MASTERTRUST
Independent Board of Trustees

Legal & General WorkSave Mastertrust
Legal & General WorkSave (RAS) Mastertrust

Task Force on Climate-related Financial Disclosures Report

Year ending 5 April 2022

Contents

Climate change is one of the world's most significant challenges and represents a material financial risk to the Mastertrust. The Trustees are committed to assessing, managing and monitoring this risk for the benefit of members.

Background
From 1 October 2021 the Occupational Pension Schemes Climate Change Governance Reporting Regulations 2021 introduced new reporting requirements in line with the TCFD recommendations. The aim is to improve the quality of governance and the level of action by Trustees in identifying, assessing and managing climate risk and opportunity. We were required to produce our first report within 7 months of the Mastertrust year ending 5 April 2022. This report covers the reporting period 1 October 2021 to 5 April 2022.

Where we use the term 'Mastertrust' we are referring to both the Legal & General WorkSave Mastertrust and the Legal & General WorkSave (RAS) Mastertrust.

In writing this report the Trustees have engaged with and relied upon information provided by Legal & General Investment Management Ltd (LGIM) as our investment manager, Legal & General as Mastertrust owner and Hymans Robertson as our independent Investment Adviser.

Chair's Summary

Welcome to the Mastertrust's first report on climate-related matters, produced in line with the Task Force on Climate-related Financial Disclosures (TCFD).

Climate change is one of the world's most significant challenges and addressing it is a key responsibility for this generation. Scientific evidence indicates that we need to **act now** to reduce carbon emissions to avoid disastrous consequences for our environment, our society, and our economies.

We consider that climate change represents a **material financial risk** to the Mastertrust as it has the potential to disrupt economic, financial, and social systems. The impact of this risk is currently unknown as it depends on several factors including the policies of governments and the efficiency of the transition to a low carbon economy. Our approach in this fast-moving area continues to develop and evolve.

The Trustees are committed to assessing these risks across the short, medium and long-term horizons to manage and monitor them for the benefit of members.

Our achievements to date

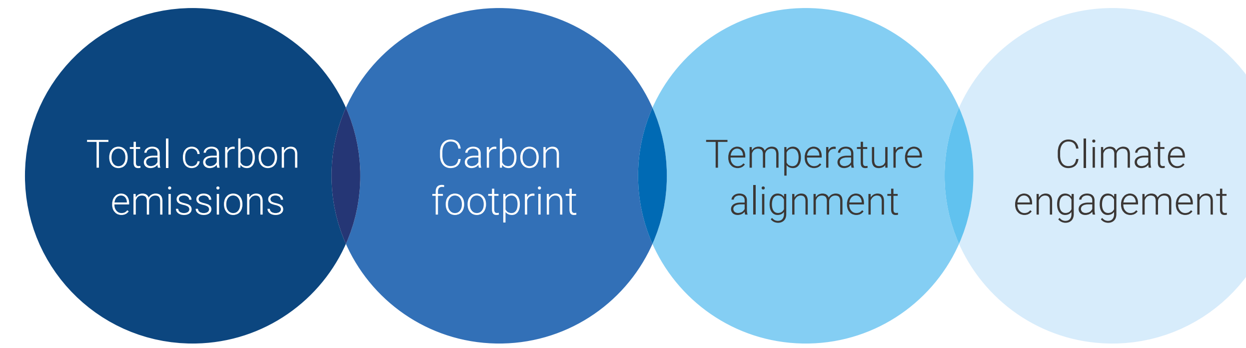
We are proud of our robust governance approach and are pleased to have expanded it to specifically cover the requirements of TCFD. By defining our climate related risks and opportunities and integrating the management of these within all our governance processes, we ensure climate change is considered in our investment decisions and when managing overall risk to the Mastertrust.

During the reporting period the Trustees:

- Successfully established a climate policy and a risk and governance framework to ensure the ongoing identification, assessment and management of climate risk and opportunity.
- Completed scenario analysis of popular arrangements across three global warming scenarios:

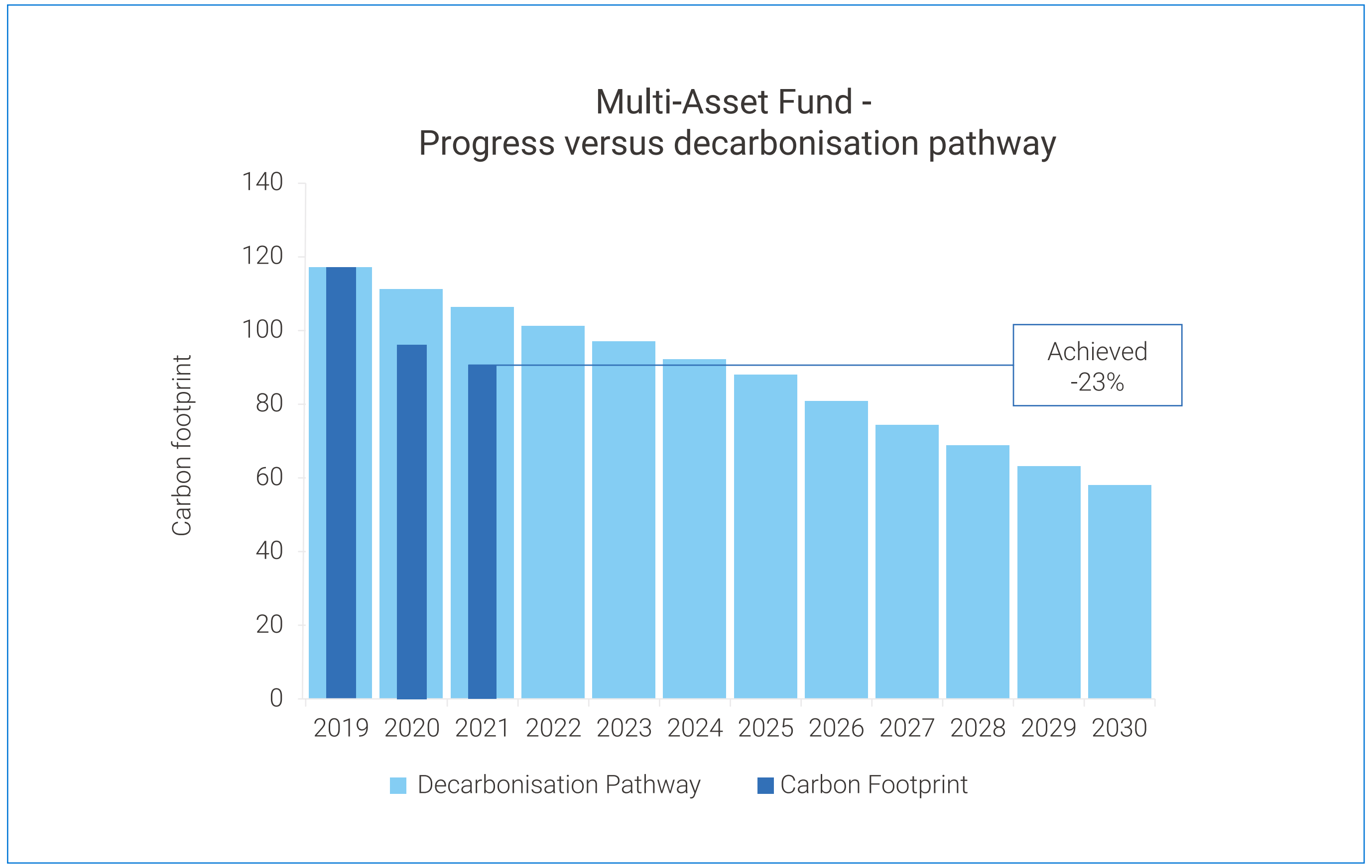
1. Limiting Global warming to 1.5 degrees C reflecting an immediate, highly ambitious action to address climate change
2. Limiting Global Warming to well-below 2 degrees C reflecting an immediate ambitious investment action
3. Limiting Global Warming to well-below 2 degrees C but reflecting delayed and disorderly action with much more disruptive change

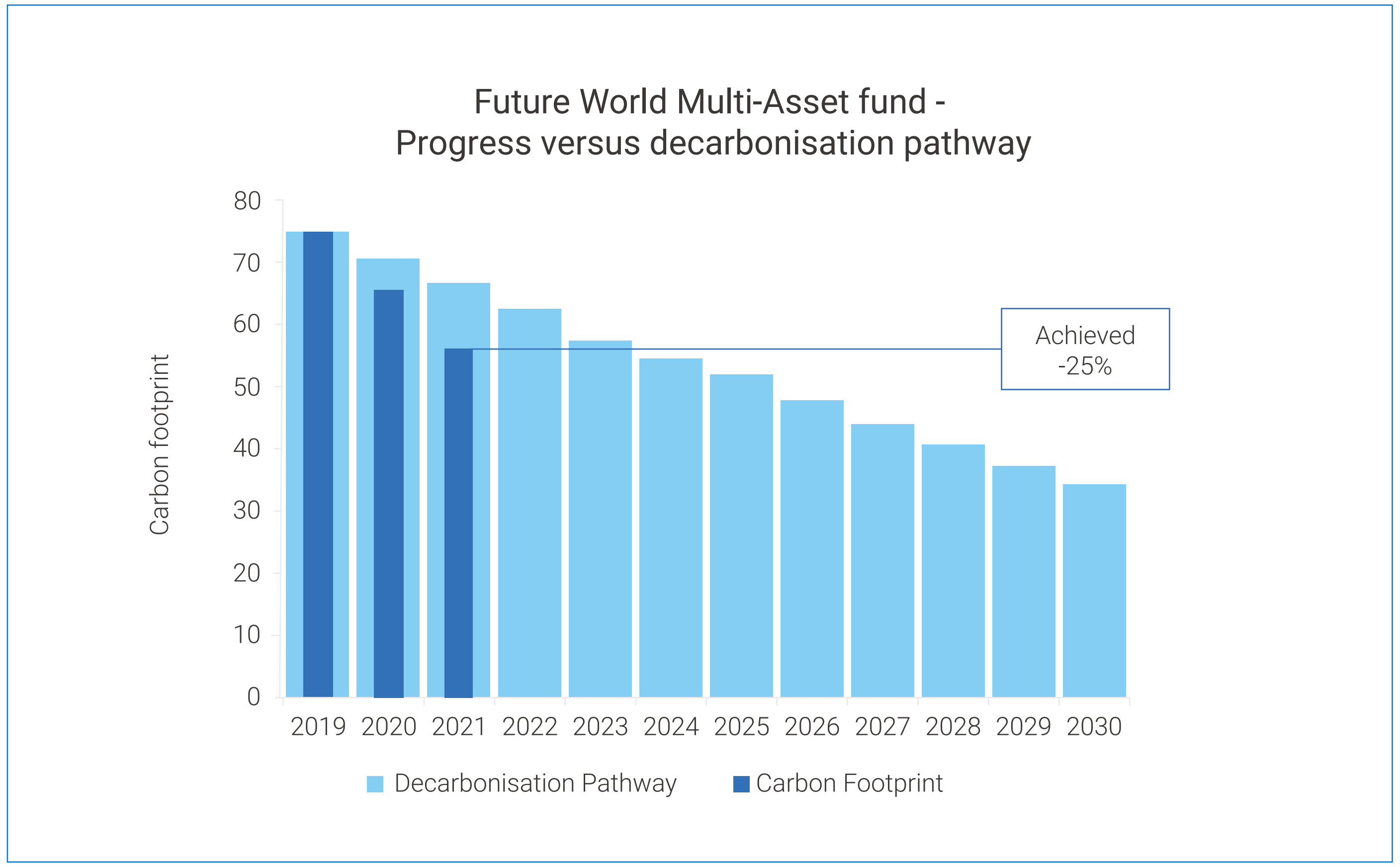
- Identified and reported on four metrics for the popular arrangements noting any gaps in data coverage:

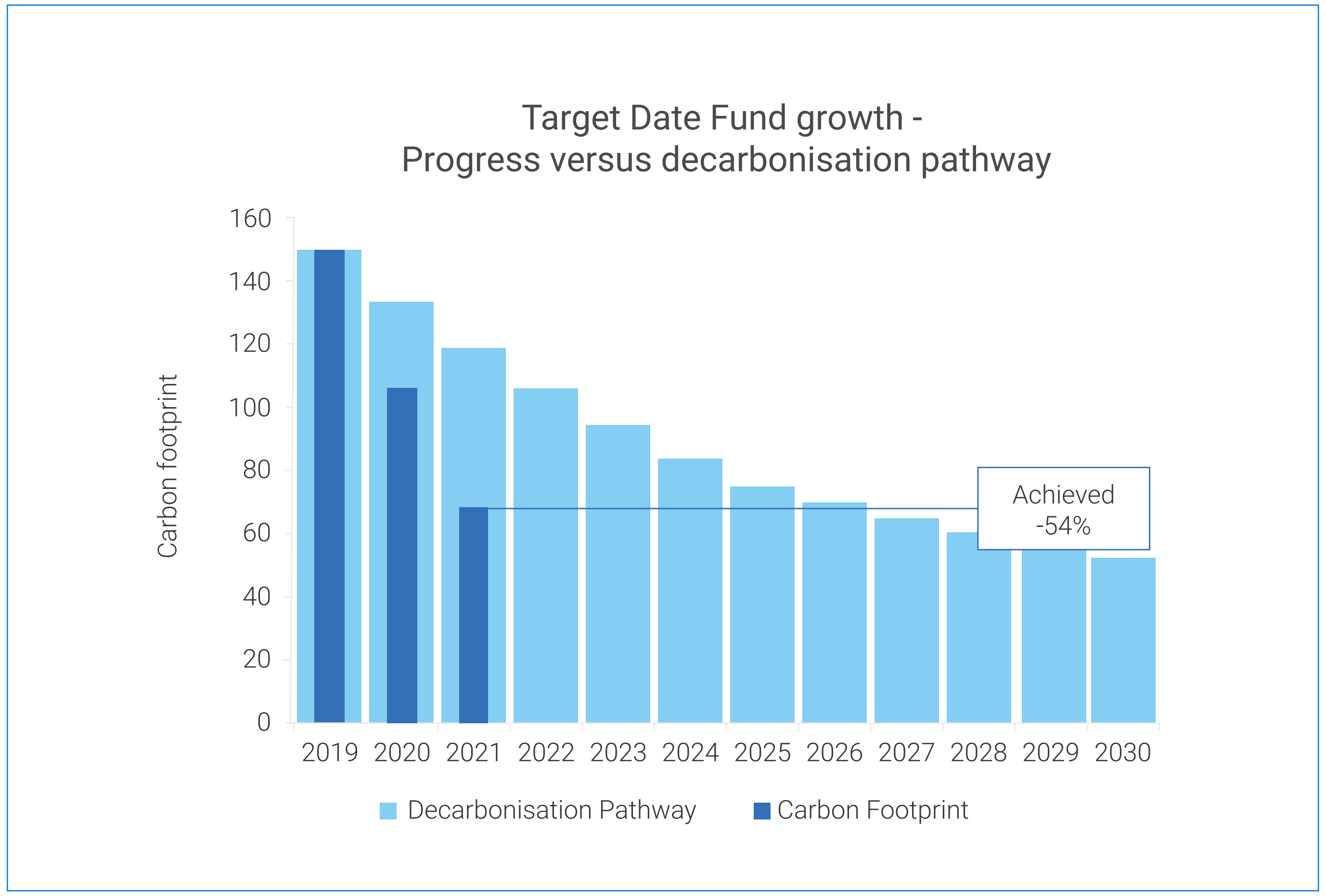


- Re-confirmed the target of 100% of sole governance default assets to be net zero by 2050 – we use carbon footprint (a measure of companies' carbon emissions relative to their size) to monitor performance against this target annually.

As demonstrated in the charts on the next page, we are on track to hit these targets and the Trustees are pleased to see that currently our sole governance defaults are making good progress against their decarbonisation pathways, on their journey to net zero.







These charts illustrate the carbon footprint of our sole governance defaults within the growth phase as at the end of 2021, compared to their intended de-carbonisation pathway (their journey to net zero). The figures shown currently exclude sovereigns.

For consistency with the other charts, we have included the growth phase of the Target Date Fund (TDF) only as this is where the majority of members are saving. As at the end of 2021, the TDF approaching retirement and retirement phases had achieved a reduction in carbon footprint of -46% and -39% respectively. The Retirement Income multi asset fund (RIMA), which forms the end of the default drawdown lifestyle, has decarbonisation targets of -25% by 2025 and -50% by 2030. As at the end of 2021 it had achieved -23%.

We acknowledge this is the first year that we are required to produce a mandatory TCFD report and we, like many other schemes, are on a journey that will develop in line with the availability, coverage and quality of climate-related data and will be driven by a growing desire for companies to move their businesses to a more sustainable model.

We are delighted with the amount of progress that's been made and the detail that we can share in this report.

Dermot Courtier - Chair of the Legal & General WorkSave Mastertrust

Introduction

In drafting this report, we have followed the Department for Work and Pensions' (DWP) statutory guidance on governance and reporting of climate-related risks and opportunities to guide our disclosures, as well as The Pensions Regulator's guidance on governance and reporting of climate-related risks and opportunities.

The climate change regulations are based on recommendations on the financial materiality of climate change. The four elements of recommended disclosures (see diagram overleaf) are designed to make our TCFD-aligned disclosures comparable, but with sufficient flexibility to account for local circumstances.

Core Elements of Climate-Related Financial Disclosures

Governance
The organisation's governance around climate-related risk and opportunities.

Strategy
The actual and potential impacts of climate related-risks and opportunities on the organisation's businesses, strategy, and financial planning.

Risk Management
The processes used by the organisation to identify, assess and manage climate-related risks.

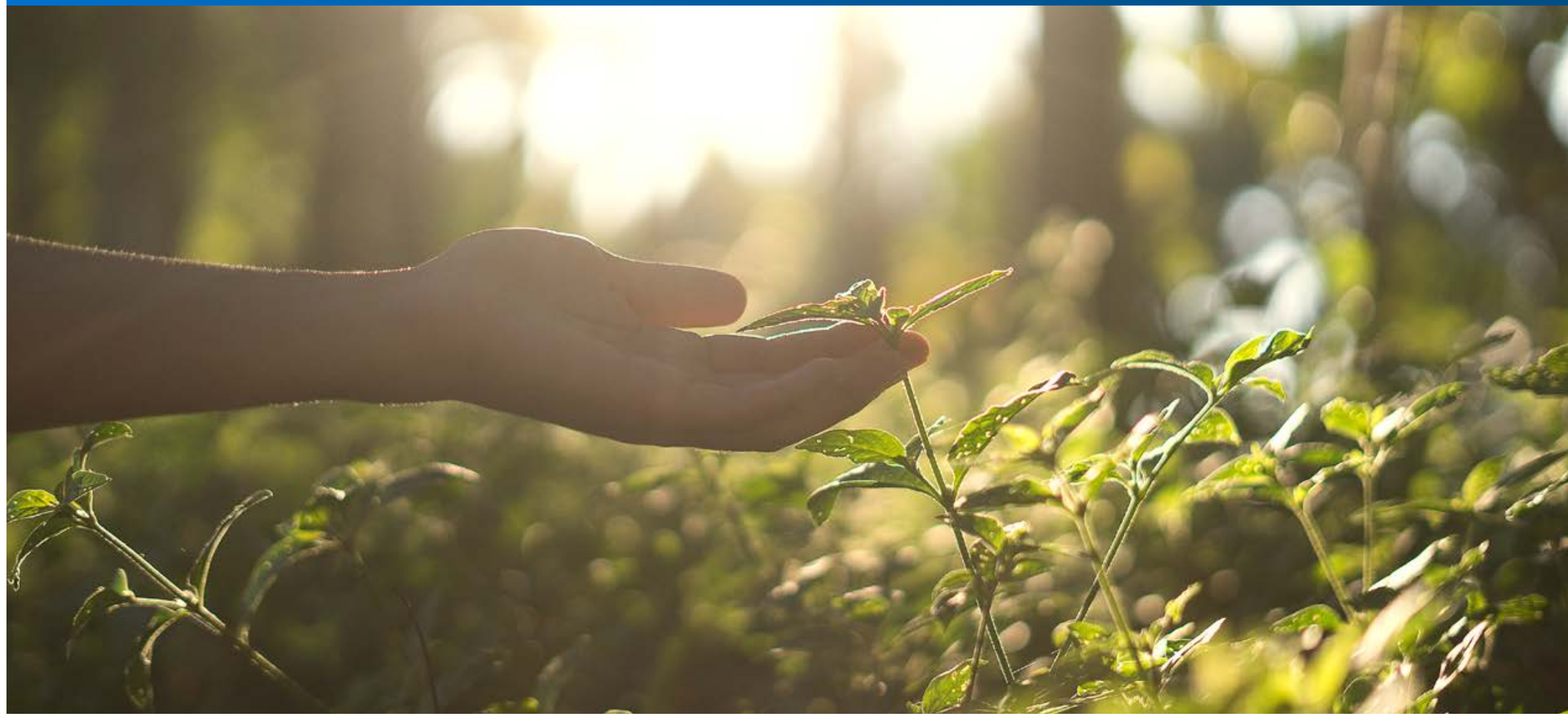
Metrics and Targets
The metrics and targets used to assess and manage relevant climate related risks & opportunities.

Scope

This report covers the Trustees' activities to address and manage climate-related risks and opportunities in our investment process during the 2021/2022 financial year. The governance and risk framework has been embedded across the full Mastertrust, and for the purposes of this report, the Trustees have limited the scope of metrics and scenario analysis to the strategies and funds which constitute popular arrangements. Popular arrangements are a fund (or funds forming part of a strategy) with assets in excess of £100m or which account for 10% or more of the assets at 5 April 2022. The Mastertrust's popular arrangements are:

- L&G PMC Multi-Asset Fund
- Legal & General Mastertrust Future World Multi-Asset Fund
- Drawdown Lifestyle Default
- L&G PMC Target Date Funds
- L&G PMC Cash Fund
- L&G PMC UK Equity Index Fund
- L&G PMC World (EX UK) Equity Index Fund 3
- L&G PMC Global Equity Fixed Weights (50:50) Index Fund 3
- Employer A Bespoke Strategy
- Employer B Bespoke Strategy
- Employer C Bespoke Strategy
- Employer D Bespoke Strategy
- Employer E Bespoke Strategy
- Employer F Bespoke Strategy – Strategy 1
- Employer F Bespoke Strategy – Strategy 2
- Employer G Bespoke Strategy
- Employer H Bespoke Strategy

At the current time, the DWP considers that it is appropriate to disclose popular arrangements only.



Trustees' climate beliefs

The Trustees believe that:

- Climate change, and its direct and indirect impact, poses a significant risk for long-term investors such as us.
- In the long term, investments which consider a range of environmental, social and governance (ESG) factors will likely be more able to manage risk and maximize opportunities without compromising returns.
- Climate risk and its impact on investments should be considered.
- Different aspects of climate change can create risks that are sector and region-specific at varying times and may affect any type of asset held within the investment portfolio.
- Stewardship of assets is critical and given the Trustees invest scheme assets through a unit-linked insurance policy, Legal & General Investment Management, the Investment Adviser and Legal & General play a significant role in ensuring stewardship is carried out effectively on the Trustees' behalf.

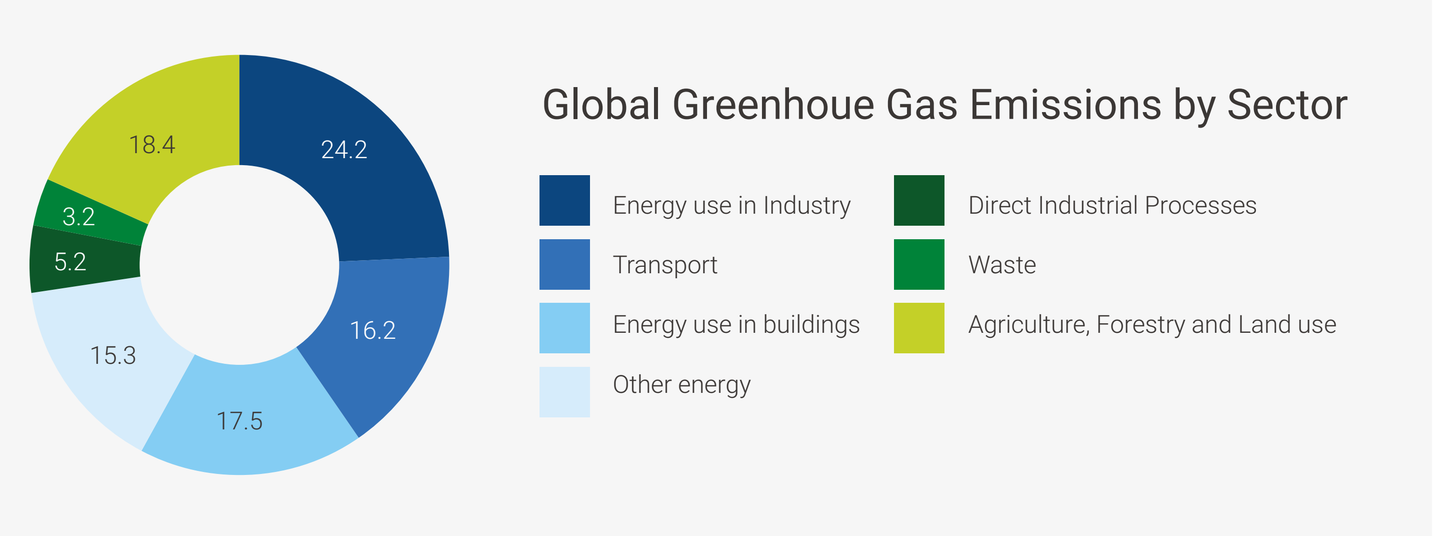
The Trustees continue to take active steps to identify, assess and manage climate-related risks and opportunities.

The long-term aim of the Mastertrust is to invest pension contributions in a sustainable way, keeping costs affordable. The Trustees' objective is to reduce the likelihood that climate-related risks impact on the value or performance of the Mastertrust's assets. We aim for 100% of sole governance default assets to be compatible with the net zero emissions ambition by 2050 or earlier in line with the Paris Agreement.

Climate change

Human activities are estimated to have caused approximately 1°C of global warming above pre-industrial levels. Most of this warming has occurred in the past 35 years, with the five warmest years taking place since 2010. Between the years 2006-2015, the global mean surface temperature was 0.97°C higher than the average over the 1950-1990 period. The overwhelming scientific consensus is that the observed climate changes are primarily the result of human activities including electricity and heat production, agriculture and land use change, industry, and transport.

Total anthropogenic greenhouse gas emissions (GtCO2eq/yr) by economic sectors



Despite the need for urgent action, the majority of climate scientists anticipate that with the current response to climate change, the world will be between 2°C and 4°C warmer by 2100, with significant regional variations. This is substantially higher than the Paris Climate Change Agreement, which reflects a collective goal to hold the increase in the mean global surface temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C.

The magnitude and speed of the Paris-aligned climate transition leads to climate-related risks and opportunities about which investors ought, as far as it is possible, to be aware. The TCFD requirements divide climate risks into two major categories. Physical risks are risks from climate change that result from more frequent and severe weather events and longer-term shifts in climate. Transitional risks are risks from climate change that arise from the process of adjustment towards a low-carbon economy.

Source: Climate Watch, the World Resources Institute, and The UNFCCC Secretariat (The United Nations Climate Change)

Examples of transitional risks

Risk	Description
Policy	• Increased pricing of greenhouse gas emissions • Enhanced emissions-reported obligations • Mandates on, and regulation of, existing products and services • Exposure to litigation
Technology	• Substitution of existing products and services with lower emissions options • Unsuccessful investment in new technologies • Costs of transition to lower emissions technology
Market	• Changing consumer behaviour • Uncertainty in market signals • Increased cost of raw materials
Reputation	• Shifts in consumer preference • Stigmatization of sector • Increased stakeholder concern or negative stakeholder feedback

Source – Taskforce on Climate-related Financial Disclosures (2017).

Examples of physical risks

Risk	Description
Acute	• Increased severity of extreme weather events, including more severe storms, wildfires and droughts
Chronic	• Changes in precipitation patterns and extreme variability in weather patterns • Rising mean temperatures • Rising sea levels

Source: Climate Watch, the World Resources Institute, and The UNFCCC Secretariat (The United Nations Climate Change)

The Trustees acknowledge that climate change is, for asset owners, a risk that cannot be fully diversified. Almost all asset classes, sectors and regions are likely to be affected by the physical, policy or market-related consequences of climate change over the long term. Climate risk is not reserved to the oil and gas and power generation sectors but applies also to downstream sectors. Investors focusing exclusively on primary energy suppliers could fail to identify material climate risks in other sectors. Speaking generally, a Paris-aligned transition to a low carbon economy would lead to better outcomes for long-term investors preferable to alternative climate scenarios.

The Trustees have considered climate in the context of their fiduciary responsibilities. Their investment principles incorporate ESG and other related matters are based on their longer-term view. Uncertainty exists in climate science, and no single tool can provide an accurate and complete observation on a scheme's climate risk. For responsible investors looking to proactively manage climate risk, a combination of metrics and methodologies represents the best possible information set currently available.

Section 1
Governance

Responsibility

Trustee Board

The Trustees have overall responsibility for the strategic oversight and approval of Climate-related Risks and Opportunities (CRRO) which are subject to annual review. In addition, the Trustees are responsible for setting the investment strategy across the whole Mastertrust (which includes a specific climate policy within it); and monitoring the activities and deliverables from service providers. The main Trustee Board meets at least quarterly and receives quarterly reports from its service providers on their investment and stewardship activities to inform the annual review. Climate risk is a regular agenda item.

Investment Committee

The Investment Committee, on behalf of the Trustees, considers and oversees the day-to-day process of identifying, assessing and managing CRRO, which includes a responsibility to determine both current and emerging risks and opportunities leveraging the support of their Investment Adviser, Hymans Robertson, LGIM and external fund managers.

The Investment Committee have assessed the CRRO across the Mastertrust. In addition, the Committee has undertaken work to establish and determine how the risks can be monitored and assessed, as well as ensuring they are provided with adequate reporting and analysis. Any changes or updates will be recommended by the Investment Committee to the Trustee Board for approval.

The Trustee Board has appointed Independent Investment Adviser Hymans Robertson to provide investment advice to them. The Investment Committee monitors and reviews the performance of Hymans Robertson regularly as work progresses and formally on an annual basis. Within their role, Hymans Robertson is responsible for providing the Trustees with guidance on CRRO, as well as the wider approach to TCFD compliance.

The Trustees, as part of their approach to TCFD, have:

- Discussed and received information from LGIM relating to the strategic approach in this area. This includes details of LGIM's climate-related engagements over the period. The Trustees challenged their Investment Adviser and LGIM on the information provided to encourage continuous improvement, for example, around the approach to net zero. This includes the request to include external fund manager data in the reporting. The Investment Committee currently meets five times per year.
- Reviewed the Statement of Investment Principles (SIP) and Investment Strategy in conjunction with the Investment Adviser and LGIM.
- Regularly reviewed climate-related risks and updated other scheme documentation in relation to climate matters, as well as wider ESG issues.

The Trustees have integrated the management of Climate-related Risks and Opportunities within their governance process and published a Climate Policy in October 2021.

Hymans Robertson worked with Legal & General and the Trustees as part of the TCFD reporting process. Legal & General developed and shared various proprietary tools and modelling capabilities with Hymans Robertson and the Trustees as part of this process, upon which the Trustees and Hymans Robertson were able to provide challenge. Hymans Robertson has provided advice to the Trustees on the suitability of the proposed metrics and approach to the scenario analysis throughout.

The following persons undertake scheme governance activities for the Trustees in identifying, assessing, and managing CRRO:

Trustees' Executive team

The Pension Scheme Management Team (PSMT) provides executive support to the Trustee Board and its sub-committees. The PSMT provides pensions and regulatory expertise and supports the Trustees with governance activities relating to identifying, assessing, and managing CRRO. The Trustees acknowledge that in this context, 'governance activities' means making Mastertrust-wide decisions.

Legal & General Assurance Society Limited (Legal & General)

Legal & General has several group businesses which are responsible for the investment platform, administration, investment and operations of the Mastertrust. The Trustees hold a unit-linked insurance policy with Legal & General, through which they hold notional units relating to investments in underlying funds. Legal & General carries out due diligence on the underlying fund managers, including LGIM, the Trustees' primary Investment Manager, and reports its due diligence activity to the Investment Committee as each fund is made available and through quarterly oversight of all funds within the Mastertrust. The Trustees are pleased to see the increase in due diligence relating to responsible investment.

As platform provider, Legal & General is responsible for providing an appropriate level of due diligence on fund managers.

Legal & General Investment Management (LGIM)

LGIM is the fund management company which manages the majority of the Mastertrust's assets as the Trustees' primary Investment Manager and contributes to the analysis of the Trustees' CRROs.

The following persons advise or assist the Trustees with governance activities in relation to identifying, assessing and managing Climate-related Risks and Opportunities:

Hymans Robertson

The Trustees have appointed Hymans Robertson as their Independent Investment Adviser. Hymans Robertson provides advice on the funds used in the default arrangement and self-select ranges including the provision of advice in line with Section 36 of the Pensions Act 1995. As part of their advice, they consider ESG factors including CRRO when selecting and advising on funds or strategies.

The Trustees have set objectives for Hymans Robertson in line with regulations. These include specifically helping the Trustees meet their climate-related objectives including the requirements under the regulations.

Working with the Trustees and LGIM as the primary asset manager for the Mastertrust, Hymans Robertson has advised on the appropriateness of metrics selected by the Trustees with input from LGIM, provided advice and commentary on this Trustee report and held discussions with LGIM to fully understand stewardship and modelling capabilities with respect to CRRO.

Governance models

When an employer decides to offer its pension arrangement through the Mastertrust which covers all popular arrangements, it will select one of two governance models depending on how involved it wants to be in the running of its pension arrangement, and in particular, the setting of the investment strategy:

Sole governance	The employer delegates all the fiduciary and governance responsibilities to the Mastertrust Trustees. For example, the design of the default arrangement and other investment funds. Under sole governance there is a choice of pre-designed investment strategies. In addition, upon request, the Trustees will also consider the creation of a bespoke default under their 'sole flexibility' policy using a pre-approved range of funds.
Shared governance	The employer is actively involved in the pension arrangement and takes investment advice, both initially and on an ongoing basis, from its own adviser. It reviews its tailored investment strategy and its ongoing appropriateness to its members at least every three years. The employers are asked to point out if their principles are different to those set by the Trustees and if they are different, the Trustees need to approve any differences. As asset owner, the Trustees are ultimately responsible for the availability and use of all the investment strategies in the Mastertrust and approve each employer's investment strategy and any changes to it. The ongoing fiduciary responsibility remains with the Mastertrust Trustees, which includes the Trustees' being satisfied (upon taking advice) that investments are suitable for all members and reflect the Mastertrust's investment policies and objectives.

Regardless of employer engagement level based on the above governance models, the Trustees retain responsibility for the investment strategy. As a result, this TCFD report covers the whole Mastertrust and popular arrangements in both the sole governance and shared governance models. We have engaged with relevant employers in the shared governance arrangement to ensure alignment of approach to managing CRRO and confirm that the investment beliefs underpinning their investment strategies are aligned with those of the Trustees as set out in the Mastertrust Climate Policy. (Note, the shared governance employers that fall within the remit of this report). The metrics and scenario analysis outlined in this report includes the relevant funds across both the sole and shared governance employers.

The Trustees will continue to engage with shared governance employers as more investment strategies come into scope of the £100m popular arrangements.

Training

Climate-related Risks and Opportunities, as well as the wider TCFD requirements, form part of the Trustees' ongoing training to develop and maintain their appropriate knowledge and understanding. TCFD is specifically assessed in Trustees' individual and collective competence.

The Trustees have undertaken several additional training sessions on ESG and climate change during the past 12 months to ensure they can sufficiently manage the approach of their investment managers in this important area, understand the climate information (such as scenario analysis and metrics) provided to them and approve any climate-related recommendations from the Investment Committee.

The Trustees will continue to monitor and develop their knowledge of CRRO through self-assessment, participating in industry-wide discussion groups, attending 'teach-in' sessions from advisers and industry experts and participating in a program of annual training. The Trustees have also added the following two items to their skills matrix to support them in ensuring they continue to have sufficient knowledge and understanding:

- Awareness and understanding of the identification, assessment and management of the risks and opportunities relating to climate change and other ESG factors.
- Awareness and understanding of the principles of TCFD, including the ways in which The Pensions Regulator expects those principles and recommendations to be applied to large UK pension schemes.

The Trustees have received training on identification, assessment and management of CRRO; this is centered around understanding how scenario analysis works, understanding why climate change poses a financial risk and the relevance of climate risk within the overall risk management framework. Such training has been provided by LGIM, the Trustees' Independent Investment Adviser, the Trustees' legal advisers and external parties.

The Trustees have received training to support them in embedding climate considerations across their investments:

1 **Define** – climate risks and opportunities, develop their investment beliefs and agree time horizons for measuring climate impact.

2 **Measure** –carbon footprint and exposure to high-carbon sectors.

3 **Analyse** – the results of the scenario analysis to assess climate implications on stocks, sectors, regions and asset classes.

4 **Act** – have implemented our own governance and sought required information from fund managers of the popular arrangements. In addition, we have sought alignment from shared governance employers in respect of investment beliefs and approach. It is noted that LGIM default funds all have a net zero commitment by 2050.

As part of this training the Trustees focused on:

- What different climate outcomes mean for the global economy
- What risks climate change exposes the Mastertrust funds to
- What climate outcome the Mastertrust is aligned with

The Trustees' training on TCFD has included the current requirements and areas of focus, but is also forward looking. The Trustees have undertaken 'what next' training around TNFD (Taskforce for Nature-related Financial Disclosures) and biodiversity whilst also keeping an eye on developments around social factors.

Climate Policy

As part of the Trustees' Climate Policy, the aim is to reduce the likelihood that climate-related risks impact on the value or performance of the Mastertrust's assets. Our long-term goal is for 100% of sole governance default assets to be compatible with the net zero emissions ambition by 2050 or earlier. We will also continue to work with shared governance employers to ensure that our climate beliefs and objectives are aligned.

To meet this objective the Trustees will:

- **Assess** their portfolio on climate change risk where it is practical to do so and incorporate this into our investment decision making process.
- **Monitor** and review fund managers in relation to their beliefs on climate change approach and policies.
- **Participate** in collective initiatives collaborating with other investors.

To support this objective, the Trustees set out the beliefs that are factored into the operation of the Mastertrust below:

1.	**Climate change, and its direct and indirect impact, poses a significant macro-economic risk for long-term investors.**
2.	**In the long term, investments which consider a range of environmental, social and governance (ESG) factors, including climate change, will likely be more able to manage risk and maximize opportunities without compromising returns.**
3.	**Climate risk is a significant risk which should be taken into account to ensure all risks and opportunities are captured in terms of the impact on investments.** The Trustees look at environmental issues and climate forms part of that.
4.	**The varying timeframes within which the effects of climate change materialise can mean that the risk implications are often sector and region-specific, and ultimately dependent on the type of the portfolio.** As such, the Climate-related Risks and Opportunities may differ across the default arrangements, depending on asset allocation and stage of retirement journey.
5.	**Stewardship of assets is critical.** The Trustees believe that a policy of engagement with companies to manage expectation and encourage change is preferable to a policy of divestment. However, we recognise that there may be circumstances where divestment is appropriate where engagement has not produced the desired impact.

In support of these beliefs the Trustees undertake the following activities:

- **Require that their Investment Managers integrate ESG issues** into their investment processes, covering the selection, retention and realisation of investments. This is to better assess the long-term sustainability of the performance of companies in which our members' savings will be invested.
- **Identify climate-related risks**, including physical and transitional risks, and climate-related opportunities. They also identify the impact these risks and opportunities will have on the Mastertrust's investments. This is ongoing and review of the risks and opportunities takes place every year as part of the disclosure process, and as a constant part of the fund monitoring process.
- **Receive regular updates on the work asset managers are doing regarding their stewardship activities**. In relation to LGIM, this includes reviewing climate risks and opportunities affecting key companies, sectors and regions in the portfolio as a whole and also in each popular investment strategy. We also request annual updates from external fund managers, where a minority of our funds are invested, on their approach.
- **Have approved the review of net zero** across our sole governance default strategies and will monitor climate-related risks over the relevant short, medium and long-term horizons. As our approach to net zero we use five- and ten-year targets for the reduction of the carbon emissions intensity of the default funds (to be rolled forward every five years), against an overarching objective of net zero by 2050 (30 years). A five-year horizon is sufficiently tangible to operate effectively as a planning horizon – to set out goals, establish a plan to implement and review at least annually the progress towards those goals.
- **Regularly review and updated our trustee governance processes** to ensure that the management of Climate-Related Risks and Opportunities (CRRO) is embedded within all of our decision making. As part of this review the Trustees have delegated the identification and monitoring of CRRO to the Investment Committee. The Investment Committee receives regular reports to support them in fulfilling this role but will escalate the approval of CRRO to the Trustees, who will then subsequently receive climate updates at least annually.

The Investment Committee has responsibility to determine current and new risks and opportunities with the support of Legal & General Investment Management (LGIM), the Investment Adviser and external fund managers.

All managers are reviewed in respect of performance by means of the Investment Manager's Report (IMR) which is produced by Hymans Robertson, the Trustees' Independent Investment Adviser, on a quarterly basis and is presented to the Investment Committee.

Where managers and funds are rated by Hymans Robertson's investment research team, a manager rating and responsible investment rating is placed in the IMR and updated quarterly or in the event of significant changes which require notification more swiftly. Any managers who are currently not rated by Hymans Robertson are monitored using a performance flagging system agreed with the Trustees. Hymans Robertson's investment research team is in the process of assigning ratings to all funds currently not researched by them and this process will be completed by Q1 2023. The Trustees recognise the limitations and lack of standardization in responsible investment ratings at present but expect this to improve as the FCA intends to make this a regulated activity in future.

Section 2

Strategy: Climate-related Risks and Opportunities and impact and scenario analysis

The Trustees understand and support the requirements in the regulations that we must:

- Identify (on an on-going basis) and assess the impact of Climate-related Risks and Opportunities (CRRO) which will affect the Mastertrust's investment strategy over the short, medium and long term.
- Determine appropriate time periods for the short, medium and long term, taking into account the Mastertrust's membership profile and obligation to pay benefits.
- Undertake scenario analysis to assess the potential impact of global temperature increases and government actions on the Mastertrust's assets and liabilities and investment strategy, and resilience of the Mastertrust's investment strategy.

In order for the Trustees to identify, assess and manage CRRO that are applicable to the Mastertrust, the following approach has been taken:

Climate Risk Assessment	Scenario Analysis	Training
Perform an assessment of the CRRO through an annual review of the Climate Policy. This is done in conjunction with LGIM and the Trustees' Independent Investment Adviser.	Perform analysis, delivered by means of climate change scenario analysis. This is performed by LGIM with consultation with the Trustees' Independent Investment Adviser.	Receive regular training on climate-related investing and how to identify Climate-related Risks and Opportunities. This is done in conjunction with looking at the wider ESG factors that could impact the Mastertrust.

Climate-related Risks and Opportunities relevant to the Mastertrust

The Trustees have identified the following Climate-related Risks and Opportunities (CRRO) and the appropriate time horizons.

Types of risk exposure to climate change	Transition risks	Physical risks	Time horizons
Corporate market risk from equities and credit	Exposure to transitional risks and opportunities, to differing extents across sectors and regions. Fundamental business risk and opportunities through technological change, consumer demand, stranded assets linked to fossil fuel value-chain, regulation, or commodity prices. Valuation risks through changes to investor preferences and regulation.	While some sectors or companies in some regions will face significant physical risks, most modelling suggests physical risks are not likely to be directly material to broadly diversified corporate exposure. Indirect physical risks to corporates primarily through macro risks and country risks.	Medium/Medium
Country risk	Transition risk to poorer credit-quality sovereign issuers' credit rating and bond spreads e.g. some emerging markets, via changes to commodity prices, trade patterns, and macro-economic stability.	Long-term physical risks to economies of some countries from climate impact on severe weather or sea levels, and therefore debt sustainability. This risk is likely to be a compounding of economic vulnerability (low income, high debt) and climate vulnerability.	Long/Long
Macro risks	Risks to interest rates and inflation (directly affecting bond valuation and indirectly valuation of other asset classes) from climate change are quite uncertain. Impacts to GDP growth experienced via portfolio's exposure to corporate market risk and country risk. Currency exposure is sensitive to macro-economic conditions, policy, commodity prices and trade volumes. Systemic market risks from climate change to financial system are within scope of regulators and present a tail risk to investment exposures.		Medium/Long
Direct Real Asset exposure (e.g. UK property)	Risk and Opportunities to UK property from regulatory risk, energy and carbon costs efficiency, opportunity for application of green building technology and sustainable development activities. No other direct asset exposure present currently in default portfolios.	Long-term physical risks to UK property present from severe weather (e.g. flooding), or rising sea levels. Expected to be quite localised in UK context.	Medium/Short-Long
Direct Carbon or Climate Instrument exposures	Direct exposure to carbon permits would result in transition risk and opportunities from policy and changing industry demand/supply balances. No direct exposure in default portfolios.	Direct exposure to catastrophe bonds results in direct exposure to severe weather risk events. No direct exposure in default portfolios.	Medium/Long

The Trustees recognise that in the short to medium term, the journey to net zero is an investment opportunity whilst managing transition risk. As the response to climate change emerges, so will the development of new markets and the scale of the opportunities.

Time horizons relevant to the Mastertrust

During the scheme year ending 5 April 2022, the Trustees agreed (with support and analysis performed by LGIM) a roadmap to net zero, which sets out five-and ten-year targets for the reduction of the carbon emissions intensity of the default funds (to be rolled forward every five years) against an overarching objective of net zero by 2050 (30 years). The Trustees believe a five-year horizon is sufficiently tangible to operate effectively as a planning horizon – to set out goals, establish a plan to implement, and review at least annually the progress towards those goals. Five years constitutes the Trustees' 'short-term' time horizon and ten years constitutes the Trustees' 'medium-term' time horizon.

In setting strategic asset allocations, LGIM (on the Trustees' behalf) conducted analysis based on long-term expectations and possible outcomes. The current projections in LGIM's energy and climate model (Destination@Risk) extend to 2050 – so thirty years for the 'long-term' time horizon.

The above suggests to us that short, medium and long-term time frames are best defined as approximately five, ten and thirty years to understand the Climate-related Risks and Opportunities. These are incorporated into governance frameworks and an evolving investment strategy, reflecting best practice on behalf of DC members.

The Mastertrust has a diverse membership investing across all stages of the retirement journey. The main sole governance defaults invest in a range of asset classes and enable risk and opportunities to be diversified. For the Target Date Funds where the asset allocation changes as members approach retirement, the Trustees have completed scenario analysis across different vintages at each stage to ensure the risks and opportunities are understood.

Scenario analysis

The Trustees have undertaken quantitative scenario analysis using LGIM's Destination@ Risk model. This has been done for all popular arrangements in scope (with assets in excess of £100m). The output uses a metric called 'ClimateVaR' which is defined later in this section.

LGIM has produced two layers of quantitative output: scenario analysis on all funds in scope and portfolio-level ClimateVaR metrics and commentary for all funds above £100m. The analysis takes the following into account:

- A deep dive into the scenario analysis results for the defaults. This included a detailed breakdown of climate risk analysis by asset class and sector for seven funds highlighted in the report, which helped represent those used in the four Mastertrust defaults under the sole governance model. The results of this are not shown in this report because the Trustees do not deem the availability of data and assumptions included in the 'deep dive' to be of sufficient quality to provide meaningful, reportable results at this stage.
- This represents the Trustees taking a proportionate approach to scenario analysis for the Mastertrust in the Reporting Period and acting as far as they are able.
- All listed assets are in scope for the analysis, however derivatives, unhedged currency exposure and cash funds have been excluded. The highest coverage is found in listed equities (typically over 80%) with listed corporate bonds showing reasonable coverage (around 65% for most bond indices).
- There is minimal derivative use within equity index funds, the Multi-Asset Fund, Future World Multi-Asset Fund and in the Target Date Funds. The Retirement Income Multi-Asset Fund does make use of derivatives, but we do not believe this will make a material difference to the ClimateVaR.
- The external managers that three of the fund blends have exposure to have been excluded from the scenario analysis. As this is a small percentage the Trustees are not concerned with the omission but will look to include external managers in future years.

The three scenarios that the Trustees agreed to were:

Scenario	Approximate global warming by 2100	Core narrative
1.5°C Net Zero	1.5°C	Immediate, highly ambitious action to address climate change leads to a reduction in CO_2 emissions to net zero around 2050
Well-Below 2°C	1.75°C	Immediate, ambitious policy and investment action to address climate change succeeds in limiting global warming to well-below 2°C
Well-Below 2°C Disorderly	1.75°C	Policy and investment action to limit global warming to well-below 2°C is delayed by 10 years, resulting in much more disruptive change from 2030

The results (shown in the table above) are all shown relative to a baseline scenario of 4°C – temperature increase. This represents a global failure to act on climate change which means emissions continue to grow at historical rates, i.e. the 'do nothing' approach.

Climate risk – interpreting results

- The modelling output is a metric termed ClimateVaR.
- It is worth noting that there is no direct analogy to VaR here. The ClimateVaR is a scenario-based risk number with no associated probability attached to the scenarios. It is an exercise in what could happen, not in predicting what will happen.
- The metric is calculated bottom-up at the security level for each timestep until 2050, which allows the Trustees to consider the results of the metric over any time-period.
- The ClimateVaR is the loss in 2050 associated with a particular climate outcome, all else held equal. The net-present value (NPV) is the 2050 risk discounted to today at the cost of capital for the asset class. This represents the expected loss if the market fully priced into the market today the climate risk for companies out to 2050, should they keep the same strategy.
- The portfolio level change in security valuations is termed ClimateVaR. This represents the NPV of climate risk possible in a portfolio under a given climate scenario.

When considering scenario analysis outputs, the Trustees with support from both LGIM and their Independent Investment Adviser Hymans Robertson noted it is important to take into account:

Scenarios, not projections
Our scenarios are not forecasts. We do not judge their probability of coming to pass.

Asset Allocation Held Fixed
Given the complexity of the analysis, funds must be run with a fixed asset allocation strategy for this first iteration. This is particularly important for Target Date Funds (TDFs) which have a built-in evolution of the investment strategy. Rebalancing is not considered.

Long time horizons
Our scenarios have a time horizon of -30 years (to 2050). This is a much longer timeframe than normal for scenario analysis on risks other than climate change. There is a large degree of uncertainty surrounding the energy transition and the associated global temperature increase.

Company adaptation plans are also not considered

The analysis takes into account transition and physical risk.

The model assesses the least costly solution to limit future emissions to levels required to meet prescribed global climate targets (the three scenarios described above), and in so doing provides a projected expected change in energy mix, expected impact on carbon price, sector level decarbonization requirements and the overall associated cost to GDP.

The projected impact of these changes are assessed at a country and sector level. This is then used to assess the impact at a financial assets level. Climate risk measures the impact of climate transition on the companies behind the assets held within a fund.

The analysis shows that climate risk is not fully discounted in current asset pricing, which tells us to expect some impact on prices as the risk is realised over time. A reduction in value can be expected on the most at risk stocks and sectors (indicated by high carbon intensity or a high risk location).

LGIM are constrained in what they can model fully by the availability of data. In the analysis shown in this report we restrict ourselves to considering assets that are listed equity and bond holdings. We also do not report on external managers, so the analysis only covers the portion of the portfolios held within LGIM. The final column in the table below shows the overall coverage for each of the portfolios analysed.

The results:

When looking at the ClimateVaR figure, the dominant drivers of the risk (and therefore the key assumptions built into the scenario analysis) are:

- **Asset class:** Equity is more sensitive to changes in net earnings of companies.
- **Sector allocation:** Higher carbon sectors are more at risk of a high carbon price, however, may have more opportunities to benefit from transition through competitive advantage.
- **Leverage:** Regions and sectors which operate at lower leverage are less vulnerable to climate risks on balance sheet.
- **Country:** Companies which operate in countries with a higher emissions intensity (e.g. commodity economies) may be at higher risk of macro-economic impacts of a carbon price.

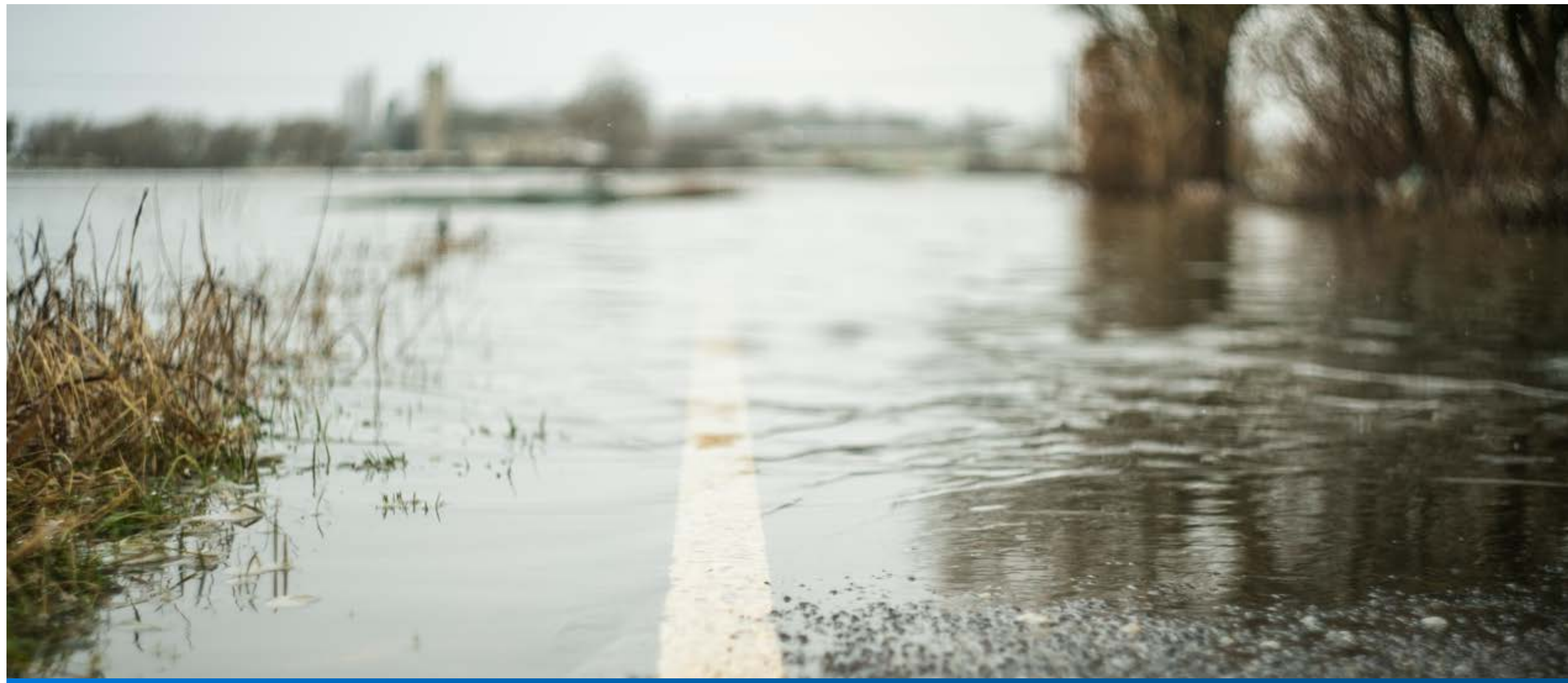
The table overleaf shows the results of all funds in scope. The client names for bespoke blends/funds have been anonymised.

The analysis shows that equity allocations are much more exposed to climate risk than bond allocations. As the relative size of allocations to equities and bonds differs for the individual funds analysed below, so will the total risk.

For this analysis we assume that the mix of assets within a portfolio does not change over time. The table below shows a summary of each fund's climate risk. If the funds held today were to stay static to 2050, this is the expected reduction in value that would be realised due to the impact on prices as climate risk is realised over time. This future reduction in value is discounted to 2020 to provide an impact today (ClimateVaR).

The disorderly scenario presents by far the highest impact, due to the delay in transitionary action. However the 1.5°C net zero impacts are notably higher than the well below 2°C given the significant extra action required under this scenario.

Looking across our defaults, the 2055-2060 Target Date Fund has a higher ClimateVaR relative to the Multi-Asset Fund as it holds a higher proportion of equity. Future World Multi-Asset Fund has a lower ClimateVaR when compared to the Multi-Asset Fund, this due to the environmental, social and governance (ESG) issues reflected in the fund's strategy.



Fund	Climate risk (ClimateVaR) 2°C	Climate risk (ClimateVaR) 2°C disorderly	Climate risk (ClimateVaR) 1.5°C	Climate risk (ClimateVaR) Coverage
Legal & General Mastertrust Future World Multi-Asset Fund	-3.9%	-13.2%	-9.4%	76.6%
L&G PMC Multi-Asset Fund 3	-5.1%	-14.5%	-11.2%	73.5%
L&G PMC Retirement Income Multi-Asset Fund 3	-4.3%	-12.8%	-9.7%	65.1%
L&G PMC 2020 - 2025 Target Date Fund 3	-3.0%	-9.8%	-6.8%	61.6%
L&G PMC 2025 - 2030 Target Date Fund 3	-3.5%	-11.7%	-8.2%	72.7%
L&G PMC 2035 - 2040 Target Date Fund 3	-3.9%	-13.2%	-9.4%	76.6%
L&G PMC 2055 - 2060 Target Date Fund 3	-4.8%	-16.1%	-11.8%	78.5%
Client A Global Equity	-7.0%	-21.2%	-16.7%	83.7%
Client A Diversified Growth	-5.2%	-14.7%	-11.4%	67.0%
Client B Diversified	-5.2%	-14.7%	-11.4%	67.0%
Client B Bond	-0.2%	-1.8%	-0.7%	86.2%
Client B Overseas Equity	-5.9%	-19.9%	-14.7%	86.8%
Client B UK Equity	-9.3%	-24.1%	-21.0%	78.1%
Legal & General Mastertrust Short Dated Bond Index Fund	-0.5%	-3.8%	-1.0%	64.1%
L&G PMC 2030 - 2035 Target Date Fund 3	-3.9%	-13.2%	-9.4%	76.6%
L&G PMC 2040 - 2045 Target Date Fund 3	-4.0%	-13.3%	-9.5%	76.7%
L&G PMC 2045 - 2050 Target Date Fund 3	-4.5%	-14.9%	-10.8%	77.7%
L&G PMC 2050 - 2055 Target Date Fund	-4.8%	-16.1%	-11.8%	78.5%
Client C Composite Global Eq Index Fund	-6.9%	-21.2%	-16.6%	84.2%

Fund	Climate risk (ClimateVaR) 2°C	Climate risk (ClimateVaR) 2°C disorderly	Climate risk (ClimateVaR) 1.5°C	Climate risk (ClimateVaR) Coverage
Client D Long Term Growth 2012	-7.1%	-21.2%	-16.7%	75.2%
Client D Long Term Growth	-6.8%	-19.8%	-15.9%	80.1%
Client E Mixed Bonds	-0.2%	-1.8%	-0.8%	84.8%
Client F Nearly There Bond Fund	-0.9%	-3.4%	-1.6%	64.4%
Client F Equity Fund	-6.3%	-20.6%	-15.6%	80.3%
Client F Equity Fund (Lifestyle)	-6.5%	-21.0%	-16.0%	45.5%
Client F Corporate Bond Fund	-0.3%	-2.1%	-0.8%	57.5%
Client F Diversified Fund	-8.7%	-18.2%	-16.2%	51.1%
Client F Growth Fund	-7.3%	-20.0%	-16.1%	47.2%
L&G PMC UK Equity Index Fund 3	-9.3%	-24.1%	-21.0%	78.1%
L&G PMC Global Equity Fixed Weights (50:50) Index Fund 3	-7.6%	-22.3%	-18.0%	82.8%
L&G PMC World (ex-UK) Equity Index Fund 3	-5.9%	-19.9%	-14.7%	86.8%

Section 3
Risk management

Embedding climate risk into decision-making

The Trustees have reviewed and updated their governance processes to ensure that the management of Climate-related Risks and Opportunities (CRRO) are embedded within their decision making. As part of this review, the Trustee Board has delegated the identification and monitoring of CRRO to the Investment Committee. The Investment Committee receive risk reports at each Committee to support them in fulfilling this role but will escalate the approval of CRRO to the Board, who will then subsequently receive a climate update at least annually.

Risk management framework

The Trustees, in collaboration with the Mastertrust Risk Officer, maintain a risk management framework that aims to capture the risks that the Mastertrust is exposed to, and which incorporates climate risks. This is reviewed quarterly ahead of the Investment Committee and is then presented and discussed by the Trustees.

The Investment Committee has responsibility to determine current and new risks and opportunities with the support of Legal & General Investment Management (LGIM), the Investment Adviser and fund managers. The Investment Committee will assess CRRO in each popular strategy over short (e.g. five years), medium (e.g. 10 years) and long term (e.g. 30 years). The Investment Committee will undertake the necessary work to establish and determine how the risks will be monitored and assessed on an ongoing basis, as well as ensuring they are provided with adequate reporting and analysis. The Investment Committee will recommend any changes and updates to the Trustees for approval.

The Trustees recognise that the monitoring and assessment of exposure to climate-related risks is developing and the metrics and tools available to us may evolve. We will monitor changes in market practice to ensure that we are aware of changing best practice.

The Trustees will monitor exposure to climate-related risks within their portfolios on an annual basis, considering exposure to carbon reserves, overall carbon intensity and alignment with future climate scenarios.

Risk management tools and approach

The Trustees have used Destination@Risk, LGIM's proprietary model, to analyse scenarios for how the energy system may evolve over the next 30 years and the investment implications. The model takes a bottom-up approach and projects companies' carbon emissions intensity into the future and compares them with industry targets for 'business as usual' and 'Paris-aligned scenarios'. This enables LGIM to identify companies with business models and assets that can adapt to a world of rising temperatures and avoid those companies that have unsustainable business models and potentially stranded assets. LGIM's Destination@Risk model is constructed to follow the recommendations of the TCFD and provides scenario analysis to explore a range of possible future climate pathways and their potential impacts, rather than predictions or probabilities.

The toolkit consists of four models:

Scenario	Primary inputs	Primary outputs
1 Destination	Carbon budgets, technology costs, service demand projections	Energy mix, oil prices, carbon prices, economic output, emissions pathways
2 Climate Risk	Carbon prices, energy demand, emissions pathways	Risk to GDP, inflation and asset values (listed corporate and sovereign bonds and equities)
3 LGIM Temperature Alignment	Energy mix, sectoral emissions pathways, economic output	Company and country temperature alignment scores
4 Gap Risk to Net zero	Temperature alignment scores, sectoral emissions pathways	Distance to net zero outcome for countries and companies

Details of the Trustees' approach to voting are outlined within the Mastertrust's Statement of Investment Principles.

Section 4

Metrics and targets

Metrics

Following in-depth conversations with LGIM and with advice from our Independent Investment Adviser, the Trustees agreed to four metrics. We describe these over the next few pages.

1. Total Carbon Emissions

Total Carbon Emissions – a measure of absolute emissions associated with a given investment – carbon footprint x investment size.

- In line with the DWP's recommendation, the Trustees selected Total Carbon Emissions (which includes seven other gases under the Kyoto protocol in carbon dioxide equivalent terms CO2e) as the absolute emissions metric.
- Total Carbon Emissions is calculated as the sum of the fund's share of each investee company's total emissions, based on the proportional ownership of the company's equity and debt. For example, if a fund's combined equity and debt investment in Shell was 0.1% of Shell's total equity and debt, that would add 0.1% of Shell's total emissions to the fund's total.
- Reporting has been performed on each investee company's direct emissions (scope 1) and indirectly through its purchased energy (scope 2) for the time being. Scope 3 emissions includes all other indirect emissions that occur in a company's value chain (the emissions that are generated upstream of or downstream to a company's operations), however these are not yet sufficiently reliable given a very high reliance on estimates, and in any case are not required to be reported in the first scheme year that TCFD applies to the Mastertrust.
- An equivalent measure can be calculated for sovereign bonds. The Trustees have considered LGIM's recommendation of a national capital stock figure to calculate the share of sovereign emissions, rather than total government debt. Use of the latter tends to inflate carbon emissions attributable to sovereigns in contrast to corporate securities, and rewards higher debt issuers. The capital stock of a country is a closer analogue to the total value of a company's equity and debt.

2. Carbon Footprint

Carbon Footprint – a measure of a company's carbon emissions relative to its size - Total Carbon Emissions/ EVIC (Enterprise Value Including Cash).

- In line with the DWP's recommendation, the Trustees selected Carbon Footprint as the emission intensity metric. Carbon Footprint is an intensity measure of emissions that takes the Total Carbon Emission emissions figure and weights it to take account of the size of investments.
- The calculation of the Carbon Footprint measure is equivalent to the formula to calculate weighted average carbon intensity if the intensity of each company is measured using Enterprise Value Including Cash (EVIC).
- Weighted Average Carbon Intensity (WACI) can also be measured using the revenue of a company to calculate emissions intensity. Going forward we will refer to EVIC weighted average emission intensity as Carbon Footprint and revenue emission intensity as WACI to avoid confusion, following what tends to be commonly used industry terminology.
- LGIM believes there are useful applications of the WACI metric in investment analysis to which the Trustees agreed. However, the intuition behind the use and reporting of Carbon Footprint by asset owners is clearer, it is recommended by DWP, and LGIM has adopted use of Carbon Footprint in other applications (standard fund reporting, LGIM ESG scores).
- As a technical point to note, the DWP guidance requires the Carbon Footprint metric to be reported in pound sterling terms, however due to the availability of data as of 5 April 2022 from the data provider, the Carbon Footprint figures have been shown in dollar terms. In future reporting, once the data is available, this will be reported in pound sterling in line with the guidance The decarbonization targets set for sole governance defaults in early 2021 will use a similar metric but using US dollar denomination, which offers the advantage of removing one source of market-driven volatility in the numbers. There will therefore be a difference in reported versus targeted metrics on this denomination, but over the long term should behave quite similarly. The Trustees note that the use of sterling denomination is not a legal requirement, but a recommended course of action, and they are satisfied with LGIM's explanation and reasoning behind the use of US dollar denomination. However, the Trustees will keep the metric (and its currency denomination) under regular review.

3. Temperature Alignment

Temperature Alignment - a measure of the global warming temperature outcome implied by companies' activities and targets.

- The Temperature Alignment for a portfolio is based on the weighting of each issuer's Temperature Alignment, which signifies which climate scenario (e.g. 3°C, 1.5°C etc.) the issuer's carbon emission pattern and company policy are currently aligned with. This is derived from an analysis of each company's historical emissions trend and formal emission reduction targets, relative to the necessary decarbonisation pathway for the company's sector for a given temperature outcome. A similar calculation applies for sovereign issuers.
- An advantage of Temperature Alignment is that it is forward-looking in nature, even when based in part on historic data. We see this measure as an indicator of the extent to which companies or sovereign issuers are aligned to Paris/net zero goals, rather than a risk measure perse, though the two are not completely distinct. We do

acknowledge that there is a wide range of model uncertainty for any point-estimate of an issuer's Temperature Alignment, and that there can be significant differences in estimate across different providers. The Trustees are aware that investing in a portfolio with low Temperature Alignment does not necessarily mean that the world is on a low temperature trajectory.

- LGIM reported Temperature Alignment based on data from the Destination@Risk tool. LGIM's reporting of Temperature Alignment data is computed as a weighted aggregate of the issuer-level warming potential and uses the output after adjustments by LGIM analysts, for example if an issuer has recently changed its policies and has a credible plan to lower emissions.

4. Engagement on Climate

Quarterly climate-related engagements associated with the fund.

- The Trustees believe it is important to report on the number of climate-related engagements with investee companies as a future-proofing measure. The Trustees consider engagement to be a vital part of the process to ensure companies are acting on climate change and reporting on this seems a natural extension of this belief.
- Climate engagements cover company meetings or written communication with companies in which topics and issues directly concerned with climate change are discussed. The metrics show the number of engagements that took place within the fund that referenced climate.

Availability of data

1. Sole governance

Metrics have been calculated for all relevant sole governance funds. The Trustees have included in the reporting the metrics for the funds that make up the four Mastertrust default strategies, this includes the Target Date Funds, the Multi-Asset Fund, the Future World Multi-Asset Fund and the Drawdown Lifestyle which is made up of the Multi-Asset Fund and the Retirement Income Multi-Asset Fund.

In addition, any fund or strategy in the sole governance range that has assets of more than £100m has been included in the metrics reporting.

To confirm, all relevant funds have been calculated.

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

Fund Code	Fund Name	Carbon Footprint			Total Carbon Emissions	Implied temperature alignment		Engagements
		Coverage (%)	Eligible Coverage (%)	(Tonnes CO2e per $1 million EVIC)	Total Carbon Emissions (TCo2e. Calculated by $NAV *Carbon footprint)	Coverage %	Degrees C %	Number of engagements where climate theme was mentioned
Mastertrust Default Funds								
NTW3	L&G PMC MULTI ASSET-FUND 3	67.4	86.2	117.8	641,606	83.09	2.84	199
BE23	L&G PMC 2020-2025 TARGET DATE FUND 3	58.1	77.8	72.9	39,020	80.69	2.76	188
BE33	L&G PMC 2025-2030 TARGET DATE FUND 3	63	82.5	74.7	79,677	82.06	2.72	188
BE43	L&G PMC 2030-2035 TARGET DATE FUND 3	68.1	86.5	74.1	96,709	83.52	2.74	187
BE53	L&G PMC 2035-2040 TARGET DATE FUND 3	68.1	86.5	74.1	94,346	83.52	2.74	187
BE63	L&G PMC 2040-2045 TARGET DATE FUND 3	68.4	86.7	74.7	82,148	83.70	2.74	188
BE73	L&G PMC 2045-2050 TARGET DATE FUND 3	74.8	89.4	80.3	79,314	86.81	2.81	188
BE83	L&G PMC 2050-2055 TARGET DATE FUND 3	78.5	90.9	83.5	63,513	88.58	2.85	188
BE93	L&G PMC 2055-2060 TARGET DATE FUND 3	78.7	91	83.5	38,775	88.67	2.85	188
BZ13	LEGAL & GENERAL MASTERTRUST FUTURE WORLD MULTI-ASSET	68.1	86.5	74.1	36,812	83.52	2.74	187

Fund Code	Fund Name	Carbon Footprint			Total Carbon Emissions	Implied temperature alignment		Engagements
		Coverage (%)	Eligible Coverage (%)	(Tonnes CO2e per $1 million EVIC)	Total Carbon Emissions (TCo2e. Calculated by $NAV *Carbon footprint)	Coverage %	Degrees C %	Number of engagements where climate theme was mentioned
Drawdown Lifestyle								
NTW3	L&G PMC MULTI ASSET-FUND 3	67.4	86.2	117.8	91,811	83.09	2.84	199
NWD3	L&G PMC RETIREMENT INCOME MULTI-ASSET FUND 3	54.1	83.1	105.7	4,435	82.92	2.86	188
Mastertrust Sole governance funds								
EAB3	L&G PMC CASH FUND 3	37.6	60.1	0.7	153	100	2.70	24
NBC3	L&G PMC UK Equity Index 3	88	90	108.4	17,454	87.49	2.34	43
NED3	L&G PMC WORLD (EX UK) EQUITY INDEX FUND 3	97.1	98.3	79.4	25,865	97.19	2.93	137
NDZ3	L&G PMC Global Equity Fixed Weights (50:50) Index Fund 3	92.3	93.9	102.3	38,015	92.47	2.61	155

2. Shared governance (bespoke strategies requested by clients)

Metrics have been calculated for all relevant shared governance funds.

Within the list of relevant shared governance funds, three funds are blends of LGIM and external fund managers. LGIM, on behalf of the Trustees, has reached out directly to the managers for metrics and these have been received for Total Emissions, Carbon Footprint and Engagement on most funds. These metrics have been recorded separately and not included within the fund blend below due to the potential differences in methodology that could distort the figures. Where this is the case the coverage percentage has been reduced to reflect the availability.

As the external manager exposure in the relevant strategies is small, the Trustees were comfortable with this position for the 2022 report but will be working with LGIM to incorporate external manager fund metrics into the total fund figures in the future. The Trustees also believe that the new FCA regulations for asset managers will help improve access to annual on-demand reporting that could help fill any data gaps as more funds/strategies become relevant.

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

Fund Code	Fund Name	Carbon Footprint			Total Carbon Emissions	Implied temperature alignment		Engagements
		Coverage (%)	Eligible Coverage (%)	(Tonnes CO2e per $1 million EVIC)	Total Carbon Emissions (TCo2e. Calculated by $NAV *Carbon footprint)	Coverage %	Degrees C %	Number of engagements where climate theme was mentioned
Employer A								
B053	XYZ Global Equity	93.3	94.8	94.5	26,816	94.23	2.88	158
B063	XYZ Diversified Growth	63.5	86.2	125.4	13,893	82.19	2.87	187
B083	XYZ Cash	41.3	63.8	0.8	7	100	2.70	23
Employer B								
B5U3	XYZ Diversified	63.5	86.2	125.4	14,378	82.19	2.87	187
B6U3	XYZ Bond Fund	10.1	37.5	34.1	556	82.01	1.98	46
B8U3	XYZ Overseas Equity	97.1	98.3	79.4	21,738	97.19	2.93	137
B9U3	XYZ UK Equity Fund	88	90	108.4	19,361	87.49	2.34	43
B1V3	XYZ WORLD EMERGING MARKET MARKETS	67.4	86.2	237.8	3,248	96.41	3.45	38
B7U3	XYZ Cash	11.6	66.7	0.3	4	100	2.70	8
Employer C								
BD83	L&G PMC MASTERTRUST SHORT DATED CORP BOND INDEX FUND	70	73.7	43.7	35	77.05	2.53	39
EAB3	L&G PMC CASH FUND 3	37.6	60.1	0.7	1	100	2.70	24
NDZ3	L&G Global Equity Fixed Weights (50:50) Index Fund 3	92.3	93.9	102.3	17,432	92.47	2.61	155
NTW3	L&G PMC MULTI ASSET-FUND 3	67.4	86.2	117.8	2,374	83.09	2.84	199

Fund Code	Fund Name	Carbon Footprint			Total Carbon Emissions	Implied temperature alignment		Engagements
		Coverage (%)	Eligible Coverage (%)	(Tonnes CO2e per $1 million EVIC)	Total Carbon Emissions (TCo2e. Calculated by $NAV *Carbon footprint)	Coverage %	Degrees C %	Number of engagements where climate theme was mentioned
Employer D								
NTW3	L&G PMC MULTI ASSET-FUND 3	67.4	86.2	117.8	58,574	83.09	2.84	199
BUT3	XYZ Long Term Gwth 2012	84.5	94.5	99.2	91,262	94.40	2.94	158
BUU3	XYZ Long Term Gwth	87	89.1	94.3	9,292	87.82	2.77	159
EAB3	L&G PMC CASH FUND 3	37.6	60.1	0.7	24	100.00	2.70	24
BUZ3	XYZ Mixed Bonds	11.4	37.5	34.1	1,125	79.77	1.98	46
Employer E								
B4T3	L&G PMC All World Equity Index 3	95.9	97.1	90	26,861	97.05	3.03	157
BN53	L&G PMC Diversified Multi-Factor Eq 3	98.18	96.53	102.4	10,064	96.37	3.06	97
NWE3	L&G PMC Pre-Ret Inflation Sensitive 3	50.7	54.83	90.26	1,002	73.07	2.09	53
NWD3	L&G PMC RETIREMENT INCOME MULTI-ASSET FUND 3	54.1	83.1	105.7	2,483	82.92	2.86	188
NTW3	L&G PMC MULTI ASSET-FUND 3	67.4	86.2	117.8	105	83.09	2.84	199
Employer F Strategy 1								
BX03	XYZ Nearly There Fund N	40.6	73.2	43.2	4,755	84.32	2.17	56
BYL3	XYZ Equity Fund (Net)	51.3	88	81.9	110,442	87.47	3.12	157
BYN3	XYZ Diversified Fund (Gross)	56.9	86.9	127.8	90,935	72.87	2.90	90
BYM3	XYZ Corporate Bond Fund	34	37.5	26.8	6,833	39.32	2.47	46

Fund Code	Fund Name	Carbon Footprint			Total Carbon Emissions	Implied temperature alignment		Engagements
		Coverage (%)	Eligible Coverage (%)	(Tonnes CO2e per $1 million EVIC)	Total Carbon Emissions (TCo2e. Calculated by $NAV *Carbon footprint)	Coverage %	Degrees C %	Number of engagements where climate theme was mentioned
BYP3	XYZ Cash Fund (Net)	41.3	63.8	0.6	22	100	2.7	26
BYT3	XYZ Growth Fund (Gross)	53	87.6	123	221,421	82.19	3.00	185
Employer F Strategy 2								
BYL3	XYZ Equity Fund (Net)	51.3	88	104.3	8,465	87.47	3.12	157
BYN3	XYZ Diversified Fund (Gross)	56.9	86.9	162.7	7,698	72.87	2.90	90
BYM3	XYZ Corporate Bond Fund	34	37.5	26.8	655	39.32	2.47	46
BYP3	XYZ Cash Fund (Net)	41.3	63.8	0.6	22	100	2.7	26
BYT3	XYZ Growth Fund (Gross)	53	87.6	123	2,565	82.19	3.00	185
Employer G								
EAB3	L&G PMC CASH FUND 3	37.6	60.1	0.7	12	100	2.70	24
NTW3	L&G PMC MULTI ASSET-FUND 3	67.4	86.2	117.8	37,454	83.09	2.84	199
NWD3	L&G PMC RETIREMENT INCOME MULTI-ASSET FUND 3	54.1	83.1	105.7	3,046	82.92	2.86	188
Employer H								
BXM3	Mastertrust Future World Global Equity Index	98.66	97.16	36.56	3,747	97.80	2.70	135
BZ13	Legal & General Mastertrust Future World Multi-Asset Fund	68.1	86.5	74.1	11,596	83.52	2.74	187
EAB3	L&G PMC CASH FUND 3	37.6	60.1	0.7	5	100	2.70	24
NWD3	L&G PMC RETIREMENT INCOME MULTI-ASSET FUND 3	54.1	83.1	105.7	2,181	82.92	2.86	188

For shared governance funds, where applicable, total carbon emissions have been calculated on the relevant portion of each of the funds stated for each employer separately. The same is also true for the Drawdown lifestyle figures shown.

Managing data gaps and treatment of data

The Trustees have been able to provide metrics for all relevant funds, but have noted where there are gaps in coverage, for example for real estate assets, or due to the complexity of methodology implementation as is the case currently for derivatives.

To provide context to these calculations we have set out the data coverage percentage for each popular arrangement alongside the calculation of selected metric.

What do we mean by data coverage?

It is essential to understand how LGIM treats missing data on the Trustees' behalf. The Trustees understand that LGIM does not assume missing values to be equivalent to zero. Instead, LGIM excludes them from the calculation. Before LGIM calculates any aggregates, they discard any positions for which there is no data i.e. they are not covered, or an appropriate calculation methodology has not been implemented, or they are not eligible. It has been determined that the data coverage is sufficient enough to render the existing data meaningful.

What do we mean by eligible coverage?

The weights of the portfolio are recalculated as if it only consisted of positions that are covered and eligible. Only then does LGIM calculate aggregates. To confirm, this is the portion of the eligible assets held.

A position is deemed eligible if a data point associated with a position is deemed relevant for the calculation of ESG metrics. For funds within the popular arrangements managed by LGIM, positions with the following asset types are generally deemed eligible: **equities, corporate and government debt, cash-equivalents.**

A data point at position level is considered covered if data is available for the specific position.

Data assumptions

For calculating ESG metrics including emissions, LGIM disregards all positions that are ineligible and not covered in the fund and recalculate the weights so that the sum of the weights is 100%. This process is called reweighting. Its purpose is to ensure that we are not making any assumptions for missing/ineligible data points, and we are not assuming that missing data is equal to zero. This means that the actual emissions could be higher or lower than reported.

Targets

In 2021, the Mastertrust established a proposed roadmap to achieve net zero by 2050 across their sole governance default investment options building on Legal & General's commitment to net zero by 2050.

The targets include around a 50% reduction in carbon emissions on the Multi-Asset Funds and around a 60% reduction for Target Date Funds with the growth phase targeting 65%. With variation across funds depending on their investment strategy. All targets are relative to end-2019 data and focused on portfolios listed equity and publicly traded corporate debt exposure.

These targets are designed to reflect the Paris Agreement goal to limit warming to 1.5°C

and are reviewed periodically in line with the best available science-based approaches and industry practice, such as the Paris-Aligned Investment Initiative.

The primary measure we use to track the decarbonisation of portfolios is Carbon Footprint. The intensity measure takes the carbon emissions of companies and adjusts for the size of the company, meaning it adjusts for growth in the size of the funds over time. Appropriate adjustments for factors that are not related to real economy emissions reductions will be incorporated as relevant. Importantly, we will also look at other measures of climate alignment and risk, such as the exposure to carbon reserves and revenues from sustainable activities, and informed metrics that come from LGIM's Destination@Risk model.

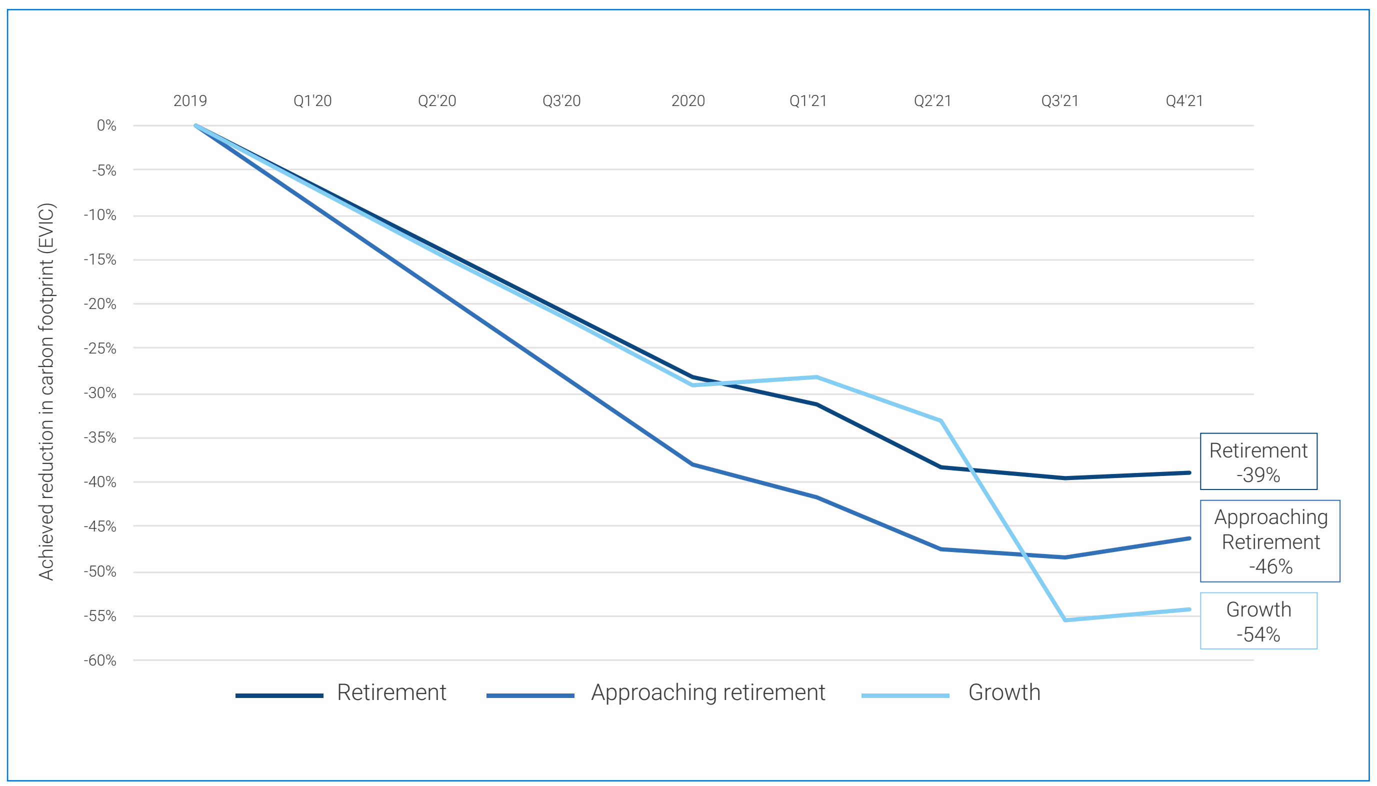
The roadmap will be reviewed by the Investment Committee to assess progress towards interim targets.

Legal & General Target Date Funds

Carbon Footprint (relative to end 2019)	2025	2030
Target Date Funds (growth phase*)	At least -50%	At least -65%
Target Date Funds (approaching retirement)	At least -40%	At least -60%
Target Date Funds (at retirement)	At least -30%	At least -45%

* Calculated as up to the point at which a member starts to de-risk, ten years from their targeted retirement date.

The Trustees have noted that the Target Date Funds are on track to meet their targets as demonstrated in the chart for the different TDF vintages:

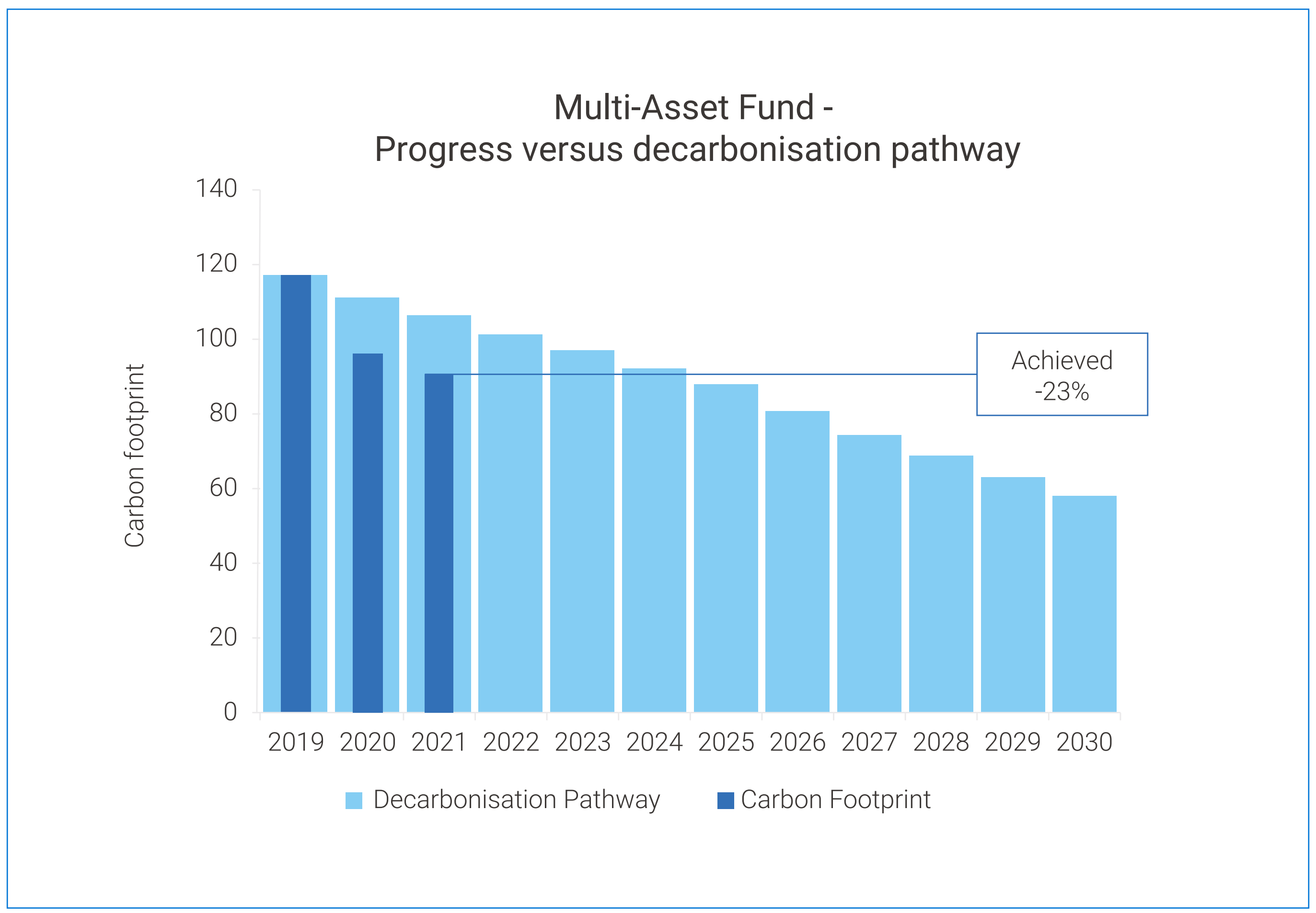


The Target Date Funds are on track to meet their decarbonisation targets as demonstrated in the chart above which shows the achieved reduction in carbon footprint (as at end 2021) of each of the three Target Date Fund phases.

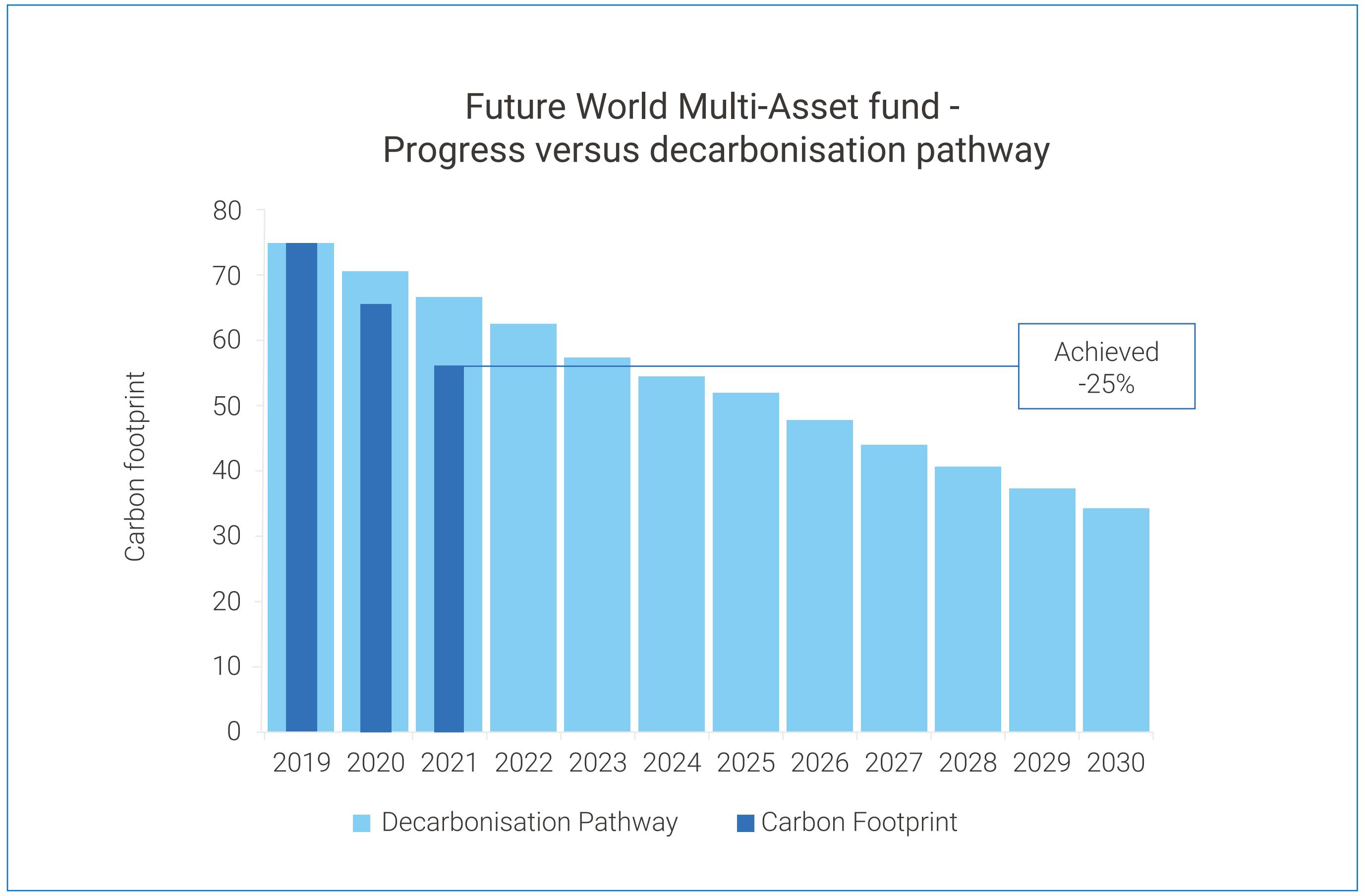
Multi-Asset Fund

Carbon Footprint (relative to end 2019)	2025	2030
Multi-Asset Fund	At least -25%	At least -50%
Future World Multi-Asset Fund	At least -30%	At least -55%

The Multi-Asset Fund is on track to meet its targets having experienced a -23% decrease in carbon footprint by the end of 2021:



The Future World Multi-Asset Fund is on track to meet its target having achieved a -25% reduction in Carbon Footprint by the end of 2021:



We acknowledge this is the first year that we are required to produce a mandatory TCFD report and we, like many other schemes, are on a journey that will develop in line with the availability, coverage and quality of climate-related data and will be driven by a growing desire for companies to move their businesses to a more sustainable model.

We are delighted with the amount of progress that's been made and the detail that we can share in this report and look forward to updating you annually.