

PepsiCo UK Pension Plan

Climate change governance
and reporting in line with the
recommendations of the Task
Force on Climate-Related Financial
Disclosures (TCFD)

Reporting period: 12 months to 30 September 2023
January 2024



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Introduction

Dear Members,

Welcome to the Trustee's first climate change report, which has been prepared in line with the recommendations of the Task Force on Climate-Related Financial Disclosures ("TCFD") and the statutory requirements prescribed by the Department of Work and Pensions¹.

The Trustee of the PepsiCo UK Pension Plan ("the Plan") recognises climate change as a risk that could impact the financial security of members' benefits if it is not properly measured and managed. It also presents a potential opportunity, by investing in companies or assets that are expected to perform well in an economy that is positioned to address climate change.

Climate change is an incredibly complex issue, both from a scientific and an economic perspective. With this in mind, the Trustee's assessment of climate-related risks and opportunities has been carried out based on information that is currently available, both in terms of data from the companies and assets in which the Plan invests and in consideration of the different global warming scenarios that the Trustee has analysed.

The ultimate responsibility of the Trustee is to pay members their pension and other benefits, as they fall due. Climate change is one risk amongst many that the Trustee measures, monitors and manages. To this extent, climate change needs to be considered alongside these other risks in a balanced and proportionate way. The Trustee may therefore continue to invest in companies that are exposed to climate risk, where there is a sufficiently attractive investment case and the asset manager believes there is an opportunity to engage and influence changes in the behaviour and actions of a company.

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



This report has been split into several sections to help members understand:



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

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

Strategy: How potential future climate warming scenarios could impact the Fund and the impact on the Trustee’s strategy; and

Metrics and Targets: The climate related metrics that the Trustee has chosen to measure, the status of the current investments against those metrics and the climate related targets that the Trustee has chosen to adopt for the investment portfolio.

The last section of this report covers the more technical aspects of the climate scenario modelling and climate metrics. This section sets out the methodology and assumptions used to produce the information contained in this report.

Steve Turner

Chair of the Trustee of the PepsiCo UK Pension Plan



Governance

Trustee Governance Approach

The Trustee has ultimate responsibility for ensuring effective governance of climate-related risks and opportunities. The Trustee maintains a Statement of Investment Principles (“SIP”), in accordance with Section 35 of the Pensions Act 1995, the Occupational Pension Scheme’s (Investment) Regulations 2005 and subsequent legislation. The Trustee has also prepared a Default Arrangement Statement of Investment Principles (“Default SIP”). The SIP, which relates to the Defined Benefit (“DB”) and Defined Contribution (“DC”) sections of the Plan, and Default SIP, which relates to the default arrangement offered under the DC section, detail the key objectives, risks and approaches to considering Environmental, Social and Governance (“ESG”) factors, such as climate change, as part of the Trustee’s investment decision making. The SIP and Default SIP are reviewed at least annually.

The Trustee has also produced a separate ESG Policy as part of its governance framework on ESG considerations. The ESG Policy sets out how the Trustee manages ESG risks and opportunities as part of the overall risk management of the Plan. The ESG Policy is reviewed at least annually.

The SIP, Default SIP and ESG Policy are available on the Plan’s website.

The Trustee’s key beliefs on ESG are:

- ESG factors may have a material impact on investment risk and return outcomes and should be integrated into the investment process.
- Good stewardship and engagement can create and preserve value for companies and markets as a whole, hence having the potential to benefit Plan members in the long term.
- Climate change poses a systemic risk, and accordingly the Trustee will consider the potential financial impacts of both the associated transition to a low-carbon economy and the physical impacts of different climate outcomes.
- ESG factors will affect more than just the asset portfolio. As such, the Trustee views ESG factors through an integrated risk management lens, including investment, funding and covenant considerations.



These investment beliefs guide the Trustee’s policy. To arrive at these beliefs, the Trustee has undertaken training on ESG related issues, including climate change. The Trustee has also participated in an ESG beliefs survey.

During the year to 30 September 2023, the Trustee received various training sessions from its Investment Consultant, Mercer Limited (“Mercer”), covering climate-related investment risks and reporting requirements in line with the TCFD recommendations.

Climate change will form an explicit agenda item at least annually for the Trustee when the Trustee’s annual TCFD report is updated. The Trustee is satisfied that the amount of governance time spent is reasonable and will allocate more time at future meetings if any analysis or wider industry research requires additional Trustee review and consideration.

The Trustee's Advisors

Investment Consultant

The Trustee has appointed Mercer as Investment Consultant to the Plan. Mercer's role is to provide ongoing advice on investment strategy and manager appointments (where relevant). This includes advice on managing and monitoring investment-related risks, such as climate change, which is considered at quarterly meetings. Mercer will assist the Trustee in producing the Plan's TCFD report on an annual basis.

On an annual basis, the Trustee formally reviews the performance of the Investment Consultant against the strategic objectives in line with the requirements of the Investment Consultancy and Fiduciary Management Market Investigation Order 2019 and subsequent Occupational Pension Schemes (Governance and Registration) (Amendment) Regulations 2022. The Trustee's review includes an assessment of the steps taken by the Investment Consultant to identify, assess and, where relevant, manage ESG / climate-related risks and opportunities as part of the advice provided to the Trustee.

Covenant Advisors

The Trustee has appointed Cardano Limited ("Cardano") as Covenant Advisor to the Plan. Cardano, advises the Trustee in relation to the Plan sponsor's ability to support the Plan, now and in the future. Climate-related exposures could have a positive or negative impact on the strength of the Plan sponsor's covenant.

The Trustee has also appointed Mercer to provide an overview of the key physical and transitional climate risks that could impact Company covenant strength over the short, medium and long term for the purposes of this report.

The Trustee conducts a review of its advisors on an annual basis. This includes an assessment of the steps taken by the Covenant Advisors to identify, assess and, where relevant, manage ESG / climate-related risks and opportunities, as part of the advice provided to the Trustee.

Actuarial Advisor

The Trustee has appointed Barnett Waddingham as Actuarial Advisor to the Plan. Barnett Waddingham's role is to provide ongoing advice on funding strategy, along with advice on members' benefits. This includes providing input to enable the Trustee to consider the impact of climate risks on funding strategy. Paul Houghton FIA of Barnett Waddingham is the Scheme Actuary.

As already mentioned, the Trustee conducts a review of its advisors on an annual basis. This includes an assessment of the steps taken by the Actuarial Advisor to identify, assess and, where relevant, manage ESG / climate-related risks and opportunities, as part of the advice provided to the Trustee.



Risk Management

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

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

Governance

- The Trustee's SIP, Default SIP and ESG Policy are reviewed at least annually and set out how investment climate-related risks are managed and monitored, as part of the overall risk management of the Plan.
- The Trustee maintains a risk register which serves to identify key risks, including climate-related risks and opportunities, which is reviewed annually.
- The Trustee receives training from time-to-time on climate-related issues. The training allows the Trustee to challenge whether the risks and opportunities are effectively allowed for in its governance processes and wider activities, as well as to challenge its advisors to ensure the governance support and advice adequately covers the consideration of climate-related risks and opportunities. Maintaining the Trustee's knowledge and understanding on ESG matters, including climate change, forms a core component of the Trustee's ongoing training plan.



- The Trustee receives periodic updates from the Sponsoring Employer on the health of the Covenant, which enables it to assess, as appropriate, changes in the Company's exposure to climate related risks and whether these are material to the Plan.
- The Trustee receives an annual ESG report that includes an independent assessment, conducted by Mercer, regarding the extent to which ESG considerations, including climate change, are integrated into the governance of the Plan. This includes a comparison against the year prior and broader benchmarks covering similar plans. The Trustee uses the results of this assessment to identify actions that could be taken in order to improve the extent of ESG integration.

Strategy

- Mercer take climate-related risks and opportunities into account as part of the wider strategic investment advice provided to the Trustee.
- Climate scenario analysis for the investment and funding strategy of the Plan will be reviewed at least triennially, or more frequently if there has been a material change to the strategic asset allocation. The impact of climate-related risks and opportunities is also an input in regular employer covenant updates. A summary of the Trustee's latest climate scenario analysis is included in the next section of this report and is the primary tool to help the Trustee understand the materiality of climate-related risks that could impact the Plan over time.

Reporting and Stewardship

- The Trustee will receive an annual report of climate-related metrics and progress against the targets set in respect of the assets held in the Plan. The Trustee expects to use the information to engage with the investment managers on their overall ESG policy and strategy, including identification of any areas for improvement and/or new ideas. The Trustee may also use this information for the purposes of establishing climate related objectives within mandate guidelines for portfolios.
- The Trustee receives a voting and engagement activity summary on an annual basis as part of the preparation of the SIP Implementation Statement (“the Statement”). The Statement summarises how and the extent to which the policies contained within the SIP and Default SIP have been followed over the period under review. This includes an assessment of how the investment managers vote and engage on climate-related issues, which is one of the Trustee’s key stewardship priorities (among others). The statement is available on the Plan’s website.
- The Trustee currently gives its investment managers full discretion in evaluating ESG factors, including climate change. However, the Trustee is increasingly considering how such factors are incorporated into mandate guidelines for portfolios (where this is possible), including exclusions, where Plan-specific exclusions will be established that align with the Trustee’s ESG beliefs and policies, as well as ESG and climate-related objectives.
- The Trustee also delegates responsibility for exercising voting rights and stewardship obligations attached to Plan investments to the investment managers. This includes engagement with issuers of debt and equity and other relevant persons about appropriate matters such as performance, strategy, capital structure, management of actual or potential conflicts of interest and risks, in accordance with their own corporate governance policies and current best practice, including the UK Corporate Governance Code and UK Stewardship Code.

Manager Selection and Retention

- The Trustee, with advice from Mercer, considers an investment manager’s firm-wide and strategy-specific approach to managing climate-related risks and opportunities when either appointing a new manager, in the ongoing review of a manager’s appointment, or as a factor when considering the termination of a manager’s appointment. This will predominantly be carried out using Mercer’s ESG ratings.
- The Trustee views climate risk as financially material and therefore expects investment managers to identify and include climate risk in their decisions around stock selection and retention.
- Mercer rates investment managers on the extent of integration of ESG factors (including climate change) into their processes. A manager’s stewardship process forms part of the rating assessment. This is considered at the firm level and at the investment strategy/fund level. The ratings are presented in quarterly investment performance reports and are reviewed by the Trustee.
- As part of the annual ESG report, the Trustee also benchmarks the Mercer ESG ratings assigned to the investment strategies in which the Plan invests against suitable peer group data. This enables the Trustee to focus its engagement activities with the investment managers. The Trustee will consider how the investment managers integrate ESG considerations, including climate change, as part of their investment strategies when presentations are provided by the managers.



Climate Risks and Opportunities

The effects of climate change will be felt over many decades. The Trustee has considered two types of climate-related risks and opportunities in its climate scenario analysis:

1. Transition Risks and Opportunities

This covers the potential financial and economic risks and opportunities from the transition to a low carbon economy (i.e. one that has a low or no reliance on fossil fuels), in areas such as:

- Policy and legislation
- Market
- Technology
- Reputation

Risks include the possibility of future restrictions, or increased costs, associated with high carbon activities and products. There are also opportunities, which may come from the development of low-carbon technologies. In order to make a meaningful impact on reducing the extent of global warming, most transition activities need to take place over the next decade and certainly in the first half of this century.

2. Physical Risks and Opportunities

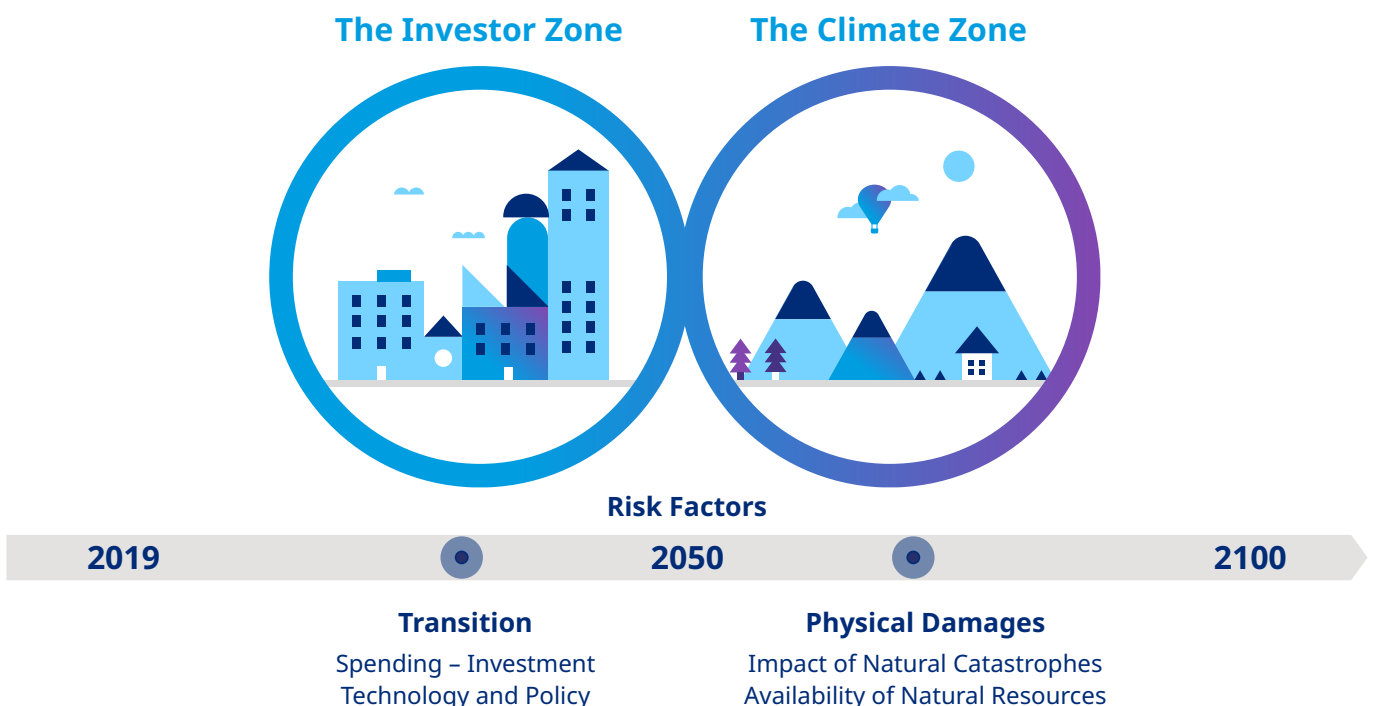
The higher the future level of global warming, the greater physical risks will be in frequency and magnitude. Physical risks cover:

- Physical damage (storms; wildfires; droughts; floods)
- Resource scarcity (water; food; materials; biodiversity loss)

Physical risks are expected to be felt more as the century progresses, though the extent of the risks is highly dependent on whether global net zero greenhouse gas emissions are achieved by 2050.

There are investment opportunities, for example, in newly constructed infrastructure and real estate that is designed to be resilient to the physical impacts of climate change, as well as being constructed and operated in a way that generates low or no net carbon emissions. There are also opportunities for investment in those companies or industries that focus on energy conservation and resource efficiency.

Figure 1: Illustrates how climate risk factors are expected to evolve over time.



Strategy

The effects of climate change will be felt at different times in the future and to different extents. The Trustee believes it is important to understand how the Plan's exposure to climate-related risks may change over time, when the risk exposure may be greatest and what actions can be taken now, or in the future, to avoid those risks becoming financially material to the Plan.

To help with this assessment, the Trustee has defined short-, medium- and long-term time horizons for the DB and DC sections of the Plan as outlined in Table 1.

Table 1: Trustee Timeframes

Timeframe	DB Section	DC Section
Short-term	Period to 2026 Consistent with the timing of the 30 September 2026 actuarial valuation	Period to 2025 Consistent with the timing for the next triennial investment strategy review
Medium-term	2026 to 2032 Consistent with when the "end game" asset allocation is expected to be achieved under the de-risking flightpath agreed as part of the Investment Protocol dated April 2023 ²	2025 to 2032 The point at which over 50% of the membership is expected to have reached retirement
Long-term	2032 to 2066 When the last member is expected to retire	2032 to 2053 When the last member is expected to retire

The climate-related risks and opportunities that are relevant to the Plan vary over these periods.



²In December 2018, the Trustee entered into a deed of guarantee with the Company to enhance the Plan's covenant. The guarantee is conditional on the Trustee investing in accordance with an agreed Investment Protocol. The Investment Protocol dated April 2023 sets a strategic asset allocation for each year from 2022 to 2032 (from which point the allocation is fixed).

Short-Term

Transition risks are greater than physical risks with moderate asset re-pricing risk driven by:

- Increases in private sector net zero commitments and clearer decarbonisation plans;
- Perceived or real increased pricing of greenhouse gas emissions/carbon;
- Exposure to developing economies, which have longer time horizons for country level phase down of fossil fuel usage.

Medium-Term

Transition risks continue to dominate with heightened asset re-pricing as:

- Future warming pathways become clearer;
- Market awareness grows and is better priced into asset valuations;
- Unexpected policy changes surprise markets.

Long-Term

Physical risks increase, but transition risks still dominate:

- Development of technology and low carbon solutions;
- Policy, legislation and regulation are likely to also play a key role at the international, national and subnational level.



Climate Scenarios

In order to assess the potential impact of climate-related transition and physical risks, the Trustee has considered two possible climate scenarios. Defined as 'warming pathways', these scenarios consider the expected degrees of warming of the atmosphere by the end of the century relative to pre-industrial levels.

The scenarios considered by the Trustee are:

- **<2.0°C Scenario ("Orderly Transition")** - Average temperature increase of less than 2.0°C by 2100. This scenario assumes political and social organisations act in a co-ordinated way to implement the recommendations of the Paris Agreement to limit global warming to below 2°C. Transition impacts do occur, but are relatively muted across the broad market.
- **>4.0°C Scenario ("Failed Transition")** - Average temperature increase above 4°C by 2100. This scenario assumes the world fails to co-ordinate a transition to a low carbon economy and global warming exceeds 4°C above pre-industrial levels by 2100. Physical climate impacts cause large reductions in economic productivity and increasing impacts from extreme weather events.

Further information in relation to the respective scenarios is included in Table 2 on the next page.

The Trustee will review the scenarios modelled and reported in future assessment periods. It is important to note that the modelling may understate or overstate the true level of risk due to the uncertainty around the future economic impacts of climate change. There is not currently an agreed market practice for the modelling of each climate scenario. However, the Trustee expects that methods will converge in future, as market practice around climate reporting improves.

The Technical Section of this report provides more detail on the modelling approach, along with the assumptions and limitations of the scenario analysis.

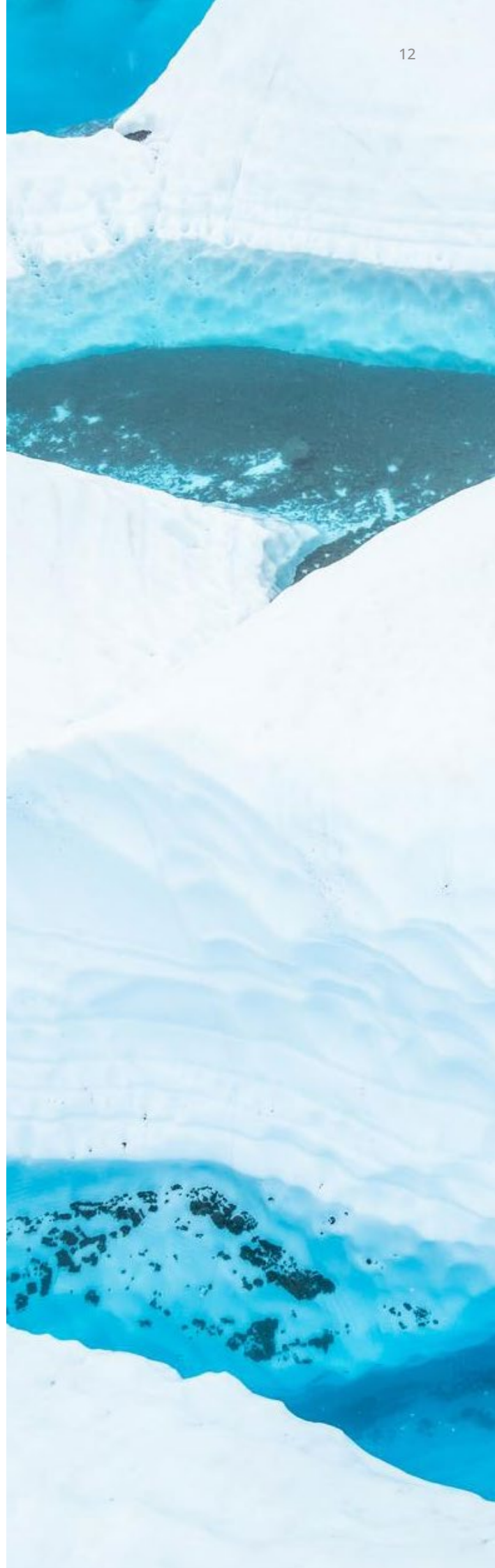


Table 2: Scenario Modelling

Detail	<2.0°C Scenario	4.0°C Scenario
Overview	This scenario captures an early transformation to a low-carbon economy, in order to limit global warming to no more than 2°C by the end of the century.	This scenario captures no transformation to a low-carbon economy, as global warming is allowed to rise to 4°C by the end of the century.
Risk factors	Transition risks are high, particularly in the first half of this century. Physical risks are anticipated in the latter half of the century though are less impactful relative to higher warming pathway scenarios.	Transition risks are very low. Physical risks are conversely high, are anticipated sooner in the century and are more impactful than with lower warming pathway scenarios.
Narrative	Global action starts today, driven by policy and regulation, as well as consumer sentiment. Emissions peak in the 2020s and coal is phased out by mid-century. By the middle of the century, the average global sea level is expected to rise and longer droughts will be experienced in regions across the globe.	Global economies fail to co-ordinate a transition to a low carbon economy. Emissions peak late in the century and coal is not phased out. The average global sea level continues to rise throughout the century and natural disasters become commonplace.
Market impact	Over the period to 2030, the cost of transition will play through at the sector level, with heavy carbon-based industries, such as the energy sector and utilities, being the most negatively impacted. The renewable energy sector is expected to perform strongly under this scenario, along with raw materials, telecoms and IT.	Heavy carbon-based industries, such as the energy sector and utilities, are not negatively affected as they would be in lower warming pathway scenarios. The renewable energy sector is expected to perform less strongly under this scenario, along with raw materials, telecoms and IT.
Asset class impacts	At the asset class level, equities, infrastructure and commodities are most sensitive to climate-related risks. Sustainable allocations to global equity and infrastructure capture the opportunities presented by the transition to a low-carbon economy and avoid exposure to carbon-intensive sectors and/or companies.	Carbon-intensive industries continue to generate stable returns, while sustainable allocations to global equity and infrastructure underperform due to the lack of a transition to a low-carbon economy.

Results of Climate Scenario Analysis: DB Section

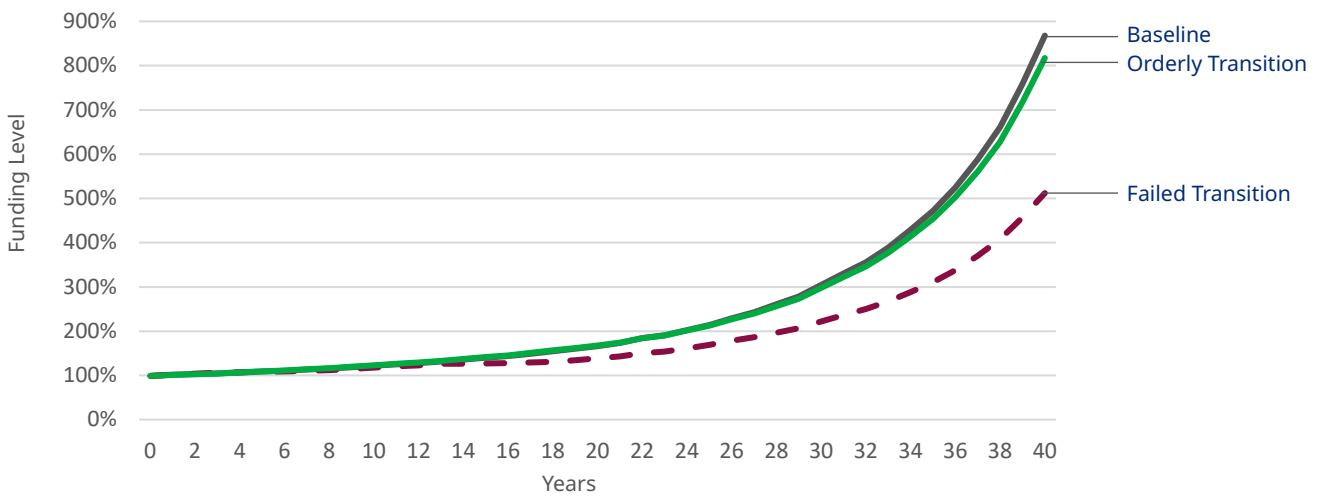
Resilience of the Investment and Funding Strategy

The Plan’s investment strategy is expected to evolve in a manner consistent with the de-risking flightpath agreed as part of the Investment Protocol dated April 2023. This involves reducing the Plan’s target allocation to growth assets (equities and property, as well as allocations to any other alternative growth assets the Trustee agrees to introduce) from 30.5% to 6.0% over the period from 2023 to 2032. The Plan’s allocation to bond assets is expected to increase commensurately, from 65.5% to 90.0%, with the Plan’s exposure to high lease to value (“HLV”) property remaining static at 4.0%. The Trustee has conducted climate scenario analysis based on the Plan’s current strategic asset allocation (30.5% growth assets, 4.0% HLV property and 65.5% bonds), as well as under the target “end game” asset allocation that is expected to be achieved under the de-risking flightpath agreed as part of the Investment Protocol.

Figures 2 and 3 summarise the key output from the analysis, based on the Plan’s current and “end game” target allocations respectively. The analysis shows the impact on the funding level, measured on the Plan’s long-term funding target basis (gilts +0.4% p.a.) as at 31 December 2022, under the Orderly and Failed Transition scenarios. This is compared with the expected baseline funding level progression, which represents the impact of climate-related risk that Mercer assumes the market is already pricing in.

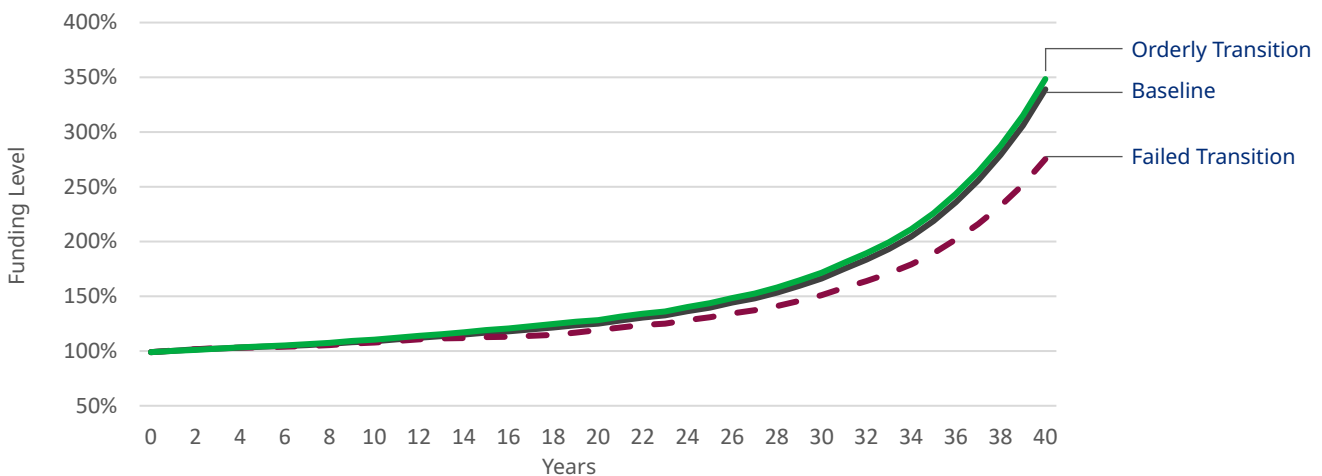
Table 3 summarises the results of the analysis over the short, medium and long-term time horizons defined by the Trustee.

Figure 2: Funding Level Progression under the Plan’s Current Strategic Target Asset Allocation



Source: Mercer. Based on assets and liabilities, measured on a gilt +0.4% p.a. basis, as at 31 December 2022.

Figure 3: Funding Level Progression under the Plan’s End Game Strategic Target Asset Allocation



Source: Mercer. Based on assets and liabilities, measured on a gilt +0.4% p.a. basis, as at 31 December 2022.

Table 3: Summary of Results over the Short-, Medium- and Long-Term Time Horizons

Scenario	Time Horizon	Current Strategic Asset Allocation			End Game Asset Allocation		
		Baseline	Impact relative to baseline	Final funding level	Baseline	Impact relative to baseline	Final funding level
Orderly Transition	Short-term	107%	-0.3%	107%	103%	+0.1%	103%
	Medium-term	119%	+1.1%	120%	108%	+1.1%	109%
	Long-term	868%	-50.8%	817%	339%	+9.3%	348%
Failed Transition	Short-term	107%	+0.2%	107%	103%	-0.1%	103%
	Medium-term	119%	-3.9%	115%	108%	-1.3%	107%
	Long-term	868%	-355.9%	512%	339%	-63.9%	275%

Source: Mercer. Based on assets and liabilities, measured on a gilt +0.4% p.a. basis, as at 30 September 2022.

The analysis shows that the Plan's funding position is expected to remain above 100% (measured on the gilts +0.4% p.a. basis) under all of the timescales and scenarios considered. Meanwhile, the overall impact of climate-related risks on the investment and funding strategy is relatively low. The main reasons for this are that growth assets represent a relatively small and reducing component of the Plan's overall strategy, noting that such assets are highly vulnerable to physical risk, while the Plan is starting from a strong funding position. The magnitude of the potential impact of climate change risk is expected to reduce over time, as the Plan's asset allocation is de-risked towards the "end game" target asset allocation.

The Trustee recognises that transition risk poses the greatest threat to the future progression of the Plan's funding level. In particular, the impact of transition risk under a scenario whereby the transformation to a low-carbon economy occurs suddenly could affect the timescales associated with the Trustee being able to secure members' benefits with an insurer. However, considering climate-related risks alongside other risks that the Plan is exposed to, the Trustee believes the current investment and funding strategy is resilient to climate-related risks. This position will be kept under review.

The intricacies of climate systems present considerable difficulties in modelling the impacts on pension plans' assets and liabilities. This is particularly true in the Failed Transition scenario, where over 4°C of warming is observed. Due to the unprecedented nature of such warming, it is challenging to encompass all potential consequences within the modelling process. Simplifications in the modelling, such as not allowing for tipping points, mean the actual impact on pension plans is likely to be more significant than is currently being modelled. As long as these limitations are understood, the scenarios still provide valuable insights to inform climate risk assessment and management.



Covenant Impact

Climate change is already having an impact on the Company's operations, supply chains and consumers and is therefore integral to the businesses' long-term success. As the Plan is well-funded, with a low risk investment strategy, this would suggest a low level of covenant reliance. However, the Plan will still have an element of covenant reliance until the point that members' benefits are secured with an insurer.

The Trustee has received advice from Mercer regarding the potential impact of climate change risk from a covenant standpoint. The analysis provided is based on PepsiCo's Climate Disclosure Project response, noting that this covers the risks at a global level and does not specifically consider UK risks, which may impact upon the Plan's direct covenant.

In the short to medium-term, PepsiCo's focus is expected to be on reducing greenhouse gas emissions, particularly in respect of scope 3³. Near-term transition risks are considered to be low, with PepsiCo well-placed to manage these challenges, noting its leading market positions and historically resilient businesses. However, long-term

transition risks are likely to be greater, with PepsiCo reliant on new technology and mechanisms not currently available, albeit opportunities driven by the transition will likely mitigate against some of the potential adverse impacts.

Over the short-term, physical risks, such as rising temperatures, are already impacting PepsiCo's business, causing supply chain disruption. PepsiCo have estimated that direct costs over the short-term could increase by c.\$1bn. Whilst significant, the additional costs are not considered material at a Group level, noting that PepsiCo has a market capitalisation of over \$200bn, with equity of c.\$17bn and net revenues of c.\$86bn across a global client base in financial year 2022.

Longer-term, the risks identified mainly relate to physical damages. In particular, the implications of rising temperatures and a failed transition more broadly are likely to have material adverse effects, suggesting an escalating level of risk in the medium to long-term.

³As outlined in the Metrics and Targets section of this report, scope 3 emissions refer to those that are the result of activities from assets not owned or controlled by the reporting organisation, but that the organisation indirectly affects in its value chain.



Impact on Mortality

The Scheme Actuary has confirmed that as for other actuarial assumptions, climate change is likely to impact on mortality assumptions. The impacts may be direct (e.g. a heatwave causing additional summer deaths, or milder winters causing fewer winter deaths) or indirect (e.g. reallocation of resources away from healthcare to combat climate change, or scientific developments resulting in better living standards), and climate change is likely to lead to some factors that improve life expectancy and some that decrease life expectancy. At this stage, the net impact of climate change is highly uncertain and depends on which climate change factors materialise in the UK. However, the Scheme Actuary expects that the impact of climate change on mortality is unlikely to materially change the funding level projections in this report.

Results of Climate Scenario Analysis: DC Section

The Trustee has considered the impact of the Orderly and Failed Transition scenarios on each of the popular arrangements offered under the DC section of the Plan. A popular arrangement is considered to be one in which £100m or more of the Plan’s assets are invested, or which accounts for 10% or more of the assets used to provide money purchase benefits (excluding assets which are solely attributable to additional voluntary contributions). The Plan has the following two popular arrangements, for which scenario analysis has been carried out:

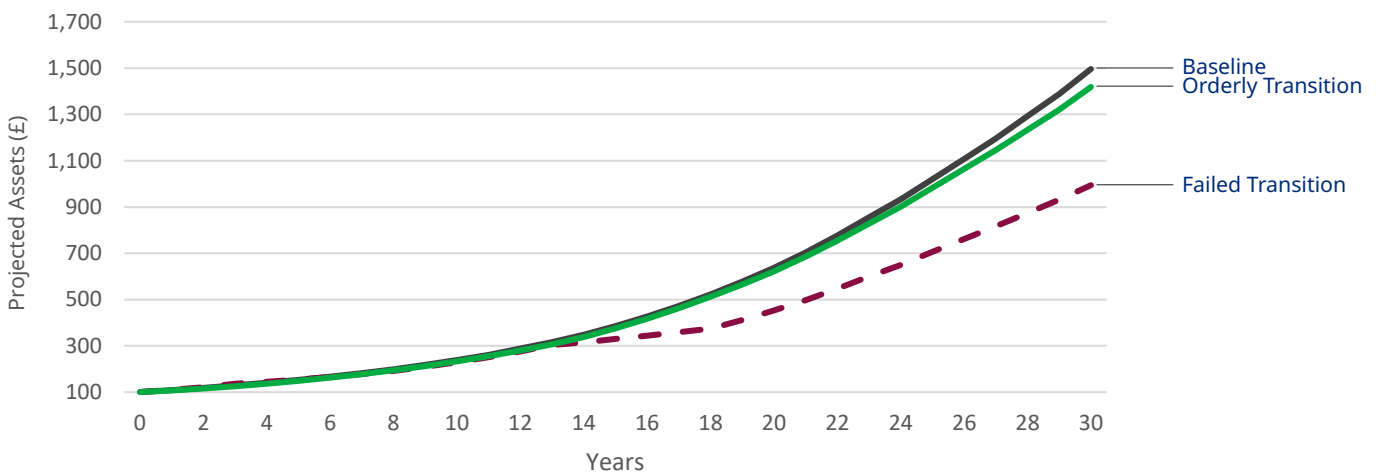
- The Default Lifestyle Strategy
- The BlackRock 30:70 Global Equity Fund

The analysis in respect of the Default Lifestyle Strategy has been carried out based on a member who invests in the “Growth Phase” over the entire period. As such, the output is the same as for the BlackRock 30:70 Global Equity Fund.

Figure 4 summarises the key output from the analysis. The analysis shows the impact on a £100 investment as at 31 December 2022, under the Orderly and Failed Transition scenarios. This is compared with the expected Mercer baseline projection.

Table 4 summarises the results of the analysis over the short, medium and long-term time horizons defined by the Trustee, relative to the expected Mercer baseline.

Figure 4: Asset Level Projection under both Popular Arrangements (per £100 invested)



Source: Mercer. Based on £100 invested as at 31 December 2022.

Table 4: Summary of Results over the Short-, Medium- and Long-Term Time Horizons

Scenario	Time Horizon	Impact relative to Mercer baseline	
		Percentage	Absolute
Orderly Transition	Short-term	-3.3%	-£4
	Medium-term	-2.2%	-£5
	Long-term	-5.2%	-£78
Failed Transition	Short-term	+4.9%	+£6
	Medium-term	-4.0%	-£9
	Long-term	-33.6%	-£503

Source: Mercer. Based on £100 invested as at 31 December 2022.

The analysis shows that members who are furthest from retirement are more greatly impacted under both scenarios, with the Failed Transition causing the highest absolute impact on members' pot sizes.



Metrics and Targets

The Trustee has chosen to present four climate-related metrics in this report. The climate-related metrics help the Trustee to understand the climate-related risk exposures and opportunities in the Plan’s investment portfolios, as well as to identify areas for further risk management, including investment manager portfolio monitoring and engagement. The metrics in this report are:

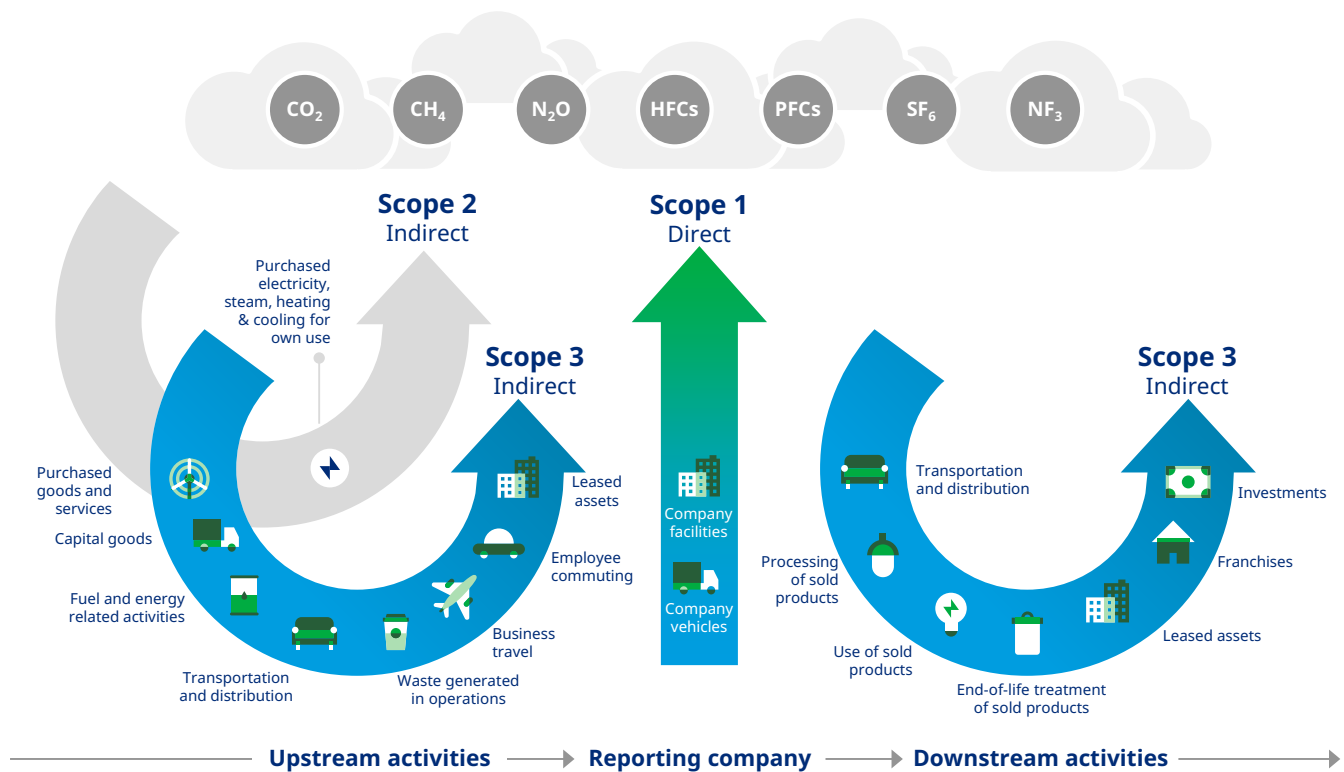
1. Absolute emissions metric: Total carbon emissions;
2. Emissions intensity metric: Carbon footprint;
3. Portfolio alignment metric: Science Based Targets Initiative; and
4. Additional climate change metric: Data quality

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

Total Carbon Emissions

This metric represents the underlying investee company’s or issuer’s reported or estimated greenhouse gas emissions, where available, and is expressed in absolute terms on an annual basis. It includes various scopes of emissions, which are summarised in Figure 5.

Figure 5: Scopes of Emissions



Source: Greenhouse Gas (“GHG”) Protocol

There are seven recognised GHGs, as defined by the GHG Protocol. In order to simplify reporting, each GHG is calibrated relative to carbon dioxide and is reported as ‘carbon dioxide equivalent’ emissions (“CO2e”).

For the purpose of this report, only scope 1 and 2 emissions have been reported (with the exception of for the Plan's property allocation within the DB section). The absolute emission metric is a proxy for the share of GHG emissions that are 'owned' by the Plan through investing in the underlying companies and issuers, including countries (referred to as 'sovereign exposure' through government debt).

Carbon Footprint

A carbon footprint demonstrates activities that result in greenhouse gas emissions. To calculate the carbon footprint associated with this Plan, we take the 'total carbon emissions' figure and calculate a weighted average against the overall market value of all underlying investments. This is a way to measure emissions relative to market size. Carbon Footprint also acts as an emissions intensity metric, which is the volume of emissions (metric tonne of carbon dioxide, CO₂e) per \$1 million of enterprise value. By looking at an intensity value you can adjust for the size of a fund to compare the funded emissions for different fund sizes.

Science Based Targets Initiative ("SBTi")

Science-based targets provide a clearly-defined pathway for companies to reduce GHG emissions. Targets are considered "science-based" if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement. This provides the Trustee with information regarding the underlying holdings of the managers, as well as a third party indication as to whether companies' decarbonisation targets are credible.

Data quality

Data quality aims to represent the proportions of the portfolio for which the Trustee has high quality data. The Trustee has considered underlying data provided by investment managers that is reported, estimated, not reported and "cash and other" to determine how representative the analysis is of the Plan's actual portfolio.

Data quality also assists the Trustee in monitoring the quality of reporting over time, as investment managers/companies are expected to continually improve their reporting on climate-related metrics.



Results of Climate Metrics Analysis: DB Section

The Trustee has made a number of changes to the DB section's investment strategy over the period from 31 December 2020 to 31 December 2022. Table 5 sets out how the Plan's listed equity and bond allocations have changed (on an annual basis) between these two dates.

Table 5: Changes in the Plan's Listed Equity and Bond Allocation

Asset Class	Manager	Mandate	Portfolio actual allocation**** (%)		
			31/12/2020	31/12/2021	31/12/2022
Listed equities	BlackRock	UK equities	9.4	8.2	2.6
	BlackRock	US equities*	12.5	10.8	5.2
	BlackRock	Canadian equities*	0.5	0.5	0.2
	BlackRock	European (ex-UK) equities*	10.1	8.4	4.1
	BlackRock	Japanese equities*	3.7	3.2	2.2
	Schroders	Asia (ex-Japan) equities*	3.4	2.1	1.9
	Genesis	Emerging markets equities	3.0	2.5	3.0
	BlackRock	RAFI equities*	6.6	4.7	5.9
	BlackRock	ESG equities*	n/a***	9.4	11.4
	Total		49.3	49.8	36.7
Listed corporate bonds	M&G	Sterling corporate bonds**	18.3	15.0	15.2
		Total	18.3	15.0	15.2
Total listed equities and corporate bonds			67.6	64.8	51.9
Sovereigns	M&G	Sterling corporate bonds**	3.1	4.1	2.4
	Schroders	LDI	21.4	23.2	29.5
		Total	24.5	27.3	32.0

Source: Investment managers, Northern Trust and Mercer. Figures subject to rounding.

*Each one of these mandates is composed of allocations to a currency hedged and unhedged fund. For presentation purposes, the Plan's allocations to both funds are displayed as a single mandate.

**Reflects the split of the M&G mandate between corporate bonds and sovereign bonds.

***Mandate yet to be funded.

****Shown as a percentage of total DB section assets. Excludes the Plan's property and cash holdings.

Tables 6, 7, 8 and 9 summarise how the climate metrics for the DB section's listed equity and bond holdings have changed (on an annual basis) between 31 December 2020 and 31 December 2022.

Table 6: Total Carbon Emissions

Asset Class	Manager	Mandate	Total carbon emissions (tCO ₂ e)		
			31/12/2020	31/12/2021	31/12/2022
Listed equities	BlackRock	UK equities	15,640	13,084	3,414
	BlackRock	US equities*	10,224	8,523	3,566
	BlackRock	Canadian equities*	895	958	426
	BlackRock	European (ex-UK) equities*	19,458	15,404	5,223
	BlackRock	Japanese equities*	5,335	5,579	2,702
	Schroders	Asia (ex-Japan) equities*	4,667	2,584	1,400
	Genesis	Emerging markets equities	6,514	4,149	1,393
	BlackRock	RAFI equities*	17,104	11,537	9,995
	BlackRock	ESG equities*	n/a***	5,687	6,017
	Total		79,838	67,547	34,136
Listed corporate bonds	M&G	Sterling corporate bonds**	42,575	38,139	19,432
		Total	42,575	38,139	19,432
Total listed equities and corporate bonds			122,412	105,642	53,568
Sovereigns	M&G	Sterling corporate bonds**	12,369	16,902	6,714
	Schroders	LDI	77,631	98,590	72,394
		Total	90,000	115,492	79,108

Source: Mercer, based on data sourced from MSCI using stock list data provided by the investment managers.

Notes: Scope 1+2 only.

Sovereign analysis has been conducted in line with the recommended methodology set out in the ongoing PCAF consultation. Data for Production Emissions (GHG) sourced from EDGARv7.0 website, Crippa et al. (2021, 2022). Data for PPP-Adjusted GDP sourced from The World Bank.

*Each one of these mandates is composed of allocations to a currency hedged and unhedged fund. For presentation purposes, the Plan's allocations to both funds are displayed as a single mandate.

**Reflects the split of the M&G mandate between corporate bonds and sovereign bonds.

***Mandate yet to be funded.

The absolute emissions of the listed equities and corporate bonds portfolio decreased by c.56.2% over the period under review. This was largely driven by the decrease observed in the investment value of the portfolio from December 2020 to December 2022.

Table 7: Carbon Footprint

Asset Class	Manager	Mandate	Carbon footprint (tCO ₂ e / \$M invested)		
			31/12/2020	31/12/2021	31/12/2022
Listed equities	BlackRock	UK equities	64.5	56.1	71.8
	BlackRock	US equities*	31.9	65.0	38.1
	BlackRock	Canadian equities*	69.7	67.6	101.3
	BlackRock	European (ex-UK) equities*	74.7	65.0	69.9
	BlackRock	Japanese equities*	55.7	62.0	67.1
	Schroders	Asia (ex-Japan) equities*	53.0	42.5	41.5
	Genesis	Emerging markets equities	84.1	57.7	25.5
	BlackRock	RAFI equities*	101.1	87.0	94.4
	BlackRock	ESG equities*	n/a***	21.4	29.3
	Total		63.0	47.8	51.7
Listed corporate bonds	M&G	Sterling corporate bonds**	90.3	90.1	71.9
		Total	90.3	90.1	71.9
Total listed equities and corporate bonds			70.4	57.6	57.6

Source: Mercer, based on data sourced from MSCI using stock list data provided by the investment managers.

Notes: Scope 1+2 only

*Each one of these mandates is composed of allocations to a currency hedged and unhedged fund. For presentation purposes, the Plan's allocations to both funds are displayed as a single mandate.

**Reflects the split of the M&G mandate between corporate bonds and sovereign bonds.

***Mandate yet to be funded.

The carbon footprint of the listed equities and corporate bonds portfolio decreased by c.18.2% over the period analysed. The Trustee's decision to introduce and gradually increase the Plan's proportional allocation to ESG equities has had a positive impact, while there were also some standout performers from a decarbonisation perspective (e.g. Genesis).



Table 8: SBTi

Asset Class	Manager	Mandate	SBTi**** (%)		
			31/12/2020	31/12/2021	31/12/2022
Listed equities	BlackRock	UK equities	39.2	40.6	45.0
	BlackRock	US equities*	39.2	38.4	38.6
	BlackRock	Canadian equities*	11.0	8.8	9.8
	BlackRock	European (ex-UK) equities*	56.7	56.3	57.0
	BlackRock	Japanese equities*	41.1	39.7	40.4
	Schroders	Asia (ex-Japan) equities*	19.8	16.5	17.5
	Genesis	Emerging markets equities	11.2	11.4	12.2
	BlackRock	RAFI equities*	36.4	37.1	36.3
	BlackRock	ESG equities*	n/a***	43.2	42.8
	Total			39.3	40.0
Listed corporate bonds	M&G	Sterling corporate bonds**	33.5	33.7	30.7
	Total		33.5	33.7	30.7

Source: Source: Mercer, based on data sourced from MSCI using stock list data provided by the investment managers.

Notes: Scope 1+2 only.

*Each one of these mandates is composed of allocations to a currency hedged and unhedged fund. For presentation purposes, the Plan's allocations to both funds are displayed as a single mandate.

**Reflects the split of the M&G mandate between corporate bonds and sovereign bonds.

***Mandate yet to be funded.

****Presenting current data for SBTi figures, as historical information for this metric is not available.

The percentage of investments within the listed equities and corporate bonds portfolio with declared net zero or Paris-aligned targets remained broadly unchanged in aggregate over the period under review. However, there was a wide range between portfolios of the percentage of companies with SBTi targets.



Table 9: Data Quality

Manager	Mandate	Date	Data quality (%)			
			Reported data	Estimated data	Not Covered by MSCI	Cash & other assets
BlackRock	UK equities	31/12/2020	78.8	1.2	16.8	3.2
		31/12/2021	80.6	2.2	13.9	3.3
		31/12/2022	92.4	2.7	1.8	3.1
BlackRock	US equities*	31/12/2020	87.9	8.1	2.2	1.8
		31/12/2021	89.2	8.5	1.3	0.9
		31/12/2022	75.3	23.5	0.6	0.6
BlackRock	Canadian equities*	31/12/2020	88.6	2.9	8.2	0.3
		31/12/2021	84.1	4.5	11.3	0.1
		31/12/2022	82.3	11.7	5.8	0.2
BlackRock	European (ex-UK) equities*	31/12/2020	88.0	6.0	6.0	0.0
		31/12/2021	90.4	7.0	2.6	0.0
		31/12/2022	87.5	10.8	1.6	0.0
BlackRock	Japanese equities*	31/12/2020	91.2	7.2	0.6	1.0
		31/12/2021	83.6	13.2	0.4	2.8
		31/12/2022	85.1	14.9	0.0	0.0
Schroders	Asia (ex-Japan) equities*	31/12/2020	87.6	4.9	2.8	4.7
		31/12/2021	92.5	3.7	0.9	3.0
		31/12/2022	92.3	5.3	0.0	2.4
Genesis	Emerging markets equities	31/12/2020	70.9	18.3	9.4	1.5
		31/12/2021	80.0	13.2	5.6	1.1
		31/12/2022	80.8	15.7	2.4	1.0
BlackRock	RAFI equities*	31/12/2020	90.1	4.1	5.0	0.8
		31/12/2021	89.6	6.9	2.9	0.6
		31/12/2022	81.7	16.0	2.4	0.0
BlackRock	ESG equities*	31/12/2020	n/a**	n/a**	n/a**	n/a**
		31/12/2021	92.3	5.2	2.5	0.0
		31/12/2022	82.8	16.2	1.0	0.0
M&G	Sterling corporate bonds	31/12/2020	64.6	14.0	6.9	14.4
		31/12/2021	53.8	16.8	7.9	21.5
		31/12/2022	55.2	23.3	7.6	13.8
Total listed equities and corporate bonds		31/12/2020	80.0	8.2	6.7	5.1
		31/12/2021	80.0	9.1	5.1	5.9
		31/12/2022	75.0	17.4	3.2	4.4

Source: Mercer, based on data sourced from MSCI using stock list data provided by the investment managers.

Notes: Only including the equity and corporate bond portions of each mandate. The remainder is included in "cash & other assets".

*Each one of these mandates is composed of allocations to a currency hedged and unhedged fund. For presentation purposes, the Plan's allocations to both funds are displayed as a single mandate.

**Mandate yet to be funded.

The data quality of the listed equities and corporate bonds portfolio has remained good in aggregate. However, data quality varies significantly by fund, with coverage for the M&G sterling corporate bonds mandate proving to be the most challenging.

Property managers

Due to the nature of the underlying holdings within property mandates, it is difficult to analyse them in the same way as for the other mandates in which the Plan invests. The Trustee has therefore relied on the managers to provide their own figures for the metrics the Plan has agreed to measure. Table 10 sets out the information provided by the managers.

Table 10: Property Managers' Metrics

Manager	Asset class	Total carbon emissions (tCO ₂ e)	Carbon footprint (tCO ₂ e / \$M invested)	Data coverage (%)
Aviva*	HLV property	50,826	17.8	92.6
Lothbury**	Property	17,890	13.0	82.0

Source: Investment managers, as at 31 December 2022.

*Includes scopes 1, 2, and 3 emissions.

**These calculations have used actual consumption data where available, with proxy data used to estimate missing tenant data and therefore the total emissions. The proxy data represents typical energy intensities for the asset type and location, which has been multiplied by the known floor areas where actual data is unavailable. Emissions factors have then been applied to the total consumption for electricity and gas to establish total emissions by scope, i.e. using a location-based approach. For assets sold during the reporting year, metrics have been calculated taking into account the amount of time during which the assets remained in the portfolio. One property was excluded from the analysis as it was being refurbished and will fall into next year's reporting.



Results of Climate Metrics Analysis: DC Section

Tables 11 and 12 summarise how the climate metrics for the two popular arrangements offered under the DC section of the Plan have changed (on an annual basis) between 31 December 2020 and 31 December 2022.

As the BlackRock 30:70 Global Equity Fund is the same strategy as is used within the Default Lifestyle Strategy, the carbon footprint, SBTi and data quality metrics for the respective arrangements are identical (as outlined in Table 11), noting that cash (the only other asset class in which the Default Lifestyle Strategy invests) is not analysed for the purposes of calculating the metrics. This is principally due to the fact that the turnover within cash portfolios tends to be extremely high, while the duration of the instruments in which such strategies invest can be as short as a few weeks. Consequently, any notion of decarbonisation progress/engagement is not feasible for such mandates.

The total carbon emissions between the two arrangements do differ (as outlined in Table 12). This is because the assets under management within the standalone variant of the BlackRock 30:70 Global Equity Fund are lower than the amount that is invested in the Fund via the Default Lifestyle Strategy.

On the whole, the metrics have generally remained consistent for the arrangements. Where metrics have increased, this is largely due to the increased coverage of the BlackRock 30:70 Global Equity Fund over the period of assessment.

Table 11: Carbon Footprint, SBTi and Data Quality

Metric	31/12/2020	31/12/2021	31/12/2022
Carbon footprint (tCO ₂ e / \$M invested)	54.7	51.1	70.9
SBTi* (%)	n/a	n/a	39.5
Data quality (%)	Reported data	83.5	85.1
	Estimated data	5.8	5.6
	Not covered by MSCI	7.1	5.5
	Cash & other asset classes	3.3	3.8

Source: Mercer, based on data sourced from MSCI using stock list data provided by the investment manager.

Notes: Scope 1+2 only.

*Presenting current data for SBTi figures as historical data for this metric is not available

Table 12: Total Carbon Emissions

Total carbon emissions (tCO ₂ e)	31/12/2020	31/12/2021	31/12/2022
Default lifestyle strategy	843	917	911
BlackRock 30:70 Global Equity Fund	316	327	331

Source: Mercer, based on data sourced from MSCI using stock list data provided by the investment manager.

Notes: Scope 1+2 only.

Decarbonisation targets

The Trustee is required to set at least one target, based on one of the selected metrics. The Trustee is free to select a target in relation to the whole portfolio or only part of the portfolio, for example, in relation to a particular section, fund, sector or asset class. In setting Plan specific targets, the Trustee considered the following four key principles:

1. Set target(s) against metric(s) where there is an acceptable level of data coverage/reliability.
2. Set target(s) on part(s) of the portfolio where the Trustee has most influence.
3. Targets should be quantitative with supporting justification.
4. Set target(s) with an eye to achieving real world impact over time, within confines of the Trustee's fiduciary duty.

The Trustee believes that setting quantitative targets for the purpose of monitoring the Plan's climate-related credentials provides a robust framework for assessing progress. However, quantitative measures also help the Trustee in identifying, managing and tracking the Plan's exposure to the financial risks and opportunities associated with climate change.

The Trustee has agreed not to set any targets in respect of the DC section of the Plan, due to the limited scope for the Trustee to effect change via the existing arrangement with BlackRock, noting that the DC section also represents a small (in relative terms) and reducing part of the overall Plan (given that the Plan is closed). The Trustee is currently considering alternative means of implementing the DC arrangements, in order to improve the extent of ESG integration (amongst other things) within the options made available to members.

With regard to the assets of the DB section, the Trustee has agreed not to set targets for either of the property mandates. Metric data is typically less

readily available for such assets, while the mandates are not expected to be a key driver of any future improvement in the Plan's climate credentials, noting that the Trustee has submitted a request to redeem the Plan's holding in the Lothbury mandate over the year under review.

Furthermore, the Trustee has excluded any allocations to cash and sovereign bonds for target setting purposes, due to the limited influence the Trustee is able to exert within these asset classes.

The Trustee has set individual targets for the DB section's listed equity and corporate bond portfolios. These are based on how the respective portfolios are expected to evolve over time, taking into account the de-risking agreed as part of the Investment Protocol dated April 2023, as well as the investment managers' views regarding the potential future decarbonisation of the portfolios.

The Trustee has chosen to set the targets with reference to the carbon footprint metric, based on scope 1 and 2 emissions. This metric has the benefit of being directly linked to real world emissions. Meanwhile, the process of normalising absolute portfolio emissions by the amount invested is expected to facilitate easier comparison over time and between portfolios of very different sizes or asset classes, making Trustee decision making for decarbonisation purposes simpler.

The respective targets that the Trustee has set are as follows:

- Reduce the carbon footprint (scope 1 and 2 emissions) of the listed equity portfolio by 40% by 31 December 2030, relative to a 31 December 2020 baseline.
- Reduce the carbon footprint (scope 1 and 2 emissions) of the listed corporate bond portfolio by 20% by 31 December 2025, relative to a 31 December 2020 baseline.

Table 13 sets out the progress the Trustee has made versus the agreed targets between 31 December 2020 and 31 December 2022.

Table 13: Progress Versus Targets

Portfolio	Carbon footprint (tCO ₂ e / \$M invested)		Change versus 31/12/2020 position		Target reduction
	31/12/2022	31/12/2022	(tCO ₂ e / \$M invested)	(%)	(%)
Equity	63.0	51.7	-11.3	-17.9	40% by 31 December 2030
Corporate bond	90.3	71.9	-18.4	-20.4	20% by 31 December 2025

Source: Mercer, based on data sourced from MSCI using stock list data provided by the investment managers.

Notes: Scope 1+2 only.

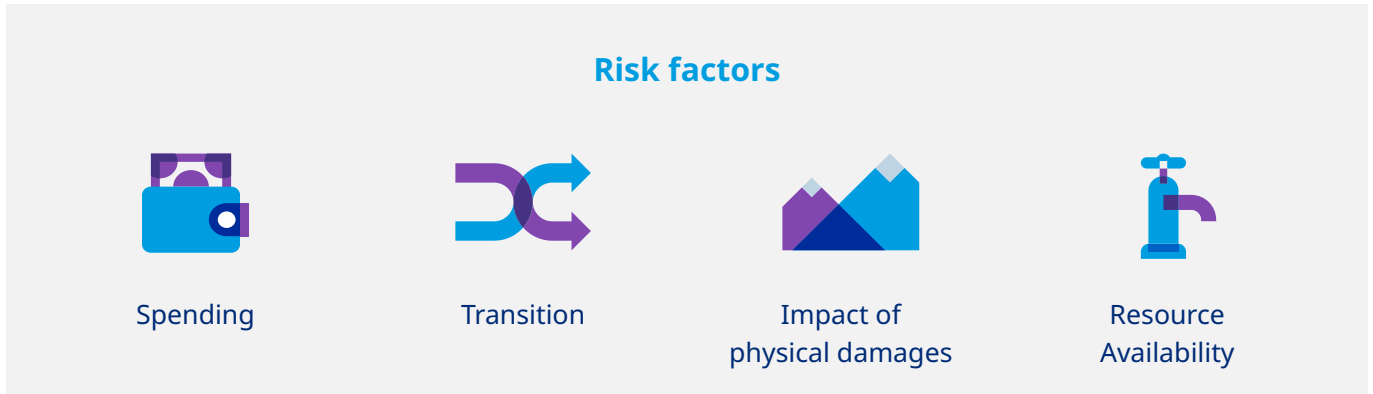
The Trustee will keep the targets under review to ensure they remain appropriate and relevant, taking into account any changes to the investment strategy, the availability of data and wider market developments. With this in mind, the Trustee may change the targets in the future.



Technical Section

Figure 6: Climate Scenario Modelling Approach

1 Four climate risk factors have been identified



2 **Asset class sensitivity**

The weighting placed on each risk factor will vary by asset class and the risk factors have different degrees of sensitivity under each of the three climate change scenarios.

3 **Climate scenarios**

An estimate can be placed on the impact on annual asset class returns over multi-year time periods, and to identify where the risk and opportunity priorities lie.



Asset class return impacts

Source: Mercer

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

1. The further into the future you go, the less reliable any quantitative modelling will be.
2. Looking at average asset class returns over multi-decade timeframes leads to small impacts. The results are potentially significantly underestimated.
3. There is a reasonable likelihood that physical impacts are grossly underestimated. Feedback loops or 'tipping points', like permafrost melting, are challenging to model particularly around the timing of such an event and the speed at which it could accelerate.
4. Financial stability and insurance 'breakdown' is not modelled. A systemic failure may be caused by either an 'uninsurable' 4°C physical environment, or due to the scale of mitigation and adaption required to avoid material warming of the planet.
5. Most adaptation costs and social factors are not priced into the models. These include population health and climate-related migration.

Data sources

Climate-related metrics provided by Mercer have been sourced from MSCI using stock list data provided by the investment managers. Other data has been requested directly from the asset managers.

Scope of emissions

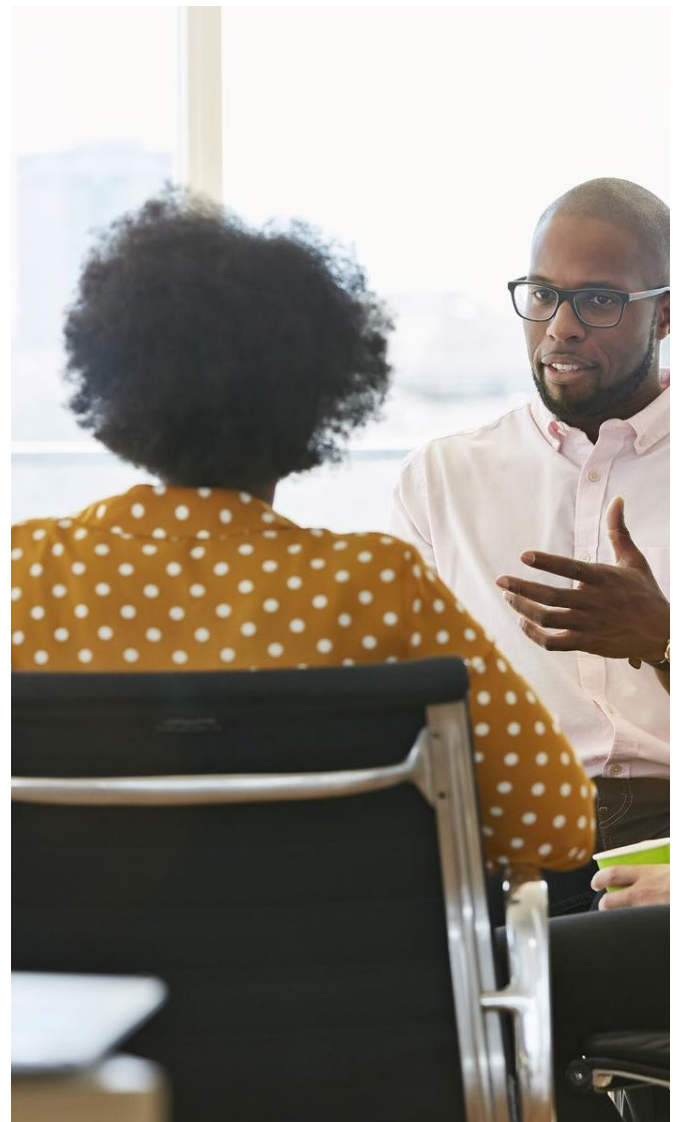
Only Scope 1 and 2 emissions data has been included in this report except where noted. Scope 3 emissions are currently excluded because scope 3 disclosure remains insufficient to use reliably at present. Scope 1, 2 and 3 emissions are as defined by the GHG protocol.

Data coverage

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

- Some public listed companies are not publishing climate-related data or are providing poor quality data. This is relevant to public equity and corporate bonds. Obtaining data for emerging market equity can also be challenging due to general disclosure and transparency challenges.
- Many private companies do not currently produce climate-related data and coverage for private markets, such as private equity and private debt, will be low, or zero for mature funds.
- Sovereigns, or governments, may not publish climate-related data in the public domain. This is a particular challenge for emerging market debt. For UK government debt, data is available but there is a delay in the data being published.
- Short-term instruments, such as secured finance assets, have limited data available due to the short-term nature of the individual assets.
- For the long dated property portfolio, the occupiers of the buildings in the portfolio have full operational control and there are no Scope 1 or 2 emissions associated with the investments. The asset managers are looking to improve the collection of Scope 3 emissions data – this includes occupier activities where they have direct utility supplier contracts.

In this report, the Trustee has used a pro rata approach to scale up each climate metric in order to present the data as if full coverage was available for each asset. This assumes that the part of an investment fund that does not have data available has the same investment characteristics (for example, same sector or geography) as the part where there is data. For example, where an investment manager can only provide climate metrics on half of the underlying investments for a particular strategy, we have assumed that the remaining half for which data cannot be provided has identical climate characteristics as the half for which climate can be provided. The relevant climate metric as provided by the investment manager has then been scaled up to allow for this. In this example, the data would be doubled to get to 100% coverage.



Glossary

Carbon intensity

The amount of emissions of carbon dioxide (or other greenhouse gasses) released per unit of another variable such as revenue, gross domestic product (GDP), per \$1million invested etc. over a given time period (typically annually).

Decarbonisation

The process by which countries, individuals or other entities aim to achieve zero fossil carbon existence. Typically refers to a reduction of the carbon emissions associated with electricity, industry and transport.

Global warming

The estimated increase in global mean surface temperature expressed relative to pre-industrial levels unless otherwise specified.

Greenhouse gases

Gases in our planet's atmosphere which trap heat. They let sunlight pass through the atmosphere but prevent heat from leaving the atmosphere. Greenhouse gases include: Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur Hexafluoride (SF₆), Nitrogen Trifluoride (NF₃).

Net zero (CO₂ emissions)

Net zero carbon dioxide (CO₂) emissions are achieved when CO₂ emissions are balanced globally by CO₂ removals over a specified period. The term "net zero" is also typically associated with the 2050 date or earlier, as this is aligned with the scientific recommendations to achieve a 1.5°C scenario.



Paris Agreement

The Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC) was adopted on December 2015 in Paris, at the 21st session of the Conference of the Parties (COP) to the UNFCCC. The agreement, adopted by 196 Parties to the UNFCCC, entered into force on 4 November 2016 and as of May 2018 had 195 Signatories and was ratified by 177 Parties. One of the goals of the Paris Agreement is "Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels", recognising that this would significantly reduce the risks and impacts of climate change. Additionally, the Agreement aims to strengthen the ability of countries to deal with the impacts of climate change.

Physical risks

Dangers or perils related to the physical or natural environment that pose a threat to physical assets e.g. buildings, equipment and people. Mercer's scenario analysis grouped these into the impact of natural catastrophes (for instance sea level rise, flooding, wildfires, and hurricanes) and resource availability (particularly water). See also Transition risks.

Scope 1, 2, 3 emissions

Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions 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. Emissions are measured over annual periods.

Transition

The process of changing from one state or condition to another in a given period of time. Transition can be in individuals, firms, cities, regions and nations, and can be based on incremental or transformative change.

Transition risks

Risks from policy changes, reputational impacts and shifts in market preferences, norms and technology. See also Physical risks.

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