

FIDELITY MASTER TRUST

Task Force on Climate-Related Financial Disclosure



2023 Report



Foreword

A word from the Chair

We have seen over 2022 and 2023 that slowing the pace of climate change continues to be one of the biggest challenges that society is facing today. The current and likely future impacts of climate change continue to grow and the need to manage these is only becoming more crucial.

As Trustees of the Fidelity Master Trust, we believe that climate change is a material financial risk and as such, we have a responsibility to identify and manage both the risks and opportunities that arise from climate change. Ultimately, we believe that in doing so, this can lead to better retirement outcomes for our members.

We have outlined these beliefs further, along with the risks and opportunities of climate change in our **climate change policy**, as well as what we are doing to advance decarbonisation in the Master Trust.

Our TCFD Report

In outlining our continued focus on climate change, I am pleased to share our second Fidelity Master Trust report on climate-related matters, produced in line with the Taskforce on Climate-Related Financial Disclosures (TCFD).

In this report we have built upon our analysis and evaluation from our 2022 report and set out our framework for identifying, assessing and managing climate-related risks and opportunities across the Master Trust. We have outlined the way that this framework feeds into the way that we manage our investments and have further developed our scenario analysis, moving to a quantitative approach. This has allowed us to measure the potential impact on members' retirement savings from different climate change scenarios over time. Finally, we have provided the latest figures available on the carbon profile of our investments and the progress that we are making towards our net zero targets. A summary of the approach to TCFD, as well as our key findings, is shown on page 5.

We will continue our focus on climate change through 2024 and onwards as we, as with many other Schemes, look to develop our reporting and managing of climate-related risks and opportunities over time as the quality of data improves.

Within this report we are pleased to share our continued progress, and we look forward to sharing more with you going forwards.



Kim Nash

Chair of Trustees of the Fidelity Master Trust





Contents

Overview	4
Introduction	6
Pillar 1: Governance	8
Pillar 2: Strategy	14
Pillar 3: Risk Management	26
Pillar 4: Metrics and Targets	30
Conclusions and Next Steps	42

Appendix 1 - Glossary	43
------------------------------	-----------

Appendix 2 - Risk Register	44
-----------------------------------	-----------

Appendix 3 - Roles and Responsibilities	45
--	-----------

Appendix 4 - Scenario Analysis	47
---------------------------------------	-----------

Appendix 5 - Risk Review Process	62
---	-----------

Appendix 6 - Integration of climate considerations in the Scheme's investments options	63
---	-----------

Overview

We, the Trustees, are responsible for overseeing the investment arrangements of the Fidelity Master Trust (the 'Scheme'). We believe that climate change poses a systemic risk for financial markets and our members' retirement savings, and therefore requires explicit consideration by the Trustees.

We will seek to identify, assess, and manage the following climate-related risks (and opportunities) to the extent possible, to protect our members' investments:

- **The transition risk** of companies which are affected by shifts in technological, regulatory policy and consumer behaviour as economies move towards low carbon alternatives. For example, such changes directly and indirectly affect the competitive positioning of firms in the move towards greater of renewable forms of energy and less intensive agriculture. These are expected to cause widespread disruption to the global economy and financial markets; and,
- **Physical risks** from climate change, including altering weather patterns and increasing natural disasters¹, which are also anticipated to cause widespread disruption to global economic activity and investments.

In this report, we provide an update on our 2022 TCFD report in response to The Occupational Pension Schemes (Climate Change and Reporting Amendments) Regulations 2021. The regulations draw on the Taskforce for Climate-related Financial Disclosures ('TCFD'), a voluntary initiative that provides guidance on climate-related disclosures by companies and investors.

The TCFD recommends disclosures across the four following pillars:

Governance: the oversight of climate-related risks and opportunities

Strategy: the strategic response to the actual and potential impacts of climate-related risks and opportunities for members' retirement savings

Risk management: the identification, assessment and management of climate-related risks

Metrics and targets: the disclosure of climate-related metrics and targets



Priority actions: We will seek to understand and respond to evolving best practice in the climate change investor landscape. This year, our focus has been on:

1. Working with Fidelity and our consultants to develop our investment solutions further to take into account climate change risks and opportunities;
2. Enhancing our climate-related reporting and moving to a quantitative approach for scenario analysis; and,
3. Monitoring and engaging with our managers on their approach to climate change and how they are working with the underlying companies that our members' monies are invested in, to reduce their carbon footprint.

We have laid out more information on these specific items in the report below and will continue to develop our learning and thinking on climate-related matters. We have also provided a summary of the key conclusions of this report, across the recommended pillars of the TCFD, in the following table.

¹ Weather-related disasters increase over past 50 years, World Meteorological Organization (wmo.int)

Key Findings

<p>Governance</p> <p>Read more on page 8</p>	<ul style="list-style-type: none"> ■ We continue to review and develop our governance framework in identifying, assessing and managing climate-related risks and opportunities. ■ We have expanded our requirements of our advisers in the way that climate change is factored into the investment advice that we receive. ■ We have continued our climate change training with a specific focus on how voting and engagement can help drive companies to reduce their emission and progress net zero goals.
<p>Strategy</p> <p>Read more on page 14</p>	<ul style="list-style-type: none"> ■ Our quantitative scenario analysis on our default strategies shows that equities will be most impacted in the short term due to transition risks and over the long term due to physical risks. The degree of these impacts on members' retirement savings also differ across different scenarios with a Divergent Scenario generally having the largest impact in the short term and a Current Policies scenario having the biggest impact over the long term. ■ We have worked with our advisers to further develop our investment strategies to take into account climate-related risks and opportunities and will continue to do so going forwards. ■ We have updated our Sustainable Investing Policy and Climate Policy to reflect our latest strategic approach towards managing climate-related risks.
<p>Risk Management</p> <p>Read more on page 26</p>	<ul style="list-style-type: none"> ■ We have transitioned the members in our standard default investment option to a new investment strategy which further integrates climate-related considerations and our net zero goals. ■ We have engaged with our key fund managers throughout 2023 on how they are engaging with underlying companies on their approach to managing the physical and transitional risks posed by climate change and continue to review their approach and the success of this. ■ We continued to review our risk register and risk management process in place to identify, assess and manage climate-related risks and opportunities.
<p>Metrics and Targets</p> <p>Read more on page 36</p>	<ul style="list-style-type: none"> ■ We have updated our metrics and targets for the end of 2022 which has shown a further reduction of the Scheme's carbon footprint (24%) and progress towards our target of halving our carbon footprint by 2030 relative to a 2020 baseline² (around 65% of the way towards our goal). ■ We have detailed the changes in data coverage and disclosure. While data coverage (the proportion of investments that we can analyse) continues to be an area which requires further work, disclosure (the amount of reliable climate data that companies are providing) has continued to improve (now 93.1%).

² Using 2019 emissions data

Introduction

ABOUT US

The Fidelity Master Trust is a multi-employer, defined contribution, occupational pension Scheme set up with the purpose of providing workplace pensions to members.

It is made up of standard sections and bespoke sections. The Trustees ('we', 'us', 'our') are responsible for governing the Scheme and offer a range of investment options for members. Where members of standard sections do not make their own selection, their money is invested in the Scheme's standard default strategy. If employers do not wish to use the standard section of the Scheme, they may hire an investment adviser to provide advice to the Trustees and establish a bespoke default arrangement and/or bespoke fund range. Investments are offered to members of the Scheme through a Defined Contribution (DC) platform provider. This is currently FIL Life Insurance Limited (Fidelity).

Note that as of the end of 2022, the Scheme was operating two standard default strategies, the FutureWise working lifestyle strategy (WLS) and the FutureWise Target Date Funds (TDFs) while planning the move of all members in standard sections to the FutureWise TDFs. As such we have included both strategies in this report. As of September 2023, the transfer of these assets was successfully completed.

THE CHALLENGE OF CLIMATE CHANGE

Climate change is a systemic risk that we recognise will impact members. The risk and opportunities arising from climate change are constantly evolving and are on a journey to identify and quantify these and manage these on behalf of our members' retirement savings.

Our approach to identifying and managing these risks and opportunities is outlined in our **Sustainable Investing Policy** and **Climate Change Policy**.

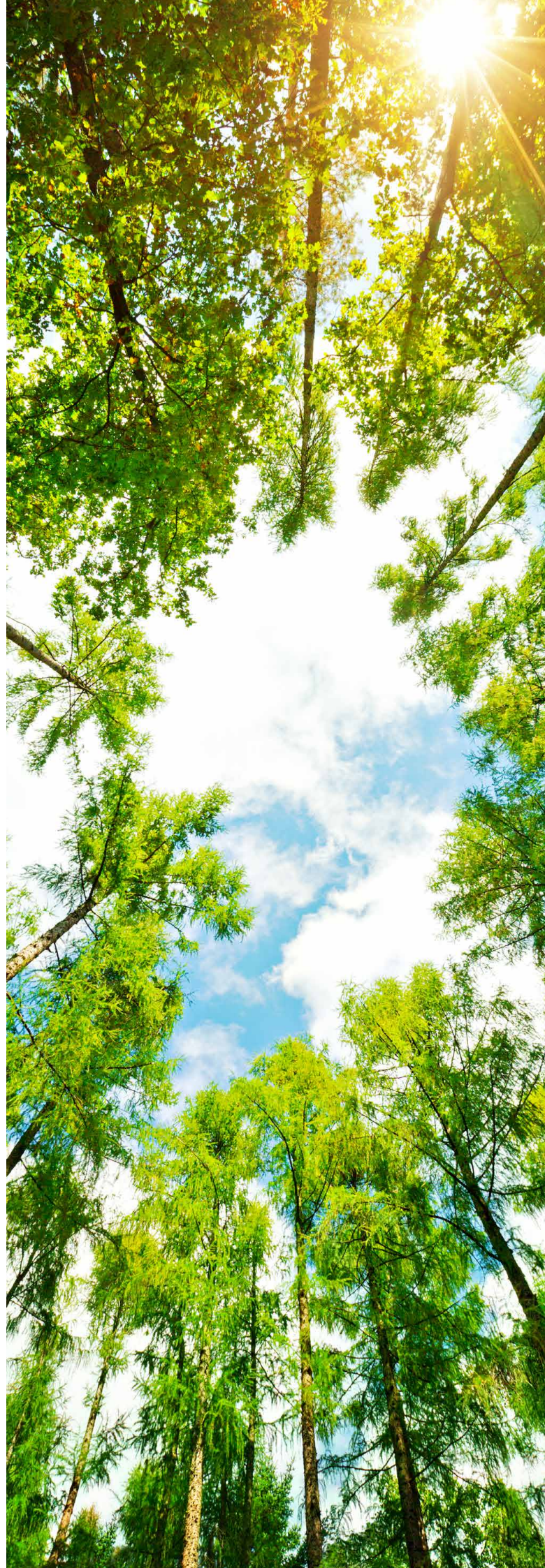
We support initiatives that will be in the long-term financial interests of members; the TCFD is one of these initiatives. The TCFD has developed recommendations for companies and investors to disclose their climate-related risks and opportunities. We believe that increasing and improving climate-related disclosures will lead to better investment decisions. This will facilitate better management of the risks and opportunities associated with climate change, with respect to members' investments.

Within the metrics and targets section we have included any funds and strategies classed as 'popular arrangements' in line with the Department for Work and Pensions (DWP) guidance for the Scheme. A popular arrangement is one in which £100m or more of the Scheme's assets are invested, or which accounts for 10% or more of the Scheme's total investments. As of 31 December 2022, this threshold continues to apply to most of the Scheme's default investment arrangements. In the interests of transparency, however, we have decided to continue to extend this coverage to provide information on all the Scheme's default investment arrangements (including those which have below £100m in assets or represent less than 10% of the Scheme's assets). These default investment arrangements are listed on the following page.

Investment	2022 Assets (£)
Standard Default Strategy 1 (FutureWise Working Lifestyle Strategy)	£2,490m
Standard Default Strategy 2 (FutureWise Target Date Funds)	£28m
Strategy B	£1,064m
Strategy C	£338m
Strategy D	£200m
Strategy E	£128m
Strategy F	£205m
Strategy G	£154m
Strategy H	£105m
Strategy I	£13m
Strategy J	£1m
2022 Total	£4,729m

Data and findings as of 31 December 2022, in line with DWP requirements for data reporting between October 2022 and June 2023.

This report has been produced in line with the Financial Stability Board guidance for asset owners. It also applies guidance from the DWP and will be updated annually.



Pillar 1: Governance

SCHEME OVERSIGHT OF CLIMATE-RELATED RISKS AND OPPORTUNITIES

Overall responsibility for the running of the Scheme, including the consideration of climate-related risks and opportunities for the standard and bespoke sections, falls to us as the Scheme's Trustees. We are made up of six Trustees, all independent of Fidelity. More information on the Board of Trustees can be found on the Master Trust [website](#).

In considering our responsibilities to act in members' best interests, we have put in place our **Sustainable Investing** and **Climate Change** Policies. Both policies demonstrate the importance of considering climate change factors in our decision making and the way we operate. More information on these policies is available in the 'Strategy' section of this report. Within these policies, we outline our belief that investing sustainably and considering environmental, social and governance (ESG) factors – including climate change – is an approach that can lead to improved long-term, risk-adjusted returns for members. We take these considerations into account when making investment options available in the Scheme.

To ensure climate change is considered as part of how the Scheme operates – and not in isolation – we also keep up-to-date Scheme documentation to reference climate change directly, including the **Statement of Investment Principles (SIP)** and our internal Risk Register. For example, outlining how we consider ESG factors (including climate) in our investment strategies and the climate-related expectations of managers, which help inform our engagement with managers.

Certain processes and reporting of consideration of climate-related risks and opportunities within the investment offering has been delegated to the Scheme's Investment Sub-Committee (ISC); however, ultimate oversight rests with the Trustee board. The ISC reviews the suitability of all investment options used by the Scheme on an ongoing basis for both the standard sections and bespoke sections. For the standard sections, the ISC is supported by Fidelity, our service provider, and Isio, the Scheme's independent investment adviser for standard investment arrangements. The ISC's review of the bespoke sections is supported by the relevant investment adviser for each section.

In constructing and reviewing the default investment strategies and the range of self-select funds offered, we require Fidelity and the independent advisers to consider climate-related risks and opportunities. We also expect them to demonstrate to the ISC how these have been considered, through annual reviews. At these annual reviews the ISC will discuss the consideration of climate-related risks and opportunities with the investment advisers to understand, and challenge where necessary, how climate-related risks are incorporated into the design and management of the investment options.

Ultimately, all governance activities that we implement, apply Scheme-wide i.e. across all investment options available in the Scheme.

ROLES AND RESPONSIBILITIES IN IDENTIFYING, ASSESSING AND MANAGING CLIMATE-RELATED RISKS AND OPPORTUNITIES

As part of the overall governance structure for the Scheme, there are several parties that we interact with on a regular basis. We have illustrated these parties below along with their high-level roles in relation to the Scheme.

As part of their roles, each of these parties also has a responsibility for providing ongoing support on climate-related matters, with ultimate oversight resting with the Trustee board. This includes ensuring we receive suitable training around identifying, assessing and managing these risks and their impacts, and providing information that will allow us to make decisions in the context of climate-related risks and opportunities.

Below we have outlined specifically, the responsibilities of the Master Trust Board as well as the ISC in relation to climate-related risks and opportunities. More information on the specific roles and responsibilities of these other parties on identifying, assessing, and managing climate-related matters can be found in Appendix 3.

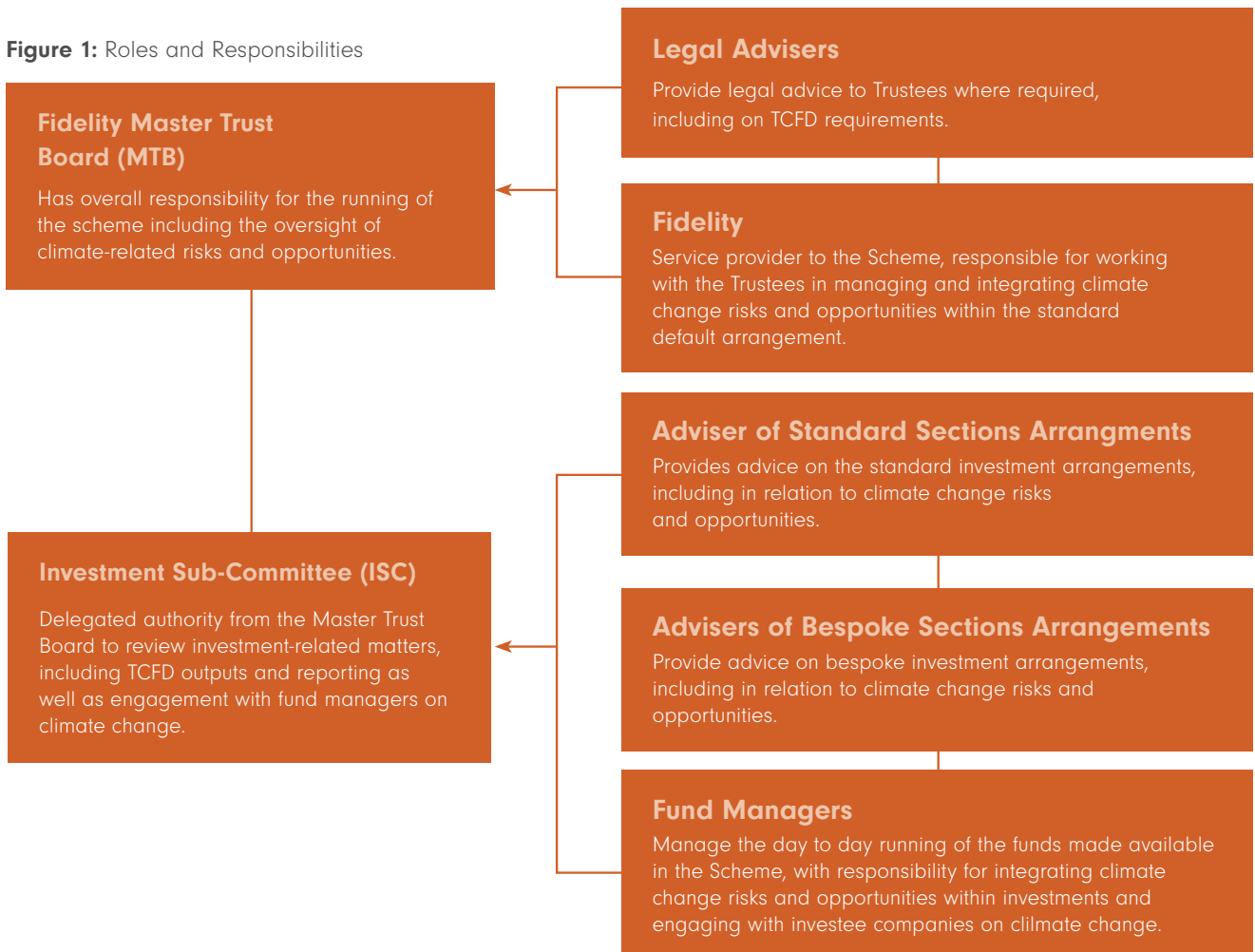
We, the Scheme's Trustees, as having ultimate oversight for the identification, assessment, and management of climate-related risks and opportunities, will on at least an annual basis enact the following processes:

- Ensure we have sufficient knowledge and understanding to be able to respond to climate-related legal and fiduciary obligations. This will be maintained through regular training sessions supported by Fidelity and other parties where required.
- Review provisions for climate change in the governance arrangements, climate policy, strategic direction, and our risk register. These documents act as the basis for driving ambitions or areas to prioritise, as well as for driving and monitoring the integration of climate change within the investment arrangements.
- Review and assess the climate-related risks and opportunities for the Scheme, and how they will develop over the short, medium, and long term (more information on how we define these time frames is in the Strategy section of this report). This is primarily done through the analysis of climate-related metrics and scenario analysis & modelling.

Pillar 1: Governance

- Manage the exposure to climate-related risks and opportunities for the Scheme, through reviews of our investment arrangements (supported by our advisers) and through engagements with managers, to ensure increased exposure to opportunities and reduced exposure to climate-related risks.
- Review any climate-related updates from Fidelity and our advisers on climate workstreams and any relevant market or regulatory updates. These come through multiple channels including through regular training sessions, board meetings, our annual advice from advisers and an annual survey we send to advisers to ensure they are identifying and raising any climate-related issues with trustees in the context of the strategies which they advise upon. These may include for example, updates on the development of specific physical or transition risks or opportunities at a sustainability training session. Climate-related matters are specifically tabled at every ISC meeting (four times per year) as well as Board meetings where required.
- Agree which climate change-related industry bodies and collaborative initiatives we will support and engage with as Trustees or via Fidelity.
- As appropriate, communicate with Scheme members and other stakeholders on the Scheme’s climate change approach, including through TCFD public reporting disclosures, as well as responding to any queries in relation to climate change.
- Fulfil regulatory requirements with respect to climate change, including preparing the annual Implementation Statement and overseeing delivery of TCFD requirements, such as:
 - Developing climate-related governance arrangements, investment beliefs and policies, and the climate strategy.
 - Selecting metrics used for climate reporting and reviewing the metrics and their appropriateness.
 - Agreeing long-term and interim targets against selected metrics, monitoring progress against those targets annually, and assessing whether to retain or replace the targets and selected metrics.
 - Publishing the annual TCFD report.
- Use Trustee board meetings and ISC meetings as an opportunity to question and/or challenge TCFD reporting produced by Fidelity and the external advisers.

Figure 1: Roles and Responsibilities



Pillar 1: Governance

The ISC's role is to:

- Review how our advisors consider the impact of climate change as part of their overall governance structure and advisory processes (more information below).
- Review the investment advice provided by our advisers, how climate change has been considered in this advice and challenge where appropriate.
- Assess how external advisers and fund providers have performed against their climate-related responsibilities.
- Support management of climate-related risks and opportunities by:
 - Alongside our advisers, reviewing fund managers' approaches to, and effectiveness in, addressing climate change in their investing activities.
 - Ensuring that climate change and ESG criteria are applied during fund manager selection and retention processes.
 - Considering the fund managers' track record on voting on climate-related matters and engaging with the management of companies in which they are invested, and report on this via the annual Implementation Statement.
- Report to the Master Trust Board on a quarterly basis its key findings, discussions and recommendations on strategic items including climate and broader sustainability matters.

Whilst in Appendix 3, we set out the roles and responsibilities of others who undertake governance activities in relation to climate change and on the Scheme's behalf, we set out a quick summary of these below:

- Fidelity is responsible for supporting the Trustees' annual reviews on the integration of climate change within governance arrangements, risk management documents, strategy and investment policies, as well as collating climate-related metrics and targets (using data available from a climate data provider).
- Isio, the Scheme's independent investment adviser for standard investment arrangements, has supported Fidelity and the Trustees in the annual review of the TCFD outputs (such as the scenario analysis and metrics), as well as the climate governance statement and climate scenario analysis.

We will conduct annual reviews on our climate governance structures to ensure these remain fit for purpose, including to better identify, assess and manage the climate-related risks and opportunities identified within our TCFD reports. For example, where manager decarbonisation is not in line with expectations, we would opt to step up our monitoring and engagement processes with the manager to change this.

OUR ADVISERS

In addition to our own governance framework and processes, we also regularly interact with our independent advisers (on both standard and bespoke sections) and obtain up-to-date information on how they ensure that there are suitable governance structures in place within each of the advisory firms to ensure climate risks and opportunities are considered in the relevant advice provided on the default strategies.

All advisers have in place proprietary governance structures, as well as senior oversight and accountability, to ensure that the risks and opportunities associated with climate change are considered within the advice that they provide us (as confirmed in the annual adviser survey). Most firms have a head of ESG or a dedicated oversight or steering committee which provides strategic direction on the integration of sustainability and climate change into research and includes any investment advice we receive. Following the feedback from our latest sustainability and climate adviser survey in 2023, we are pleased to see continued development to the approach that our advisers are taking on how they research, analyse and integrate the impact of climate-related risks and opportunities in the advice that they provide us. Going forward this will be key to meeting our net zero targets.

All advisers are signatories of the Principles for Responsible Investment (PRI) which focuses on incorporating, disclosing, and promoting ESG matters (including climate change) across the industry. Our advisers are also signatories to the UK Stewardship Code which sets stewardship standards for asset owners, managers and advisers. All advisers are members of the Investment Consultants Sustainability Working Group (ICSWG) which outlines several themes that Trustees should expect their investment consultants to demonstrate in terms of climate competency. In addition to these, various advisers are also members and signatories of other groups including the Net Zero Investment Consultants Initiative (NZICI), Institutional Investors Group on climate change (IIGCC), the Thinking Ahead Institute (TAI), and Coalition for Climate-resilient Investment (CCRI), amongst others. We are supportive of the continued and developing engagement that our advisers have with wider industry bodies, including regulatory bodies, on climate-related matters.

Pillar 1: Governance

TIME & RESOURCE ALLOCATED TO CLIMATE CHANGE

At the start of every year, we agree a climate change plan and associated budget with Fidelity and our advisers. As part of the oversight of climate-related risks and opportunities, we will seek to ensure that sufficient time and resources are awarded to climate change by the Board of Trustees and ISC. This year, sustainability, and climate change has been discussed on a regular basis with dedicated slots at the quarterly ISC meetings (usually one hour each) as well as a separate 2023 training session for the entire Board of Trustees specifically, on sustainability and climate change (more information in the training section below). This frequency and length ensures that the Board and the ISC has enough time to consider sustainability and climate change-related matters specifically, while awarding it equal weight to other tabled matters such as review of the performance of the standard default investment option.

A climate change plan, which sets out climate-related deliverables for the year, helps us to ensure that we are on track for responding to the climate-related regulatory requirements (including TCFD), from climate strategy setting to monitoring climate-related metrics and targets. We will continue to review the time and resources allocated to climate change, to ensure this is sufficient for the identification, assessment and management of climate-related risks and opportunities.

OVERSIGHT PROCESSES

We seek to engage with our advisers and investment managers on climate change on a regular basis. There are several avenues that we pursue to ensure accountability around agreed climate-related actions, including:

- Reviewing the climate-related outputs provided to us by Fidelity and our advisers to assist in identifying, assessing and managing climate-related risks and opportunities.
 - This includes presentation material shared at climate-focused training sessions (more information available below), TCFD outputs such as the scenario analysis, metrics and targets data, and information shared by our advisers either on an ad-hoc basis, through annual advice on our investment strategies or through the annual TCFD questionnaire (see third bullet point on the next page).
 - We may challenge these outputs from time to time, where we believe climate risks and opportunities have not been identified, assessed or managed appropriately. For example, over 2023, the ISC has requested from its advisers, further information to support the consideration of climate in annual reviews of investment arrangements, beyond what has been previously required, to validate the consideration of climate-related matters in their advice.
- We set out expectations of advisers with respect to the consideration of climate risks and opportunities, in our investment framework and annual investment adviser contract (we updated these documents at the beginning of 2023 to expand our requirements on climate reporting from our advisers). These documents also outline the frequency and timing of when this information is expected. These are revisited annually to ensure that adequate steps are being taken to identify and assess climate-related risks and opportunities, whilst reflecting evolving best practice within the climate change investor landscape.
- We annually assess the competency of external advisers using a TCFD questionnaire. This assesses the areas of governance and oversight with relation to identifying, assessing and managing climate-related risks and opportunities in the design of the investment strategies. It also reviews the advisers' approach to strategy and risk management, manager selection and engagement and voting with underlying companies. This helps to ensure our advisers have the appropriate climate-related governance, resources, and expertise to support the Scheme in identifying, assessing and managing climate-related risks and opportunities.

Pillar 1: Governance

- We engage with our fund managers on our goal and aims around climate and net zero and expect these to be considered as part of their engagement and investment process (see more in the strategy section).

We discuss the role of different risk management processes further within the Risk Management section, with a focus on engagement and reporting, and how these are approaches across the different investment arrangements.

TRAINING

As part of our processes, we receive annual training from Fidelity on climate-related matters, including ongoing global developments, how these may impact investors and Scheme members and how these can be identified and managed. These sessions run by Fidelity and their team of investment professionals and ESG and climate specialists over a few hours, allow the entire Board of Trustees to engage, query, learn and challenge on a variety of topics. These sessions serve to do the following:

- Keep us abreast of climate-related developments including evidence and current and future consequences of climate change as well as climate-related terminology
- Give us the tools and knowledge required to identify, assess, and manage physical and transition risks (and key existing or developing transitional or physical risks to be aware of e.g. increasing biodiversity loss)
- Demonstrate how to measure how climate-related risks and opportunities may impact members' retirement savings (via scenario analysis)
- Help understand how climate-related risks and opportunities can be managed by factoring these into the design of the strategies we offer, as well as the management of the Scheme (more information in the risk management section on the training we receive)
- Demonstrate how considerations are integrated in investment design and management and our approach to net zero
- Understand how to interpret and use climate metrics as well as assess our progress against our net zero goals
- Understand how voting and engagement can be used as a tool to help drive companies to reduce their emissions and progress towards net zero goals
- Keep us abreast of other ongoing industry or climate-related initiatives.

The sessions use information and data gathered and presented by Fidelity's in-house research and strategy teams as well as information available externally (from other data providers or aggregators) to provide up-to-date picture on climate change matters for the Board.

Specifically in our 2023 session, we focused on stewardship, particularly engagement and voting on climate-related matters and had the ability to discuss and challenge our largest asset manager how they engage with companies and measure the success of these engagements. We also covered how feedback from engagement feeds into the investment solutions and processes via ESG rating systems. We have also reviewed feedback from the TCFD report that we produced last year and improvements that we are making.

In addition to training provided to us as Trustees, there is also in-house training in place for Fidelity and our advisers to ensure their awareness of climate-related matters as well as competence in factoring climate-related risks and opportunities into the advice they provide us with. This training takes place through a combination of internal seminars, technical training and time spent with their in-house responsible investing teams. These cover topics such as carbon pricing, net zero challenges, transition pathways and TCFD. This training is shared with the Trustee Board to review and challenge if necessary.

We will continue to monitor the broad approach to climate-related training, moving forward. Reviews of meeting minutes from ISC and climate training sessions at subsequent meetings, are also used to identify any climate-related knowledge gaps and can become the triggers for Trustees requesting further training requests from Fidelity or our advisers.



There is also in-house training in place for Fidelity and our advisers to ensure their awareness of climate-related matters as well as competence in factoring climate-related risks and opportunities into the advice they provide us with.



Pillar 2: Strategy

OVERVIEW

Over the short, medium, and long term, we believe that climate-related risks and opportunities will have a significant and growing impact on the value of our members' retirement savings. We have seen the Scheme continue to grow over 2022 and 2023, and as members contribute and this growth continues, the assets in the Scheme will also grow. We anticipate that this rate of growth is likely to increase as businesses increasingly turn to Defined Contribution Master Trusts such as Fidelity's, to support the pension and financial needs of their employees.

As the numbers of members joining the Scheme increases, the Scheme must adapt its planning and strategy with the aim to maximise opportunities and minimise risks. We recognise that if we do not provide our members with a range of solutions that factor in the risks and opportunities associated with climate change, or if we do not have the appropriate governance to manage these, while still ensuring compatibility with regulations and disclosures, the retirement savings of our members may be negatively impacted.

More information on how we plan to address these climate-related risks and opportunities can be found in the risk management section beginning page 26.

CLIMATE-RELATED RISKS AND OPPORTUNITIES

Our approach to climate-related risks and opportunities is grounded in the belief that they are financially material and, as a result, are relevant to members and to our running of the Scheme. Much of our approach to assessing and managing the risks and opportunities associated with climate change is outlined in our latest **Sustainable Investing Policy** and **Climate Change Policy**. At a high level this includes the following:

- Integrating funds and investment processes that consider climate-related risks and opportunities into our default strategies and wider fund ranges.
- Engaging with our fund managers on their approach to managing climate-related risks and opportunities and how they engage with companies on these.
- Setting and reviewing our climate-related targets and reviewing the footprint of our operations.

TYPES OF CLIMATE-RELATED RISKS AND OPPORTUNITIES

Our members will be invested in the Scheme over varying time horizons (depending on their time to, and in, retirement). Over this time, there will be long-term risks if climate-related targets (including net zero targets as defined in appendix 1) are not met. Climate-related risks can be broadly categorised into two groups. These are as follows:

Transition risks: These are risks that arise from taking the necessary steps to transition to a low-carbon economy. These may arise from policy and legal changes, technological developments, reputational damage, or market forces.

Physical risks: These are risks that arise directly from changing climate conditions. These can be acute, episodic risks such as tornadoes, flooding, typhoons and wildfires, or chronic, which relate to long-term incremental changes such as the variation of amounts of rainfall, availability of fresh water, rising sea levels or frequency of supply chain disruption. With widespread nature degradation, the state of our planet's health is already at risk, which will negatively impact its ability to be able to respond to climate-related physical forces. This recognises the need to consider global environmental risks, holistically. Within physical risks, we have discussed over the past year, the increasing importance of nature-related risks. As biodiversity is falling across the globe, this calls into question the sustainability of natural resources upon which more than 50% of the world GDP depends on. For example, populations of pollinators such as bees, can lead to reduced crop yields which in turn leads to concerns about food security, impacting supply chains³.

Climate-related **opportunities** will also arise to support sustainable growth, development and investment across industries as we move towards net zero economies. For example, we believe that companies that proactively adapt to the above risks or develop solutions that help mitigate these risks are likely to outperform in the long-term relative to companies who are less able to adapt to these risks.

Both physical and transition risks as well these opportunities, can affect the value of investments, and in turn, the members' retirement savings.

³ [weforum.org/agenda/2020/08/loss-of-bees-threatens-us-crop-yields/](https://www.weforum.org/agenda/2020/08/loss-of-bees-threatens-us-crop-yields/)

Pillar 2: Strategy

RISKS, OPPORTUNITIES AND STRATEGY ACROSS DIFFERENT TIME PERIODS

As we transition to a low-carbon economy in pursuit of meeting net zero targets, these risks and opportunities will transpire over the short, medium and long term. We have defined these time periods and associated risks and opportunities below based on the investment time horizons of member cohorts across the Scheme. The progress to mitigate emissions and speed with which we adapt to climate change, will determine the extent to which they arise. Earlier and greater efforts will tend to increase transitional risks while dampening the progression of physical risks, whilst the opposite also applies.

We have evolved our timeframes to better recognise the Scheme cohorts (see tables below for further details). Accordingly, we have evolved the overview of transition risks, physical risks and opportunities below from our 2022 report. While much of these are still relevant, we have commented where we have begun to see changes and development from last year's report.

Note that for the purpose of this analysis we have grouped together cohorts across our individual arrangements, as we believe that the impact across all time periods on these cohorts will be broadly similar at this stage. This aligns to our approach of treating climate risk as a Scheme-wide risk and keeps the report understandable for members. We will keep this approach under review on an ongoing basis.

Investment	Short Term (8 years)
Transition Risks	<ul style="list-style-type: none"> ■ Many older members in the Scheme will be close to taking their retirement savings in the next few years or in the process of doing so. ■ We expect significant changes in the economic landscape as we near 2030, a common milestone to keep the world on track for meeting net zero targets. During this time, we expect transition risks to be most impactful and are likely to materialise from regulatory changes, as well as evolving market norms, given increasing reporting requirements as well as companies' exposure to litigation risks. ■ The policy goals of governments and regulators may also impact company or government investment value through a change in growth and/or cost expectations and thus members' retirement savings. ■ As technological change advances alongside market regulation, there is likely to be shifting supply and demand between products and industries. High emitting sectors such as utilities, transport, energy and materials are likely to be a focus area. ■ In the short term, the focus will be on safeguarding member assets from these risks. ■ Reputational risks from inaction may also have a material effect on the financial performance of members' retirement savings.
Physical Risks	<ul style="list-style-type: none"> ■ While we expect the most impactful risks to be transition risks, the impact of physical risks are building and we expect these to continue to increase in frequency, severity and disruption.
Opportunities	<ul style="list-style-type: none"> ■ Climate-related opportunities in the short term involve taking advantage of existing opportunities in providing low-cost alternatives to inherent and high emitting technologies. Examples of this include electric vehicles and renewables.

In the short term, regulatory and public policy factors as well as evolving market norms define the appetite for risks and opportunities by assigning costs to climate events e.g. carbon pricing. These factors can also define the climate-related framework a company must operate within. Members' investments will largely be influenced by regulatory and policy-related factors, so we must ensure that managers of the solutions and funds are considering these within their investment process and are monitoring the relevant data points. In addition to this, we anticipate the consideration of the impact of climate change on different asset classes to begin to feed into the design of all investment strategies over the short term. Indeed, we are already seeing strategies beginning to tilt towards managers who can effectively engage their high carbon emitters to set climate targets and reduce their emissions, and as such, climate transition risk.

Pillar 2: Strategy

MEDIUM TERM

Investment	Medium Term (28 years)
Transition Risks	<ul style="list-style-type: none"> ■ The average age of a member in the Scheme is 41 and as such will be retiring in 25-28 years' time. ■ In this time period we will be approaching common net zero targets that some sectors may have achieved and others are striving for. As such transition risks may be prominent especially in those hard-to-decarbonise sectors such as heavy industry. ■ By this point, as decarbonisation solutions will have become more common, there is likely to have been a change in the supply and demand of products and services in related industries towards low-carbon solutions, as well as a decrease in low carbon technology costs.
Physical Risks	<ul style="list-style-type: none"> ■ Over this timeframe, transition risks will be declining as physical risks increase significantly. ■ Acute weather events are expected to increase in severity and frequency, which may lead to business disruptions across our investments. ■ Physical climate risks, both acute and chronic, can cause disruptions to operations and supply chains, affect the functionality or value of physical assets, and affect access to natural resources and insurance for firms. All of these can have detrimental impacts on a company's ability to deliver shareholder value. ■ For example, companies with a reliance on real (physical) assets, such as real estate and industrials, may see the value of those assets threatened if they're located in areas vulnerable to adverse climate-related events, such as rising sea levels or forest fires. ■ Chronic physical risks will lead to increased insurance costs for businesses exposed to them, as well as potential destruction of assets. Availability of insurance may also become problematic or uncommercial. ■ Chronic risks are also likely to add to economic and demographic distress in countries exposed to them. This could include longer-term impacts such as climate migration, less productive workforce due to excessive heat or certain parts of the world becoming uninhabitable due to heat, drought, flooding or other physical risks.
Opportunities	<ul style="list-style-type: none"> ■ In the medium term, the opportunity set will likely have moved or expanded from technologies such as electric vehicles and renewables to potentially include technologies such as battery storage / charging stations, AI and machine learning and smart building infrastructure.

Over the medium term, it is likely the composition of investment strategies will have shifted towards specific industries that are facilitating the transition to a net zero future, and toward companies that are benefiting from the change in consumer preferences. We expect that in advance of the net zero targets for 2050, more capital will be allocated to companies with strong transition plans and science-based targets. It is also likely that as physical risks grow, certain sectors may face mounting pressures to invest in adaptation to manage physical risks, such as flood defences and water efficiency solutions.

Companies in the agricultural industry, for example, may be finding it more difficult to continue to reduce output cost-effectively, so the cost of adaptation may impact profits. The performance of more sustainable strategies is likely to be stronger than those strategies that have less consideration for climate risks.

Pillar 2: Strategy

LONG TERM

Investment	Long Term (40 years)
Transition Risks	<ul style="list-style-type: none"> ■ The youngest members in the Master Trust are around 20-25 years old and so will be approaching retirement in around 40 years' time. ■ This will be a period after net zero goals of 2050 and we may see run-away climate change unless the world has been able to meet these goals. ■ The most important aspect over this time horizon is the degree to which companies that make up public and private markets across the globe, have achieved their decarbonisation aims. ■ Unless most of companies accessed through investments in the Scheme have a net zero strategy in place, then the physical and transition risks are likely to have impacted members' retirement pots increasingly as the value of these companies is affected.
Physical Risks	<ul style="list-style-type: none"> ■ At this time point, physical risks will be most prominent and their frequency and severity will vary depending on how well the world has decarbonised and whether net zero targets have been met or not. ■ Under a current policies scenario and without further decarbonisation action, the world could experience unprecedented physical risks.
Opportunities	<ul style="list-style-type: none"> ■ For the long term, building on the continued opportunities shown in the short and medium terms, a focus on energy alternatives beyond renewables into hydrogen may occur. Further digitalisation of industries will likely continue to accelerate as well.

Over the long term, physical risks will have materialised and companies with a reliance on real (physical) assets, such as real estate and industrials, may be experiencing greater disruption or cost. These companies are also likely to see the value of those assets threatened if they're located in areas vulnerable to adverse climate-related events, such as flooding, rising sea levels or wildfires. Some of our investment strategies have direct investment in real assets, however exposure to companies via equity or fixed income investments that rely on such real assets for business may still mean indirect exposure to such real assets.

In the long term our aim will be for the Scheme to have made significant progress developing our strategies to manage and mitigate (as far as possible) future climate-related physical risks. However, we see the most crucial aspect over this time horizon as the degree to which companies that make up public and private markets across the globe, have emissions or net zero plans in place. Given the diversified nature of investment strategies in the Scheme we recognise that unless most of these companies have a net zero strategy in place then the physical and transition risks are likely to impact members' retirement pots increasingly as the value of these companies is affected.

Pillar 2: Strategy

SCENARIO ANALYSIS

Scenario analysis is the process of estimating the impact of various scenarios on the value of an investment. It can be a useful tool in assessing the potential impact of climate change on strategies used by members within the Scheme and provide a top-down portfolio perspective to assessing the impacts of climate risk on investments.

Following on from our 2022 report, for our 2023 report we have sought to enhance our scenario analysis and have done so by working with Fidelity and Isio (the independent investment adviser of our standard sections), to produce quantitative scenario analysis on our popular arrangements. This quantification can help prioritise actions to manage climate-related risks within the investment arrangements.

Below we have provided the key points from our scenario analysis. Details of how this analysis was carried out can be found further below as well as in Appendix 4.

Key points from the analysis:

- Members should focus on the timeframes most relevant to them, focusing on their timeframe to retirement, to understand their specific exposure to transition and physical risks
- All strategies see return drags to some degree across all three scenarios versus baseline demonstrating the inevitable negative impact (at least to some degree) of physical and transition risks on member outcomes
- Those strategies with higher equity allocations throughout are likely to deliver higher pot sizes over the medium and long-term. However, equities are also expected to see the first wave impacts of transition and physical risks. As such, there is a greater difference in pot size between the three scenarios and the baseline for those strategies with higher equity allocations. Both points are pronounced for strategies that keep higher equity allocations towards retirement
- Climate-aware allocations within the strategies dampen the impact of these risks and benefit members in the net zero 2050 scenario especially (these strategies have been called out specifically)
- Overall, the net zero 2050 and Divergent scenarios perform more strongly over the long-term across the strategies, as the transitional risks that are incurred early on, dampen the impact of physical risks late on a members' pot
- It is the years closer to retirement where members' pots are larger in which the return drags have the greatest impact. This is the timeframe where physical risks are expected to ramp up significantly over time, just as decarbonisation costs may lessen over time.

Approach

The scenario analysis has been carried out by Isio using Moody's Analytics climate change tool which is used to understand the potential impacts of rising transition and physical costs associated with climate change on investment strategies. As part of this, Isio's Technical Modelling Group (TMG) modelled circa 120,000 stochastic climate simulations across our default strategies.

Given that scenario analysis is a forward-looking assessment, we believe it is important to focus this analysis on those strategies in place and being used by members in the Scheme as recently as possible. This keeps the information relevant to members and ensures that we are focusing on adding value to the report. As such, given that all members invested in both Strategy D and FutureWise WLS moved into FutureWise TDFs before this analysis was published, we have omitted these strategies from the analysis.

We have carried out this analysis by modelling the youngest members' journey from today until retirement. The assumptions used in this analysis can be found in Appendix 4.

Pillar 2: Strategy

Identifying climate scenarios

Climate scenarios are hypothetical futures which apply different levels of climate action and explore how this translates into the cost, availability and deployment of low carbon technologies. The resulting emissions and temperature pathways will therefore produce a unique combination of physical and transition risk with differing economic and financial impacts over time.

For this analysis, in line with DWP guidance, we have chosen three climate change scenarios which represent the possible range and extremes of transition and physical risks from climate change:

Scenario	Overview	Impact of physical risks	Impact of transition risks
Net zero 2050	A Paris-aligned scenario where temperatures are kept to a 1.5°C rise this century. CO ₂ emissions reach net zero 2050 globally, but only some regions achieve global GHG net zero by 2050.	Physical damages are minimised.	Immediate global action applied uniformly to decarbonise hence relatively high transition costs incurred, particularly in the near term.
Divergent Net zero	A Paris-aligned scenario where temperatures are kept to a 1.5°C rise this century. However, policies and speed of decarbonisation differ between sectors.	Physical damages are minimised.	Divergence in sector approaches results in higher transition costs.
Current Policies	The world largely fails to meet the ambition set out in the Paris Agreement resulting in 1.5°C of warming this century.	Higher physical costs arise because of rising global temperatures, with shifts in weather patterns and an increased incidence of natural disasters.	Current global climate policies are implemented, but no further ramping up of climate policy ambition over time, resulting in lower transition costs.

Each of these scenarios has a different physical or transitional impact, with the most ambitious scenario in terms of managing or mitigating long-term risks being the net zero 2050 scenario where short-term transitional risks are consequentially highest. The Current Policies scenario on the other hand, puts less emphasis on decarbonisation and as such while implying lower short-term transitional risks, allows for significant warming leading to a high impact of physical risks over the long term.

To isolate and determine the impact of the risks associated with climate change, we have benchmarked these three climate change scenarios against a 'climate-neutral' baseline which assumes no costs associated with transition or physical climate risk. This in itself is not a scenario but is rather used to isolate and illustrate the impacts of transition and physical costs more clearly for each scenario on each popular arrangement.

Modelling asset classes

To conduct this modelling Isio have begun with modelling the projected growth impact, and resilience on the various asset classes used in our popular arrangements. Where funds which cover multi-asset funds are used, these have been assigned to the asset class of 'best fit'.

All asset types across the Scheme have been assessed. In this analysis, any funds which have a 'climate-aware' element to them, have had this taken into account.

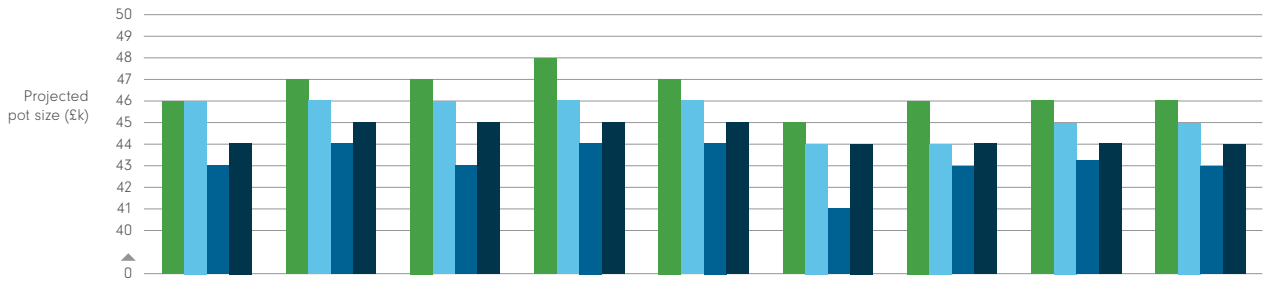
More information on how climate-aware funds are identified, as well as the asset class usage across different strategies and modelling limitations can be found in Appendix 4.

Pillar 2: Strategy

Output

We have split our analysis by time frame in order to clearly show the impact on different strategies (as well as their resilience) depending on a members time to retirement.

SHORT TERM



	STRATEGY									
	FutureWise TDFs	B	C	E	F	G	H	I	J	
● Baseline	46	47	47	47	47	45	46	46	46	
● Net zero	46	46	46	46	46	44	44	45	45	
● Divergent	43	44	43	44	44	42	43	43	43	
● Current Policies	44	45	45	45	45	44	44	44	44	

Source: Isio, December 2022.

IMPACT ON STRATEGIES

In the short term (8 years), it will be transition risks that are predominantly impacting member outcomes.

The impact of this is notable under all three scenarios as is driven by efforts to limit the impacts of physical risks. However, this impact is lowest in the Current Policies scenario, where no further action is taken to limit the increase in global temperatures.

For all strategies, the biggest impact of this in the short term comes under the Divergent scenario which is broadly the same across all strategies (circa -£3k versus baseline). This is where the implications of the transition towards low carbon alternative solutions, creates the highest drag on investment returns and thus member outcomes. This is largely due to the more chaotic nature of decarbonising under a Divergent scenario relative to a net zero scenario which is more orderly. In a Divergent scenario carbon pricing is higher as some sectors are forced to make up for the lack of progress in other sectors in order to achieve 1.5 degrees warming in the century. This impact is prominent for asset classes and investments which are not aligned for this e.g. companies which are not prepared for or are more exposed to transition risks.

IMPACT ON ASSET CLASSES (FIGURES IN APPENDIX 4)

Equity markets are hit hardest by these short-term transition risks as these risks are priced in more quickly than other asset classes. Within this space, **Emerging Markets equities are hit particularly harder** by transition risks as these markets are particularly reliant on high carbon power and transport services.

The FutureWise TDFs allocate 100% to equities, in the early years to increase the potential returns for members over the long term. This exposure however is all accessed through climate-aware funds (with specific net zero targets) managed by BlackRock and Fidelity. This means that while the FutureWise TDFs have **greater exposure of these short-term transition risks**, they also have **greater resilience as the impact on member outcomes is managed and mitigated somewhat through the use of climate-aware funds**. This is illustrated by the low divergence from the baseline for the three scenarios.

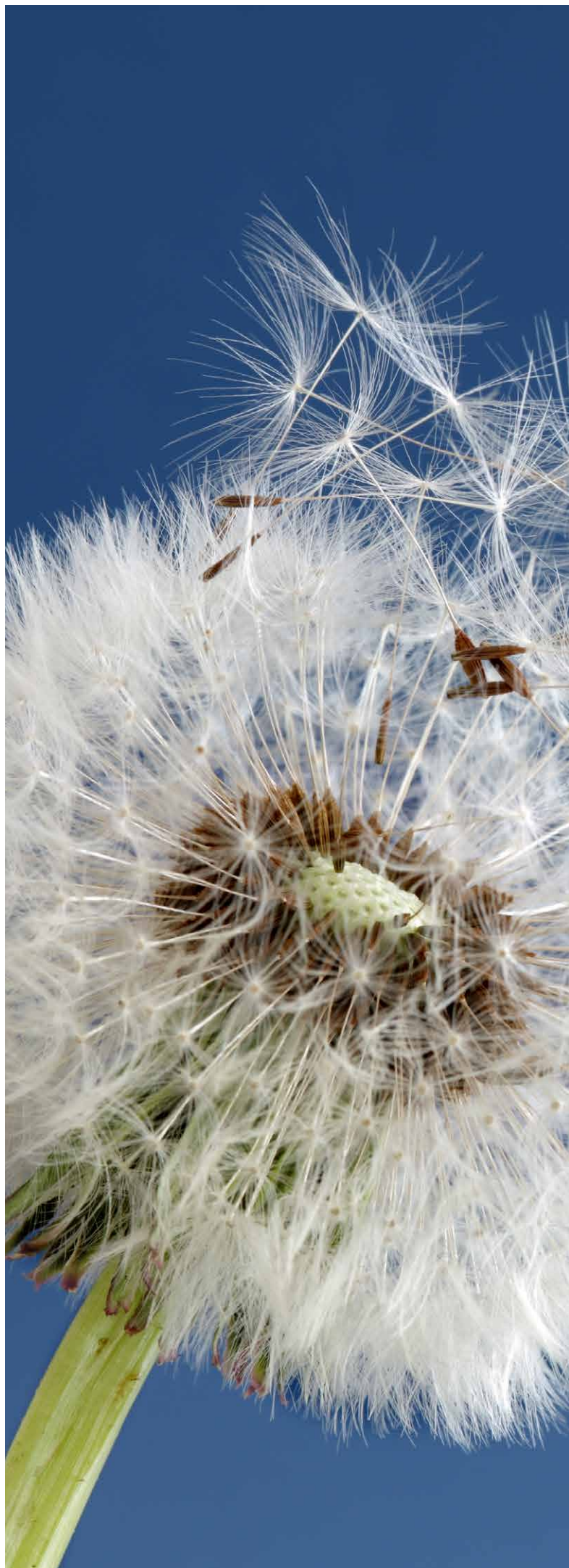
Similarly, the reduction in returns is more pronounced for bespoke strategies which have a higher allocation to equities (strategies B, C, E, F and I). However, this is mitigated somewhat in strategies which use climate-aware equity funds (strategies B, E and F) managed by a range of managers including Impax, Baillie Gifford and L&G, which provide more resilience through their ongoing carbon-reduction targets. These funds provide exposure to climate opportunities and as such decelerate the return drag.

Emerging Markets which are hit particularly hard by transition risks are used across most of the strategies, but typically not more than with a 10% allocation for younger members.

The other major asset class used across the strategies for diversification purposes is corporate bonds (credit). Over this period, **the climate-aware credit funds used within the FutureWise TDFs mainly deliver a return premium under all scenarios.** This may partly be through a flight to quality with investors picking issuers based on their creditworthiness (and those companies that are better mitigated to manage climate-related transition risks) as well as the model's focus on the total return drag for fixed income which is influenced by the inverse price/yield dynamics.

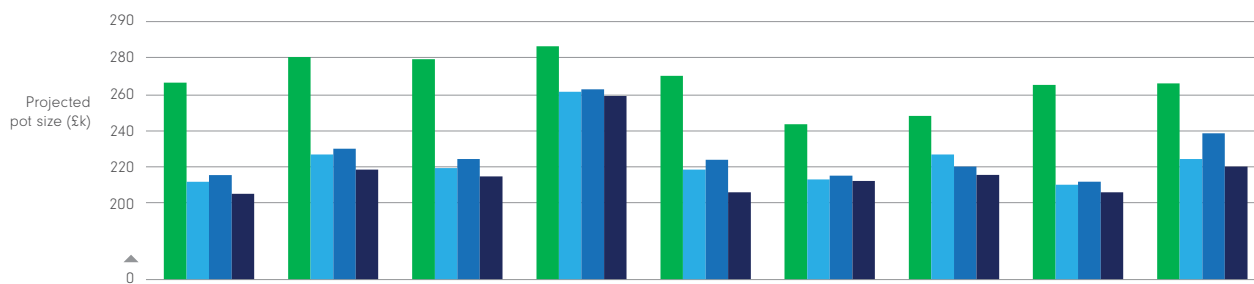
Within bespoke strategies, a higher allocation to credit (strategies G, H and J), means that while achieving a lower baseline return, there is a lower impact from transition risks in the short term. This is especially so for instances where climate-aware credit funds (or funds with climate-aware credit allocations) are used (strategies F, H and I) providing further resilience. **Gilts (also prominent in strategies G, H and J) in fact show the strongest performance in the short term** delivering positive returns in net zero and Divergent scenarios versus baseline, primarily through higher carbon pricing.

Diversified funds used within the bespoke strategies which have a level of risk between equities and corporate bonds also see a marginal drag on returns (though this is reduced slightly for climate-aware diversified funds, for example a multi-asset climate-aware strategy managed by Schroders).



Pillar 2: Strategy

MEDIUM TERM



	STRATEGY								
	FutureWise TDFs	B	C	E	F	G	H	I	J
● Baseline	265	281	279	271	271	244	248	264	264
● Net zero	212	225	219	218	218	213	217	209	224
● Divergent	215	228	222	221	222	216	220	211	229
● Current Policies	206	219	215	213	213	211	215	205	220

Source: Isio, December 2022.

IMPACT ON STRATEGIES

Over the medium term (28 years) we begin to see the outcomes in the 3 chosen scenarios deviate from the baseline more drastically, with the **Current Policies scenario showing the greatest deviation from baseline**. Transitional risks by this point will have continued to increase, however, the impact of physical risks including natural disasters and shifting weather patterns will be present and increasing in severity and frequency. Indeed, decarbonisation costs under a Net Zero and Divergent scenario will have fallen as policy and action has forced prices down, thus ongoing decarbonisation.

Over the medium term the divergence from the baseline for all strategies increases markedly under all three scenarios. Over this timeframe it is in fact the Current Policies scenario which, on average, has the biggest impact on members' pot values at around -£52k across the strategies relative to their baselines.

IMPACT ON ASSET CLASSES (FIGURES IN APPENDIX 4)

Equity markets, which make up a significant proportion of strategies are likely to be most adversely impacted and most rapidly, by increasing physical risks as these are priced into equity markets more quickly relative to other asset classes. Physical risks begin to take their tolls on equities through shifting weather patterns and more frequent large-scale natural disasters.

This is most notable under a Divergent scenario.

Emerging Markets may also be particularly at risk as they are expected to experience some of the worst shifts in weather patterns and rising disasters.

Those strategies with higher exposure to equities (FutureWise TDFs as well as strategies B, C, E, F and I) again will see the brunt of this impact under all scenarios. However, there is some buffer and resilience from using climate-aware funds. Credit allocations (predominant in the FutureWise TDFs as well as strategies F, H and I) continue to provide some buffer under all scenarios, though even under a Current Policies scenario this is still a negative drag on returns versus the baseline.

Credit, and in particular climate-aware credit available in the FutureWise TDFs, continues to lead to less drag and higher resilience over these time frames

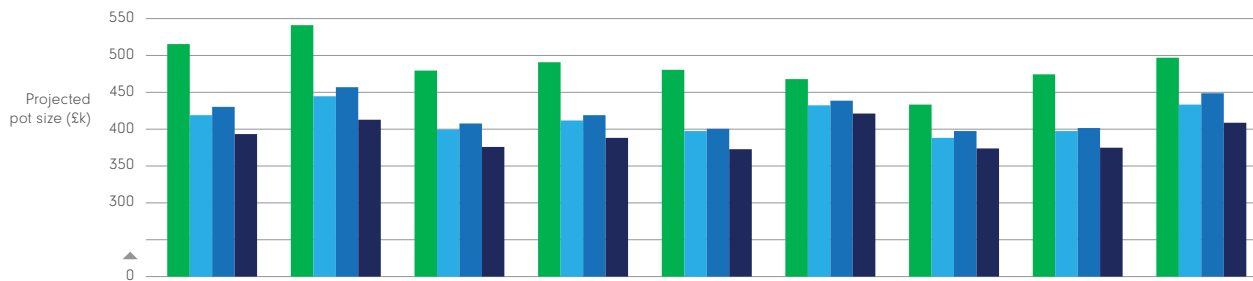
especially in the net zero and Divergent scenarios (although these are materially worse in the Current Policies scenario). Those strategies with higher fixed income (credit and gilt) allocation (strategies G and H) throughout, while having a lower base line pot size, see a reduced impact of the Current Policies scenario (around -£33k versus baseline).

Diversified alternatives (strategy E) which may include real assets such as property, infrastructure and commodities, also produce heavy negative return drags.

This is primarily down to the additional transition costs of developing and retrofitting these assets combined with the physical costs of extreme weather and natural disasters and the associated physical damage of these events.

Pillar 2: Strategy

LONG TERM



	STRATEGY								
	FutureWise TDFs	B	C	E	F	G	H	I	J
● Baseline	515	544	480	490	470	459	436	476	495
● Net zero	420	444	397	410	392	398	389	395	436
● Divergent	430	458	408	418	399	409	397	403	449
● Current Policies	389	413	375	389	374	379	376	376	408

Source: Isio, December 2022.

IMPACT ON STRATEGIES

Over the long term the divergence from baseline for the strategies becomes more pronounced. **Ultimately over this time period the impact of physical risks is dependent on whether the world has met its climate goals.** Under a net zero scenario this would have been completed, as well as under a Divergent scenario although through a more unequal and inefficient approach.

Under a Current Policies scenario, the world did not meet its climate goals and as such this is where there is the greatest impact from long-term physical risks on member outcomes. Indeed, the reduction in pot size across Current Policies scenario is on average -£98k versus net zero at -£76k and Divergent at -£66k.

IMPACT ON ASSET CLASSES (FIGURES IN APPENDIX 4)

Exposure to equities is the driver of returns here under each scenario as physical risks continue to impact returns relative to the baseline. Broadly, those strategies with higher equity allocations throughout (FutureWise TDFs as well as strategies B, C, E, F and I) while providing some of the higher baseline pot sizes are more impacted by the physical impacts across the scenarios, principally the Current Policies scenario.

Allocations to climate-aware strategies in the FutureWise TDFs and strategies B, E and F will have mitigated transition risks over the short term, providing resilience and a positive counteraction to climate drags. **However, over the long term the impact and resilience of asset classes will principally be down to the success of decarbonising across public and private markets.**

Strategies with a credit focus (strategies F, H and I) continue to provide a buffer against return drags over the long term and this continues to be enhanced for strategies with climate-aware credit allocations (strategies F, H and I). Additionally, those strategies which use diversified or multi-asset funds in the growth phase for younger members (strategies G and H), while seeing likely lower growth than investing purely in equities will manage transition and physical risks better as well providing further resilience.

Pillar 2: Strategy

Pressure on government budgets may rise to fund climate adaptation measures, including sea level defences, freshwater flooding responses, and promoting public-private partnerships. **This is therefore the timeframe under which gilts perform the most poorly.**

Those strategies with material exposure to diversified funds (strategies E, F, G and H) will also see an impact over the long term between that of equities and corporate bonds.

Diversified alternatives (used in strategy E) also continue to suffer further in the Current Policies scenario from physical costs.

Strategies with heavy investments in cash at retirement (strategy C) also see a drag over the long term.

NEXT STEPS AND ACTIONS ON THE BACK OF THE ANALYSIS

The analysis on FutureWise highlights a few key action areas for us as Trustees to focus on going forwards:

Strategy Design

- Many of our strategies already use climate-aware funds (the FutureWise TDFs use these throughout the strategy). **However, we will need to continue working with our advisers to further integrate climate-aware funds into our strategies** to help reduce the potential future impact of transitional and physical risks and take advantage of climate-related opportunities to support member outcomes.
- While useful diversifiers of return, real assets (property and infrastructure) are likely to be impacted significantly by physical risks across all scenarios. As such, it will be important to **work with our advisers to ensure that the managers which we select for this asset class are taking a proactive approach to responding to physical risks and opportunities from climate change.**

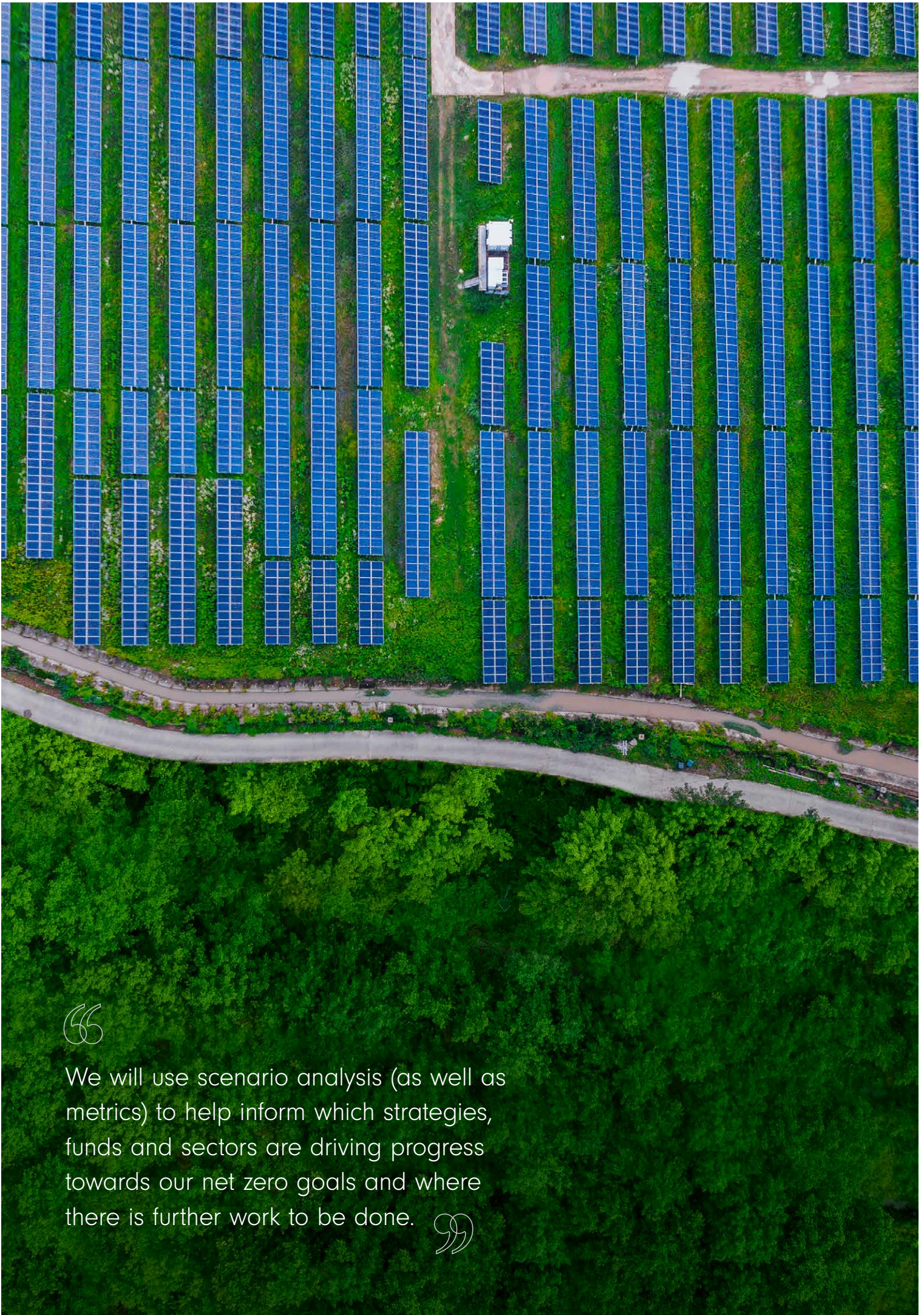
Engagement

- In the short term, a lot of the risk for members comes from transition risk and as such it will be important for us to **engage the managers of our strategies as well as our advisers on how this is being managed** with those companies most susceptible to transition risk.

- Emerging Markets play an important source of diversification and return within our strategies. However, given that they are most at risk of disruption, engagement with companies in Emerging Markets around their resilience of short-term transition and long-term physical risks will be key to managing the impact on member outcomes.

Risk Management

- It will be important **to continue to factor in the impact of these different risks over differing time horizons into our risk management framework** to ensure that we continue to identify, assess, and manage the relevant risks in the relevant time horizons (see Risk Management section, below).
- We will use scenario analysis (as well as metrics) to help inform which strategies, funds and sectors are driving progress towards our net zero goals and where there is further work to be done.
- While some asset classes will be better positioned than others to manage the impact of climate-related risks, it will be important to consider these in the round, alongside other financial risks as laid out in our risk register. This will also feed into our strategy design.



We will use scenario analysis (as well as metrics) to help inform which strategies, funds and sectors are driving progress towards our net zero goals and where there is further work to be done.



Pillar 3: Risk Management

PROCESS FOR IDENTIFYING AND ASSESSING RISKS (INCLUDING CLIMATE-RELATED RISKS)

Risk management is a continuous process of identifying, assessing and managing risks.

We maintain a Risk Policy and a Risk Framework which outlines our approach to this process and which we review and approve annually. We also maintain a risk register which documents the risks facing the Scheme and its members and which includes climate-related risks. Including climate-related risks within the risk management framework helps drive a consistent approach, in turn, aiding the identification of drivers of changes, over time.

We adopt a four-stage process within our risk management process:

- I. Identification** (of new and emerging risks or changes to existing risks)
- II. Measurement** (of new and emerging risks and reassessment of existing risks)
- III. Monitoring** (of the internal and external risk environment, risks and risk events)
- IV. Mitigation** and ongoing management of identified risks.

These activities are not undertaken independently but in tandem with each other.

The identification and assessment of climate-related risks and opportunities is undertaken within the risk register, with reviews on a quarterly basis (see more information below on how new risks are identified). The Trustee Board will review the severity and/or likelihood of climate-related risks within the risk register (see Appendix 4 for further details on the risk management processes). We set out the controls and monitoring processes that seek to respond to these climate-related risks in Appendix 2.

We also review existing and any potential new risks at least once a year and assigned an impact rating (low, medium or high) and a likelihood rating (low, medium or high), with a total Pre-Mitigation Risk Score out of 5. Should a risk become more pressing or the likelihood or severity of impact increase, we will determine the most appropriate action and owner, which will depend, in part, on the severity and nature of the risk event.

CLIMATE CHANGE RISK

Climate change risk (and the effect that physical and transition risks will have on the value of the underlying value of members' savings over varying time horizons as outlined in the strategy section) is explicitly identified as a risk on our risk register with a high impact (severity) and medium likelihood, giving a pre-mitigation risk score of 4/5. However, we have several existing controls and measures in place to manage (and as far as possible mitigate) the risks associated with climate change (as outlined further below). These are outlined below (see Managing Climate-related Risks and Opportunities in Investment Strategies). Taking these controls into account the post-mitigation score for climate change risks is a medium impact with low likelihood, giving a post-mitigation score of 2/5. We will keep this score under review as we monitor climate-related risks and our controls over time.

As part of our governance framework and as stated in our climate policy, we will also work with our advisers and Fidelity to monitor these risks and opportunities over the short, medium, and long terms, as well as looking to manage these in respect of the investments that are offered within the Scheme.

As part of reviews of the risk register, any increases in the severity and/or likelihood of climate-related risks will trigger discussions on the climate strategy and engagement priorities with managers. For example, internal drivers, where mandates fail to adhere to Scheme decarbonisation targets, the manager will be engaged to improve. Or external drivers, where climate-related education indicates an increase in global climate policy ambition, which could increase the severity of low carbon transition risks for the Scheme's investment arrangements.

Pillar 3: Risk Management

IDENTIFYING CLIMATE-RELATED RISKS AND OPPORTUNITIES

As part of our risk management process for evaluating existing risks and identifying any new risks, we also receive advice from Fidelity's team of investment professionals and climate experts who are responsible (alongside the Trustees themselves) for ensuring that the Trustees have the training and information required to identify any new climate-related risks. The Board of Trustees have annual training sessions which are primarily used for the identification of new or emerging climate-related risks.

For example, in our latest training session in 2023, Fidelity shared information and data which highlighted, within physical risks, the growing importance of nature-related risks such as deforestation and falling biodiversity and the impact that this may have on natural resources which are heavily relied upon across the globe (which in turn will impact supply chains, businesses and thus members' retirement savings). In addition, we have discussed the changes that are likely to take place over the short term in consumer demand. For example, the move away from fossil fuel powered vehicles towards electric vehicles, and the impact this may have on companies in sectors which rely on consumer demand for fossil fuels. As such it will be important to engage with these types of companies on transition risks. While training on these matters is usually provided through annual sessions, further information may be shared by Fidelity and our independent advisers as well as fund managers on these matters at quarterly ISC meetings that aid our risk management process of climate-related risks.

The climate-related training provided to us by Fidelity and advice from our advisers can also provide context on the climate-related risks that can have a material impact on the investment arrangements, namely, risks arising from the transition to a low carbon economy and physical impacts from climate change.

ASSESSING CLIMATE-RELATED RISKS AND OPPORTUNITIES

As Trustees, we seek to ensure climate-related risks feed into the Scheme's wider risk management processes. We review the relative importance of climate-related risks compared to non-climate risks by considering the severity and/or likelihood of climate and non-climate-related risks within the risk register. Climate-related risks may impact on the overarching risk budget, and we will therefore take action to manage climate-related risks to the extent possible, where appropriate.

We will draw on climate scenario analysis to inform the climate-related risks that might be most material for the Scheme, across different asset classes. Our latest scenario analysis has identified that the biggest impacts are likely going to be on equity assets which will be impacted most greatly over the short-term due to transition risks and over the long term from physical risks as well. The performance of emerging markets equities will be particularly significant under several scenarios due to the heavy reliance on fossil fuel-related sources of energy. As such in the short term we will continue to focus our engagement efforts with managers on risks to companies arising from a low carbon transition.

We expect physical risks to scale up significantly over the long term, particularly within equities but also alternatives. This means physical risks from natural disasters and resource availability shifts will become more material for member investments over the long term. Over the long term these risks are greatest under a Current Policies scenario so engagement with companies on transitioning to a net zero economy will be key.

MANAGING CLIMATE-RELATED RISKS AND OPPORTUNITIES IN INVESTMENT STRATEGIES

We adopt several risk management tools to support the management of climate-related risks and opportunities on an ongoing basis, and review these on a regular basis to ensure that these remain appropriate. These include:

- **Engagement** is an important tool for exercising our climate-related views. We have been engaging with the asset managers we use on managing climate-related risks and how they manage exposure to climate-related opportunities, within the funds and investments used by our members. We expect fund managers to vote in line with their voting policies and further engage with investee companies and assets on our behalf.
- We ensure that climate-related risks and opportunities are embedded within the Scheme's **investment processes**. We will monitor this through regular reviews of our default strategies and fund ranges with the support of Fidelity and our independent investment advisers.
- We rely on climate-related **reporting** to monitor the progress of managers, from decarbonisation objectives to climate-related engagement activities. (See the next section on Metrics and Targets).

Below, we provide a high-level overview on risk management tools adopted by the Scheme, and then set out the individual approaches adopted across the standard default strategy, bespoke strategies and self-select ranges.

Pillar 3: Risk Management

ENGAGEMENT ACTIVITY

We believe that engagement with companies on financially-material environmental, social and governance matters is one of the key forces that can contribute to the long-term sustainability of a company and thus help manage and mitigate the impact of climate change risks on behalf of our members. While we have adopted a policy of delegating engagement and voting activities with companies to the managers of the funds in which we invest, we seek to ensure that managers are using their engagement and voting rights appropriately to influence the strategies of underlying companies on matters of climate change.

We expect our fund managers to outline how they engage with companies on ESG and climate-related risks and opportunities, as well as to have a shareholder engagement policy in place. We also expect managers to engage with companies on a regular basis to encourage them to improve reporting on their carbon footprint. This will help provide greater transparency for investors, as well as help guide companies' business strategies towards reducing their carbon footprint. Managers should be able to demonstrate how they measure the effectiveness of this engagement. Our goal is to understand where manager engagement with companies has resulted in a positive outcome for members and where engagement has failed.

We use our meetings with our key managers during the year as an opportunity to understand and challenge them on these aspects, in order to ensure that they are acting in Scheme members' interests. For example, we engaged with one of our key managers in 2023 on their stewardship priorities, one of which is deforestation, to understand how this can lead to the release of large quantities of CO₂ thus leading to an increase in global temperatures and subsequent physical risks which will impact members retirement savings (see scenario analysis).

Our continued reviews over 2023 of manager engagement and voting activity, have indicated that the managers that we invest with have used their agency powers effectively to date. We assess this through the gathering and monitoring of data, for example, how and how much a manager has voted as well, clear examples of where manager engagement has led to improvements in a companies' approach to ESG matters, as well as our engagement directly with the managers.

We monitor and publish the voting and engagement activities through our annual **Implementation Statement**. This includes examples of significant votes and where managers have discussed climate-related matters with the companies in which they invest.

We also encourage managers to be signatories of the United Nations Principles for Responsible Investing (UNPRI) and the UK Stewardship Code. The managers of the funds used in the standard default strategy are signatories to UNPRI and the UK Stewardship Code.

INVESTMENTS

As of December 2022, the Scheme was operating two default strategies (FutureWise working lifestyle strategy and FutureWise Target Date Funds) for its standard sections (though the transition of members to the FutureWise Target Date Funds has since completed). For those sections that wish to create their own default investment strategy, these are known as bespoke sections. The employers of bespoke sections may hire an adviser to advise us on the appropriateness of their own default investment strategies.

We consider climate-related risk and opportunities within our relevant investment strategies, from both a top-down and bottom-up approach. From a top-down perspective, we have set total default strategy aims with regards to emissions as previously outlined (committed to a net zero target for scope 1 & 2 emissions by 2050 in line with the Paris Agreement and an interim target to halve relative carbon footprint by 2030 against a 2020 baseline⁴). This approach will aim to help reduce the impact of climate change on members' investments.

We monitor the level of carbon emissions (among other factors) of the default strategy over time to ensure it is being managed in adherence to our net zero goals and any other climate-related targets. These metrics and their position relative to our climate-related targets will be shared in our annual TCFD report.

From a bottom-up perspective, when considering the appointment of investment managers, we (with the support of our investment advisers) assess how they incorporate the management of climate-related risks and opportunities, in a manner consistent with the funds in question and regulatory responsibilities.

⁴ Using 2019 carbon emissions data

Pillar 3: Risk Management

Effective management of climate-related risks should hopefully reduce members' exposure to issuers that may have stranded assets (i.e. assets where the full value cannot be extracted due to regulatory or customer preference changes) or those companies that depend on fossil fuel-based energy production and are potentially overvalued.

We have summarised the different types of approaches that are currently being taken across one or more of our investment strategies to address climate change risks and opportunities below (please see Appendix 5 for more detail on investment strategies):

- Integration of sustainability and ESG rating methodologies to tilt investments towards companies deemed more sustainable and away from those deemed less sustainable (including their approach to managing climate-related risks and opportunities as well as their decarbonisation strategies).
- Integration of funds which aim to have a lower carbon footprint/intensity than their broader market (parent) index.
- Integration of funds which themselves have planned decarbonisation targets.
- Exclusions of companies which derive more than 5% of their revenue from certain carbon-heavy activities such as thermal coal and oil sands.
- Exclusions of violators of the United Nations Global Compact Principles (which include principles on environmental challenges, environmental responsibility and the development of environmentally-friendly technologies).
- Inclusion of funds which focus on climate change opportunities by investing in companies that create solutions for climate change, and are involved in the resource efficiency and environmental markets.
- Integration of bond funds which purchase bonds from issuers which positively contribute to the UN Sustainable Development Goals.

Over 2022 and 2023 we have overseen positive developments across both our standard section strategy as well as the strategies used in our bespoke sections, to further integrate funds which manage climate-related risks and opportunities through the approaches mentioned above.

The most notable of these is the range of FutureWise Target Date Funds which fully integrates many of these approaches and processes. These approaches will help to mitigate climate-related risks, take advantage of climate-related opportunities, and help us meet our net zero targets.

We continue to develop our investment strategies to address climate change risks and opportunities and will detail further enhancements and changes in future TCFD reporting.

More information on how climate risks and opportunities are being considered in the standard default strategy and other investment strategies are detailed in Appendix 5.

FIDELITY MANAGEMENT OF RISKS AS THE MASTER TRUST PLATFORM PROVIDER

Fidelity is authorised by the Prudential Regulation Authority ("PRA") and regulated in the UK by the PRA and Financial Conduct Authority ("FCA"). The Board of Fidelity needs to identify and obtain prior regulatory approval of senior managers responsible for risk, compliance, and internal audit in addition to executive roles. Fidelity has risk specialists in first-line and second-line roles, including pension experts.

The Trustees review Fidelity's risk management practices through discussion with and challenge of its representatives, from direct interaction with Fidelity's operations teams during the annual visit to Kingswood (when possible) and through the independent audit of the Scheme by its appointed auditors (the MAF05/20).

We also benefit from the memberships that Fidelity has with relevant associations such as The Institutional Investors Group on Climate Change (IIGCC). The IIGCC aims to work with businesses, policy makers and investors to define the investment practices, policies and behaviours required to address climate change, allowing us to contribute towards wider public policy solutions that ensure a seamless transition to a low carbon economy. Fidelity is also a member of the UK Stewardship Code which sets out stewardship principles for asset managers and owners.

Fidelity is a regulated group with its own risk management framework, policies and risk experts. We monitor management information and challenge Fidelity's response to risk events and risk mitigation activities.

You can read more about how Fidelity takes into account sustainable investing and climate change matters [here](#).

Pillar 4: Metrics and Targets

MEASURING AND ASSESSING CLIMATE IMPACT

As we outlined in last year's report, metrics can be a useful way to identify, manage and assess the impact of climate-related risks and opportunities and the associated financial risks. They can also help manage the strategic direction of travel for our investment strategies.

We believe it is important to use a variety of metrics and for this TCFD report to the end of June 2023, we will be reporting on four metrics, in line with those recommendations from the DWP, that we believe will act as appropriate measures of the climate-related risks and opportunities. We will keep the appropriateness and effectiveness of the metrics chosen under review.

The requirements set out by the DWP state that metrics will need to be produced for investments with over £100m invested or which represent 10% of assets of the Scheme. For 2022, (assets data calculated as of 31 December 2022) this covers most of the Scheme's default investment arrangements. However, to support our climate-related assessments, we have decided to calculate these metrics across all default investment strategies for the Scheme subject to any current coverage limitations set out on page 38.

The metrics will be measured based on the monies invested and asset allocation of the relevant investments at the end of every calendar year (end of 31 December). In addition, we will monitor the metrics as at the end of the Scheme Year (30 June) on an annual basis to monitor progress in between these periods. The four metrics that we have chosen are:

The three metrics that we have chosen are:

Metric type	Metric	Value	Rationale
Absolute Emissions Metric	Total Greenhouse Gas Emissions (Scope 1&2) tCO _{2e} , measures the total absolute greenhouse gas emissions attributable to a given investment portfolio. In this year's report we have also separately shown Scope 3 emissions.	tCO _{2e}	This gives members an overview of the real world emissions attributed to the strategy based on its investments in underlying companies and assets.
Emissions Intensity Metric	Relative carbon footprint: Measures how many tonnes of tCO _{2e} emissions per each million invested (£) within a portfolio.	tCO _{2e} per £million invested	This allows members to understand the emissions per £ invested, irrespective of the size of the strategy thus allowing a consistent basis for comparison. This metric is what we will use to monitor progress of our net zero goals.
Portfolio Alignment Metric	Portfolio alignment: Provides a forward-looking metric projection of estimated expected future emissions associated with a given investment portfolio.	% deviation from the IEA Sustainable Development Scenario (SDS) ⁵ 2030 and 2050 targets	This provides members with an indication of the emissions trajectory of the companies within the portfolio and how well they are aligned to a particular target, in this case the SDS. As a "below 2°C" pathway, the SDS represents a gateway to the outcomes targeted by the Paris Agreement.
Additional Climate Change Metric	Data quality	% Disclosure	This illustrates to members the % of available data which has been deemed reliable by the data provider (with the remaining % being modelled by the data provider).

Please see appendix 1 - Glossary for further details of the calculations of the metrics we use.

⁵ Introducing the Sustainable Development Scenario - Event - IEA

Pillar 4: Metrics and Targets

DATA PROVIDER & METHODOLOGY

To carry out our analysis of the data, we have sought to obtain reliable climate-related data that can be obtained at proportionate cost. As such we will be using the same approach that we used in our previous 2022 TCFD report, using a system called ISS-ESG provided by Institutional Shareholder Services (ISS). We chose this system primarily because ISS have a wide coverage and deep methodology for estimating data where it is not reported on by companies. ISS also carry out an assessment on all reported data to test validity.

ISS-ESG update their emissions data on an annual basis at the end of each year. This process ensures that all the emissions data used in the reports are from the same fiscal year. For the purpose of this TCFD Report, we have measured data across the time periods shown in the table below. The methodology used by ISS-ESG for calculating each of the metrics can be found in the Glossary and more information about the methodology ISS-ESG is available on their website.

For each of the metrics we have aggregated on the total investments across all member age cohorts, for the investment strategies assessed. The data is presented in tables by investment strategy.

Time Period (Year)	Date Assets Calculated	Market Cap / Enterprise Value Data	Financial Year Emissions & Revenue
2020	31st December 2020	31st December 2020	2019
2021	31st December 2021	31st December 2021	2020
2021	31st December 2022	31st December 2022	2021

Pillar 4: Metrics and Targets

EMISSIONS DISCLOSURE

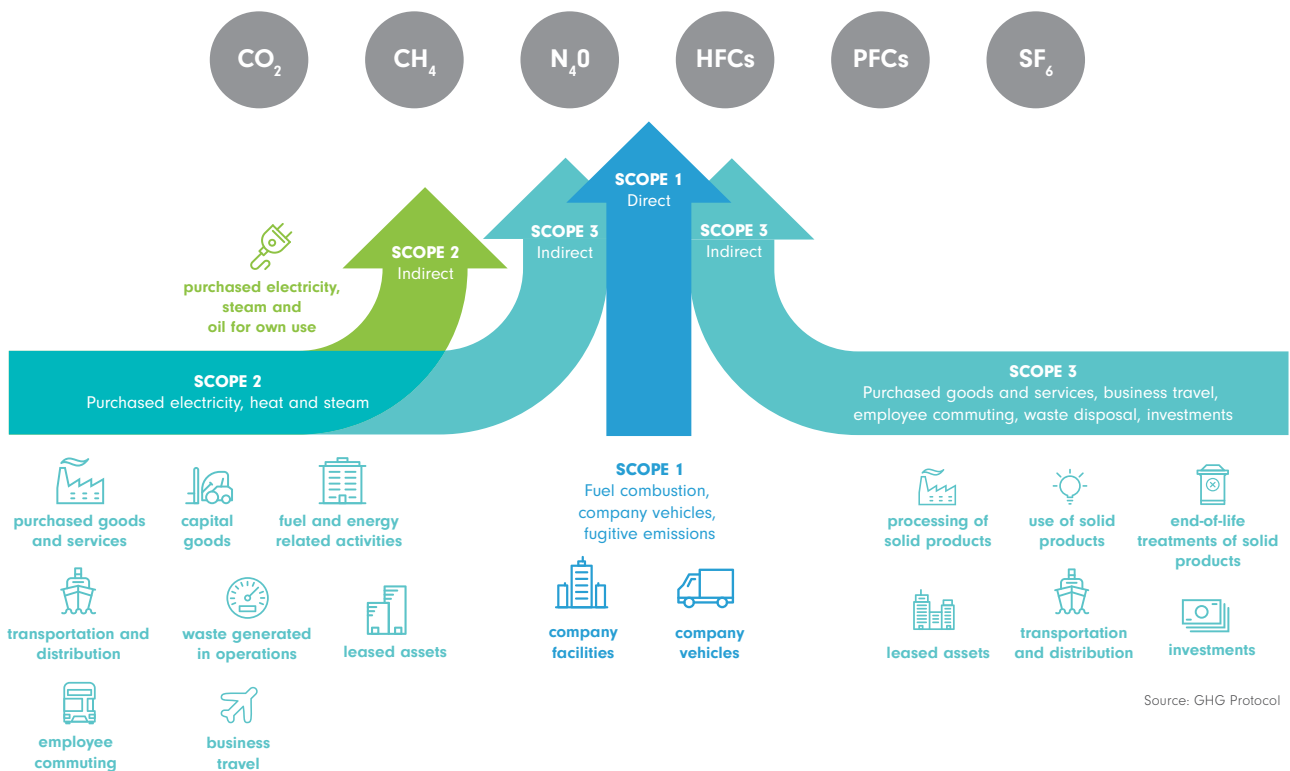
We see emissions disclosure as an important tool to ascertain whether a company is measuring its own carbon footprint. Disclosure, in and of itself, is an important indicator for whether that company is taking climate risks and opportunities into account. A company's willingness to publish emissions figures provides a baseline from which reductions can be measured.

These metrics help us understand the current state of a strategy and the companies invested in from a climate-related perspective. Emissions are broken down into the following:

- **Scope 1 emissions** – These are direct emissions from company owned, purchased and/or controlled energy sources.
- **Scope 2 emissions** – These are indirect emissions from the generation of purchased energy.
- **Scope 3 emissions** – These are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

The diagram below illustrates these types of emissions with examples.

Overview of GHG emissions



A NOTE ON SCOPE 3 EMISSIONS

In this report, in line with DWP requirements, we have shared scope 3 emissions data for all default strategies. As we outlined in our 2022 TCFD report, Scope 3 emissions data continues to be typically unreliable, and much of the data available is leveraged using modelled estimates (which can vary considerably) as companies currently do not tend to have or report Scope 3 emissions from their upstream supply chains (i.e. all emissions that occur in the lifecycle of a product up to the point of sale).

The accuracy of Scope 3 emissions is in the early stages of evolution, and we expect this to improve over time as disclosure requirements increase, including under the ISSB (International Sustainability Standards Board) which in turn will drive greater transparency of company supply chains and thus hopefully reliability of Scope 3 data.



A company's willingness to publish emissions figures provides a baseline from which reductions can be measured.



Pillar 4: Metrics and Targets

ASSESSING CLIMATE-RELATED RISKS AND OPPORTUNITIES

Our Target

We believe setting a target is a useful approach for trustee boards to track their efforts to reduce climate change risk exposure and maximise climate change investment opportunities. In line with our net zero goals and the DWP requirements around target setting, as previously outlined, we have set the following targets for the Scheme across the range of our default investment strategies:

1. Halve the relative carbon footprint (of Scope 1 and 2 emissions) by 2030 compared to a 2020 baseline (using 2019 emissions & revenue data).
2. Reach net zero by 2050 (achieving an aggregated carbon footprint for scope 1 and 2 emissions of zero).

To monitor progress against these targets, we are using the relative carbon footprint (emissions intensity metric) of those popular investment arrangements in the Scheme. We will monitor this metric with the aim to reduce that year-on-year towards a 50% reduction in 2030 (from the 2020 baseline).

Measurement

As the Master Trust is a multi-section Scheme, sections will come and go over time. To be able to consistently track the Scheme's relative carbon footprint and progress towards our goal, we will calculate a weighted average relative carbon footprint across all of the Scheme's popular arrangements. This will show how much each section's popular arrangement (currently default strategy) is contributing towards the total relative carbon footprint of the Scheme, weighted by the assets held within the arrangement. The disclosure on coverage and methodologies in this report are also applicable to the metric applied to the target.

Data coverage

For the context of the other metrics in this report we will begin with the coverage of the data we have available, as we believe it is important to highlight gaps in the available coverage of investments using the ISS-ESG tool.

The methodology used to gather this information via our licence with ISS-ESG is not currently able to support the analysis of certain instruments (principally cash, derivatives and sovereign bonds), which have therefore been excluded from the analysis as we have not been able to source this data via an alternate method at a reasonable cost. We recognise that these asset classes (including sovereign bonds) can represent material portions of our strategies and as such, Fidelity have identified a provider for our future reports that would allow us to include these asset classes in our metric reporting that would further close existing data gaps. We expect to begin using this functionality for our 2024 TCFD report. For this report however, this means that this analysis only currently covers data which is available in relation to public equity and corporate bonds. Additionally, while we aim to use data which is as complete as possible, there are still limits to the proportion of the data available which can be mapped. As such where this is not possible, this data has not been included in the calculations. We will continue to work with Fidelity and tool providers to narrow these data gaps, as well as engaging with our fund managers on pushing improved disclosure from companies on reliable carbon data.

Pillar 4: Metrics and Targets

With the remaining data, the ISS-ESG system looks to analyse as much as is practicable; however, the Trustees, Fidelity and ISS-ESG cannot be and are not responsible for any gaps in data due to lack of reporting by companies held within investments. We have detailed what proportion of the strategies' total underlying investments are recognised by the system and thus 'covered', for the years of 2020, 2021 and 2022 below. Note that while we expect coverage to increase on average each year, as more companies report emissions or have estimated emissions calculated, individual strategies may see a fall in coverage if changes are made or data is not available on the underlying securities for those strategies as of the relevant time periods. As explained in the 'Disclosure' section of this report, ISS-ESG continues to rely on a proportion of estimated data, which is expected to be superseded by greater reported numbers as company reporting requirements take effect.

Please note that whilst the Scheme year runs to 30 June, the data available was to the end of the calendar year (31st December), and therefore the reporting periods below are set out by calendar year rather than Scheme year.

As of December 2022, the total coverage across all the strategies is 72.0% (this is down slightly from 75.3% at the end of 2021). This means that, as at the end of December 2022, ISS-ESG could identify and analyse around 72.0% of the underlying investments of the strategies. Part of this reduction in coverage can be put down to the more defensive positioning of funds used in our strategies in late 2022. Given higher volatility in the markets at the time, some multi-asset funds and investment strategies began to tilt out of equities towards sovereign bonds to manage the level of risk within the funds. As we do not have the ability to cover sovereign bonds currently this has meant a slight fall in the coverage. As mentioned, we are working with Fidelity to incorporate metrics on sovereign bonds in future reports.

Coverage	Total Strategy Assets (£m)			Coverage %			Assets covered in analysis (£m)		
	2020	2021	2022	2020	2021	2022	2020	2021	2022
FutureWise WLS	1,361	2,022	2,490	65.5%	78.2%	68.4%	891	1,581	1,703
FutureWise TDFs	N/A	N/A	28	N/A	N/A	97.5%	N/A	N/A	28
Strategy B	968	1,167	1,064	77.6%	78.1%	84.4%	751	912	899
Strategy C	299	360	339	73.7%	72.6%	68.0%	220	262	230
Strategy D	204	227	201	64.2%	64.8%	57.5%	131	147	115
Strategy E	106	132	128	77.3%	78.1%	77.2%	82	103	99
Strategy F	163	222	205	75.9%	77.6%	76.0%	124	172	156
Strategy G	N/A	167	155	N/A	61.0%	60.1%	N/A	102	93
Strategy H	N/A	115	105	N/A	40.8%	69.6%	N/A	47	73
Strategy I	12	13	13	74.2%	56.0%	51.3%	9	8	7
Strategy J	N/A	N/A	1	N/A	N/A	70.7%	N/A	N/A	1
Total/Average	3,113	4,427	4,729	70.9%	75.3%	72.0%	2,208	3,335	3,403

Source: Fidelity International. Asset data calculated at end of calendar year. Climate data taken from ISS-ESG based on available coverage and disclosure.

Market cap and EV data based on 31 December, 2020, 2021 and 2022. Emissions data based on 2019, 2020 and 2021. 'N/A' indicates Scheme onboarded after end of calendar year.

Pillar 4: Metrics and Targets

DATA QUALITY (DISCLOSURE)

As part of analysing the data available ISS collects carbon data made available by a company through formal reporting (for example sustainability reports or reporting directly to the CDP). Having collected this data, ISS-ESG then checks the trustworthiness of the data through quantitative and qualitative analysis which includes looking at elements such as the deviation from previous disclosures, the deviation between different sources, external validation of the data and the company's experience in carbon footprinting. A manual review by ISS-ESG analysts may be required where data is determined to have a low trustworthiness rating.

Whilst we hope that most companies report reliable emissions that ISS-ESG can determine as trustworthy, some may not currently disclose emissions data or may report data that ISS-ESG believes may be unreliable. For these companies, ISS-ESG runs modelled estimations. We have detailed the proportion of **reliable** emissions data ISS-ESG is able to obtain and analyse (%), subject to the coverage limitations set out in the previous section.

This is presented on a weighted basis, which means that the figure represents the disclosure based on the weight of those companies included in the strategy. For example, if a strategy has 1,000 underlying securities and 700 of them are reporting reliable emissions data, which represent 80% of the weight of the portfolio by value, this will be shown as 80%. The remaining 20% will be modelled estimations conducted by ISS-ESG.

As of December 2022, the average disclosure across our strategies was 93.1%, which means on average 6.9% of the data was estimated. This is a continued improvement on last year's disclosure and represents a 9.6% increase in reliable reporting from companies since 2020. This is due to a combination of an increased quantity of disclosures by companies as well as an improvement in the reliability of the data that they are disclosing. We expect companies to continue to improve the quality of their published emissions data, and we will be working closely with our fund managers to ensure that they are working with companies to do so.

Disclosure	Assets Covered in Analysis			Disclosure Number/Weight		
	2020	2021	2022	2020	2021	2022
FutureWise WLS	891	1,581	1,703	82.5%	86.5%	94.0%
FutureWise TDFs	N/A	N/A	28	N/A	N/A	96.3%
Strategy B	751	912	899	84.3%	92.2%	92.2%
Strategy C	220	262	230	87.8%	89.7%	94.5%
Strategy D	131	147	115	82.3%	85.6%	92.1%
Strategy E	82	103	99	85.1%	85.2%	90.1%
Strategy F	124	172	156	78.2%	85.0%	89.9%
Strategy G	N/A	102	93	N/A	88.8%	93.5%
Strategy H	N/A	47	73	N/A	89.5%	89.8%
Strategy I	9	8	7	83.6%	90.2%	92.0%
Strategy J	N/A	N/A	1	N/A	N/A	82.7%
Total/Average	2,208	3,335	3,403	83.5%	88.3%	93.1%

Source: Fidelity International. Asset data calculated at end of calendar year. Climate data taken from ISS-ESG based on available coverage and disclosure.

Market cap and EV data based on 31 December, 2020, 2021 and 2022. Emissions data based on 2019, 2020 and 2021. 'N/A' indicates Scheme onboarded after end of calendar year.

Pillar 4: Metrics and Targets

ABSOLUTE EMISSIONS METRIC - TOTAL GREENHOUSE GAS EMISSIONS

Having illustrated where we have coverage and reliable disclosure of data, below we have laid out our other metrics. We have started with the absolute emissions metrics (Scopes 1 & 2). This represents the total tonnes of CO₂ equivalent emissions generated by each strategy.

As expected, absolute emissions vary considerably between the different arrangements that we are reporting on and are largely driven by the level of assets in each strategy. Also as expected, strategies with fewer assets tend to have lower absolute emissions than those with greater assets. Additionally, we expect the absolute emissions for strategies to grow over time as the amount of assets in the strategies grow and the quality of emissions data improves. However, we hope that the rate at which absolute emissions grows (per £ invested) to slow over time. This will be influenced by both the types of funds which are included within the strategy as well as the management of the Scope 1 and 2

emissions produced by the underlying companies in which the strategies invest. In line with regulatory guidance, for this years' report we have also included Scope 3 emissions data.

As expected, the reported emissions for 2022 are broadly tied to the amount of assets in each strategy. The trend over 2020, 2021 and 2022 is also linked to the coverage for each strategy. The most notable change is for the FutureWise WLS which is predominantly down to the fall in coverage (78.2% to 68.4%). There are minor improvements in scope 1 & 2 emissions from the other strategies.

We also see that Scope three emissions are largely tied to the amount of assets in each strategy, though we re-emphasise our comments made earlier in this section. While we recognise the importance of reporting scope three emissions (as these can often represent the largest source of a company's emissions), further progress is required around the quantity and reliability of data available from companies in order to draw meaningful conclusions from data.

Absolute Emissions	Scope 1 & 2 Emissions			Scope 3 Emissions
	2020	2021	2022	2022
Strategy				
FutureWise WLS	88,891	129,304	82,637	959,172
FutureWise TDFs	N/A	N/A	1,061	14,800
Strategy B	34,577	37,413	36,323	505,674
Strategy C	15,909	16,748	15,739	149,323
Strategy D	11,034	10,405	7,865	70,909
Strategy E	5,904	4,887	4,815	50,818
Strategy F	6,698	8,548	8,213	86,940
Strategy G	N/A	7,413	7,181	61,682
Strategy H	N/A	2,544	3,758	41,176
Strategy I	565	477	452	3,404
Strategy J	N/A	N/A	41	391
Total	163,578	217,739	168,085	1,944,289

Source: Fidelity International. Asset data calculated at end of calendar year. Climate data taken from ISS-ESG based on available coverage and disclosure. Market cap and EV data based on 31 December, 2020, 2021 and 2022. Emissions data based on 2019, 2020 and 2021. 'N/A' indicates Scheme onboarded after end of calendar year.

Pillar 4: Metrics and Targets

PORTFOLIO ALIGNMENT METRIC

Below we have set out the analysis of each strategy against our Portfolio Alignment Metric, which measures the deviation from the International Energy Agency's SDS which aligns with the Paris Agreement. A positive figure indicates that based on the current coverage, disclosure and investment allocation, the strategy is on track to produce emissions above the SDS target, while a negative figure indicates that the strategy is on track to produce emissions below the SDS target. We have weighted this by strategy at the bottom of the table to show the overall % deviation across the strategies.

As at the end of December 2022, the weighted average deviation from the SDS across the strategies was 2.5% to 2030 and 207.2% to 2050. The difference between the 2030 and 2050 figures is largely down to the carbon budgets of the SDS. For 2030 the carbon budget (i.e. the amount of emissions to match that of the SDS) is higher in 2030 than for 2050. This means that based on current coverage and disclosure, companies will need to significantly reduce their emissions and carbon footprint to meet the 2050 SDS scenario.

Additionally, exclusions and tilts, which apply to most of the strategies continue to impact the results. Many of the strategies in the table apply exclusions to certain sectors or industries (for example oil sands and thermal coal). While the impact of these exclusions can be demonstrated by the reduction in the relative carbon footprint shown in the following section, it is often companies within emission intensive industries (such as those excluded) that tend to have an emission reduction plans in place (and explicit net zero targets). The impact of this has in part contributed to the forecasted increase in deviation from the SDS.

Overall, these figures for 2022 are a reduction from the 2021 figures (16.5% by 2030 and 251.9% by 2050). This is a positive step, especially for the 2030 goal, though we note that there is more work required here by companies to bring their emissions in line with this scenario and the metrics highlight the importance of ensuring that companies across all sectors have plans in place to address climate change and net zero goals. We will be working closely with our managers to ensure they are engaging with companies across all sectors on emission reduction plans.

Portfolio Alignment	% deviation from SDS target 2020		% deviation from SDS target 2021		% deviation from SDS target 2022	
	2030	2050	2030	2050	2030	2050
FutureWise WLS	33.1%	197.8%	30.3%	297.2%	-0.5%	201.7%
FutureWise TDFs	N/A	N/A	N/A	N/A	-7.4%	166.9%
Strategy B	-28.9%	80.6%	-28.10%	111.70%	-22.4%	140.1%
Strategy C	34.9%	184.4%	60.7%	333.8%	80.0%	396.4%
Strategy D	11.4%	168.9%	22.8%	337.9%	-13.7%	198.7%
Strategy E	19.2%	182.0%	-3.8%	192.7%	1.3%	190.4%
Strategy F	5.4%	149.0%	29.3%	282.2%	29.5%	278.8%
Strategy G	N/A	N/A	64.6%	433.7%	55.5%	372.6%
Strategy H	N/A	N/A	46.0%	338.6%	39.3%	247.5%
Strategy I	39.5%	196.8%	23.6%	270.1%	8.7%	229.2%
Strategy J	N/A	N/A	N/A	N/A	33.2%	301.2%
Total/Average	8.8%	151.5%	16.5%	251.9%	2.5%	207.2%

Source: Fidelity International. Asset data calculated at end of calendar year. Climate data taken from ISS-ESG based on available coverage and disclosure. Market cap and EV data based on 31st December, 2020, 2021 and 2022. Emissions data based on 2019, 2020 and 2021. 'N/A' indicates Scheme onboarded after end of calendar year.

Pillar 4: Metrics and Targets

RELATIVE CARBON FOOTPRINT

For this year's report, to show the information as clearly as possible, we have shown the individual relative carbon footprint for each strategy and the progress towards net zero target (weighted carbon footprint) separately. Below we have outlined the relative carbon footprint metric for each default strategy based on available coverage and disclosure.

There is a mix of trends across the strategies (with some carbon footprints increasing and some falling) though we are pleased to see a reduction in the carbon footprint of one of our standard default strategies (FutureWise WLS) over time, as well as a lower carbon footprint for our new default strategy (FutureWise TDFs). We will continue to monitor these trends going forwards and engage with our advisers and managers on what we can do to see positive improvement in these metrics.

Relative Carbon Footprint (Scope 1 & 2) target	Relative Carbon Footprint (tCO ₂ e/Portfolio Value £m)		
	2020	2021	2022
Strategy			
FutureWise WLS	99.8	81.8	48.5
FutureWise TDFs	N/A	N/A	38.5
Strategy B	46.0	41.0	40.4
Strategy C	72.3	64.0	68.3
Strategy D	84.3	70.7	68.1
Strategy E	71.8	47.3	48.7
Strategy F	54.0	49.7	52.7
Strategy G	N/A	72.6	77.2
Strategy H	N/A	54.1	51.2
Strategy I	64.5	63.4	69.4
Strategy J	N/A	N/A	63.1

Source: Fidelity International. Asset data calculated at end of calendar year. Climate data taken from ISS-ESG based on available coverage and disclosure. Market cap and EV data based on 31 December, 2020, 2021 and 2022. Emissions data based on 2019, 2020 and 2021. 'N/A' indicates Scheme onboarded after end of calendar year.

Pillar 4: Metrics and Targets

TARGET

As previously highlighted, our target as part of this reporting is to achieve a 50% reduction in our overall carbon footprint (measured across all of our default strategies on a weighted basis). Currently this includes scope 1 and 2 emissions only. To calculate our progress on this, we have taken the carbon footprint of all our default strategies and weighted these based on the proportion of assets invested in each, out of all the assets across the strategies. We have shown the weighting of each strategy in the table below. As a reminder, this data is based on the available coverage and disclosure detailed in above sections.

By combining the relative carbon footprint and the weight for each strategy we have calculated the weighted carbon footprint for each strategy. For example, the standard default strategy is the largest strategy with a weighting of 50.0% of the Scheme's assets at the end of December 2022. We have multiplied the carbon footprint of the strategy (48.5) by the weight of the strategy (50.0%) to get the contribution of the strategy to the relative carbon footprint of the Scheme (24.3).

At the bottom of the table, we have outlined the total relative carbon footprint for the Scheme as of 2020, 2021 and 2022 as well as the 2030 goal (37.0 tCO₂e/£1m Portfolio value) which is based on a 50% reduction relative to the 2020 figure⁶. The total figures are what we are using to track our target.

Overall, we are pleased to see a fall in our carbon footprint from 2020 to 2022 which helps us towards achieving our 2030 target. From 2021 to 2022, based on the available coverage and disclosure, the Scheme's relative carbon footprint fell from 65.3 to 49.4 (a reduction of 15.9 tCO₂e per £1m invested) which represents a fall of 24% over the year and, from 2020, means we are 67% of the way towards our target of 37.0 tCO₂e per £1m invested. This reduction in carbon footprint is down to a combination of an improvement in the carbon footprint of underlying companies and the integration of more sustainable funds in the default strategies, but it does also partially include the fall in emissions globally between 2019 and 2020 due to lockdowns, because of the COVID-19 pandemic.

Relative Carbon Footprint (Scope 1 & 2)	Scheme Default Strategy Weight			Relative Carbon Footprint (tCO ₂ e/Portfolio Value £m) weighted by strategy			Target (50% of 2020)
	2020	2021	2022	2020	2021	2022	
Strategy							
FutureWise WLS	40.3%	47.4%	50.0%	40.3	38.8	24.3	20.1
FutureWise TDFs	-	-	0.8%	-	-	0.3	-
Strategy B	34.0%	27.3%	26.4%	15.7	11.2	10.7	7.8
Strategy C	10.0%	7.9%	6.8%	7.2	5.0	4.6	3.6
Strategy D	5.9%	4.4%	3.4%	5.0	3.1	2.3	2.5
Strategy E	3.7%	3.1%	2.9%	2.7	1.5	1.4	1.3
Strategy F	5.6%	5.2%	4.6%	3.0	2.6	2.4	1.5
Strategy G	-	3.1%	2.7%	-	2.2	2.1	-
Strategy H	-	1.4%	2.2%	-	0.8	1.1	-
Strategy I	0.4%	0.2%	0.2%	0.3	0.1	0.1	0.1
Strategy J	-	-	0.0%	-	-	0.0	-
Total/Average	100%	100%	100%	74.1	65.3	49.4	37.0

⁶ Using 2019 carbon emissions data

Pillar 4: Metrics and Targets

It's important to note that based on the disclosure figures, we have, to some extent, relied upon estimated data to measure progress against the set target. On a weighted basis this is 6.9% of the available data analysed being estimated across the Scheme's investment strategies. It is also important to be aware that these figures do not currently include sovereign bonds and as such, once we are able to integrate this reporting these figures may change.

Currently, the standard default strategy (the combination of the FutureWise WLS and FutureWise TDFs) accounts for half of all the Scheme's investments in popular arrangements and partly due to this, is the largest contributor to the relative carbon footprint. As such, reducing the carbon footprint of this strategy by half will be key to achieving our 2030 goal. The manager has put in place their own targets of halving emissions on the standard default strategy by 2030 and achieving net zero by 2050 and we will be working with them closely on this.

We recognise that over time as coverage and disclosure improves, our reporting on these metrics will become more useful and reliable. We will continue to engage with Fidelity and our investment advisers and third parties on decarbonisation and increased and improved reporting, to support momentum in this area. As the Scheme grows, we will also look at reviewing these metrics for any new onboarding Schemes which use a bespoke default strategy to understand how this will impact our current relative carbon footprint and progress towards our goals.



Conclusions and Next Steps

We are pleased with the progress that we have made since our last TCFD report but note that climate reporting is a journey and there is further work to be done to improve reporting and ensure we hit our net zero targets.

We will use the output of our reporting to aid in our climate strategy and enhance our reporting going forwards.

Our key areas of focus going forwards:

- Continued evolution of our investments (including our default strategies) to further reduce our carbon footprint and help meet our net zero targets.
- Further engagement with our investment managers to encourage companies to improve the quality of their disclosure of carbon data.
- Continued evolution of our governance and risk management frameworks in line with a best-practice approach.



Appendix 1 – Glossary

Absolute emissions (Scope 1 & 2):

$$\sum_1^n \text{Position Ownership Value} \times \text{Position Scope 1 \& 2 Emissions}_i$$

Carbon dioxide removal (CDR): is defined as actions to remove emissions from the atmosphere, using man-made technologies (such as carbon capture utilisation and storage), or nature-based solutions (such as reforestation).

Irreversible climate tipping points: are stepwise changes in the climate, such as permafrost melting releasing further emissions into the atmosphere. The consideration of irreversible tipping points is limited within the climate scenarios and modelling conducted by investors.

Paris Agreement: International legally binding treaty on climate change adopted in 2015 in Paris at COP 21. Its goal is to limit global warming to well below 2°C, preferably 1.5°C compared with pre-industrial levels.

Net zero: Where emissions released into the atmosphere are equal to those emissions taken back out of the atmosphere, through the application of nature-based solutions or man-made technology. This may include carbon offsets where required.

NGFS: Network for Greening Financial System ('NGFS') - a group of organisations looking to scale green finance and promote consistency in the climate scenarios adopted by the finance industry.

Position ownership ratio: \sum_1^n

$$\sum_1^n \frac{\text{Position Value}}{\text{Enterprise Value Including Cash (EVIC)}}$$

Relative carbon footprint⁷:

$$\frac{\text{Carbon Footprint}}{\text{Assets Under Management}}$$

SDS scenario: The SDS is tied to a certain carbon budget which specifies the cumulative amount of CO₂ emissions permitted to remain to limit warming to 1.5°C (with 50% probability). The ISS-ESG scenario analysis combines the IEA scenarios with the Sectoral Decarbonization Approach (SDA) by allocating a carbon budget to a company-based on its market share and the expected emissions trajectory associated with that sector.

Systematic risk: This is risk that applies to and can affect an entire industry, economy or system, rather than one particular entity.

Stranded Assets: Assets which once had value but no longer do due to external changes such as technology markets or societal preferences.

tCO₂e: Tonnes of carbon dioxide equivalent. This is a standard measurement of emissions from various greenhouse gases by converting other gases to the equivalent amount of CO₂.

⁷ Adjustments and minor differences exist due to data coverage being below 100%

Appendix 2 – Risk Register

We outline climate change as a specific risk in our risk register. Specifically, the impact/risk of climate change on the value of underlying assets held by us and thus members' pension savings. The risk register outlines the following controls and monitoring in place around this risk, split across:

Investment - Standard Sections

The default strategy invests in sustainably oriented investments which aim to reduce the risks related to climate change through reducing investment in those companies most greatly exposed to the risks of climate change and increasing investment in those companies best placed to take advantage of climate change opportunities (such as renewable energy companies).

The default strategy will exclude investment in companies (through certain funds) where the fund manager feels engagement on climate-related matters is not working.

For self-select investors, the Scheme offers climate-oriented investments (across multiple risk levels) specifically designed to invest in assets that aim to mitigate the risks of climate change and take advantage of opportunities that it presents.

The goal for the default strategy is to halve emissions by 2030 (compared to a 2020 baseline) and reach net zero by 2050 – a journey that will aim to reduce the impact of climate change on members' investments.

Engagement

The fund manager engages with companies on a regular basis to encourage them to improve reporting on their carbon footprint, as this provides greater transparency for fund managers and helps guide their business strategy towards reducing their carbon footprint.

We engage with fund managers to ensure they are using their engagement and voting rights appropriately to influence the strategies of underlying companies on matters related to climate change.

As part of TCFD requirements, the Trustees will monitor the level of carbon emissions (among other factors) of the default strategy over time to ensure it is being managed by the fund manager in adherence to the net zero goal and any other climate-related targets.

Reporting

The carbon footprint of funds is displayed on quarterly fund factsheets which allows members to compare the footprint of different funds and choose funds based on this metric.

Appendix 3 – Roles and Responsibilities

The below provides further details on the climate-related roles and responsibilities of the Scheme's fund managers and advisers, as set out in the climate governance statement.

Fidelity responsibilities:

Fidelity will:

- Provide ongoing support to the Trustees in the effects of climate change on the Scheme's investments.
- Support us in ensuring that the Scheme's investment advisers, legal advisers and fund managers have a clear understanding on their climate-related responsibilities, as set out within service or fund manager agreements.

Fidelity will, on at least an annual basis:

- Support us in regular reviews for the identification, assessment and management of climate-related risks and opportunities, over the short-term, medium-term and long-term time horizons.
- Support reviews on the integration of climate change within governance arrangements, risk register and investment policies.
- Support us in assessing how external advisers and providers have performed against their climate responsibilities, on a regular basis.
- Support us in identifying managers which align to our climate change beliefs and policies.
- Provide us with updates on the Scheme's investments with respect to sustainable investment and climate change.
- Support us in reviews of the fund managers' approaches to and effectiveness in addressing climate change, including policies, processes, resources and expertise. This includes but is not limited to the climate voting and engagement record.
- Support with the selection, collection and presentation of metrics, targets and scenario analysis required for the annual TCFD report, as well as more qualitative considerations such as governance and strategy where required.
- Support us in providing members with information and engagement tools to collate member views on climate change, as appropriate.
- Provide the agreed climate-related metrics in relation to the Scheme's investments and focus on increasing the quality and availability of these metrics, over time.
- Measure performance in relation to the climate-related target set by the Scheme.
- Support us with training around climate-related matters.

Fidelity also provides sustainability and climate-related training to its employees including those who are responsible for running the Scheme on a day-to-day basis as well as those who manage the standard default strategy.

Investment adviser responsibilities:

We employ investment advisers for the standard section and any employer-designed bespoke strategies, whose responsibilities include, but are not limited to, the following:

- Assisting us in meeting our legal obligations in relation to climate change, in partnership with the Fidelity, the legal advisers and fund managers.

The investment advisers will, on at least an annual basis:

- Advise on the ESG and climate considerations that may arise as risks and/or opportunities in the Scheme's governance arrangements, investment beliefs and policies, strategy, risk management and monitoring.
- Review the material climate-related risks and opportunities for the Scheme, and how these might play out over the short-term, medium-term and long-term time horizons selected by the Scheme.
- Assess existing and proposed managers and mandates from the perspective of ESG and climate-related expertise, resources, policies and processes, as part of manager selection and retention processes. Support us in engaging with managers on these matters.
- Review the arrangements from an ESG and climate perspective.
- Assist with the selection, collection and presentation of the metrics, target and scenario analysis required for the annual TCFD report where required, as well as support in more qualitative areas, such as climate governance and strategy.
- Collate information on the climate-related voting and engagement activity of underlying managers for inclusion in the Implementation Statement where required.
- Provide us with training and relevant updates on relevant ESG and climate-related matters where required.

Appendix 3 – Roles and Responsibilities (continued)

Legal adviser responsibilities:

- Provide us with training on ESG and climate-related legal matters, and ensure we are aware of our ESG and climate-related statutory and fiduciary obligations.
- Work with Fidelity and the investment adviser, to ensure we fulfil our legal obligations in relation to climate change.
- As requested, assist in the documentation of the arrangements with the Scheme's third parties with respect to ESG and climate-related matters, including but not limited to its governance arrangements, risk register, investment policies and climate strategy.

Fund manager responsibilities:

- Identify, assess and manage ESG and climate-related risks and opportunities in relation to the Scheme's investments, and how these play out over the short-term, medium-term and long-term time horizons of the Scheme.
- Exercise voting rights and engage with portfolio companies in relation to ESG and climate-related risks and opportunities, on behalf of and in the best interest of the financial interests of members.

The fund managers will, on at least an annual basis:

- Review material climate-related risks and opportunities for the fund, over the short-term, medium-term and long-term time horizons.
- Review climate-related policies, processes, resources and expertise to ensure this is fit for purpose to support fund climate integration and climate-related investment objectives.
- Report to us on climate-related processes, resources and expertise to feed into manager selection and retention processes.
- Provide reporting on climate-related voting and engagement activities.



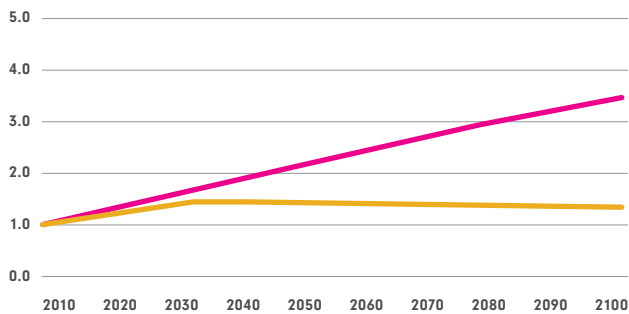
Appendix 4 - Scenario Analysis

The modelling was delivered by our investment adviser, who partnered with Moody's to undertake the climate scenario analysis. The climate model incorporates a variety of climate change scenarios, to understand the potential impacts of rising transitional and physical costs associated with climate change. The model is composed of various building blocks.

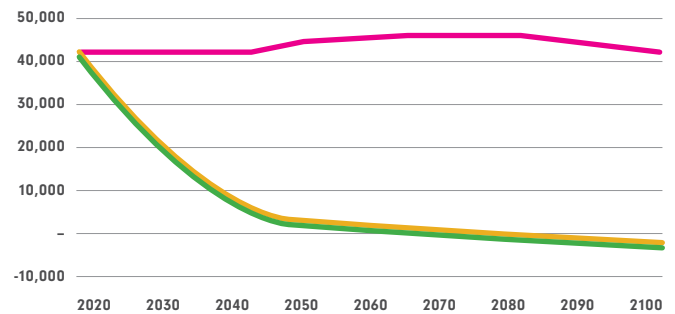
1. The climate model: composed of MAGICC 6 for modelling climate outcomes and REMIND-MAGPIE for modelling socio-economic outcomes
2. Economic scenario generator developed by Moody's, to understand different possible economic futures
3. Isio's SOFIA model, to isolate the investment implications of climate change

The Investment adviser's climate model is updated regularly, with the Trustee using the June 2022 baseline model in this report.

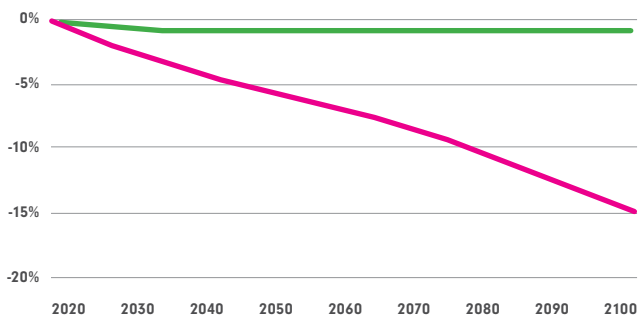
Temperature change (°C)



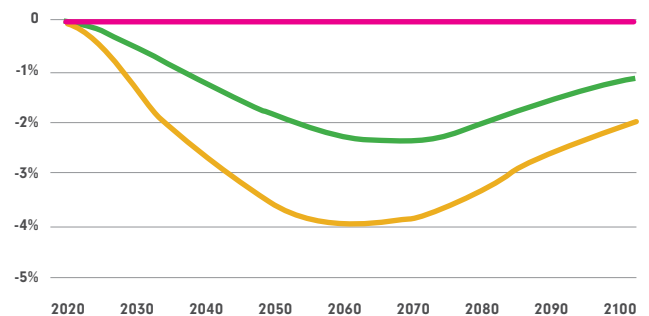
Global emissions (MtCO₂e)



Change in GDP after Physical Damages costs (%)



Change in GDP after Abatement costs (%)



Appendix 4 - Scenario Analysis

	2050 net zero	Divergent Net Zero	Current Policies
Climate policy	Climate policies introduced early and uniformly across sectors, and become gradually more stringent.	Divergent climate action, with more ambitious climate policies in some sectors than others.	Current policies implemented, but Nationally Determined Contributions (under the Paris Agreement) are not met. There is no further increase in climate policy ambition over time.
Scenario outcome	Global net zero carbon emissions achieved by 2050, resulting in a 50% chance of achieving a below 1.5°C scenario.	Emissions reductions are costlier (vs the 2050 Net Zero scenario), in order to meet the same target of a 1.5°C scenario.	Emissions continue to grow from today until 2080, leading to a 3.8°C scenario outcome this century. This scenario measures a failure to meet the Paris Agreement ambition
Macro-economic impact	GDP losses from transition risks increase over time, peaking in the 2060s, but declining slowly thereafter. GDP impacts from physical risks remain minimal, across the century.	GDP losses from transition risks are higher (vs 2050 Net Zero scenario), peaking in the 2060s, and declining slowly thereafter. GDP impacts from physical risks remain minimal, to 2100.	GDP impacts from transition risks remain minimal, across time. Increasing physical risks result in a -15% loss in GDP, towards the end of this century.
Carbon price	Gradual increase in the carbon price from 2020 onwards, reaching \$540 per ton of greenhouse gas (GHG) emissions by the end of the century.	Whilst carbon price remains extremely low to 2030, it accelerates to over \$1,350 per ton of GHG emission by the end of this century.	Carbon price remains extremely low until the end of the century, with minimal impact on markets.

	2050 Net Zero	Divergent Net Zero	Current Policies
Transition risks	<p>Transition costs are incurred but are kept low due to the efficient manner of implementation. Resulting in relatively low transition risk (vs the Divergent scenario).</p> <p>Emissions reductions occur immediately and are relatively ambitious, across sectors.</p> <p>There is sufficient investment in green/offsetting technology to meet climate ambition. With a gradual increase in renewable energy and biomass to >70% of global energy mix by 2050, and near complete coal phase out.</p> <p>Carbon dioxide removal (CDR) is deployed, including nature-based solutions and carbon capture, usage and storage. This is kept to the minimum level possible to still achieve the temperature target.</p>	<p>Transition costs are higher than the Net Zero 2050 scenario due to inefficient implementation of decarbonisation policies, and offsetting technology being less widely available and more expensive. Meaning decarbonisation actions are more disorderly and costly.</p> <p>Emissions reductions are divergent across sectors (being more ambitious in transport and buildings, vs less ambitious in energy and industry sectors).</p> <p>The renewable energy mix outcome is relatively similar to the 2050 Net Zero scenario, with nuclear energy also being important across the low carbon scenarios.</p> <p>There is slightly more limited CDR deployment (vs the 2050 Net Zero scenario).</p>	<p>Current climate policies are implemented, but with no further decarbonisation action taken, resulting in lower transition costs.</p> <p>Emissions eventually stabilise across sectors, at higher levels than the other scenarios considered.</p> <p>Renewable energy and biomass share only increases marginally from 2020 levels, reaching ~25% by 2050, as investment in fossil fuels continue.</p> <p>No investment in CDR approaches and technologies.</p>
Physical risks	<p>Physical impacts remain relatively low (vs Current Policies scenario).</p> <p>There will be gradual impacts from the climate system, including a ~0.4m rise in sea levels, globally, and an estimated decline in the yields of major agricultural crops, e.g. wheat, maize and soybean crops, of up to a quarter, by the end of the century.</p> <p>Shifts in natural disasters will vary across geographies. For example, in the UK, the extent of river flooding could increase by over 20% by the end of the century (from 2020 levels).</p>	<p>Physical impacts are similar to the 2050 Net Zero scenario, given similar temperature outcomes.</p> <p>This includes sea level rise and crop yield expectations being similar to the 2050 Net Zero scenario. In the UK, precipitation is expected to decrease threefold by the end of the century (across both of the low carbon scenarios).</p> <p>Whilst the daily average temperature will increase only marginally in the UK, the incidence of heatwaves will increase at a more significant rate, alongside a higher extent of flooding.</p>	<p>Severe physical impacts result, with shifts in weather patterns and increased incidence in natural disasters. Under this high warming scenario, there may be irreversible changes in the climate system.</p> <p>Sea levels rise is expected to reach ~0.7m by the end of the century, accompanied by significant declines in agricultural yields, in particular for maize crops, which experience a halving of yields (on average, globally).</p> <p>Unprecedented natural disasters could be experienced. For example, in the UK, annual damages incurred from cyclones could increase by circa 60% (from near zero in 2020), whilst the land exposed to wildfires could double.</p>

Appendix 4 - Scenario Analysis

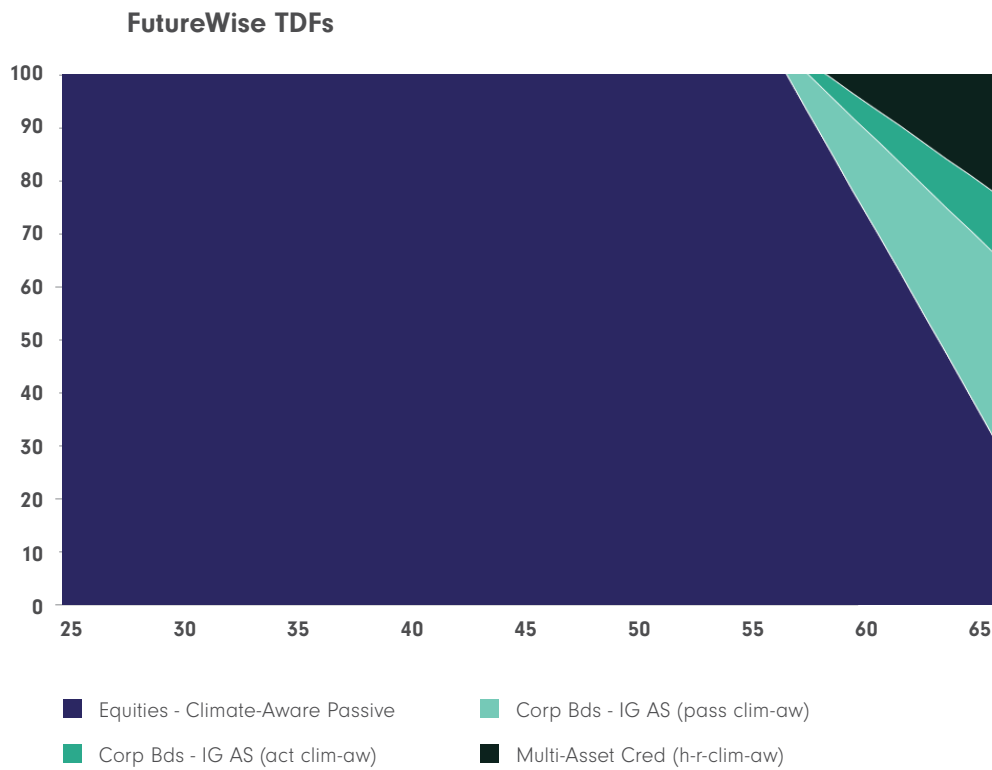
Member assumptions

The climate scenario analysis is based on an illustrative youngest member assumptions, across the entire Master Trust platform (i.e. across the default and bespoke arrangements):

- Starting age: 25
- Retirement age: 65
- Starting pot size: £5,250
- Starting salary: £35,000, increasing annually at inflation + 1.75%
- Contributions: 11.75% p.a.
- Inflation: 2.5% p.a.

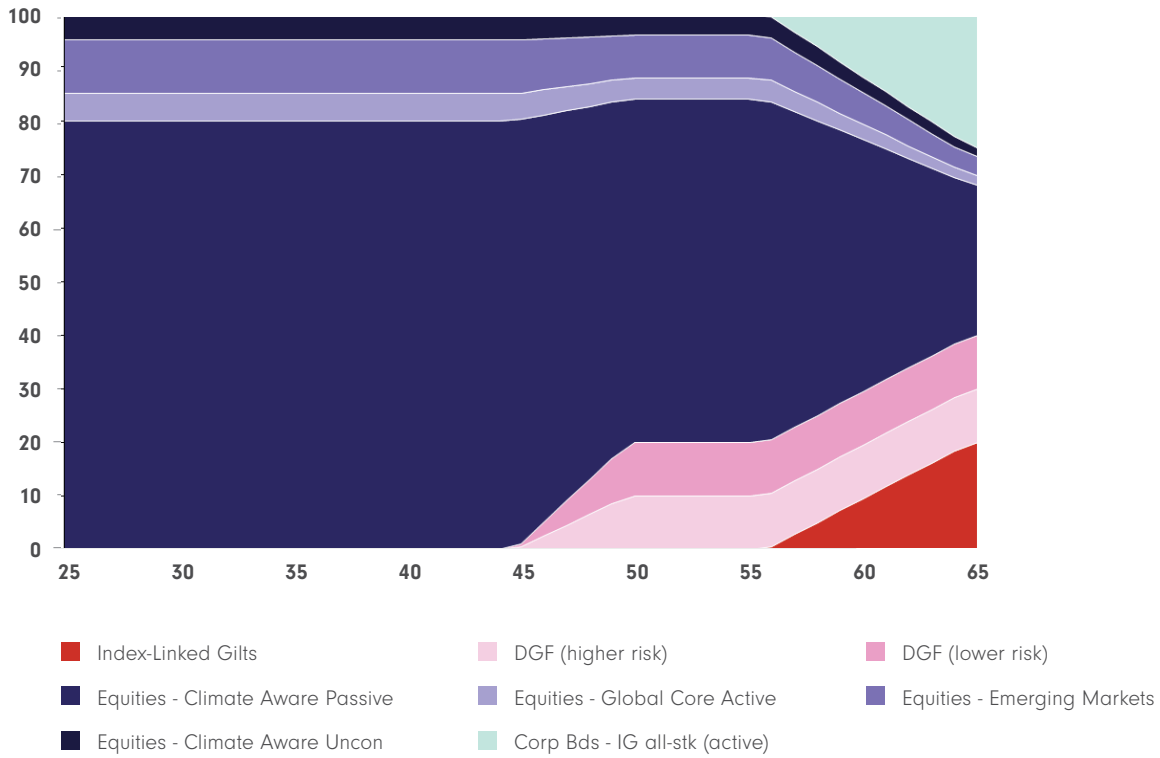
Member investment strategies

We show the glidepaths of the default and bespoke arrangement strategies, below.

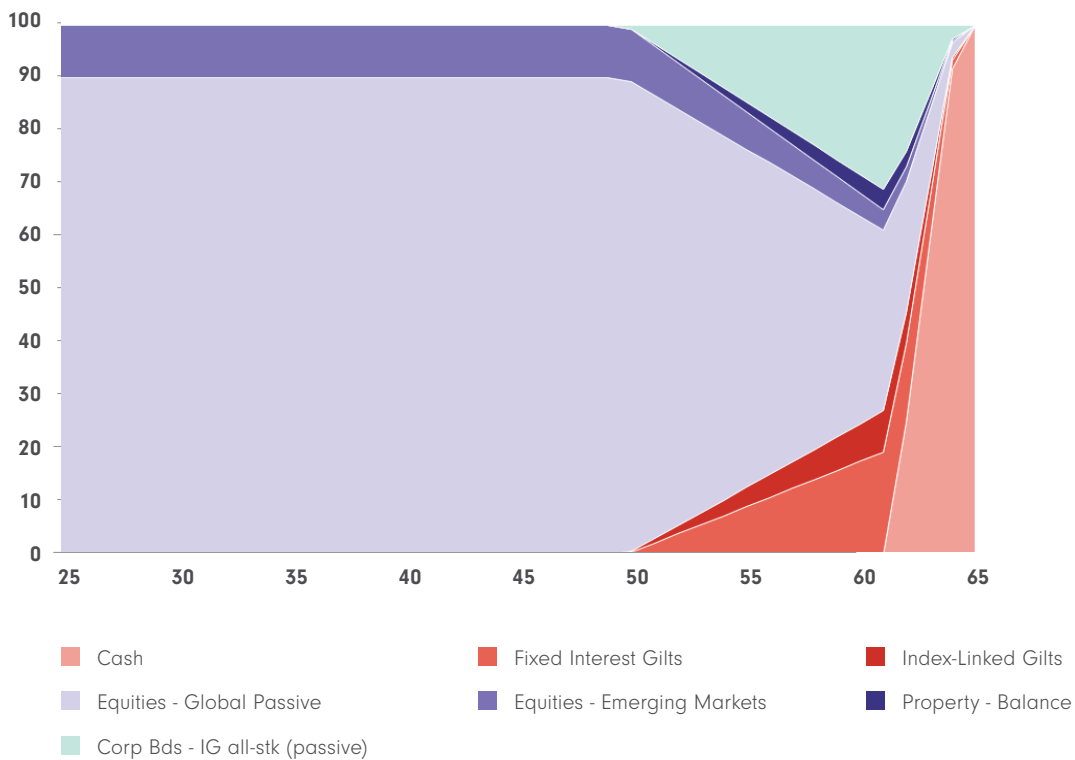


Appendix 4 - Scenario Analysis

Strategy B

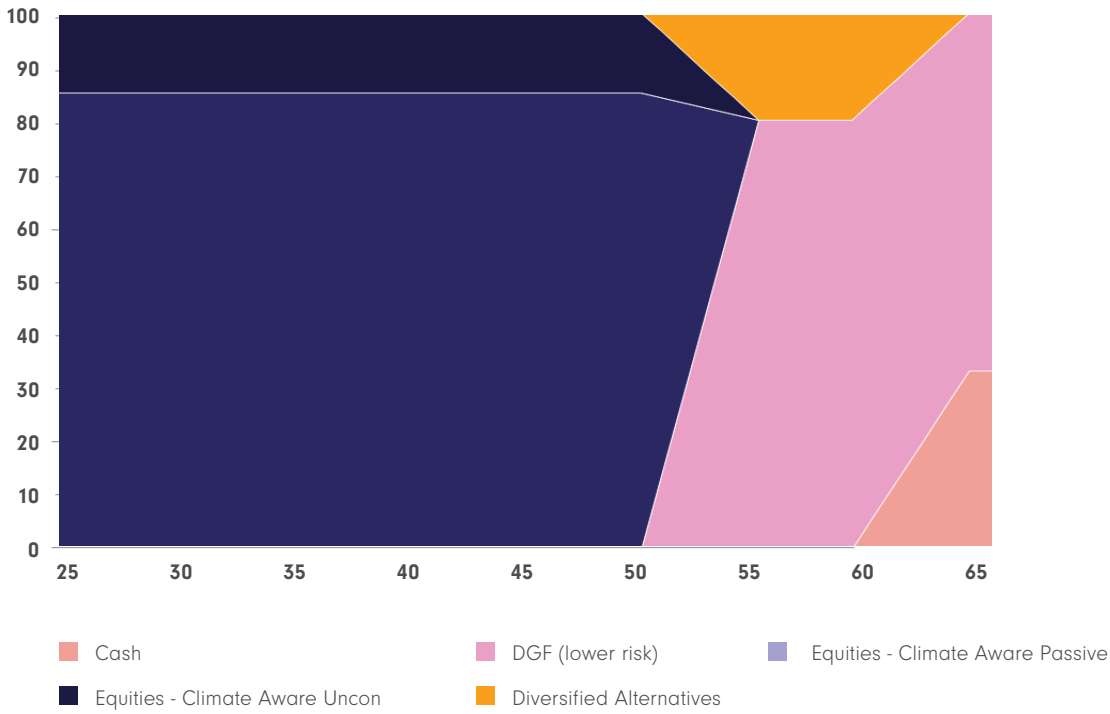


Strategy C

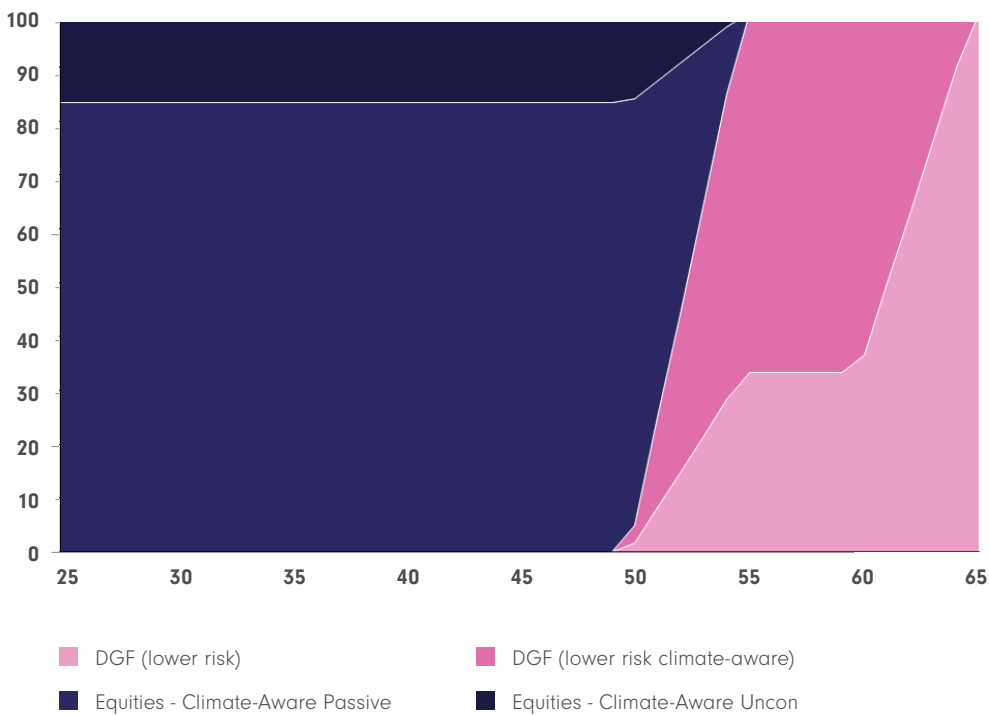


Appendix 4 - Scenario Analysis

Strategy E

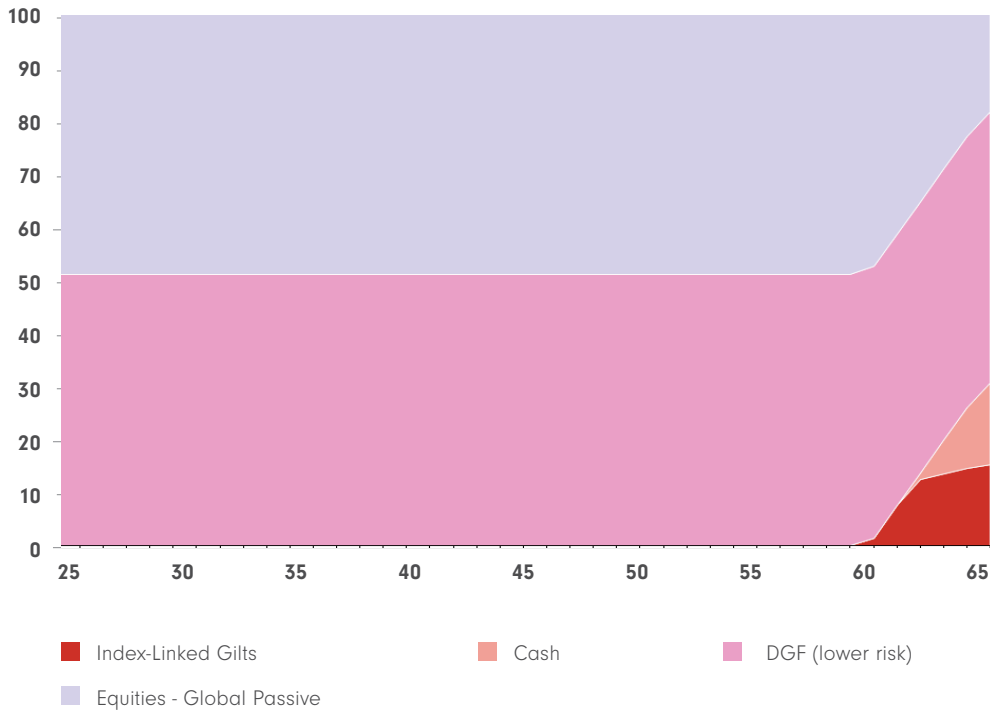


Strategy F

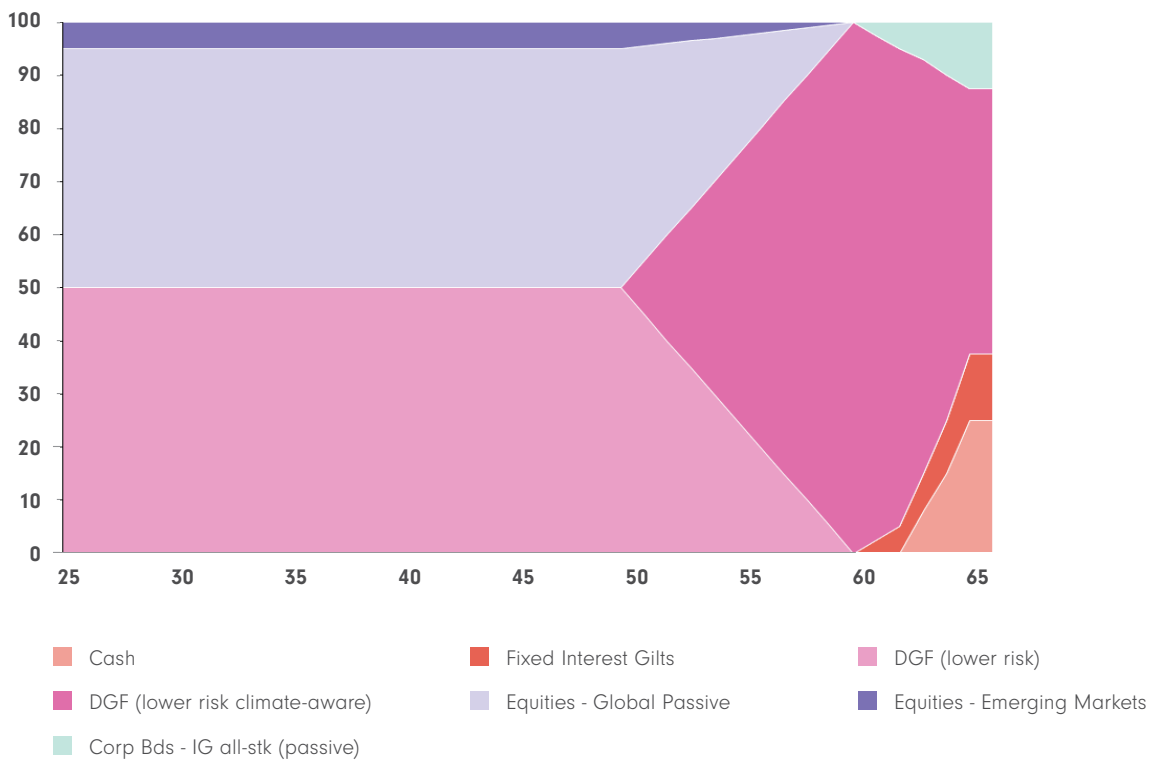


Appendix 4 - Scenario Analysis

Strategy G

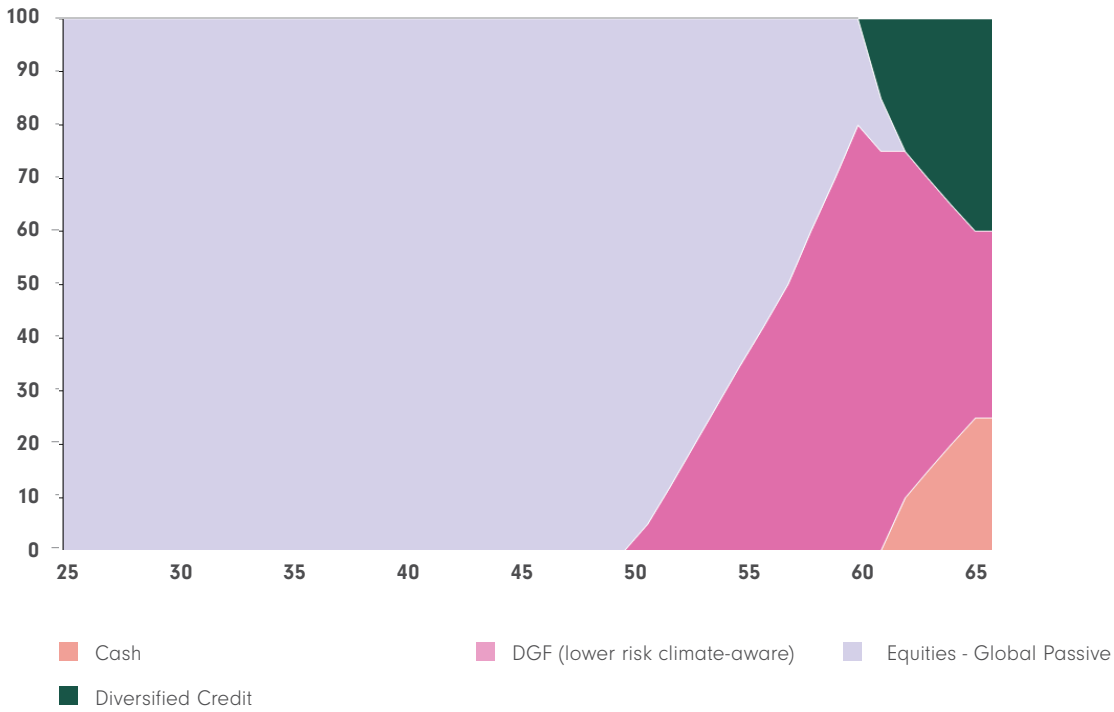


Strategy H

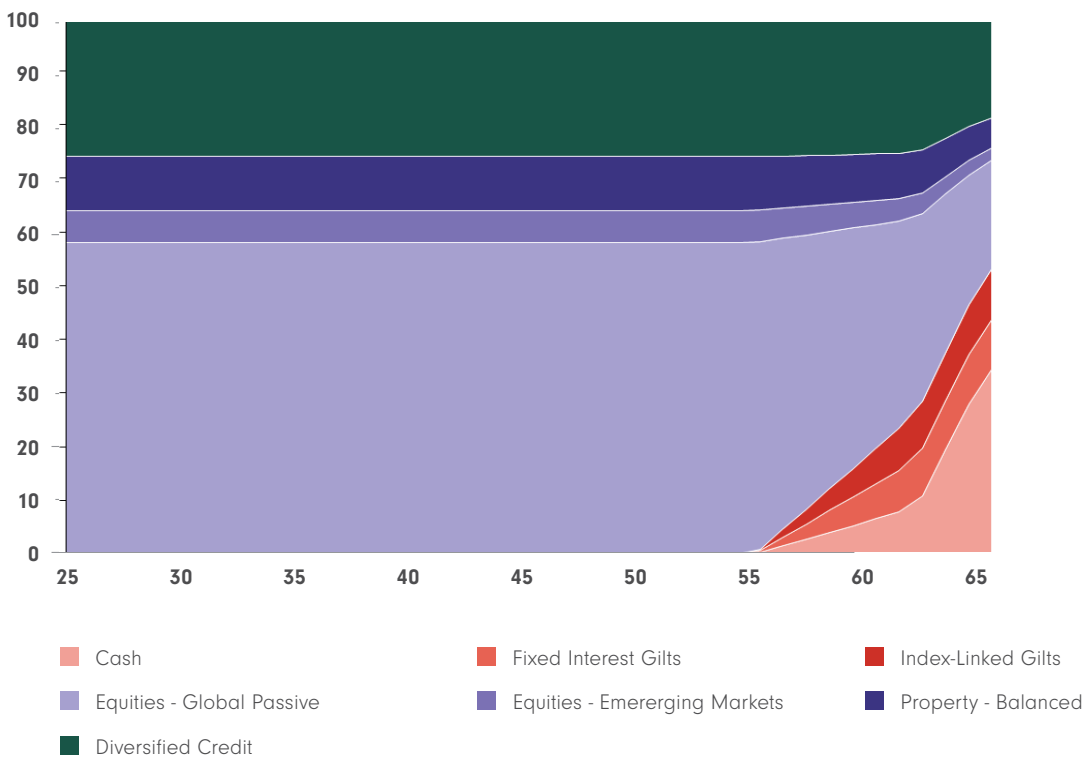


Appendix 4 - Scenario Analysis

Strategy I



Strategy J



Appendix 4 - Scenario Analysis

Disclaimer for chart data

The Baseline scenario assumes no transition or physical impacts of climate change i.e. a climate-neutral scenario. Source: Isio, Moody's. This is based on stochastic modelling, with the median outcome shown. Note that annualised return drags are shown but costs and impacts in reality won't be uniform. Whilst we have modelled the potential physical and abatement costs over the next 40 years, in theory, markets may price these in sooner. The model's projections are sensitive to the underlying methodology and assumptions. No guarantee can be offered that actual outcomes will fall within the range of simulated results. Due to the long projection period, the model's outcomes are particularly reliant upon the underlying assumptions. Therefore, more attention should be paid to the relative comparisons between different projections than to the absolute magnitude of the results.

Modelling principles

- SOFIA is a stochastic model that simulates a large number of possible future economic outcomes, in which financial conditions develop in a number of different ways, defined by assumptions for average outcomes, range of variability, and inter-dependency between different markets.
- The high-level market scenarios are generated by a third-party Economic Scenario Generator (ESG) provided by Moody's Analytics. The ESG is an industry-standard tool that is widely used by financial institutions (e.g. insurers, asset managers, and investment banks). Both the climate scenarios and the underlying economic impacts are provided by Moody's Analytics.
- Based on the scenarios generated by the ESG, SOFIA simulates asset-class returns calibrated to Isio Investment Advisery's asset-class assumptions.
- SOFIA takes the initial starting position of the assets, and projects these values forward under the simulated scenarios, taking into account any relevant inflows and outflows.
- The modelling in this report has been carried out on a 'best estimate' basis, taking into account the model's expectations for future investment returns and interest rates.
- The modelling has not been performed in line with the Statutory Money Purchase Illustrations ('SMPI') which apply when projection results are provided to Scheme members. Different assumptions apply in respect of SMPI calculations. The modelling output contained in this report should not be provided to Scheme members as it is not compliant with SMPI requirements.

Modelling results

- The results of the projections are shown by ranking the calculated results from best to worst in each year, and presenting the following outcomes:
 - Median: this is the middle outcome and can be thought of as the 'expected result'. Half of the modelled outcomes are better than this and half are worse.
 - Bad: this splits the results so that there is a one in five (20%) chance of having a worse outcome. This is a measure of risk.
 - Very Bad: this splits the results at a one in twenty (5%) chance of having a worse result. This is a more extreme measure of downside risk.
 - Good and Very Good (where shown): these illustrate possible positive outcomes at the 20% and 5% levels respectively.

Introduction to the assumptions

- These are our 'best estimate' asset class return and volatility assumptions. We believe there is a 50:50 chance that the actual outcome will be above/below our assumptions.
- Please note that the assumptions have a subjective element, particularly for asset classes with less history and greater reliance on active management.
- These assumptions are the 'baseline' assumptions, before climate impacts are accounted for within the non-baseline scenarios.
- Return assumptions are:
 - Annualised (i.e. geometric averages), rounded to the nearest 0.1%.
 - Expressed relative to the yield on fixed interest gilts (the annual yield at the 10-year tenor on the Bank of England spot curve). This yield was 2.3% at 30 June 2022.
 - Net of management fees.
 - Before tax. UK pension Schemes are exempt from tax on investments. The impact of taxation may reduce returns for other investors.
- Volatility assumptions are based on the standard deviation of annual returns over a 10-year period.

Appendix 4 - Scenario Analysis

Asset class assumptions

- Annualised (i.e. geometric averages), rounded to the nearest 0.1%.
- Expressed relative to the yield on fixed interest gilts (the annual yield at the 10-year tenor on the Bank of England spot curve). This yield was 2.3% at 30 June 2022.
- Net of management fees.
- Before tax. UK pension funds are exempt from tax on investments. The impact of taxation may reduce returns for other investors.
- Volatility assumptions are based on the standard deviation of annual returns over a 10-year period.

Greenium assumptions

- For the application of climate-aware tilting to asset classes, the allocations must show evidence of the majority of the following criteria. Only the sustainable allocations that met this threshold, across the default and bespoke arrangements, received climate-tilting premium:
 - Initial decarbonisation achieved, versus the asset class universe;
 - Forward-looking decarbonisation efforts; and,
 - Allocations to climate impact solutions.

Compliance statement

- This report, and the work relating to it, complies with 'Technical Actuarial Standard 100: Principles for Technical Actuarial Work' ('TAS 100').
- This report has been prepared for the purpose of assisting the addressee in quantifying climate risk and feeding into a TCFD report. If you intend to use it for any other purpose or make any other decisions after considering this report, please inform Isio and we will consider what further information or work is needed to assist you in making those decisions.

Other material assumptions

- Isio Investment Advisory's central asset-class assumptions are assessed and revised at each calendar quarter-end. The assumptions used within this modelling exercise are set out in the Appendix.
- Certain assumptions are sourced directly from the Moody's Analytics ESG and available market data, or set via adjustments to these sources. Where required or deemed to be more appropriate, assumptions are entirely determined by Isio Investment Advisory. The assumption setting process is subjective and based on qualitative assessments rather than a wholly quantitative process. Where judgement is required, input is received from Isio's internal asset-class research teams.

Limitations and risk warnings

- The only risk factors considered in our modelling are those that affect the values of pension Schemes' assets. The modelling results should be viewed alongside other qualitative considerations including portfolio complexity, governance burden, and liquidity risk.
- The model's projections are sensitive to the starting position and the econometric assumptions. Changes to the assumptions can have a material impact upon the output. There can be no guarantee that any particular asset class or investment manager will behave in accordance with the assumptions. Newer asset classes can be harder to calibrate due to the lack of a long-term history.
- The modelling analysis is based on portfolios containing a range of asset classes and different approaches to fund management. Clients should not make decisions to invest in these asset classes or approaches to fund management based solely on the modelling analysis.
- Modelling over a very long time horizon involves a great deal of uncertainty. Therefore more attention should be paid to relative rather than absolute results.
- No guarantee can be offered that actual outcomes will fall within the range of simulated results. Actual outcomes may be better than the simulated 95th percentile or worse than the simulated 5th percentile.

Appendix 4 - Scenario Analysis

Strategy Asset Allocation

We have commented in the analysis below where certain asset classes are used more in certain strategies and have shown the approximate asset allocation of the different strategies for younger and older members below.

Asset allocation from retirement (40 years from retirement)

Strategy	Equities	Diversified Funds	Corporate Bonds	Bonds	Direct Property	Cash	Alternatives
FutureWise TDFs	100%	-	-	-	-	-	-
Strategy B	100%	-	-	-	-	-	-
Strategy C	100%	-	-	-	-	-	-
Strategy E	100%	-	-	-	-	-	-
Strategy F	100%	-	-	-	-	-	-
Strategy G	50%	50%	-	-	-	-	-
Strategy H	100%	-	-	-	-	-	-
Strategy I	100%	-	-	-	-	-	-
Strategy J	64%	-	26%	-	10%	-	-

Source: Fidelity International December 2022. These allocations are approximations only and may not round to 100%

Appendix 4 - Scenario Analysis

Asset allocation at retirement (0 years from retirement)

Strategy	Equities	Diversified Funds	Corporate Bonds	Gilts	Direct Property	Cash	Alternatives
FutureWise TDFs	30%	-	70%	-	-	-	-
Strategy B	35%	20%	25%	20%	-	-	-
Strategy C	-	-	-	-	-	100%	-
Strategy E	-	67%	-	-	-	33%	-
Strategy F	-	100%	-	-	-	-	-
Strategy G	20%	50%	-	15%	-	15%	-
Strategy H	-	50%	12.5%	12.5%	-	25%	-
Strategy I		35%	40%			25%	
Strategy J	23%		19%	19%	6%	34%	

Source: Fidelity International December 2022. These allocations are approximations only and may not round to 100%

Note: that diversified strategies are modelled based on broad split between equities and corporate bonds (with a corresponding risk level).

Appendix 4 - Scenario Analysis

Impact on different asset classes

SHORT TERM	% per annum (median impact)		
Asset Class Impacts	Net Zero 2050	Divergent Net Zero	Current Policies
Developed Equity (passive, climate aware)	-0.48%	-1.71%	-0.66%
Investment Grade Credit (passive, climate aware)	0.28%	0.18%	0.14%
Investment Grade Credit (active, climate aware)	0.29%	0.19%	0.14%
Multi-Asset Credit (higher risk, climate aware)	0.06%	-0.07%	-0.20%
DGF (higher risk)	-0.38%	-0.99%	-0.43%
DGF (lower risk)	-0.24%	-0.60%	-0.24%
DGF (lower risk, climate aware)	-0.16%	-0.54%	-0.21%
Equities - Global Passive	-0.77%	-2.01%	-0.80%
Equities - Global Core Active	-0.81%	-2.03%	-0.86%
Equities - Emerging Markets	-0.98%	-2.49%	-0.96%
Equities - Climate-aware unconstrained	-0.62%	-1.85%	-0.71%
Property - Balanced	0.01%	-0.28%	-0.36%
Corporate Bonds ILG All stock (passive)	0.25%	0.15%	0.13%
Corporate Bonds ILG All stock (active)	0.27%	0.16%	0.15%
Corporate Bonds Investment Grade All stock (active)	0.28%	0.18%	0.14%
Corporate Bonds Investment Grade All stock (climate-aware)	0.29%	0.19%	0.14%
Diversified Credit	0.16%	-0.01%	-0.11%
Diversified Alternatives	-0.58%	-1.50%	-0.59%
Cash	0.23%	0.24%	-0.20%
Fixed Interest Gilts	0.71%	1.00%	0.90%
Index-Linked Gilts	0.80%	1.44%	0.44%

Appendix 4 - Scenario Analysis

MEDIUM TERM	% per annum (median impact)		
Asset Class Impacts	Net Zero 2050	Divergent Net Zero	Current Policies
Developed Equity (passive, climate aware)	-1.50%	-1.81%	-1.78%
Investment Grade Credit (passive, climate aware)	-0.14%	-0.13%	-0.33%
Investment Grade Credit (active, climate aware)	-0.12%	-0.12%	-0.32%
Multi-Asset Credit (higher risk, climate aware)	-0.09%	0.06%	-0.30%
DGF (higher risk)	-0.83%	-0.99%	-0.93%
DGF (lower risk)	-0.52%	-0.62%	-0.59%
DGF (lower risk, climate aware)	-0.47%	-0.57%	-0.55%
Equities - Global Passive	-1.60%	-1.92%	-1.80%
Equities - Global Core Active	-1.64%	-1.96%	-1.86%
Equities - Emerging Markets	-1.84%	-2.24%	-2.01%
Equities - Climate-aware unconstrained	-1.61%	-1.90%	-1.84%
Property - Balanced	-0.77%	-0.88%	-0.96%
Corporate Bonds ILG All stock (passive)	-0.16%	-0.15%	-0.33%
Corporate Bonds ILG All stock (active)	-0.14%	-0.13%	-0.32%
Corporate Bonds Investment Grade All stock (active)	-0.14%	-0.13%	-0.33%
Corporate Bonds Investment Grade All stock (climate-aware)	-0.12%	-0.12%	-0.32%
Diversified Credit	-0.18%	-0.08%	-0.41%
Diversified Alternatives	-1.25%	-1.48%	-1.39%
Cash	-0.51%	-0.54%	-0.72%
Fixed Interest Gilts	-0.29%	-0.35%	-0.33%
Index-Linked Gilts	-0.48%	-0.58%	-0.54%

Appendix 4 - Scenario Analysis

LONG TERM	% per annum (median impact)		
	Asset Class Impacts	Net Zero 2050	Divergent Net Zero
Developed Equity (passive, climate aware)	-1.32%	-1.47%	-1.68%
Investment Grade Credit (passive, climate aware)	0.08%	0.12%	-0.09%
Investment Grade Credit (active, climate aware)	0.08%	0.12%	-0.09%
Multi-Asset Credit (higher risk, climate aware)	-0.02%	0.08%	-0.17%
DGF (higher risk)	-0.73%	-0.80%	-0.89%
DGF (lower risk)	-0.41%	-0.46%	-0.52%
DGF (lower risk, climate aware)	-0.41%	-0.45%	-0.53%
Equities - Global Passive	-1.37%	-1.51%	-1.70%
Equities - Global Core Active	-1.42%	-1.56%	-1.76%
Equities - Emerging Markets	-1.54%	-1.71%	-1.88%
Equities - Climate-aware unconstrained	-1.42%	-1.55%	-1.76%
Property - Balanced	-0.47%	-0.51%	-0.71%
Corporate Bonds ILG All stock (passive)	0.07%	0.11%	-0.09%
Corporate Bonds ILG All stock (active)	0.08%	0.12%	-0.08%
Corporate Bonds Investment Grade All stock (active)	0.08%	0.12%	-0.09%
Corporate Bonds Investment Grade All stock (climate-aware)	0.08%	0.12%	-0.09%
Diversified Credit	0.13%	0.20%	-0.09%
Diversified Alternatives	-1.04%	-1.15%	-1.30%
Cash	-0.32%	-0.32%	-0.53%
Fixed Interest Gilts	-0.20%	-0.20%	-0.24%
Index-Linked Gilts	-0.37%	-0.39%	-0.38%

Appendix 5 - Risk Review Process

Below, we set out further details on our risk review processes.

- At each quarterly Board and Sub-Committee meeting we review a section of the risk register. Across the year, all existing risks are reviewed at least once to identify any changes, whether that is to the nature of the risk, its potential or actual impact, the control environment or any mitigating actions required to reduce or remove the risk. This also provides an opportunity to identify new and emerging risks.
- Annually, the Administration Sub-Committee will review the full risk register in its entirety.
- At the end of each quarterly board meeting, we have an agenda item specifically for the purpose of reflecting on the matters discussed in the meeting and to consider whether any items should be escalated to Fidelity. Items for escalation may be proposed during or following a broad range of discussions, such as legislative/regulatory updates, data and information we have reviewed, discussions of issues, presentations by third parties and review of risks.

- Risk mitigating actions will be monitored through the risk register and/or the matters arising log.
- We may highlight a new or emerging risk or changes to existing risks at any time.

The Trustee Action Plan includes the above activities, and the Scheme Secretary is responsible for ensuring that we undertake these activities. They must also report where these activities are not undertaken in line with the Trustee Action Plan so that remedial action can be taken.

We assess our individual and collective risk management knowledge on at least an annual basis when we assess the overall skills and knowledge of the Board. As a part of this, we may identify individual or Board training needs, including in relation to climate change related risks.

Appendix 6 - Integration of climate considerations in the Scheme's investments options

As of December 2022 and during a transitional period of 2023, the Scheme has operated two default strategies, FutureWise working lifestyle strategy (WLS) and FutureWise Target date funds (TDFs). We have outlined, in turn, how these each consider climate risks and opportunities.

Standard Default Strategy (FutureWise TDFs)

The FutureWise TDFs are the Scheme's new default investment strategy for standard sections. The strategy was introduced in December 2022 and all members invested in standard sections were moved across from the FutureWise WLS to the FutureWise TDFs by October 2023.

Members who do not select their own investments are defaulted into the Target Date Fund that matches their retirement age. Members can also self-select a Target Date Fund of their choice.

The FutureWise Target Date Funds are managed by Fidelity and BlackRock invest in a range of underlying 'building blocks' which in turn hold stocks and shares, bonds and other investments. More information on how FutureWise and Target Date Funds work can be found on our website.

All the FutureWise Target Date Funds fully integrate sustainability throughout, meaning that regardless of where a member is in their working life or retirement journey, the TDF that they are invested in will fully incorporate consideration of sustainability and climate-related risks and opportunities. The FutureWise TDFs do this in several ways:

- **Carbon footprint targets:** Each building block used within the FutureWise TDFs aims to have a lower carbon footprint than the broader market in which it invests. For example, one of the building blocks used within the FutureWise TDFs is the BlackRock ACS North America ESG Insights Equity Fund. This fund aims to have a lower carbon footprint than its broader market which is measured by the FTSE World North America Index.

- **Decarbonisation targets:** Each building block also factors in a decarbonisation target. This means that it aims to reduce its carbon footprint over the long term.
- **Proprietary ESG ratings:** All of the building blocks incorporate the fund managers' proprietary sustainability tilting process. This process uses the fund managers' proprietary sustainability ratings (based on research and engagement with those companies as well as their approach to climate change risks and opportunities), to tilt towards those companies in each sector which are leaders or improving from a sustainability perspective and away from those companies which are lagging behind their peers on sustainability.
- **Exclusions:** The building blocks exclude certain industries and companies partly based on their sustainability profile. This includes exclusions of companies that generate more than 5% of their revenue from thermal coal and oil sands. Thermal coal, out of all fossil fuels, produces the most significant greenhouse gas emissions (GHG), with a direct link to climate change. Oil sands are also particularly harmful as they have a more carbon-intensive production process compared with global oil/gas extraction averages. As we transition to a low carbon economy, production of fossil fuels should be focused on the safest, most environmentally friendly and efficient processes to limit associated upstream GHGs. The building blocks also exclude companies in violation of the 10 principles of the United Nations Global Compact Principles (which include principles on environmental challenges, environmental responsibility and the development of environmentally friendly technologies).

By integrating these approaches, the new FutureWise TDFs will help us achieve our net zero goals across the Scheme.

Appendix 6 - Integration of climate considerations in the Scheme's investments options

Bespoke Investment Strategies

We have worked closely with the advisers of bespoke sections to continue to integrate sustainability and climate considerations into the design of bespoke default strategies. These take a variety of approaches to incorporating climate change risks and opportunities, in accordance with the Scheme's climate policy. The implementation of different approaches differs depending on how close members are to retirement.

Growth Phase

The bespoke strategies use a mix of passively or actively managed equity funds, as well as diversified funds in the early years (when members are younger), focusing primarily on capital growth. Within the growth phase, we continue to see the adoption of passively managed ESG funds which focus on tilting towards or away from companies with poor sustainability ratings relevant to their peers (which includes consideration of their environmental impact and their carbon footprint). Many of these funds also exclude companies involved with certain high-emitting industries such as oil sands and thermal coal.

Some strategies also use actively managed funds which focus on climate change opportunities by investing in companies that create solutions for climate change or are involved in the resource efficiency and environmental markets. There is also use of an impact fund which aims to deliver a positive societal impact (including delivering climate solutions) alongside capital growth.

De-risking towards retirement

As members approach retirement in bespoke strategies there is continued use of many of the approaches mentioned above through equity and diversified funds, as well as introducing of lower-risk funds e.g. bond funds. While incorporating consideration of climate risks and opportunities as part of their investment process, these also go further in addressing those risks and opportunities. For example, there is use of a fund which chooses which companies to purchase corporate bonds from, partly based on their contribution to the UN Sustainable Development Goals. These companies may have a positive (or at least neutral) contribution to these goals which include affordable and clean energy and climate action. This fund also has 40% lower absolute emissions than its broader comparator index.

We will continue to work closely with our advisers to ensure the continued development of bespoke investment strategies and to ensure climate change risks and opportunities are factored into their design, in line with our climate policy.

Appendix 7 - Integration of climate considerations in the Scheme's investments options

Self-select

To help members take carbon emissions into account when viewing or selecting their investments, the carbon footprint of funds is displayed on quarterly fund factsheets. An example is shown below.

For those investors who wish to select their own investments, we also offer climate-oriented investments (across multiple risk levels) that are specifically designed to invest in assets aiming to mitigate the risks of climate change or take advantage of the opportunities that it presents. For example, this includes the Master Trust Sustainable Climate Equity Fund, which currently invests in a fund which invests in companies that are expected to benefit either directly or indirectly from developments related to environmental challenges, such as climate change.

For members who wish to invest in a climate-focused bond fund, we also have the Master Trust Sustainable Climate Bond Fund. It aims to purchase bonds from companies with the lowest carbon footprints in their sectors.

We will continue to develop our climate-focused investment options for members as the landscape evolves.

How climate-related risks and opportunities are integrated within the investments of bespoke sections is based on advice received from the relevant investment adviser of the bespoke section. More information on how these risks and opportunities are considered within bespoke investment strategies is available in Appendix 5.

We encourage advisers of bespoke sections to advise on self-select funds which incorporate climate considerations as part of the investments made available to members of bespoke sections.

Carbon Footprint

The investment analysis company MSCI measures a fund's carbon intensity by calculating how much CO₂ is emitted by the companies it invests in. To allow companies of different sizes to be compared, the figures are adjusted according to the value of each company's sales. The table on the right shows emissions in terms of tons of CO₂ for each million dollars' worth of sales.

MSCI has provided the following guidance for assessing the figures shown in the table. These ratings help to show where each fund stands in relation to the fund marketplace as a whole. As in the table, the figures are for tons of CO₂ for each million dollars' worth of sales.

CO₂ analysis as at 30.09.2022

Fund

Fidelity Sustainable UK Aggregate Bond Fund I-ACC

Tons of CO₂ per million dollars of sales

57.36

Source: MSCI

n/a will be displayed when there is no ESG data available for the fund or the fund is not ESG rated. The information is as at the date of production based on data provided by MSCI. There may be timing differences between the date at which data is captured and reported. For more up to date information you can visit <https://www.msci.com/esg-fund-ratings>

Very high	High	Moderate	Low	Very low
525 tons or more	250 to 524 tons	70 to 249 tons	15 to 69 tons	Less than 15 tons



Issued by FIL Life Insurance Limited. Authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Registered in England and Wales No. 3406905. Registered Office at : Beech Gate, Millfield Lane, Lower Kingswood, Tadworth, Surrey, KT20 6RP. Fidelity, Fidelity International, the Fidelity International logo and the F symbol are trademarks of FIL Limited. MT_TCFD-report-2023_20240126 UKM1223/1627026/SSO/1224

