

# United Utilities Pension Scheme (the “Scheme”)

## Climate Change Report

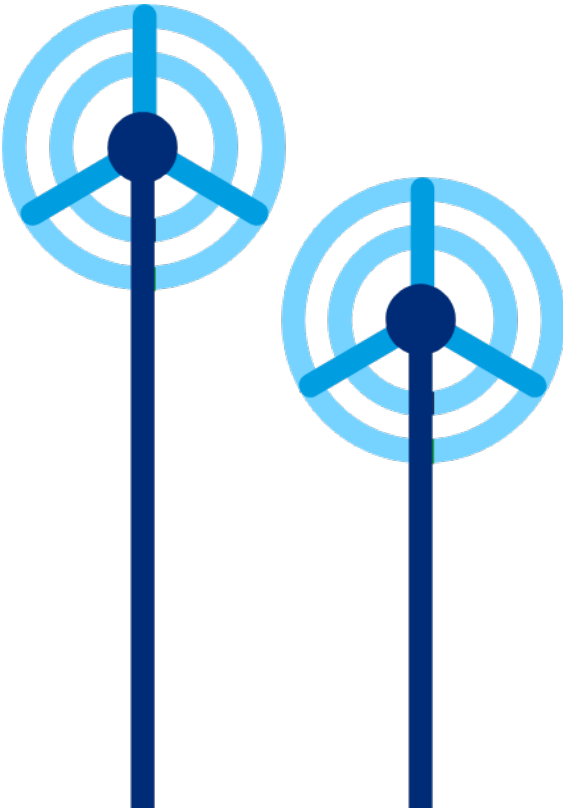
Reporting period: 12 months to 31 March 2023

October 2023



# Contents

- 1. Executive Summary ..... 2
- 2. Introduction ..... 5
- 3. Governance ..... 7
- 4. Strategy ..... 14
- 5. Risk Management..... 25
- 6. Metrics and Targets ..... 29
- Appendix A: ..... 45



# Executive Summary

Dear Members,

Welcome to our first climate change report. While this report is now a regulatory requirement, the Trustee Board 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 also recognises 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 risks and opportunities, including setting clear expectations and responsibilities in relation to climate change. 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 held with the Scheme’s investment managers.



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.

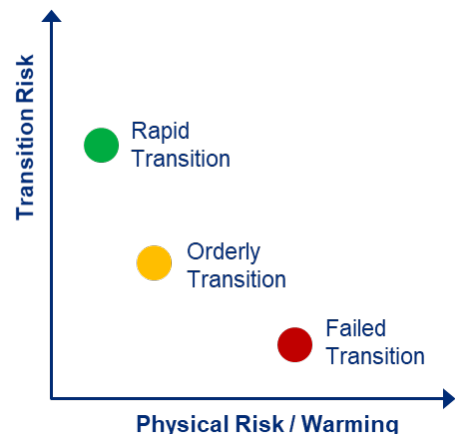


The Trustee expects, and encourages, its investment managers to use stewardship (voting and engagement) to engage with investee companies on climate change and ESG topics. We report on this annually in the Implementation Statement, including details of significant votes on climate change.

## 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. This assumes the world fails to co-ordinate a transition to a low carbon economy. Physical impacts significantly reduce economic productivity and have increasingly negative impacts. **For our Scheme, this is the most negative and damaging scenario over the long term.**



A failed transition is expected to have a very substantial negative impact on DC investments. For example the projections show a cumulative return loss of 80% relative to the baseline level of return over 20 years, in respect of the default investment strategy under a failed transition. The impact on the DB section is smaller as the scheme adopts a low risk investment strategy, but it is still negative in a failed transition scenario.

## 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 following metrics:

Metric category	Selected metric	What does this represent?	DB Section at 31 March 2023 (at 31 March 2022)	DC Section at 31 March 2023 (at 31 March 2022)
<b>Absolute emissions</b>	Total Greenhouse Gas Emissions	The tonnes of carbon dioxide and equivalents that the Scheme is responsible for financing.	66,661 tCO <sub>2</sub> e (128,260 tCO <sub>2</sub> e)	14,040 tCO <sub>2</sub> e (22,260 tCO <sub>2</sub> e)
<b>Emissions intensity</b>	Carbon Footprint	The amount of carbon dioxide and equivalents (tCO <sub>2</sub> e) emitted per million US dollars of Scheme investments.	51.4 tCO <sub>2</sub> e/\$m invested (64.7 tCO <sub>2</sub> e/\$m invested)	42.9 tCO <sub>2</sub> e/\$m invested (70.0 tCO <sub>2</sub> e/\$m invested)
	% of portfolio with targets approved by the Science Based Targets initiative (SBTi)	Assessment of the proportion of portfolio companies / issuers of securities that have set net-zero targets that have been validated by an independent body, the SBTi.	26.9% (22.5%)	32.2% (7.8%)
<b>Portfolio Alignment</b>	Implied Temperature Rise (ITR)	A forward-looking assessment of how aligned the assets 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.	2.2°C – 2.7°C (1.6°C – 2.9°C)	2.3°C – 2.9°C (3.1°C)
			A "point estimate" is not available – please see Metrics and Targets Section for more detail.	A "point estimate" is only available for 2022 – see Metrics and Targets Section for more detail.
<b>Additional</b>	Data Quality	The proportion of the assets for which there is high quality data.	63.6% reported or estimated (63.6% reported or estimated)	70.8% reported, 10.8% estimated (74.2% reported, 5.3% estimated)

It is important to note that the metrics are limited by the available data. The limitations are explained in the report. At the time of writing the report, the Trustee is unable to provide an asset-weighted point estimate of the Implied Temperature Rise (ITR) metrics. Further detail is provided in the Metrics and Targets Section and the appendix of this report.

The metrics used all have their pros and cons, and data standards (and availability) are still developing. However, the Trustee has set out in the Metrics and Targets Section details of these metrics.

Under the regulations, the Trustee is required to set a target based on one of the metrics disclosed in this report.

## The Scheme's Climate Target

The Trustee wishes to 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 baseline figure was 51.4 tCO<sub>2</sub>e/\$m invested for the DB Section and 42.9 tCO<sub>2</sub>e/\$m invested for the DC Section at 31 March 2023 (based on the available data).

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.

You can read more about the target, and steps being taken to achieve the target, in the Targets Section.

## What's Next?

This report will be 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 first climate change report, which has been prepared in line with the recommendations of the Task Force on Climate-related Financial Disclosures ("TCFD") and the statutory requirements prescribed by the Department of Work and Pensions<sup>1</sup>.

The Trustee has a fiduciary duty to invest the Scheme's assets appropriately. As part of this responsibility, 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 an opportunity, by investing 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 scenarios analysed. This is subject to change as climate reporting improves.

Climate change is one risk among many that the Trustee measures, monitors and manages. Therefore, climate change needs to be 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.



---

<sup>1</sup> 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](mailto:uups@wtwco.com)

Telephone 0113 394 9309

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

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

Email [my.pension@aegon.co.uk](mailto:my.pension@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 as a whole, 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 also 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 Scheme's professional advisers have clearly defined responsibilities in respect of climate change, and are competent to advise on such matters.
- 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

The Investment Sub-Committee 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 Investment Sub-Committee is necessarily 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 Investment Sub-Committee meetings as appropriate, to ensure a joined up approach is taken.

## **DC Sub-Committee**

The DC Sub-Committee 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 Investment Sub-Committee).
- 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, which includes the Implementation Statement (covering climate change matters, among other ESG topics).
- Reporting to the Trustee Board 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 programme for Trustee Directors, and making recommendations to the Trustee Board in this regard. This oversight helps the Trustee to 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 Investment Sub-Committee, the DC Sub-Committee, 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

From time-to-time the Trustee has put in place an ESG Sub-Group to assist the Trustee Board and its Sub-Committees in fulfilling its oversight responsibilities with regard to ESG matters, including climate change. Decision-making will continue 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 (where relevant) 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 relevant, in the approach taken on ESG matters across various pension arrangements within the United Utilities Group.
- 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, through the purchase of an insurance "buy-in" policy covering a portion of the liabilities of the DB Section. From a governance perspective, 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.

## 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, and in particular assists with ensuring climate-related matters are included on relevant meeting agendas and embedded within the Trustee's annual business plan, and in its training plans.

## 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 and relevant climate-related targets.
- Liaises with investment managers 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 will also provide investment 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 will advise on both the default investment strategy and the self-select fund range, taking into account climate change considerations, and will assist with investment related communications.

### **Investment Managers**

The Trustee has delegated day to day management of the assets to its 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 selected 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 investments.
- 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**

- 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 and investment managers to act with integrity and diligence in fulfilling the set 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, through the ESG Sub-Group, has undertaken an assessment of the investment adviser against the climate competency framework set out by the Investment Consultants Sustainability Working Group. 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 the 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, investment managers, or bulk annuity insurance policy providers, climate change knowledge, experience, and competency will be an explicit consideration in assessing different 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 will form 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 will also be covered as part of other agenda items 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.

There are a number of activities that are to be completed regularly in order for the Trustee to fulfill its responsibility for managing climate risks and opportunities. It is important to note that 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 may be facing. The activities are listed below as well as the frequency of which each task will be carried out:

- 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)
- Target setting / target appropriateness review (minimum frequency = annual)
- Progress against target assessment (minimum frequency = annual)
- ESG beliefs (including climate change) update / review (minimum frequency = triennial)
- Review of investment manager ESG ratings (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 13 September 2022 training day the Trustee Board completed training on climate change, including consideration of regulatory developments, different types of climate risk, and how these risks (and opportunities) may impact the Scheme's assets, its liabilities, and the employer covenant. The training also covered reporting duties under the TCFD framework.

The Trustee Directors also received training on the Pensions Regulator's Single Code (now renamed the General Code) which included aspects that related to climate change.

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 will also complete 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.

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



# 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
<p><b>DB Section:</b> Consistent with the length of the actuarial valuation cycle.</p> <p><b>DC Section:</b> Consistent with the length of the triennial investment strategy review cycle.</p>	<p><b>DB Section:</b> Aligned with expected changes in climate change data quality and climate regulations.</p> <p><b>DC Section:</b> 10 years is the length of the default strategy’s derisking phase.</p>	<p><b>DB Section:</b> 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.</p> <p><b>DC Section:</b> Broadly in line with the term to retirement for the average age DC member.</p>

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 short, medium and long-term 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. For example a change in the likelihood of a well below 2°C warming scenario occurring (i.e. an increase in probability would be expected to drive additional 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.

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

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

**Over the medium term (out to 7 years for the DB Section, and 10 years for the DC Section),** risks are likely to be more balanced reflecting both transition and physical risk.

Over this time period the transition pathway will unfold and the level of anticipated physical damage 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.

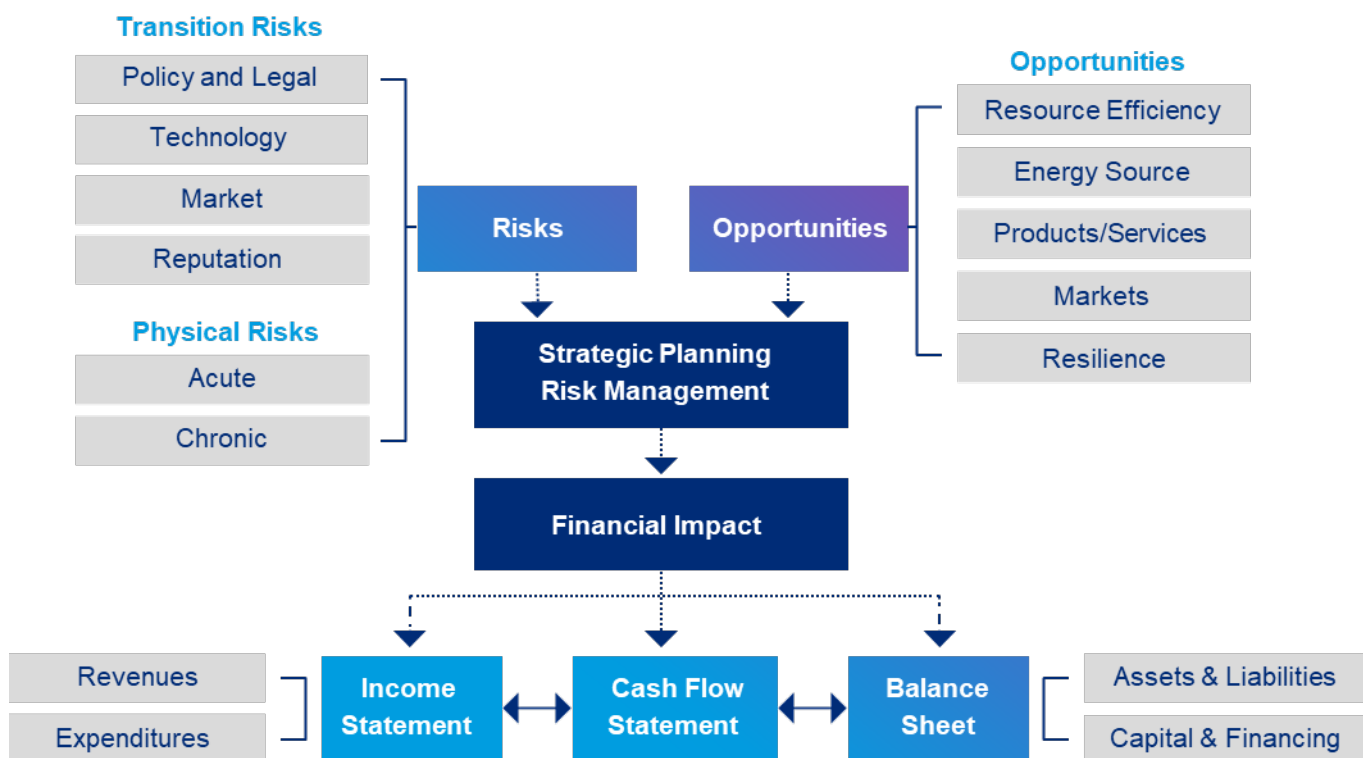
The Trustee's ability to understand these changes and evolve its approach as the pathway develops should help to control risk and could potentially enhance returns.

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

The Trustee has investigated the potential impacts of these risks and opportunities in the scenario analysis that follows.

## Testing the resilience of the Scheme

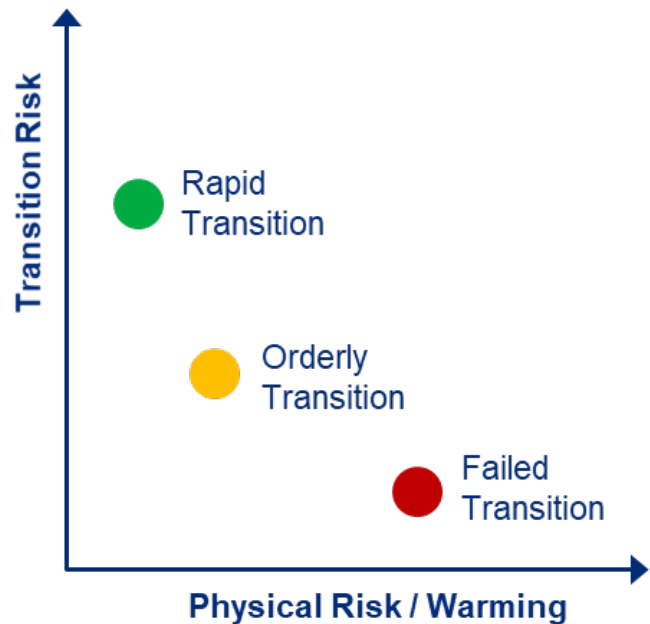
### Scenario analysis

The Trustee has undertaken 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 has been 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.

## 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<sup>2</sup>; the implication is that all return impacts are presented in terms of how they are different to what we are assuming is priced in today.

Further detail on climate scenario narratives, including modelling limitations, is included in the appendix.

## Scenario Analysis Results

The charts represent projections of annualised returns over a period of up to 40 years. Projections do not include the impact of future contributions, in order that the output can focus specifically on climate impacts. Further detail on the underlying asset allocations and limitations associated with climate scenario analysis are set out in the appendix.

The charts and tables on the following pages represent the output of the Trustee’s quantitative analysis. Further detail on the analysis is set out in the appendix.

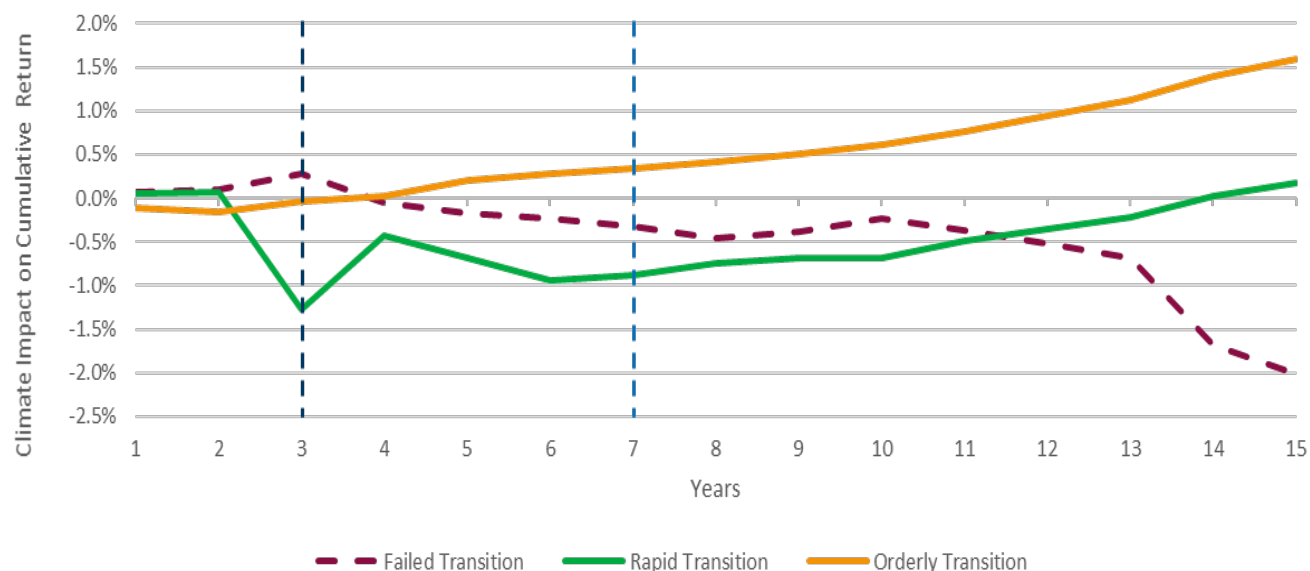
### DB Section Introduction

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), under the different possible climate scenarios. The analysis assumes a static asset allocation in line with the low risk investment strategy that was in place during the year covered by this report (see appendix). The chart shows the “climate impact” which represents the difference in returns relative to the baseline position, under the various scenarios.

<sup>2</sup> The baseline represents what it is assumed that the market is currently pricing in. The baseline includes a 10% weight to a **Failed Transition**, 40% weight to an **Orderly Transition**, 10% to a **Rapid Transition** and 40% to a range of **low impact scenarios**.



## DB Section Results – Investment Strategy and Returns (results expressed relative to baseline outlined on previous page)



### 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 during the year covered by this report, 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 at the analysis date of 31 March 2021, the Scheme’s invested assets totalled **£3.5 billion**, all of which was invested in bonds (including secured finance bonds), liability driven investments, and private market debt. However, 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. The residual assets *not* invested in the bulk annuity policy now only total **£864 million**, as at 31 July 2023.

Clearly, this marks a significant change in investment approach. As such, the Trustee and its advisers consider that showing funding level projections based on older information may be misleading. However, we summarise at the end of this section of the report the key conclusions from the analysis, and how these have been integrated in the Trustee’s approach to climate risk and opportunity management.

## DB Section – Covenant Impacts

In relation to covenant analysis, the covenant adviser 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, which highlights the three highest physical risks by impact as noted in United Utilities Group PLC’s annual report for the year ended 31 March 2023. The covenant adviser includes an estimate of the potential impact of these risk scenarios on the NPV (net present value) of the company for periods to 2050 as shown in the annual report. These NPV impacts should be put in the context of the company’s Regulatory Capital Value (RCV) of £14.0bn as at 31 March 2023 and a market capitalisation of £6.6bn as at 26 September 2023.

Risk	Description	Controls	2050 impact (NPV)
Water sufficiency event	<ul style="list-style-type: none"> <li>• Prolonged dry periods can cause supply challenges. Warmer temperatures intensify these pressures because of increased water usage and evapo-transpiration</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce leakage</li> <li>• Support customers to use less water</li> <li>• Install more meters in domestic properties</li> <li>• Develop new sources of water, particularly boreholes</li> <li>• Long-term water resources management planning</li> <li>• Facilitate water trading between the North West and other regions of the UK</li> </ul>	£264m
Failure of wastewater network	<ul style="list-style-type: none"> <li>• More frequent and intense storms can overload the wastewater network and lead to severe sewer flooding or storm overflow activations. Urbanisation makes this worse due to quick runoff from hard surfaces</li> </ul>	<ul style="list-style-type: none"> <li>• Increase combined sewer capacity and build stormwater holding tanks</li> <li>• Implement and encourage 'slow the flow' and sustainable drainage solutions</li> <li>• Support customers to use sewers responsibly. Use technology to monitor and better control flows in the sewer system</li> <li>• Install flood protection devices to at-risk properties</li> </ul>	£262m
Recycling of biosolids to agriculture	<ul style="list-style-type: none"> <li>• 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</li> </ul>	<ul style="list-style-type: none"> <li>• Additional storage capacity.</li> <li>• Contingency planning for alternative methods for sludge disposal, e.g. incineration.</li> </ul>	£88m

Source: Penfida and United Utilities.

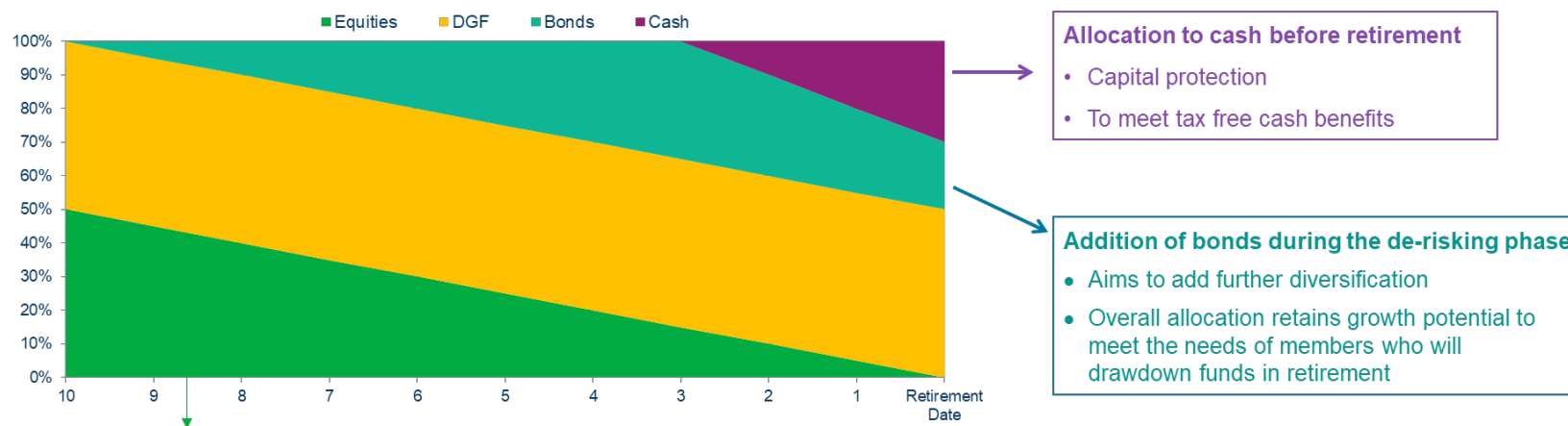


## DC Section Introduction

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. The Scheme’s default, the Retirement Flexible Income Lifestyle qualifies as a popular arrangement. A table with asset values for the popular arrangements is available in the appendix.

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.



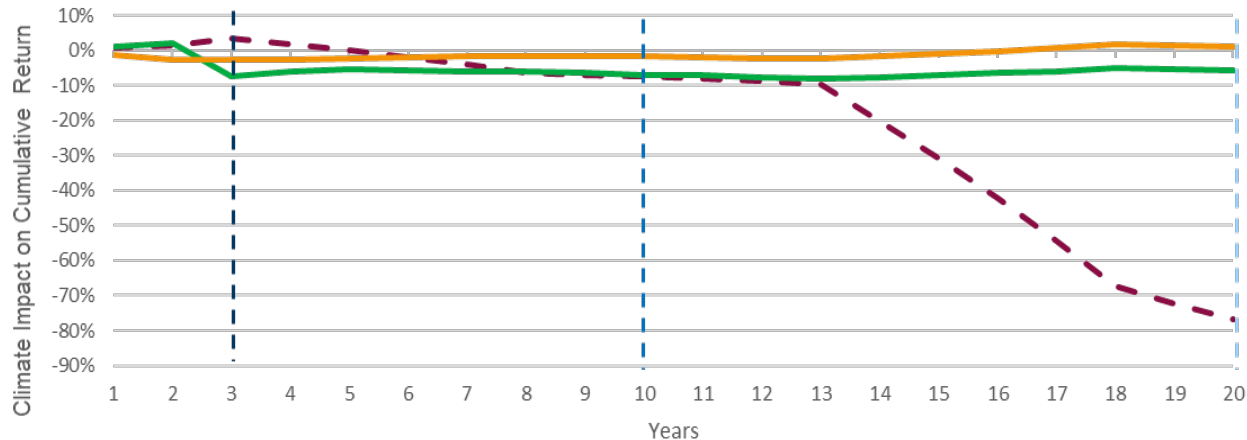
**Medium Growth Fund** (a 50/50 blend of equities and diversified growth funds (DGFs)) until 10 years pre-retirement

- Diversification to seek to reduce volatility extremes of a pure equity portfolio
- A portion of the equities, as well as two of the three underlying DGFs used, are managed under sustainable guidelines

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 appendix for details).

## 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

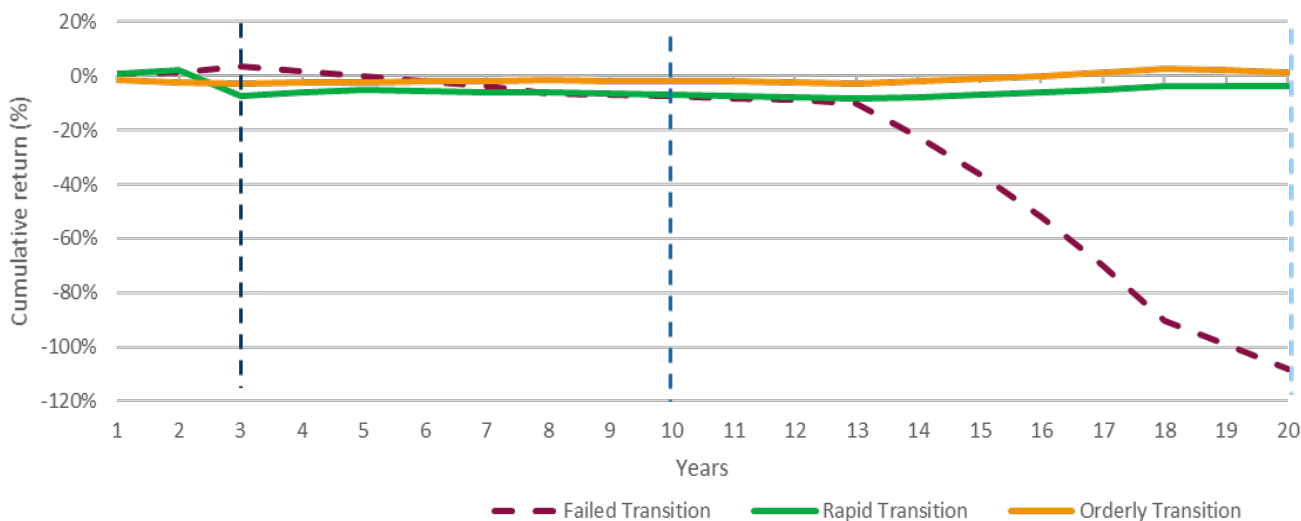
- 3 Short term – 3 years:** Transition risk dominates. A rapid transition is the most impactful (and negative) scenario, leading to a shock to returns as the market prices in the cost of transition to a lower carbon world. This is however followed by a partial recovery. A failed transition is perhaps 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 relative 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.

For both Sections, we set out the steps the Trustee is taking to mitigate risks (and access opportunities) following this table, and in the next section of this report.

---

**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 (see further detail later in this report).

---

**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 (post the Scheme year-end). More details are provided in the next section of the report.

**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.

---

The analysis 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 our DB investments, using certain lower carbon global equity index 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 to further enhance this, taking into account overall risk and return considerations 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 (post the year-end) 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 3

# 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 Investment Sub-Committee (DB Section) or DC Sub-Committee (DC Section), supported by briefing papers from the adviser.
- The Trustee maintains an ESG “dashboard” project plan, which is reviewed on a quarterly basis. This document forms part of the Trustee’s wider business plan and summarises the progress, actions and outcomes of scheduled ESG projects including climate-related activities.

## 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).
- 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 most recent triennial actuarial valuation report highlighted climate change risks as a potentially material financial risk.
- Given the nature of United Utilities’ 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. The Investment Sub-Committee and DC Sub-Committee have also established processes whereby prior to any future proposed investment strategy changes, climate scenario analysis will be prepared in order to test the resilience of the strategy both “pre and post” the proposed changes. 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.

## Strategic Asset Allocation Spotlight – DB Section

In order to ensure that climate risks are mitigated, the Trustee, via the Investment Sub-Committee, explored whether it would be appropriate to exclude certain sectors / companies from the Scheme's corporate bond portfolio. Considerations included the impact on risk and return expectations, alignment with the Scheme's ESG and climate change policies, and the timing and potential cost of any implementation of exclusions.

Following receipt of investment advice, the Trustee agreed to put in place climate-related exclusions such that the types of companies below will not be permitted within the portfolio:



Violators of the United Nations Global Compact, an initiative to encourage businesses worldwide to adopt sustainable and socially responsible policies.



Companies involved in mining and extraction of thermal coal, coal power generation, and unconventional oil and gas extraction.



Certain companies considered by the investment manager to be failing to meet minimum standards on climate change transition planning, including for example being highly carbon intensive, not having an operational greenhouse gas emissions target, or not having any plans for coal phase-out.

## Strategic Asset Allocation Spotlight – 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 investment strategy reviews, the Trustee, via the DC Sub-Committee, has put in place a number of allocations to sustainable investment opportunities, taking appropriate investment advice throughout. In particular:



Within the Medium Growth Fund used as the growth phase of the default investment strategy (and available as a self-select fund option), an allocation has been made to a global equity fund that incorporates ESG considerations within the portfolio. Companies that fail to meet certain standards in relation to adapting to a lower carbon world and / or corporate governance may be excluded from this fund.



The ESG-focused equity fund described above was also implemented within other risk-profiled funds (the Higher Growth and Lower Growth Funds), and is available as a self-select fund option, the UUPS Sustainable Global Equities Fund.



Wherever the Scheme uses diversified growth funds (for example, within risk-profiled funds, the blended UUPS Diversified Growth Fund, and in the default strategy), three investment managers are used, all of which have in place sustainable guidelines which aim to mitigate climate risks whilst also accessing opportunities in areas such as green energy and other new technology solutions.

## Risk Reporting

- The Trustee receives annual reports of climate-related metrics and will monitor progress against targets established for the Scheme. The Investment Sub-Committee and DC Sub-Committee also uses 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). The statement is available on the Scheme's website.
- As noted within the Implementation Statement, the Trustee has set stewardship priorities and will report on significant votes across the Scheme's investment portfolio (where there are assets with voting rights attached) on matters that relate to these priorities. The stewardship priorities are:
  - Climate change
  - Labour practices and standards
  - Corporate governance, including board quality and diversity.

As such, there will be annual reporting of significant votes on climate change incorporated in the Scheme's disclosures.

## 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 4

# Metrics and Targets



### Metrics – Introduction

The Trustee has chosen to present climate-related metrics across four categories in this report. Metrics help the Trustee to understand the climate-related risk exposures and opportunities associated with the Scheme, and to identify areas for further risk management, including investment manager portfolio reviews, monitoring, and voting and engagement activity. The metrics in this report relate to the Scheme’s financed emissions and exclude emissions associated with the operation of the Scheme. The metrics shown in this report are listed below and where metrics relate to emissions, these cover scope 1 and 2 (see later for definitions). The Trustee will begin reporting scope 3 emissions from its next report.

Metric category	Selected metric	Further detail
<b>Absolute emissions</b>	Total Greenhouse Gas Emissions	Tonnes of carbon dioxide and equivalents (tCO <sub>2</sub> e) that the Scheme is responsible for financing.
<b>Emissions intensity</b>	Carbon Footprint	The amount of carbon dioxide and equivalents (tCO <sub>2</sub> e) emitted per million US dollars of Scheme investments.
	% 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.
<b>Portfolio Alignment</b>	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.
<b>Additional</b>	Data Quality	Represents the proportions of the portfolio for which there is high quality data.

The metrics presented in this report are as at 31 March 2022 and 31 March 2023 and are based on the actual asset allocation 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).

## 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.

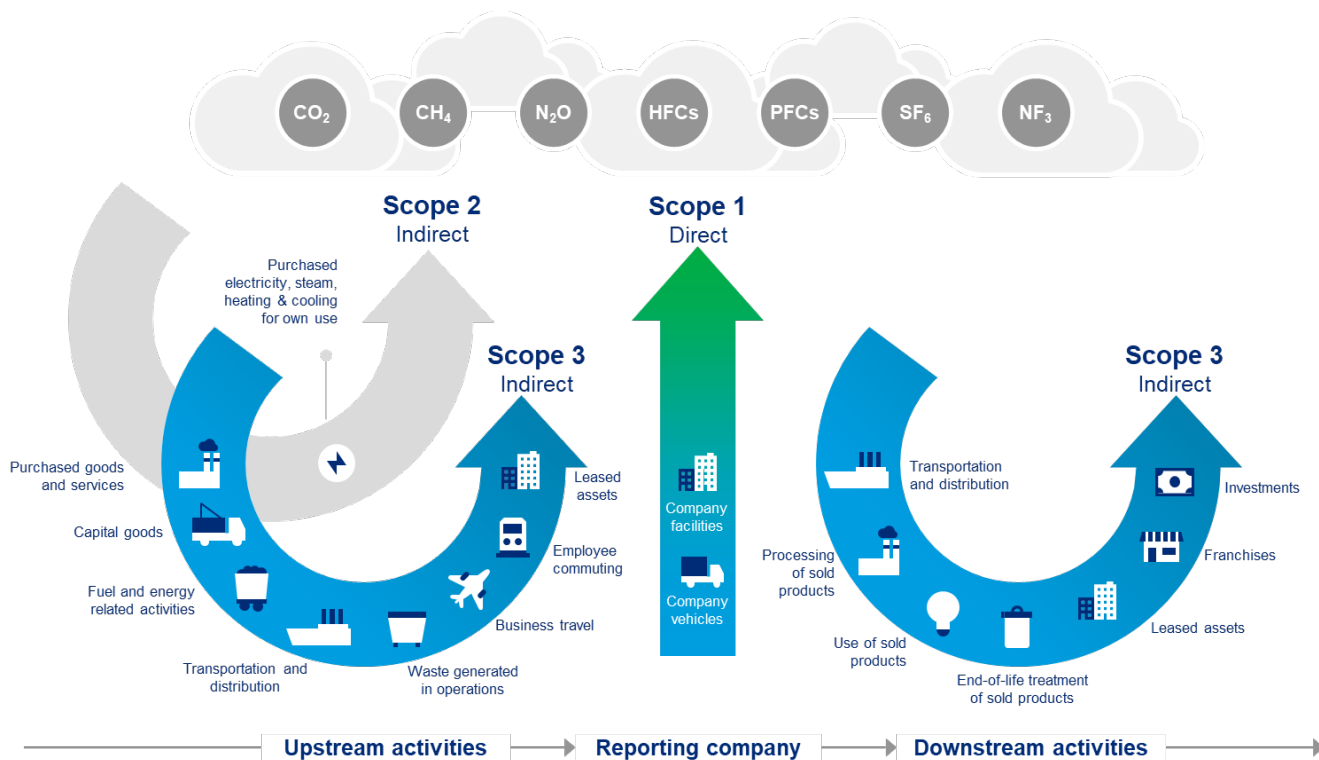
The Trustee recognises the challenges associated with various metrics, tools and modelling techniques used to assess climate change risks. The Trustee aims to work with its investment adviser and investment managers to continuously improve the approach to assessing and managing risks over time as more 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, as summarised below.





Source: GHG Protocol

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<sub>2</sub>e). 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.

This report excludes scope 3 emissions, which will be included from the next report. There are significant challenges relating to scope 3 emissions. The reasons for excluding them at this stage are:

- a. Reliability of data - in measuring the “upstream” purchased goods and services emissions of a company, government, or other issuer of securities, there are varying levels of data accuracy. Entities often struggle to collect relevant and sufficiently granular primary data from their suppliers. This results in the adoption of secondary data, which may come from industry averages or spend-based emission factors.
- b. Lack of standardised methodology - while the greenhouse gas protocol Scope 3 standard and calculation guidance is helpful, there are certain practical challenges. The use of multiple data feeds and methodologies all come with their own assumptions and definitions, and the calculation approaches selected vary.
- c. Lack of resources - calculating value chain emissions often requires specialists with technical expertise in carbon measurement, data management, and data quality processes. For a number of small and medium companies, this can present a barrier to reporting.

The Trustee is not required to publish scope 3 emissions in the first year of climate reporting. However, as scope 3 reporting improves, the Trustee looks forward to considering this data as part of the suite of metrics considered.



## **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.

## **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 net zero plans to SBTi, who then act as an independent assessor of the validity of the plans.

SBTi use either a sector decarbonisation approach (SDA) or an absolute contraction approach (ACA). Under the SDA approach, SBTi allocate the 2°C carbon budget to different sectors, taking into account differences between sectors today and mitigation potential going forwards (e.g. this takes into account the fact that power generation will likely be able to decarbonise faster than cement production). The ACA approach is a broad assumption that assumes 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. Underlying funds with a low percentage of companies with SBTi-approved targets could indicate investment in companies or issuers that are not setting targets to align their businesses or activities with net zero, which is a forward-looking indication of climate transition risk.

The Trustee recognises that the SBTi does not currently cover every sector, however is cognisant that the Initiative's coverage across 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

It is important to note that subsequent to the Scheme year end, the Trustee took the decision to further increase 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. The metrics detailed here cover the investment strategy that was in place during the Scheme year (see appendix).

### Data Availability

The Scheme 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, secured finance and derivatives.

DB Section	Is data available?	31 March 2022		31 March 2023	
		£m	%	£m	%
Insight Buy and Maintain	Yes	730.1	20.7	644.9	25.3
Insight Interest Rate Hedge	No	14.3	0.4	30.9	1.2
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
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
Cash	No	26.6	0.8	24.8	1.0
<b>Total with available data</b>		<b>2,954.7</b>	<b>83.6</b>	<b>2,013.0</b>	<b>79.0</b>
<b>Total with unavailable data</b>		<b>578.7</b>	<b>16.4</b>	<b>534.5</b>	<b>21.0</b>

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.

Although the Trustee is only able to report on certain portfolios, it is able to cover the majority of DB Section assets at both reporting dates (c. 84% of DB Section assets at 31 March 2022 and c. 79% at 31 March 2023). 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

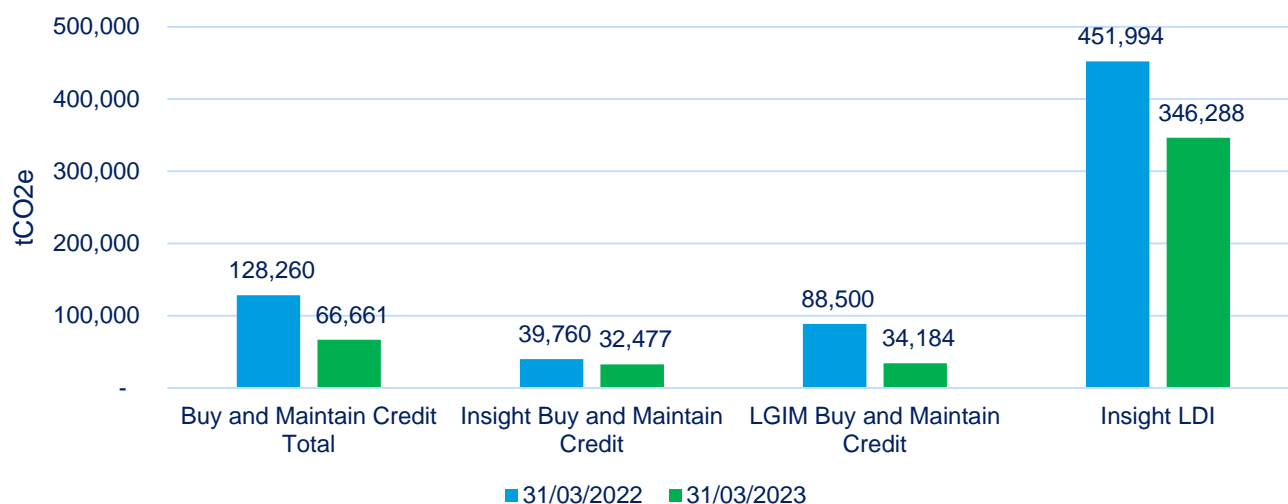
The following chart shows the total greenhouse gas emissions for the portfolios at 31 March 2022 and 31 March 2023 for which data is available. The Buy and Maintain Credit total shows the aggregated greenhouse gas emissions for the two Buy and Maintain portfolios at each reporting date. The total emissions 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. 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 2023 denotes a decrease, whereas amber indicates a stagnant and pink indicates an increasing carbon footprint. Over the reporting period, the total greenhouse gas emissions have decreased for each of the portfolios. This is not surprising, as total emissions are closely related to the investment value owned by the Scheme. The asset values for all portfolios shown have decreased over the reporting period.

The absolute emissions for the Insight Buy and Maintain portfolio and the LGIM Buy and Maintain portfolio were significantly different at 31 March 2022, although the total value of investments in these portfolios was similar. At 31 March 2023, the total greenhouse gas emissions were similar although the Scheme allocated c. £640m to the Insight portfolio and c. £410m to the LGIM portfolio. This is explained by the different carbon intensity of the two portfolios, primarily driven by a higher allocation to the industrial sector in the LGIM portfolio (as opposed to sectors such as financials or telecommunications, which tend to have lower emissions).

### Total Greenhouse Gas Emissions



Source: LGIM and Insight, 31 March 2022 and 31 March 2023. Buy and Maintain Credit totals calculated by Mercer. Insight LDI total greenhouse gas emissions show the combined emissions from funded gilts and derivatives as provided by Insight. Funded gilts only accounted for 169,104 tCO2e at 31 March 2022 and 152,973 at 31 March 2023 for the LDI portfolio. Gilts on repo and/or total return swaps accounted for 282,891 tCO2e and 191,315 tCO2e respectively.

### Carbon footprint

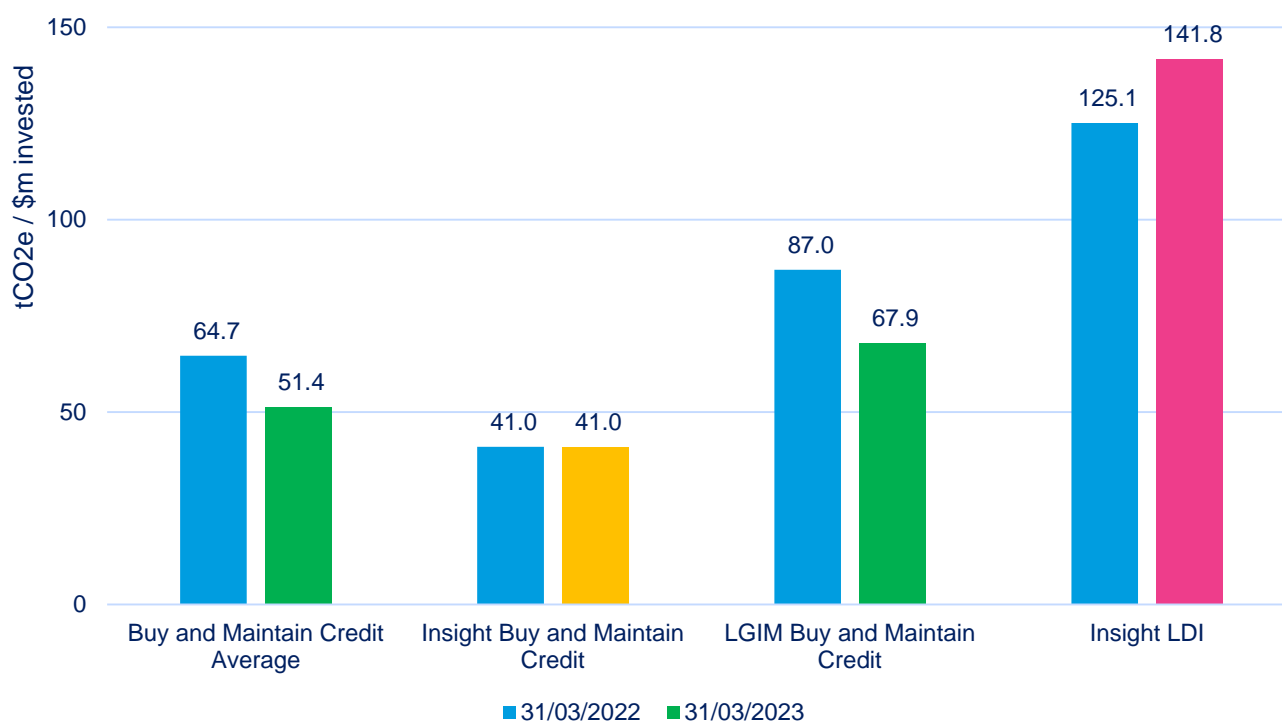
The following chart shows the carbon footprint for the portfolios with available data at both reporting dates. The carbon footprint metric normalises absolute emissions by the amount invested in each portfolio and it therefore allows for better comparison of the actual carbon intensity per unit of investment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

In the following chart, a green bar for the carbon footprint at 31 March 2023 denotes a decrease, whereas amber indicates no change, and pink indicates an increasing carbon footprint. The Trustee has set an interim target of achieving a 50% reduction in scope 1 and 2 emissions – measured on the carbon footprint metric - for listed equity and credit assets by 2030 relative to a baseline date of 31 March 2023. In the DB Section, the two portfolios within scope for the Trustee’s interim target are therefore the Buy and Maintain portfolios. The chart shows that the average carbon footprint of the Buy and Maintain portfolios has decreased, driven by the decrease of the LGIM Buy and Maintain carbon footprint, with the Insight carbon footprint the same at both dates. As previously noted, 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. The Insight LDI carbon footprint increased between 31 March 2022 and 31 March 2023.

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 reason for the increase in carbon footprint for the LDI portfolio is *not* that the UK’s total carbon emissions have increased – in fact, they have decreased. Rather, the carbon footprint for gilts is normalised by the total market value of gilts in issuance, which changed over the period.

## Carbon Footprint



Source: LGIM and Insight, 31 March 2022 and 31 March 2023. Buy and Maintain Credit average calculated by Mercer.

Note: An aggregated carbon footprint figure is shown for the Buy and Maintain Credit portfolios as both invest 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.

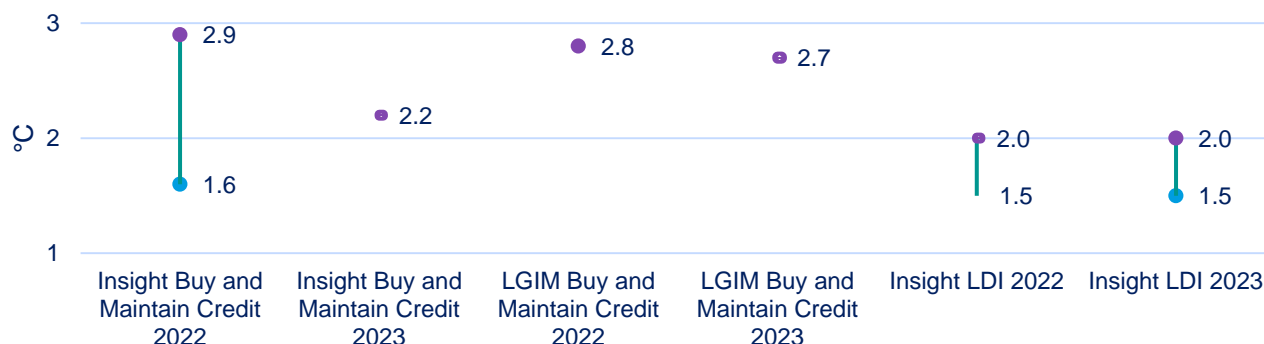
## Implied Temperature Rise

The Implied Temperature Rise (“ITR”) figures for the portfolios with available ITR metrics are presented below. Please note that while LGIM provided a point estimate at both reporting dates, Insight only provided a point estimate of this metric for the Buy and Maintain portfolio at 31 March 2023. At other dates, and for the LDI portfolio, Insight provided ITR ranges.

The LGIM Buy and Maintain portfolio’s ITR decreased marginally between the reporting dates. For the Insight LDI, the range was stagnant. 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 portfolio therefore falls into the range envisaged by the Paris Agreement, however both Buy and Maintain portfolios track above the Paris goal, even if considering the “lower estimate” for the Insight Buy and Maintain portfolio at 31 March 2022 of 1.6°C.

## Implied Temperature Rise

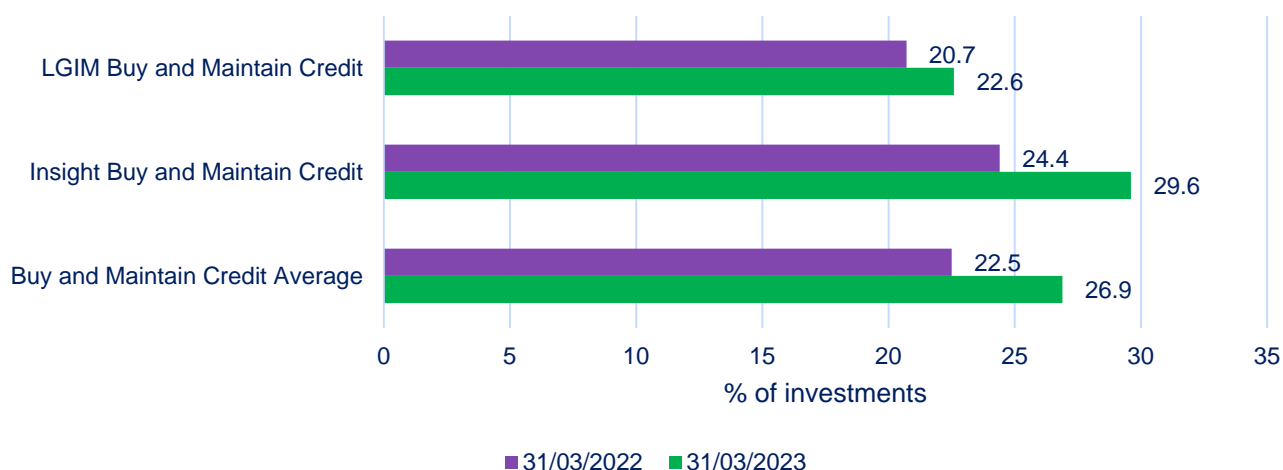


Source: LGIM and Insight, 31 March 2022 and 31 March 2023. Note: Insight provide ITR ranges rather than a point estimate.

## 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. On average, holdings within both the LGIM and Insight Buy and Maintain portfolios have increased their share of targets approved by the SBTi. The relative increase in the share of assets with SBTi-approved targets was more than 20% for the Insight portfolio and more than 9% for the LGIM portfolio. The increase across both portfolios combined was c. 20% on an asset-weighted basis.

## Share of investments with approved SBTs



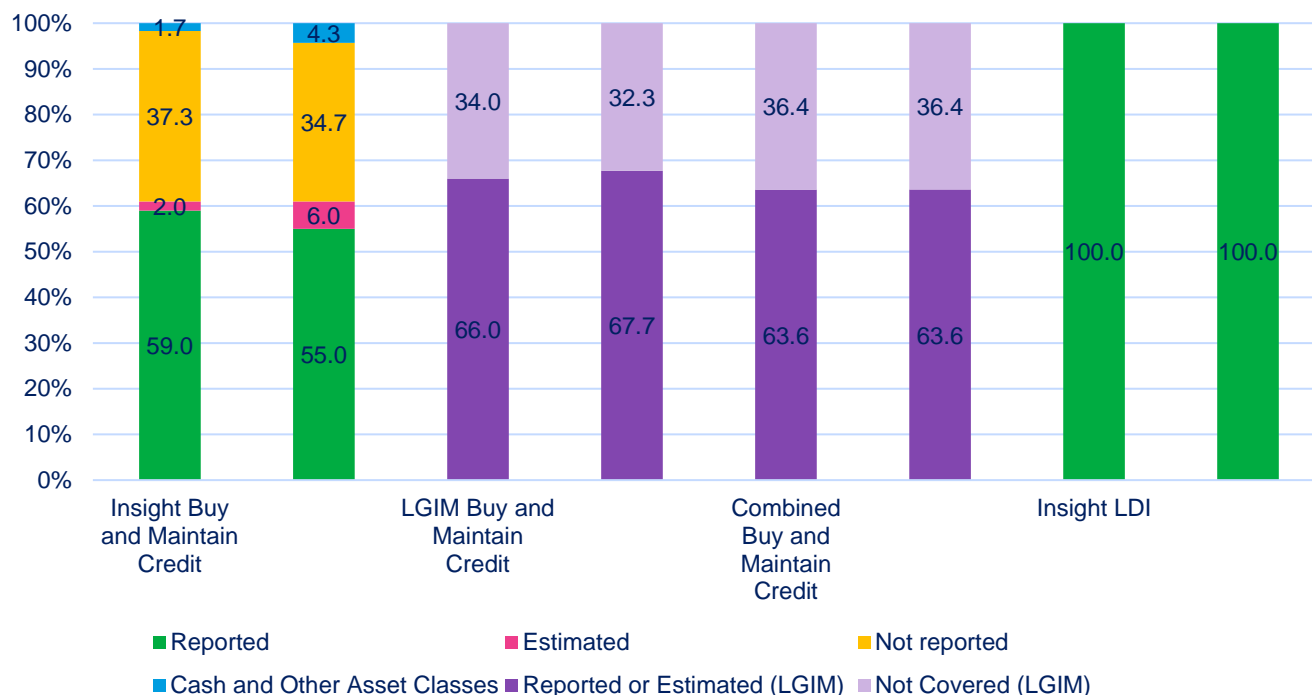
Source: LGIM and Insight, 31 March 2022 and 31 March 2023. Buy and Maintain Credit average calculated by Mercer.

## 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 underlying the metrics shown in this report at both reporting dates. LGIM are unable to differentiate between reported and estimated data at the given reporting dates, therefore the data for their Buy and Maintain Credit mandate is laid out in a different format. 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.



## Data Quality



Source: LGIM and Insight, 31 March 2022 and 31 March 2023.

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.

## 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.

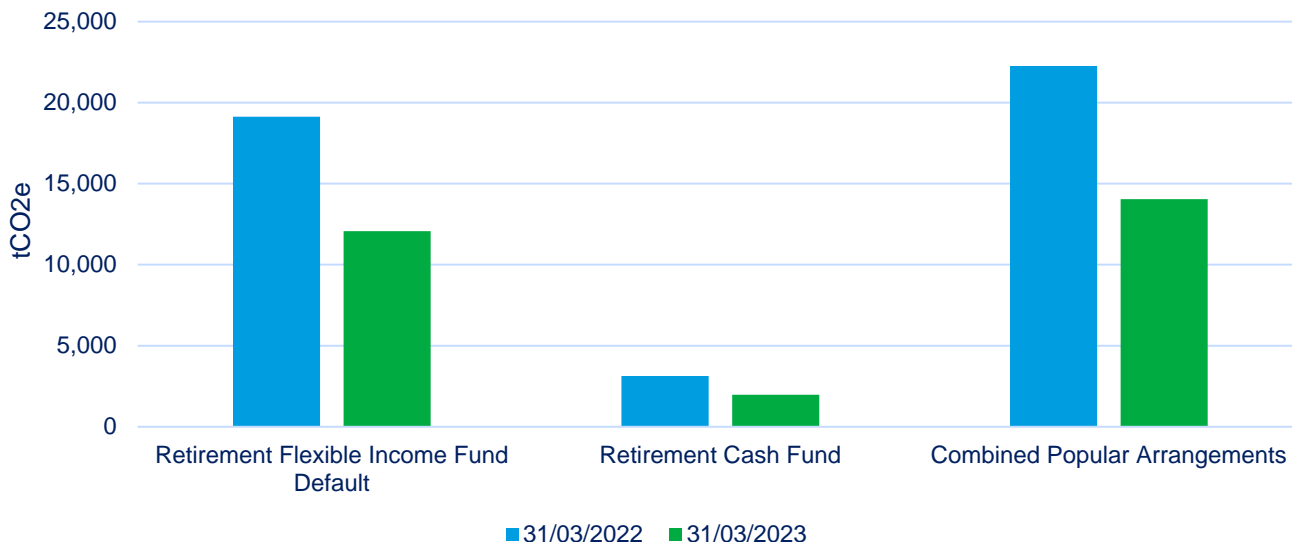
### Total Greenhouse Gas Emissions

The following chart shows the total greenhouse gas emissions for the popular arrangements at 31 March 2022 and 31 March 2023. The total emissions have decreased between the reporting dates for each popular arrangement, as well as in aggregate.

The underlying investment value for both lifestyles increased between the reporting dates, from c.£214.8m to c.£230.4m and from c.£48.7m to c.£57.2m respectively. At the same time, total greenhouse gas emissions decreased by approximately 37% for both lifestyles, driven by a net decrease in carbon intensity of the underlying funds. This was driven in a large part by the Trustee's decision to move some of the underlying investments from the abrdn Global Absolute Return Strategies ("GARS") fund to the BlackRock ESG Strategic Growth Fund. The BlackRock ESG Strategic Growth Fund's

carbon footprint at 31 March 2023 was approximately a sixth of GARS' carbon footprint at 31 March 2022.

### Total Greenhouse Gas Emissions



Source: Aegon (the DC platform provider) and Investment Managers, 31 March 2022 and 31 March 2023. 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).

### Carbon footprint

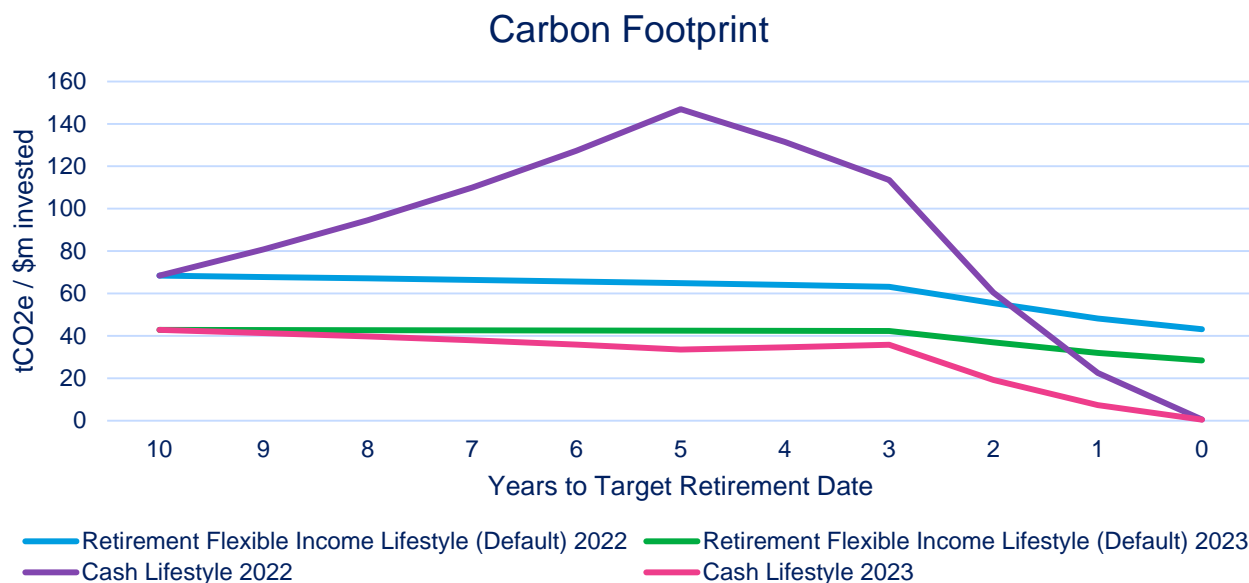
Weighting the carbon intensity of all underlying assets to the two popular arrangements at each reporting date provides a carbon footprint of 70.0 tCO2e/\$m invested at 31 March 2022, and 42.9 tCO2e/\$m invested at 31 March 2023. This is a decrease of 39%.

While the asset-weighted carbon footprint allows the Trustee to establish a baseline for its long-term and interim target, it is not a measure of the carbon intensity a member would see on their investments. 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 and make this section most useful for members, charts have been included for the lifestyle strategies to show the progression of climate metrics exposures across the retirement savings journey.

The following chart shows the aggregate carbon footprint as a member in either of the two lifestyles approaches retirement. Before 10 years to retirement, members invest 100% in the Medium Growth Fund, therefore the carbon footprint will be the same as at the 10-year mark at any point before the period shown below.

As the chart shows, the carbon footprint for a default member in the run-up to retirement has decreased from 31 March 2022 to 31 March 2023. The carbon footprint of the underlying Medium Growth Fund decreased from 68.4 tCO2e/\$m invested to 42.8 tCO2e/\$m invested between the reporting dates, fuelled in turn by decreases in all of its underlying funds (see appendix for more information).

The carbon footprint profile of the Cash Lifestyle over this period has changed significantly due to the move from abrdn Global Absolute Return Strategies (GARS) to the BlackRock ESG Strategic Growth Fund. GARS' carbon footprint at 31 March 2022 was 198.1 CO<sub>2</sub>e / \$m invested. The BlackRock ESG Strategic Growth Fund had a carbon footprint of 30.1 CO<sub>2</sub>e / \$m invested as at 31 March 2023. As the Cash Lifestyle approaches retirement, it previously built up an allocation of c. 50% to abrdn GARS at 5 years before retirement, and then gradually reduced this allocation in the following 5 years so as to invest 100% in cash at retirement. The path has not changed, but this allocation is now replaced by the BlackRock ESG Strategic Growth Fund, explaining the shape of the 2022 and 2023 graphs for the Cash Lifestyle.



Source: Aegon and Investment Managers, 31 March 2022 and 31 March 2023. 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 at the given point of the de-risking path.

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. As data is unavailable, the aggregated carbon footprint does not factor this fund in – i.e., the carbon footprint figures are a weighted average only of the funds for which carbon footprint data is available.

## Implied Temperature Rise

The Implied Temperature Rise (“ITR”) data for the two popular arrangements is limited. 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. The relative weights of the Medium Growth Fund in the asset allocations of both lifestyles - as well as the allocation of GARS as a standalone in the Cash Lifestyle - over the course of the retirement savings journey can be found in the appendix. GARS had an ITR of 3.1°C, well above the global temperature rise aim of the Paris Agreement.

Similarly, at 31 March 2023, the metric was only available for some of the underlying funds of the Medium Growth Fund managed by LGIM and Schroder. 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.

Underlying Fund at 31 March 2023	Allocation in the Medium Growth Fund (%)	Implied Temperature Rise (°C)
LGIM Future World Global Equity Fund (GBP Hedged)	16	2.8
LGIM Future World Global Equity Fund	16	2.8
Schroder Sustainable Future Multi-Asset	17	2.3
LGIM Diversified Fund	17	2.9

A comparison between the ITR values at the two reporting dates is hindered by the fact that the only fund with available data on 31 March 2022, abrdrn GARS, was terminated and replaced by the BlackRock ESG Strategic Growth Fund before 31 March 2023, and no ITR data is yet available for the latter.

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

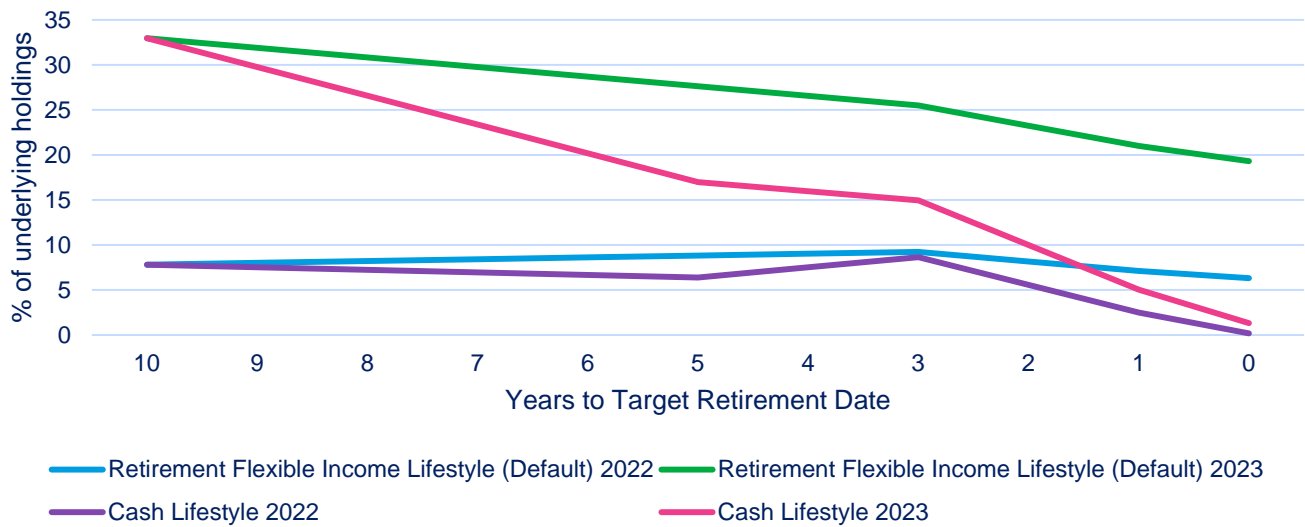
This metric is only available for the corporate portfolios as only companies may sign up to the Science-based Targets Initiative, as opposed to governments issuing sovereign bonds. Weighting the share of investments with approved Science-based Targets of the two popular arrangements at each reporting date provides an SBT share of 7.8% at 31 March 2022, and 32.2% at 31 March 2023. This is a fourfold increase over the year. Again, these figures are not a true measure of a member's exposure over the course of the de-risking journey.

Both lifestyles de-risk towards a diversified portfolio of corporate bonds, sovereign bonds and cash as members approach retirement. The increasing allocation to sovereign bonds and cash, especially from 3 years to retirement, means that a greater proportion of assets are held which cannot adopt science-based targets.

It should be noted that both lifestyles have nevertheless increased their share of science based targets at each stage of the retirement savings journey between 2022 and 2023. This change can be attributed to better data quality as well as the strategic investment changes implemented over the period. Among the underlying diversified growth portfolios, this data point was only available for abrdrn GARS at 31 March 2022 and its share of approved SBTs was only 1%.

At 31 March 2023, the data point was available for all corporate bond funds used in the lifestyle strategies and the newly implemented BlackRock ESG Strategic Growth Fund, which replaced Abrdrn GARS had a share of 21.8% approved SBTs.

## Proportion with Approved Science-based Targets



Source: Aegon and Investment Managers, 31 March 2022 and 31 March 2023. 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 at the given point of the de-risking path.

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.

### Data Quality

The data quality at both reporting dates is shown in the table below on an aggregated level for the two popular lifestyles.

Data Quality Category	31 March 2022	31 March 2023
% reported	74.2	70.8
% estimated	5.3	10.8
% not covered	5.5	8.3
% cash and other asset classes	15.0	10.4

Source: Aegon and Investment Managers, 31 March 2022 and 31 March 2023. Mercer has calculated aggregated metrics. Figures may not sum due to rounding.

The aggregated figures are not a true measure of the data quality pertaining to the assets a member would hold at different stages of the retirement savings journey. Between the two reporting dates, on an aggregated level, the share of reported data has decreased while the share of estimated data has increased. A greater share of assets eligible for reporting have not been covered, but a smaller share of assets was invested in cash and other "out of scope" asset classes.

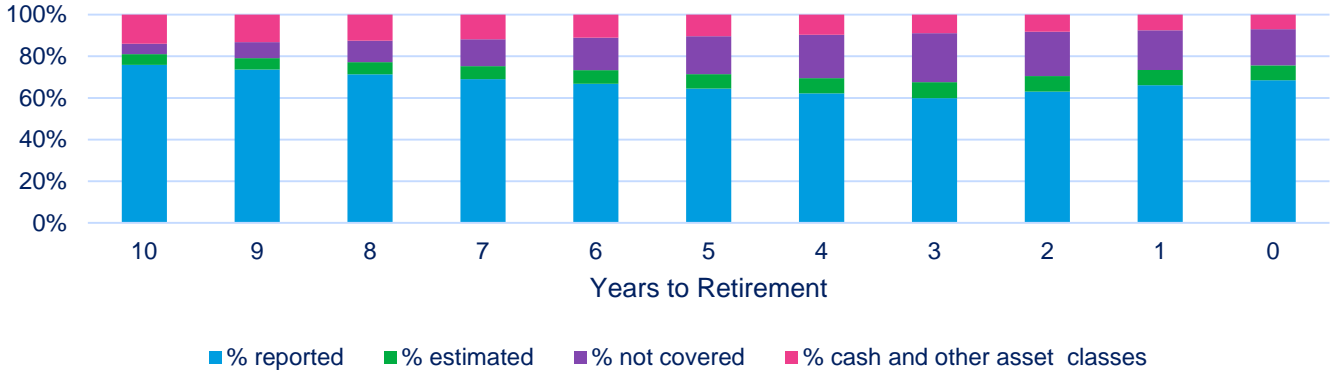
In the following, the movement of data quality over the course of the retirement savings journey for both popular arrangements is presented in four charts, 2 for each lifestyle at each reporting date. Data quality for the underlying funds at each reporting date is detailed in the appendix.

For the Retirement Flexible Income Lifestyle, data quality was broadly similar at all stages of the retirement savings journey between the two reporting dates.



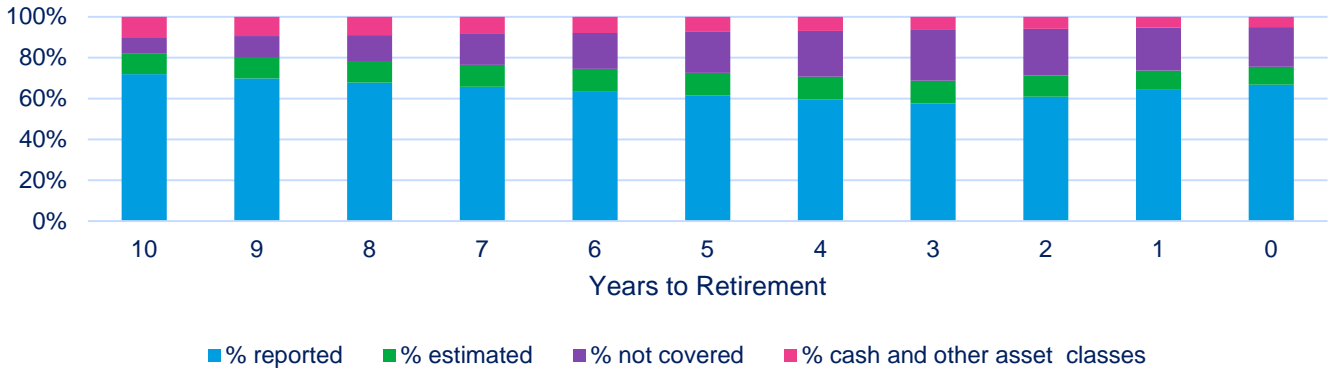
There was some movement between the different categories of data quality, but the overall picture did not change drastically with the proportions of available data (reported and estimated) compared to unavailable data (not reported or cash and other asset classes) broadly similar.

**Retirement Flexible Income Lifestyle (Default) - Data Quality as at 31 March 2022**



Source: Aegon and Investment Managers, 31 March 2022. 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 at the given point of the de-risking path.

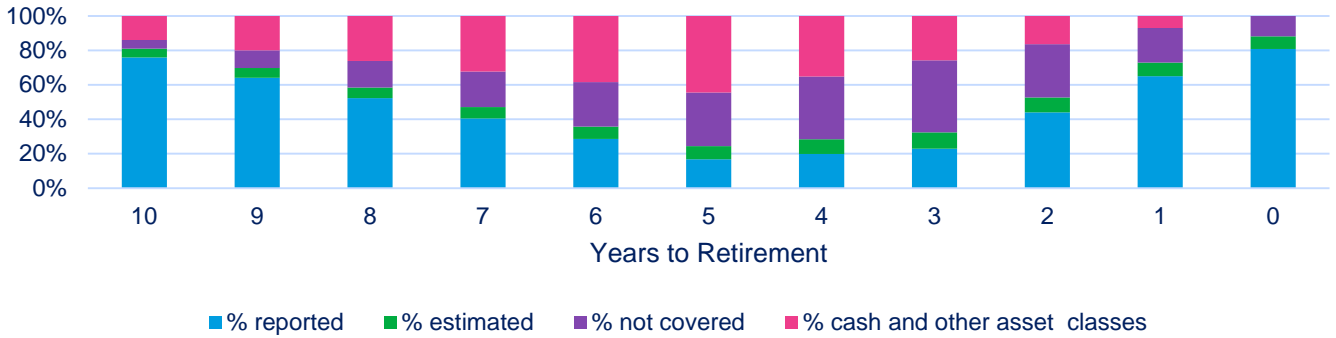
**Retirement Flexible Income Lifestyle (Default) -Data Quality as at 31 March 2023**



Source: Aegon and Investment Managers, 31 March 2023. 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 at the given point of the de-risking path.

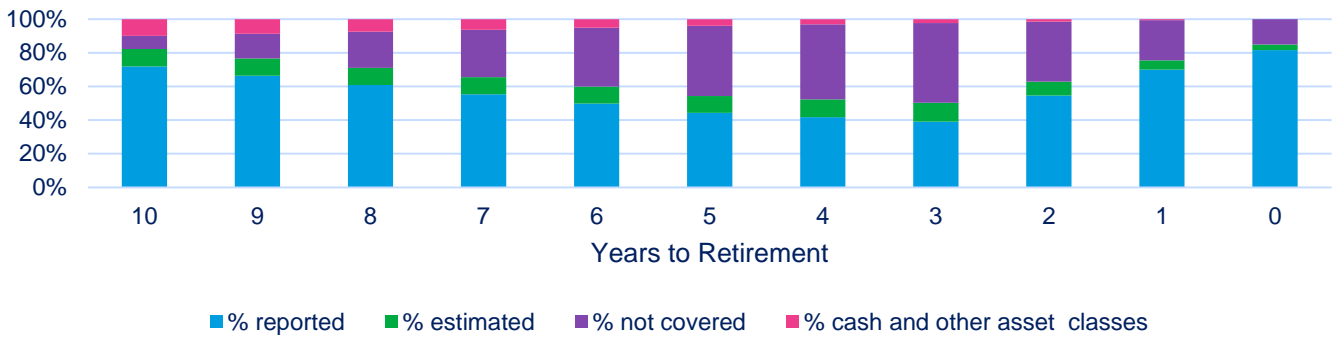
The picture was different for the Cash Lifestyle and this can be largely attributed to the fact that it builds a 50% allocation to a single diversified growth fund to 5 years before retirement. The diversified growth fund was Abrdn GARS at 31 March 2022 and the BlackRock ESG Strategic Growth Fund at 31 March 2023. Abrdn GARS employed a greater range of derivative strategies, therefore many of its assets fell into the "cash and other assets" category, explaining the differences between the two charts below.

### Cash Lifestyle - Data Quality as at 31 March 2022



Source: Aegon and Investment Managers, 31 March 2022. 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 at the given point of the de-risking path.

### Cash Lifestyle - Data Quality as at 31 March 2023



Source: Aegon and Investment Managers, 31 March 2023. 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 at the given point of the de-risking path.

## 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 wishes to 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 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.

The Trustee will be able 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

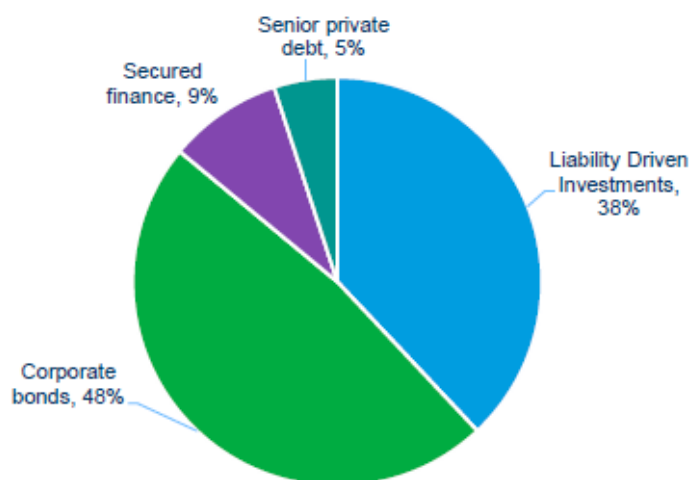
The return impacts of the climate scenarios represented in this report are relative to the 'baseline'. The baseline represents what we are assuming the market is currently pricing in. The baseline includes a 10% weight to a **Failed Transition**, 40% weight to an **Orderly Transition**, 10% to a **Rapid Transition** and 40% to a range of **low impact scenarios**.

### Climate scenario narratives and assumptions

	Rapid Transition	Orderly Transition	Failed Transition
<b>Summary</b>	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.
<b>Cumulative emissions to 2100</b>	416 GtCO <sub>2</sub> e	810 GtCO <sub>2</sub> e	5,127 GtCO <sub>2</sub> e
<b>Key policy and technology assumptions</b>	An ambitious policy regime is pursued to encourage greater decarbonisation of the electricity sector and to reduce emissions across all sectors of the economy. Higher carbon prices, larger investment in energy efficiency and faster phase out of coal-fired power generation under a 'Rapid' transition.		Existing policy regimes are continued with the same level of ambition.
<b>Financial climate modelling</b>	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).
<b>Physical risk impact on GDP</b>	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).		
<b>Physical risk impact on inflation</b>	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 scenarios as at 31 December 2022.

## DB Section asset allocation modelled



Each asset class is 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 category for secured finance in climate models.
- A portion of the corporate bond allocation is assumed to be in “green” bonds, as a way to reflect the fact that the Scheme has implemented ESG based exclusions.

## 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

Only Scope 1 and 2 emissions data has been included in this report except where noted. This means that for some companies the assessment of their carbon footprint could be considered an understatement. Scope 1 and 2 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
Insight Buy and Maintain	61.0	61.0
LGIM Buy and Maintain	66.0	67.7
LGIM LDI	100.0	100.0

### DC Section

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

## 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

Abrdn use a carbon budget approach to calculate Implied Temperature Rise, 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?*

- *The Budget approach most closely aligns to Glasgow Financial Alliance for Net Zero (GFANZ) 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 CO<sub>2</sub>e) as opposed to an emissions intensity (tCO<sub>2</sub>e/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 metrics*

### 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, like 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

Implied Temperature Rise is calculated by projecting forward the 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 in the analysis, includes all greenhouse gases 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).

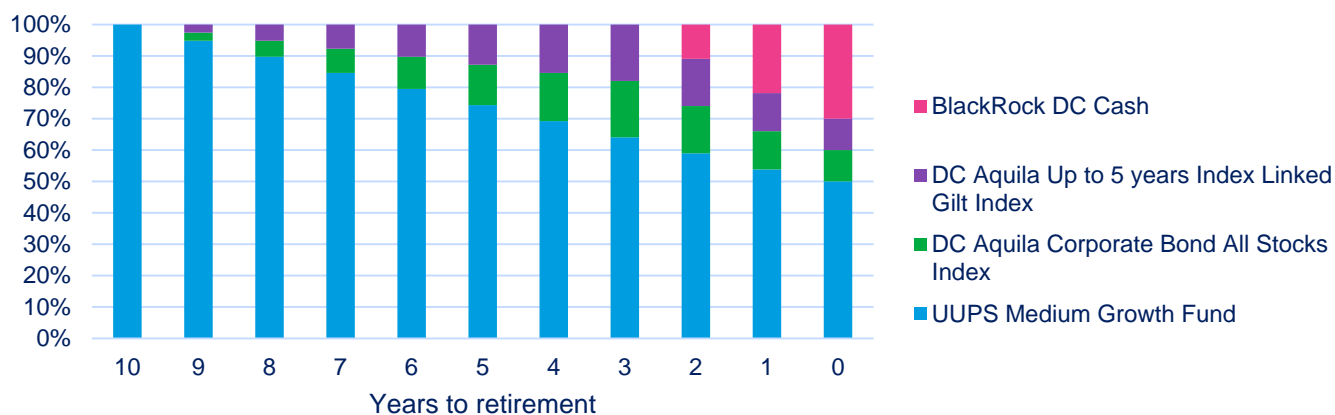
For the purpose of identifying popular arrangements, lifestyle strategies are regarded as one unit. This means that any assets held by lifestyle members are attributed to the relevant lifestyle arrangements rather than the underlying funds. In practice, this means that a popular underlying fund may not 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.

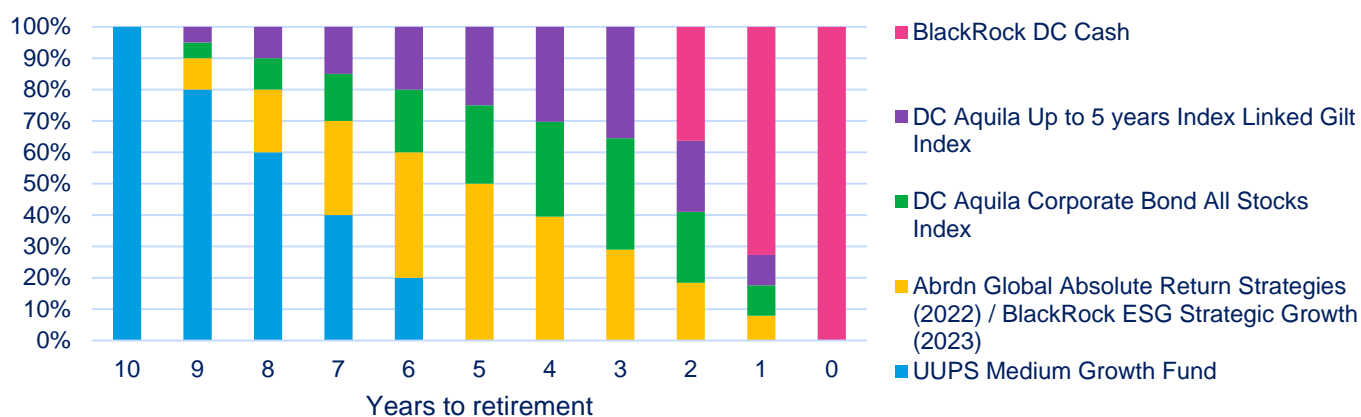
#### 1. Asset Values (and Percentage Shares of Total DC Assets)

	31 March 2022		31 March 2023	
<b>DC Scheme Total</b>	£317.6m	100.0%	£342.1m	100.0%
<b>Retirement Flexible Income Lifestyle</b>	£214.8m	67.6%	£230.4m	67.3%
<b>Cash Lifestyle</b>	£48.7m	15.3%	£57.2m	16.7%

## 2. Retirement Flexible Income Lifestyle (default arrangement)



## 3. Cash Lifestyle



Please see below the underlying allocations for the Medium Growth Fund used in both lifestyle strategies, as well as the allocations for the underlying Diversified Growth Fund.

<b>Medium Growth (default growth phase fund)</b>	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
<b>United Utilities Diversified Growth Fund</b>	33.3% Schroder Sustainable Future Multi-Asset
	33.3% LGIM Diversified
	33.4% Abrdn Global Absolute Return (in 2022) / BlackRock ESG Strategic Growth (in 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
<b>Intensity</b>	Carbon footprint	68.4	198.1	44.5	n/a	0.5
<b>Data Quality</b>	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
<b>Portfolio Alignment</b>	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

*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
<b>Intensity</b>	Carbon footprint	28.6	28.7	51.1	111.5	135.5
<b>Data Quality</b>	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
<b>Portfolio Alignment</b>	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

*Underlying funds of the UUPS Diversified Growth Fund*

Type of Metric	Metric	Schroder Dynamic Multi-Asset	LGIM Diversified	Abrdn Global Absolute Return Strategies
<b>Intensity</b>	Carbon footprint	n/a	98.5	198.1
<b>Data Quality</b>	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
<b>Portfolio Alignment</b>	Implied Temperature Rise (°C)	n/a	n/a	3.1
	Proportion with SBT (%)	n/a	n/a	1.0

**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
<b>Intensity</b>	Carbon footprint	42.8	30.1	40.5	n/a	0.5
<b>Data Quality</b>	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
<b>Portfolio Alignment</b>	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



*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
<b>Intensity</b>	Carbon footprint	24.1	24.0	56.9	47.7	133.4
<b>Data Quality</b>	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
<b>Portfolio Alignment</b>	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

*Underlying funds of the UUPS Diversified Growth Fund*

Type of Metric	Metric	Schroder Dynamic Multi-Asset	LGIM Diversified	BlackRock ESG Strategic Growth
<b>Intensity</b>	Carbon footprint	38.6	78.6	30.1
<b>Data Quality</b>	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
<b>Portfolio Alignment</b>	Implied Temperature Rise (°C)	2.3	2.9	n/a
	Proportion with SBT (%)	27.0	20.8	21.8

## Important notices from data providers

### **Mercer**

Past performance does not guarantee future results. Information contained herein has been obtained from a range of third-party sources. While the information is believed to be reliable, Mercer has not sought to verify it independently. As such, Mercer makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability (including for indirect, consequential or incidental damages), for any error, omission or inaccuracy in the data supplied by any third party. The information does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities and/or any other financial instruments or products or constitute a solicitation on behalf of any of the investment managers, their affiliates, products or strategies that Mercer may evaluate or recommend. This does not offer any advice regarding current or future applicable laws or regulations. Mercer does not provide legal advice. You should contact your legal adviser before making any decisions with legal and/or regulatory implications.

Mercer Limited is authorised and regulated by the Financial Conduct Authority. Registered in England and Wales No. 984275. Registered Office: 1 Tower Place West, Tower Place, London EC3R 5BU.

### **Ortec Finance**

Mercer has entered into a global agreement with Ortec Finance regarding the use of their climate scenarios by Mercer's clients.

Climate scenarios have been prepared with care using the best available data. The scenarios may contain information provided by third parties or derived from third party data and/or data that may have been categorized or otherwise reported based upon client direction. The scenarios are for information purposes and are not to be construed as investment advice. Ortec Finance assumes no responsibility for the accuracy, timeliness or completeness of any such information. Ortec Finance accepts no liability for the consequences of investment decisions made in relation on information in this report. The scenarios are copyright of Ortec Finance. You may not, except with our express written permission, distribute or commercially exploit the content. All Ortec Finance services and activities are governed by its general terms and conditions which may be consulted on [www.ortecfinance.com](http://www.ortecfinance.com) and shall be forwarded free of charge upon request.