%)	47.4	47.7	50.1	35.0	16.4

[1] *Please note that the sum of reported and estimated data equals data coverage, i.e. the portion of the fund data emissions data is available for.*

Underlying funds of the UUPS Diversified Growth Fund

Type of Metric	Metric	Schroder Dynamic Multi-Asset	LGIM Diversified	BlackRock ESG Strategic Growth
Intensity	Carbon footprint (1 and 2)	34.8	76.7	25.1
	Carbon footprint (3)	205.8	672.0	220.8
	Sovereign Carbon Intensity	n/a	258.9	380.3
Data Quality (Scopes 1 and 2) [1]	Reported (%)	55.9	60.6	66.9
	Estimated (%)	8.5	5.3	5.4
	Not covered (%)	6.7	12.3	5.4
	Cash and other asset classes (%)	28.9	21.8	22.4
Data Quality (Scope 3) [1]	Reported (%)	0.0	38.2	0.0
	Estimated (%)	61.9	27.6	72.4
	Not covered (%)	7.4	12.3	5.2
	Cash and other asset classes (%)	30.7	21.9	22.4
Data Quality (Sovereign carbon intensity) [1]	Reported (%)	n/a	10.0	66.9
	Estimated (%)	n/a	6.5	5.4
	Not covered (%)	n/a	0.0	27.8
	Cash and other asset classes (%)	n/a	83.5	0.0
Portfolio Alignment	Implied Temperature Rise (°C)	2.1	2.7	not provided
	Proportion with SBT (%)	57.8	25.4	26.7

[1] *Please note that the sum of reported and estimated data equals data coverage, i.e. the portion of the fund data emissions data is available for.*

Important notices from data providers

Mercer

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Penfida

Financial impact is valued in £m, estimated for a 40-year period (2024–2064). The valuation includes impacts on income, capex, opex, interest, tax, penalties, and fines and incorporates inflation. Sourced from Company reports.

Insight

UK gilts carbon calculation methodology – Key considerations, assumptions and sources:

• Production emissions data used (DWP guidance defines production emissions as Scope 1 and 2, and consumption emissions as Scope 3. PCAF defines production emissions as Scope 1, and consumption emissions as Scope 2 (emissions imported relating to electricity) and Scope 3 (other imported emissions).
• Figures cannot be sensibly aggregated across different asset classes (e.g. due to the use of different denominators for normalised metrics).
• There is a risk of 'double counting' emissions, as it is difficult to obtain sovereign emissions data that excludes corporate emissions.
• Little consideration for 'exported' emissions in raw data
– exporting countries retain carbon responsibility for production, even if the good is used elsewhere, for example:
    ▪ China, Thailand, South Africa: considered higher emitters, as exporters of CO2-intensive goods
    ▪ France, Switzerland, Sweden: considered lower emitters, as importers of CO2-intensive goods
• Purchasing power parity (PPP) adjusted GDP is used for certain metrics, to achieve consistency across all sovereigns
• Carbon values include land use, land use change, and forestry (LULUCF)
• Germanwatch Climate Change Performance methodology provides more sophisticated (but less measurable) output and is a recommended alignment tool by Paris Aligned Investment Initiative (includes IIGCC).

Corporate bond carbon calculation methodology – Key considerations, assumptions and sources:

• Enterprise value (EVIC) is enterprise value including cash.
• To determine book value for the Carbon Footprint and the GHG emissions calculations, notional values are being used.
• Any calculation for non-base currency denominated data use current FX rates.
• We use the most recent data available from the vendor each quarter which may result in aggregating underlying information from different reporting periods.
• We obtain carbon emissions data from MSCI or for a small number of issuers it is manually sourced from the issuer reporting.
• Where a denominator (or a component of a denominator) is not available, we use internal credit analysis processes to create an estimate which can be used in its place. For EVIC this will include at the very least the issuer's total debt.

LGIM

Carbon dioxide equivalent (CO2e) is a standard unit to compare the emissions of different greenhouse gases.

LGIM have previously set a quality threshold for reportable funds such that 1) the assets eligible for coverage (eligible ratio) needed to be greater than or equal to 50% and 2) the carbon coverage of the eligible assets (eligible coverage) needed to be

greater than or equal to 60%. Under the FCA ESG sourcebook regulations and the recommendations of TCFD, there are no thresholds currently applied. As a result, and for TCFD reporting purposes, the LGIM thresholds have been removed meaning that in some cases the funds will show low coverage.

Eligibility % represents the % of the securities in the benchmark which are eligible for reporting including equity, bonds, ETFs, and sovereigns (real assets, private debt, and derivatives are currently not included for carbon reporting). The Coverage % represents the coverage of those assets with carbon scores.

Derivatives including repos are not presently included and the methodology is subject to change. Leveraged positions are not currently supported. In the instance a leveraged position distorts the coverage ratio over 100%, then the coverage ratio will not be shown.

LGIM define 'Sovereigns' as Agency, Government, Municipals, Strips, and Treasury Bills and is calculated by using: the CO2e/GDP, Carbon Emissions Footprint uses: CO2e/Total Capital Stock.

Total carbon emissions are a way of attributing the absolute emissions to a fund position based on the proportion of its market value compared to the issuer's EVIC.

Sovereign carbon data available to LGIM does not separate Scope 1 and Scope 2.

LGIM's temperature alignment methodology computes the contribution of a company's activities towards climate change. It delivers a specific temperature value that signifies which climate scenario (e.g. 3°C, 1.5°C, etc.) the company's activities are currently aligned with. The implied temperature alignment is computed as a weighted aggregate of the company-level warming potential.

Where the Information includes scope 3 greenhouse gas emissions data (as defined in the Final Report on the Recommendations of the Task Force on Climate-related Financial Disclosures (June 2017) ("Scope 3 Data")), please note that: Legal & General relies on third-party sourced model-based estimates for Scope 3 Data, as most within-scope companies do not publish Scope 3 Data; and Legal & General makes no representation and/or warranty that Scope 3 Data provided to you may be utilized to satisfy any requirements you may have under the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021.

BlackRock

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MSCI

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