

**TCFD** | TASK FORCE ON  
CLIMATE-RELATED  
FINANCIAL  
DISCLOSURES

# TCFD report for year ending 5 April 2025

Saint-Gobain Manufacturing UK Pension Scheme (the  
“Scheme”)

Produced by: Saint-Gobain UK Pension Trustees Limited (the “Trustee”)  
Date: August 2025

# Introduction

Climate change is affecting the planet, causing extreme weather events, impacting crop production, and threatening Earth's ecosystems. Understanding the impact of climate change and the Scheme's vulnerability to climate-related risks will help us to mitigate the risks and take advantage of any opportunities.

UK regulations require Trustees of pension schemes with more than £1bn in assets to meet certain climate governance requirements and publish an annual report on their scheme's climate-related risks.

Better climate reporting should lead to better-informed decision-making on climate-related risks and greater transparency around these risks should increase accountability and provide decision-useful information to investors and beneficiaries.

This report is the annual climate disclosure for the Scheme for the year ending 5 April 2025. The four elements covered in the report are:

<b>Governance</b>	The Scheme's governance around climate-related risks and opportunities.
<b>Strategy</b>	The potential impacts of climate-related risks and opportunities on the Scheme's strategy and financial planning.
<b>Risk Management</b>	The processes used to identify, assess and manage climate-related risks.
<b>Metrics and Targets</b>	The metrics and targets used to assess and manage relevant climate-related risks and opportunities.

This report has been prepared by Saint Gobain UK Pension Trustees Limited (the "Trustee") in accordance with the regulations set out under The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 (the "Regulations") and is aligned to the Taskforce for Climate-related Financial Disclosures ("TCFD") framework<sup>1</sup>.

<sup>1</sup> The TCFD was disbanded in October 2023, noting that its work (to create a global framework for businesses to disclose climate-related risks and opportunities to support stakeholders in making informed financial decisions) was successfully completed. The International Financial Reporting Standards ("IFRS") foundation now monitor corporate TCFD disclosures.



---

# Table of contents

Introduction.....	3
Executive summary.....	5
Governance.....	7
Strategy.....	10
Risk management.....	28
Metrics & Targets.....	34
Appendices.....	44
<i>Glossary.....</i>	<i>45</i>
<i>Appendix – An explanation of climate risk categories.....</i>	<i>47</i>
<i>Appendix – Climate scenario modelling assumptions.....</i>	<i>49</i>
<i>Appendix – Greenhouse gas emissions in more detail.....</i>	<i>51</i>

# Executive summary

This report sets out the actions that we, the Trustee, have taken to understand the potential impact climate change could have on the Scheme.

We have worked closely with our investment adviser to identify the climate-related risks and opportunities faced by the Scheme to understand ways it can manage and mitigate those risks.

## Overview of the Scheme

The Scheme has a Defined Benefit (“DB”) structure with Additional Voluntary Contributions (“AVCs”) however the AVCs are small in size compared to the DB assets and have therefore been deemed immaterial for the purposes of this report. The Scheme invests across a range of asset classes including private equity, Liability Driven Investments and fixed income with an asset portfolio of c.£1,147m as at 31 March 2025.

Within this report, we consider the impact of climate related risks on those asset classes, the investment strategy, and potential impacts on the funding of the Scheme.



## Governance

- The Trustee Board is ultimately responsible for the oversight of all strategic matters relating to the Scheme, this includes climate-related risks and opportunities.
- We, as the Trustee are responsible for the day-to-day oversight of the Scheme’s climate change risk management.



## Strategy

- Our qualitative analysis of climate related risks and opportunities showed that the asset classes in which the Scheme invests are impacted to some degree by climate-related risks and over time, the risk exposure is expected to increase.
- We have also identified potential investment opportunities for the different asset classes.
- We have undertaken climate scenario analysis which shows that the Scheme has a reasonable degree of resilience relative to climate-related risks. The modelling also showed further improvements in resilience upon de-risking of the Scheme’s assets.
- The resilience was primarily driven by the level of diversification and derisking.



## Risk Management

- We established a process to identify, assess and manage the climate-related risks and opportunities the Scheme is exposed to. This is integrated into the Scheme’s wider risk management framework.
- Our Climate Risk Management framework is set out on pages 30-32, which assists with the ongoing management of climate related risks and opportunities. Alongside this, we undertake periodic training on responsible investment to understand how ESG factors,

including climate change, may impact the Scheme's assets and liabilities. Details of training that we have undertaken through the Scheme year are included in the Governance Section and Risk Management Section.



## Metrics and Targets

We have disclosed information on four climate-related metrics for the Scheme. In this report, last year's metrics have been restated to ensure consistency between asset allocations and carbon emission metrics. This has been done to remove the historic lag in data reporting and provide a more updated view of the Scheme's carbon emissions profile.

- Total Greenhouse Gas ("GHG") Emissions.
- Carbon Footprint.
- Data Coverage.
- Proportion of the assets with a net zero or Paris-Aligned target (using independent verification through the Science Based Targets Initiative).

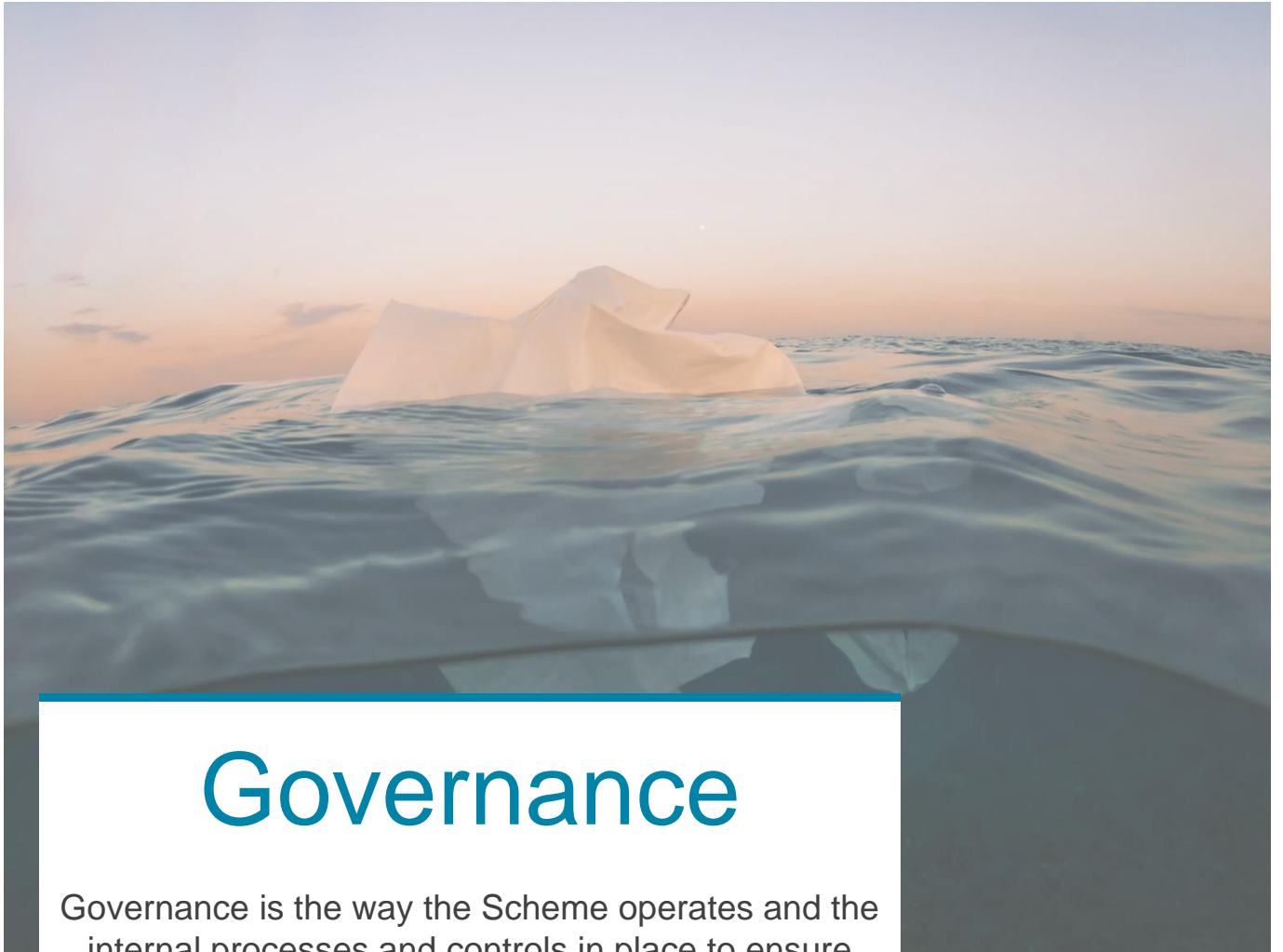
We have also set the following targets for the Scheme to improve data coverage for Scope 1 and 2 emissions across all asset classes (excl. LDI and private equity) to 90% by 2027.

We hope you enjoy reading this report and understanding more about how we are managing climate-related risks and opportunities within the Scheme.

### *Chair's signature*

Tom Lukic, Daldriada Trustees Limited on behalf of the Saint-Gobain Manufacturing UK Pension Scheme (the "Scheme").





# Governance

Governance is the way the Scheme operates and the internal processes and controls in place to ensure appropriate oversight. Those undertaking governance activities are responsible for managing climate-related risks and opportunities. This includes us, as the Trustee, and others making Scheme-wide decisions, such as those relating to the investment strategy or how it is implemented, funding, the ability of the sponsoring employer to support the Scheme and liabilities.



# Our Scheme's governance

As the Trustee of the Scheme, we are responsible for overseeing all strategic matters related to the Scheme. This includes the governance and management frameworks relating to environmental, social and governance (“ESG”) considerations and climate-related risks and opportunities.

We have agreed our climate-related beliefs and our approach to managing climate change risk. These are set out in the Scheme's Statement of Investment Principles (“SIP”).

## Our climate mission statement

Our primary concern is to act in the best financial interests of the Scheme and its beneficiaries, seeking the best return that is consistent with a prudent and appropriate level of risk. This includes the risk that environmental factors, including climate change, may negatively impact the value of the investments held if not understood and evaluated properly.

Through the actions of our appointed investment managers and advisers, an engagement-led approach allows us to be an active participant in improving corporate behaviour, upholding high standards of corporate governance, and encouraging responsible ownership practices.

We believe that the risks associated with climate change can have a materially detrimental impact on the Scheme's investment returns within the timeframe that we are concerned about and, as such, we seek to integrate assessments of climate change risk into our investment decisions.

Furthermore, we believe that climate-related factors are likely to create investment opportunities. Where possible, and where appropriately aligned with our strategic objectives and fiduciary duty, we will seek to capture such opportunities through the Scheme's investment portfolio.

Climate-related risks and opportunities are integrated into our risk management framework so we can maintain oversight of the climate-related risks and opportunities that are relevant to the Scheme.

We receive training on an annual basis (or more frequently if required) on climate-related issues to ensure that we have the appropriate knowledge and understanding to support good decision-making.



## Role of the Trustee

The Trustee Board is ultimately collectively responsible for oversight of all strategic matters related to the Scheme. This includes approval of the governance and management framework relating to ESG considerations and climate-related risks and opportunities.

The Trustee is responsible for the implementation and day-to-day oversight of the Scheme's climate change risk management framework and will monitor and review progress against this framework on a regular basis.

We have discussed and agreed our climate-related beliefs and overarching approach to managing climate change risk. Details are set out in the SIP and are reviewed and reapproved annually.

We also receive regular training on climate-related issues to ensure that we have the appropriate degree of knowledge and understanding on these issues to support good decision-making. We expect our advisers to bring important and relevant climate-related issues and developments to our attention in a timely manner.

## Role of our advisers

**Investment adviser** – Our investment adviser, Aon, provides strategic and practical support in respect of the management of climate-related risks and opportunities and ensuring compliance with the recommendations originally set out by the Task Force on Climate-related Financial Disclosures ("TCFD"). This includes provision of regular training and updates on climate-related issues and climate change scenario modelling to enable us to assess the Scheme's exposure to climate-related risks.

**Scheme Actuary** – The Scheme Actuary, Philip Dennis, helps us consider climate change risk when setting the Scheme's funding assumptions.

**Covenant adviser** – Our covenant adviser, Aon, helps us understand the potential impact of climate change risk on the sponsor covenant of the principal employer and participating employers of the Scheme.

## How we work with our advisers

We expect our advisers and investment managers to bring important climate-related issues and developments to our attention in a timely manner. We also expect our advisers and investment managers to have the appropriate knowledge on climate-related matters to advise us effectively. We therefore review our adviser objectives to ensure advisers have appropriate capabilities to advise and support on climate-related issues. In the case of our investment adviser, we carry out this review once a year, as part of our annual review of our investment adviser's wider objectives.

### Trustee's update

In August 2024, the Trustee received a Responsible Investment dashboard from its investment adviser, which provides visibility into the climate-related risk credentials of the Scheme's investment managers. Using these insights, Trustee representatives held targeted engagement meetings with some of the managers as a result.

In Q2 2025, we reflected on the progress we have made to date regarding our TCFD disclosures to ensure that climate-related risks and opportunities that may affect the Scheme are understood. This had a specific focus on the governance and risk management processes to ensure that we continue to reflect feedback from the Regulators in our practices.

We dedicated time to work through specific feedback from the Pensions Regulator ("TPR") and continue to align our TCFD disclosures with TPR's latest available feedback and observations at the time of writing.

### Trustee's update

We set clear expectations to our advisers around the need to bring important and relevant climate-related issues and developments to our attention in a timely manner.



# Strategy

Assessing the climate-related risks and opportunities the Scheme is exposed to is key to understanding the impact climate change could have on the Scheme in the future.



# What climate-related risks are most likely to impact the Scheme?

We carry out a qualitative risk assessment of the asset classes the Scheme is invested in. From this we identify which climate-related risks could have a material impact on the Scheme. We also identify suitable climate-related opportunities.

To help us with our assessment, our investment adviser, Aon, surveyed our investment managers asking them to rate the climate-related risks and opportunities they believe their funds are exposed to. At the time of writing four managers have not been able to provide information for the risk assessment. We have outlined these managers in more detail below on page 17.

## Our investments

The Scheme's investment portfolio is diversified across a range of different asset classes including Liability Driven Investment ("LDI"), Multi-Asset Credit, Absolute Return Bonds, Private Equity and Asset-Backed Securities.

The Scheme's asset allocation is as follows:

Asset Class	LDI	Hedge Funds	Multi-Asset Credit	Absolute Return Multi-Asset	Asset-Backed Securities	Absolute Return Credit	Private Equity
Allocation	54%	17%	11%	6%	6%	5%	2%

Note: Asset allocations are as at 31 March 2025. Note figures may not sum directly due to rounding. LDI includes the ILF Fund. Currency hedging funds have been excluded on the grounds of materiality.

### Trustee's update

Similar to last year, we asked the managers to review their risk assessments and update them if any material changes had taken place over the reporting period.

## How the risk assessment works



### Risk categories

In the analysis, the climate-related risks have been categorised into physical and transition risks.

**Transition risks** are associated with the transition towards a low-carbon economy.

**Physical risks** are associated with the physical impacts of climate change on companies' operations.



### Ratings

The analysis uses a RAG rating system where:

**Red** denotes a high level of financial exposure to a risk.

**Amber** denotes a medium level of financial exposure to a risk.

**Green** denotes a low level of financial exposure to a risk.

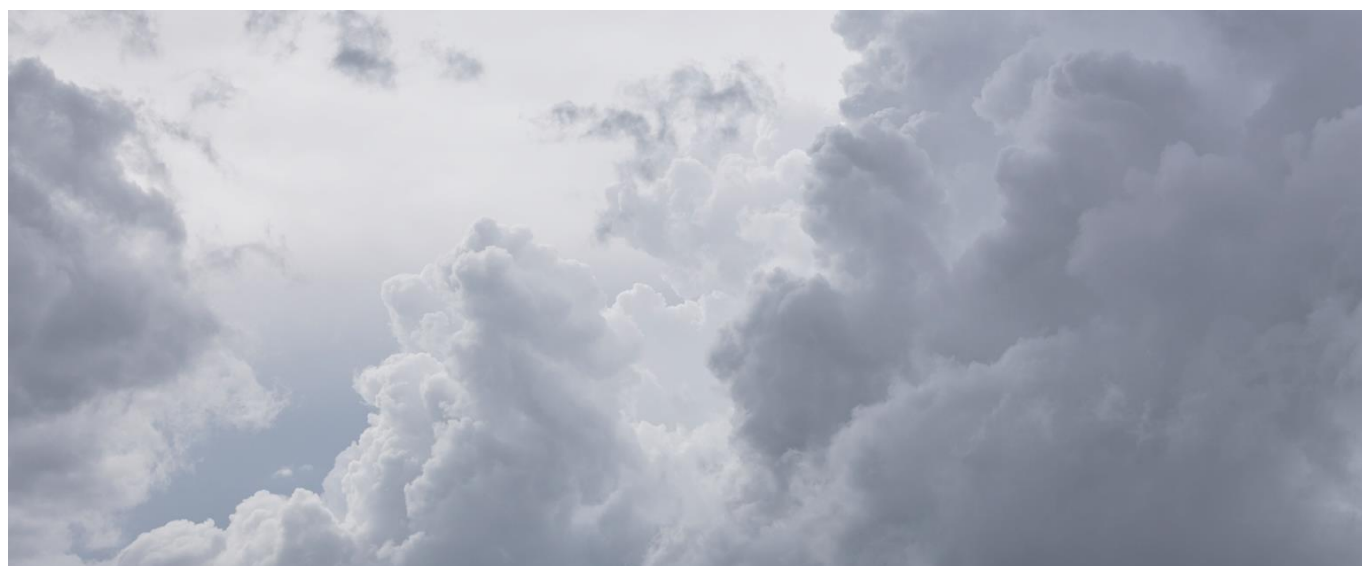


### Time horizons

We assessed the climate-related risks and opportunities over multiple time horizons considering the liabilities of the Scheme and its obligations to pay benefits. We decided the most appropriate time horizons for the Scheme are:

- short term: 1-3 years
- medium term: 4-10 years
- long term: 11-20 years

More details about transition and physical risks can be found in the [Appendix](#).



---

## Climate-related risk assessment

---

### Key conclusions

**Overall, the Trustee is comfortable with the level of understanding demonstrated by the fund managers in their responses to questions about climate-related risks.**

Relative to last year, more managers responded to our request for information. Additionally, RAG ratings changed minimally relative to last year's responses. Most managers continue to demonstrate an awareness of climate related risks and opportunities and willingness to engage with the questions asked.

Diversification across asset classes, sectors and regions is important to manage climate-related physical and transition risks for the Scheme.

LDI is deemed a lower risk area, as the Scheme's investment in LDI consists mainly of UK government gilts. Most governments in developed markets are members of climate change mitigation initiatives and have set carbon reduction targets. These assets are therefore unlikely to be affected significantly by climate-related risks.

Absolute Return Bonds held by the Scheme are allocated across a range of global multi-sector fixed income assets, including sovereign bonds, investment grade and high yield corporate bonds to name a few. This asset class is also considered to have low levels of financial exposure to climate-related risks across all time horizons, alongside LDI and Multi-Asset Credit.

One of the Scheme's Multi-Asset managers reported an improvement in its risk assessment, having deemed short-term regulatory risk as low (previously medium). This was because the fund has less than 15% exposure to disclosure topics tied to a specific climate risk category.

Regarding investments in Asset Backed Securities, no material risks have been identified in both the short and medium term. However, the Scheme's Asset Backed Securities manager acknowledges a medium level of financial exposure to physical risks in the long-term. Noting that for residential mortgages, risks related to climate change concern rising sea levels and floods could destroy properties.

This year, two of the three hedge fund managers were able to provide a quantitative assessment for climate-related risks, which were identified as a medium risk area across all time horizons. One of the managers recognised that the asset class could be exposed to climate-related risks, but states that the likely impact of these risks is expected to be low, due to its risk-balanced exposure to a broad set of market risk premia, and the level of diversification within the strategy.

---

The following tables summarise the transition and physical risks for each asset class the Scheme is invested in. All information summarised below has been sourced from the fund managers.

## Liability Driven Investment (“LDI”)

### Physical Risks

	Acute	Chronic
Short	G	G
Medium	G	G
Long	A	G

When stress testing LDI portfolios, it is expected that any change in value of the gilt should be in line with change in value of the liabilities. Therefore, given the objective of the portfolio is to track that of the liabilities, the impact on the value of gilts from climate outcomes is less relevant than for other assets. The UK has made good progress in reducing emissions by international standards and is geographically less exposed to physical climate risks than other nations (although not immune).

### Transitional Risks

	Regulatory	Technology	Market	Reputation
Short	G	G	G	G
Medium	G	G	G	G
Long	G	G	G	G

The LDI portfolio primarily comprises of UK gilts. Some reassurance can therefore be taken from the UK Government’s strong Environmental rating relative to other sovereigns in addition to their commitment to achieving net zero by 2050. The UK’s credit risk is also considered to be low given its robust credit rating and history which should give it the ability to issue further debt in its own currency to refinance existing debt positions.

## Absolute Return Bonds

### Physical Risks

	Acute	Chronic
Short	G	G
Medium	G	G
Long	G	G

### Transitional Risks

	Regulatory	Technology	Market	Reputation
Short	G	G	G	NA
Medium	G	G	G	NA
Long	G	G	G	NA

Note: Reputation as a transitional risk is no longer modelled by current analytics for this manager. Risk ratings have changed since the last reporting period due to methodological changes made by the manager.

The Absolute Return Bond fund is resilient across all time horizons against the effects of both physical and transition risks associated with climate change and is therefore classed as low risk. The manager assigns risk ratings to securities depending on how the holdings today are exposed to physical and transition risks in different scenarios within the manager’s underlying proprietary climate risk models.

## Multi-Asset Credit

### Physical Risks

	Acute	Chronic
Short	G	G
Medium	G	G
Long	G	G

### Transitional Risks

	Regulatory	Technology	Market	Reputation
Short	G	A	A	A
Medium	G	G	G	G
Long	G	G	G	G

Note: One of the Scheme's Multi-Asset Credit managers was only able to provide a short-term analysis. This is because the manager takes an active approach to portfolio management and has the ability to dynamically shift exposures across asset classes. The Scheme's other Multi-Asset Credit manager has not provided the information in the requested format, however, did provide a high-level RAG table which has been used in the analysis.

Relying on top-down methodology informed by globally recognised frameworks and standards, the manager identifies low physical risks across all three-time horizons. The other manager has provided a high-level overview of acute and transitional risks it faces, assessing them as low and identified medium transitional risks in the short-term only. It recognises the resource transformation, infrastructure and financial service sectors as the three areas where policy, technology and market risks exist respectively.

## Absolute Return (Multi-Asset) Fund

### Physical Risks

	Acute	Chronic
Short	G	G
Medium	G	G
Long	A	A

### Transitional Risks

	Regulatory	Technology	Market	Reputation
Short	A	G	G	A
Medium	A	A	A	A
Long	G	G	A	A

In the long term, the increased severity of extreme weather events, such as floods, cyclones, hurricanes, wildfires will raise the specific risk for equities operating in affected geographies. Chronic physical risks such as longer-term shifts in climate patterns such as sustained higher temperatures may cause sea levels to rise, or chronic heat waves. The manager notes that physical acute climate risk impacts will become more acute should the Paris Agreement's temperature pathway be overshoot.

The equity component of the portfolio is most exposed to these risks with the major equity contributors to climate risk being transportation, energy and mining holdings within the portfolio. The main risk exposures are transition risks over the medium term with the most dominant expected to be technology disruption, policy and regulatory changes.

Rapid policy and regulatory changes to limit GHG emissions have been identified as the most significant short-term risk to the portfolio's performance. The manager also recognises that long-term reputational risks have improved since last year, as a result of further engagement with portfolio companies at high risk. The portfolio is mainly exposed to transition risks over the medium term.

## Asset-Backed Securities (“ABS”)

### Physical Risks

	Acute	Chronic
Short	G	G
Medium	G	G
Long	A	A

The manager does not expect major climate events to happen in the next five years before ABS bonds are paid off and overall, climate related risk is deemed to be limited in ABS bonds backed by a diversified pool of residential mortgages which is the portfolio’s single largest collateral allocation. In the long term, the impact of the transition is expected to differ for different types of collateral, but this will generally have limited material impact due to the short-term nature of the fund.

### Transitional Risks

	Regulatory	Technology	Market	Reputation
Short	G	G	G	G
Medium	G	G	G	G
Long	G	G	G	G

ABS funds are typically backed by a pool of collateral with this fund having collateral from a diversified pool of residential mortgages and a range of loans. The climate impact is expected to differ for the different collateral types but in general, given that the maturity profile of the fund does not exceed more than 10 years, the climate related financial risks over that maturity are considered to be immaterial and limited.

## Hedge Funds

### Physical Risks

	Acute	Chronic
Short	A	A
Medium	A	A
Long	A	A

The tables above represent two of three of the Scheme’s Hedge Fund managers. The other manager has been unable to provide the assessment this year for reasons explained below.

One of the managers recognises that it may be exposed to a number of sustainability risks but due to the diversified construction of the fund, such risks are considered to be low. It was also highlighted that the transition risks highlighted above largely assume governments or markets seek to protect the real economy against the physical risks noted and states that if this were to happen, the broad asset allocation of the fund would be unlikely to conceptually change. Any changes will be made in the context of sustainability-related risk and return relative to normative preferences from asset owners.

The Scheme’s other manager also explained that the strategy trades a highly diversified portfolio, does not have significant exposure to any particular underlying issuer or hold underlying positions for extended periods of time.

### Transitional Risks

	Regulatory	Technology	Market	Reputation
Short	A	A	A	A
Medium	A	A	A	A
Long	A	A	A	A

## **Other Funds**

### **Manager 1 – Private Equity**

This manager has been unable to provide the assessment, with the manager focusing reporting and engagement on its direct assets, and most recent vintages. Given the maturity of the relevant portfolio, the manager cannot provide reporting information beyond the standardised data collection.

### **Manager 2 – Private Equity**

This manager has been unable to provide the assessment, as the assessment is not applicable for the fund. The relevant funds are in liquidation or in the final year of extension preceding liquidation, therefore the remaining investments are not an accurate representation of the overall funds.

### **Manager 3 – Hedge Fund**

This manager has stated that both physical and transition risks have been researched by its team alongside how these can be managed in its portfolios however, it does not currently disclose risk assessments at an individual asset class level across the time horizons requested.

### **Manager 4 – Private Equity**

This manager has noted that due to the nature of its investment, the level of granularity needed to conduct this analysis is still unavailable, particularly at a fund-of-funds level. The manager is continuing to work alongside peers and broader trade bodies to assist the TCFD develop a framework for its particular asset class, which should improve its provision of data over time.

## Climate-related opportunities

We have identified a range of potential climate-related opportunities for the Scheme which are applicable over the short, medium, and long-term time horizons defined earlier in this report. These are broadly in line with opportunities identified last year. This year, the Scheme's Absolute Return Bond fund manager did not provide an update on climate-related opportunities for the asset class, but we do not expect for these have changed significantly from green bonds as outlined in the previous report.

<p><b>LDI</b></p>	<ul style="list-style-type: none"> <li>▪ Green gilts have been identified as an opportunity to provide LDI mandates where the bonds they buy are specifically linked to the financing of green initiatives</li> <li>▪ The UK government's green financing framework sets out six key areas where the proceeds will be invested: clean transportation, climate change and adaptation, renewable energy, energy efficiency, pollution prevention and control and living and natural resources</li> <li>▪ The manager has however downgraded the UK government's green government bonds ('green gilts') from its highest, dark green rating, indicating a best-in-class green bond, to a light green rating. This downgrade reflects the manager's judgement that while green gilts bear many positive sustainability characteristics, recent developments, such as the approval of a West Cumbria mining project in late 2022, mean the manager no longer consider them best-in-class.</li> </ul>
<p><b>Absolute Return Multi-Asset</b></p>	<ul style="list-style-type: none"> <li>▪ Opportunities are expected to become apparent as technologies and sectors that benefit from a low-carbon economy and the energy transition increase in scale. For instance, Rolls Royce which has been conducting R&amp;D in technologies that would help improve emissions records and Bayer's agriculture division is innovating to reduce crop protection's environmental impact. A successful transition is also expected to require new solutions that provide low-carbon replacements for existing needs and new entrants that compete effectively with established market players.</li> </ul>
<p><b>Multi-Asset Credit</b></p>	<ul style="list-style-type: none"> <li>▪ There are opportunities in innovation via technologies such a renewable energy, carbon sequestration, and electrification, as well as improvements to energy efficiency that will facilitate the global economy's ability to decrease its dependence on fossil fuels.</li> </ul>
<p><b>Asset-Backed Securities</b></p>	<ul style="list-style-type: none"> <li>▪ The number of 'green' products have grown substantially, with many originators offering green mortgages on energy efficient houses.</li> <li>▪ Within Commercial Mortgage-Backed Security we see the real estate owners, together with investment banks providing their financing, formulating a climate supporting narrative for some of their assets. Resulting in a green securities bond framework being developed and verified by Sustainalytics. Consumer lenders also offer green loans or incentives for consumers to purchase an electric vehicle with more favourable terms in the loan agreement.</li> </ul>

# How resilient is the Scheme to climate change?

Last year we refreshed our climate change scenario analysis to better understand the impact climate change could have on the Scheme's assets and liabilities, and to reflect findings from the 2023 actuarial valuation.

The Trustee undertook climate change scenario analysis for the Construction Products section (the "Section") of the Scheme to better understand the impact climate change could have on the largest section of the Scheme's assets and liabilities, for which climate risk is most material across all the sections. Additionally, other sections have similar investment strategies and are similarly well funded, similar conclusions can be drawn if we were to run the equivalent analysis for those sections. The analysis also considered Construction Product's two strategies, pre and post de-risking. The latter has now been fully implemented by the Scheme. Upon review, the Trustee considers this analysis to remain appropriate as the Scheme has not undergone any material changes to its investment strategy.

The analysis looks at three climate change scenarios. We chose these scenarios because we believe that they provide a reasonable range of possible climate change outcomes. The climate scenarios are compared to a "base case" scenario.

Each climate scenario considers what may happen to the Scheme when transitioning to a low carbon economy under different temperature-related environmental conditions. These scenarios were developed by Aon and are based on detailed assumptions. They are only illustrative and are subject to considerable uncertainty.

The climate scenarios intend to illustrate the climate-related risks the Scheme is currently exposed to, highlighting areas where risk mitigation could be achieved through changing the investment portfolio.

Other relevant issues such as governance, costs and implementation (including manager selection and due diligence) must be considered when making changes to the investment strategy.

Investment risk is captured in the deviance from the base case scenario, but this is not the only risk that the Scheme faces. Other risks include covenant risk, longevity risk, timing of member options, basis risks and operational risks.

## Trustee update

Under the Regulations, climate scenario analysis must be carried out at least every three years, with an annual review in interim years. Circumstances which may require the climate scenario analysis to be re-done. This may be as a result of, but not limited to:

- a significant/material change to the investment and/or funding strategy; or
- the availability of new or improved scenarios or modelling capabilities or events that might reasonably be thought to impact key assumptions underlying scenarios.

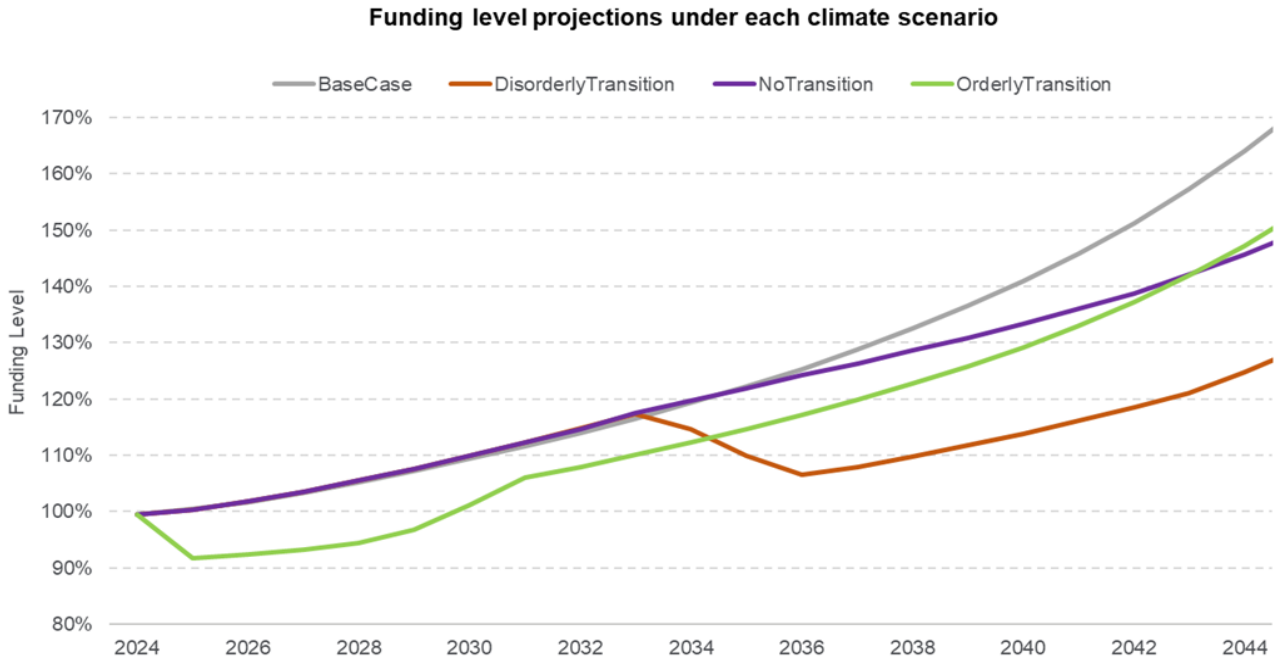
We reviewed the scenario analysis completed as at 31 March 2024 and are comfortable that the analysis remains appropriate for this report, given that there were no significant changes to the investment strategy over the reporting period which differ to the strategies we modelled.

Details of the climate scenarios we chose to analyse are set out in the table below.

Scenario	Reach net zero by	Degree warming vs pre-industrial levels by 2100	Introduction of environmental regulation	Scenario description
Base Case	2050	~2°C – 2.5°C	-	Emission reductions start now and continue in a measured way in line with the objectives of the Paris Agreement and the UK government's legally binding commitment to reduce emissions in the UK to net zero by 2050.
No Transition	After 2050	+4°C	None	No further action is taken to reduce GHG emissions leading to significant global warming.
Disorderly Transition	After 2050	<3°C	Late and Aggressive	Limited action is taken, and insufficient consideration is given to sustainable long-term policies to manage global warming effectively.
Orderly Transition	2050	1.3°C - 2°C	Coordinated	Immediate and coordinated action to tackle climate change is taken using carbon taxes and environmental regulation.

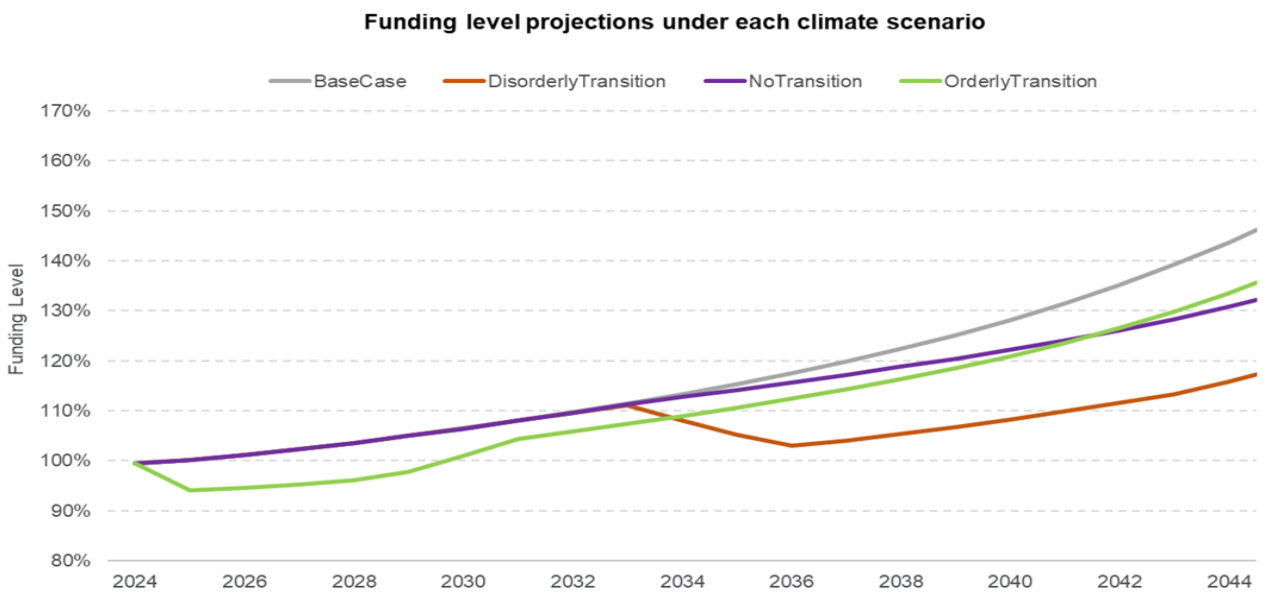
Source: Aon.

## Impact on funding level: Construction Products Section (Pre - derisking strategy)



Source: Aon. Scenario projections as at 31 March 2024.

## Impact on funding level: Construction Products Section (De-risked strategy)



---

## Key conclusions

**Overall and similar to last year, we are comfortable with the level of resilience exhibited by the investment portfolios, pre and post de-risking and we have agreed not to make any further changes to the investment strategy as a result of this analysis.**

The Section's investment portfolio exhibits reasonable resilience under all of the climate scenarios. This is due to the diversification of assets, the low-risk strategy/allocation to private equities, high levels of hedging against changes in interest rates and inflation. Furthermore, the analysis shows that the Section's resilience to climate risk is expected improved as a result of the de-risking actions undertaken which reflects positively on the strategic changes that are being made by the Scheme.

In the Disorderly Transition scenario, the shock to the economy sees a sharp fall in the Scheme's funding level. However, due to the Scheme being in surplus at the time of the market shock, the funding level is able to improve quickly. Overall, this leaves the Scheme materially worse off in terms of surplus relative to the base case. Although this is the worst scenario for the funding level, it is important to consider the implications of a "No transition" scenario on the well-being of members and beneficiaries.

Another key risk is volatility of the funding level. Under the orderly transition, the Scheme experiences large falls in the funding level of around 5% and 8% before recovering in the de-risked strategy and the pre-de-risking strategy respectively.

---

The table below describes the impact of each scenario on the Scheme over the short-, medium- and long-term time horizons.

## No Transition Scenario

Temperature rise  
+4°C

Reach net-zero  
After 2050

Environmental  
regulation  
None

### Summary of the Scenario

#### In the short term:

No action is taken to combat climate change.

#### In the medium term:

No action is taken to combat climate change.

#### In the long term:

Climate change headwinds grow and act as a drag on economic growth and risk asset returns. Impacts from physical risks become more severe and irreversible by 2100.

### Summary of the impact to the Scheme

#### In the short term:

There is no initial risk to the Scheme. The funding level is expected to follow the base case. There are however increasing risks posed to the overall well-being of members and their beneficiaries.

#### In the medium term:

There continues to be little impact on the Scheme's funding level, however as time passes the funding level starts to lag behind the base case. The impacts of climate change in this scenario are expected to cause increased risks to the overall well-being of members and their beneficiaries.

#### In the long term:

The funding level lags behind and becomes relatively worse off compared to the orderly transition and base case. The impacts of climate change in this scenario are expected to cause increased risks to the overall well-being of members and their beneficiaries.

## Disorderly Scenario

Temperature rise  
<3°C

Reach net-zero  
After 2050

Environmental  
regulation  
Late and  
Aggressive

### Summary of the Scenario

#### In the short term:

Insufficient consideration given to long-term policies and there is no action taken to combat climate change

#### In the medium term:

Late but coordinated action is taken to tackle climate change. The late timing means it is less effective and more costly to implement. Adverse impacts from climate change leads to a drag on risk assets

#### In the long term:

After the costly implementation to tackle climate change and the resulting drag on risky assets, the transition to clean technologies and green regulation begins to boost economic growth when considering the very long term. However, the late and disorderly climate transition means that physical climate risks remain prominent over the very long term.

### Summary of the impact to the Scheme

#### In the short term:

There is no initial risk to the Scheme. The funding level is expected to follow the base case.

#### In the medium term:

The Scheme's funding level deteriorates sharply and lags behind the base case.

#### In the long term:

A large shock to asset returns takes place in later years. This is following very limited action to reduce GHG emissions in earlier years, resulting in a much larger impact once action is belatedly taken. This results in very poor asset returns over the longer term, particularly when comparing against the other scenarios.

## Orderly Scenario

Temperature rise  
1.3°C - 2°C

Reach net-zero  
2050

Environmental  
regulation  
Coordinated

### Summary of the Scenario

#### In the short term:

Immediate coordinated global action is taken to tackle climate change. Risky assets perform poorly.

### Summary of the impact to the Scheme

#### In the short term:

The Scheme suffers a minor deterioration in its funding level, dropping below the base case.

**In the medium term:**

The rapid transition to clean technologies and green regulation begins to boost economic growth.

**In the medium term:**

The funding position recovers following the initial fall in funding level and moves closer in line with the base case.

**In the long term:**

The rapid transition to clean technologies and green regulation begins to boost economic growth. This represents the fastest transition to a green economy, combined with limited physical impacts from climate change despite the large initial transition cost.

**In the long term:**

The Scheme's funding position improves and follows the base case. This is the best-case scenario for the Funding level of the Scheme in the long-term relative to the disorderly and no transition scenarios.

Source: Aon. Effective date of the impact assessment is 31 March 2024. The above analysis has been conducted for the Construction Products section of the Scheme for materiality purposes. Please note that the impact of mortality rates has not been considered in the above analysis. Additionally, other sections have similar investment strategies and are similarly well funded, similar conclusions can be drawn if we were to run the equivalent analysis for those sections. In the "No transition" scenario, consideration should be given to the negative impacts of climate change on the well-being of members and beneficiaries. Please note: the results of the climate scenario analysis are only illustrative and are subject to considerable uncertainty.

## Modelling limitations

Please refer to the Appendix for further details in relation to the assumptions used for the scenario analysis and its limitations.

## Covenant Assessment

The Trustee has asked its covenant adviser to undertake a high-level qualitative analysis of the potential impact on the covenant of Compagnie de Saint-Gobain (the “Group”) and its subsidiaries as the Scheme’s sponsoring employer, over the timescales and the scenarios that the Trustee has considered earlier in this report.

**Overall, the consequences of climate change could have a positive impact on the Scheme’s covenant but there are key risks related to higher carbon and energy costs as well as physical threats to facilities.**

Some of the key risks posed to the Group include the following:

### **An increase in carbon pricing:**

- Many of the Group’s European facilities are already part of the EU’s Emissions Trading System, being c.40% of its Scope 1 emissions.
- The Group receives free CO<sup>2</sup> allocations for some products, but these are expected to be curtailed, and equivalent regulations are anticipated in other territories (e.g. US).
- Higher carbon pricing could be used to accelerate decarbonisation (particularly in the Orderly Transition scenario) over the medium term. The Group estimates the potential cost as €75m-100m p.a.
- To mitigate this risk, the Group has set carbon emission reduction targets of 33% by 2030 for scope 1 and 2 emissions vs. 2017 (we note this has already been achieved), and net zero emissions by 2050 (also including scope 3).
- The Group is budgeting capital expenditure and R&D of at least €100m p.a. until 2030 in the “carbon roadmap” related investment and is engaging with its suppliers and logistics to reduce scope 3 emissions.

### **Physical risks:**

- The Group has identified that climate change could bring physical risks (e.g. from flooding resulting from extreme weather and/or rising sea levels and changing weather patterns) to its sites, particularly those located on floodplains (c.15% of its sites).
- This is seen as a near-term risk noting a recent flooding event in Germany and hail-related damage in France.
- The potential financial cost is estimated as €50m to €100m p.a. (based on the costs related to these events).
- In response, the Group continues to perform regular physical risk assessments, development of contingency plans, and adaptations (where possible). The annual cost associated with these efforts is currently minimal (€0.3m p.a.).
- An external study in 2023 of Saint-Gobain’s exposure to physical risks found that even in the most extreme scenario to 2050, the overall risks identified were relatively insignificant. This was reconfirmed in 2024.<sup>2</sup>

---

<sup>2</sup> Saint-Gobain Consolidated Financial Statement, FY2024

### **Rising energy costs:**

- The Group's manufacturing processes for some of its products are energy intensive and it is exposed to the cost of natural gas.
- Under the Orderly Transition scenario (in particular) there is the risk of the Group being required to adopt a lower carbon energy mix before newer fuel sources are fully developed and cost effective.
- The Group estimates the potential costs as €1.1bn to €1.9bn p.a. which would be expected to impact the Group over the medium term.
- The Group's mitigations are the same investment in capital expenditure and R&D referenced in relation to carbon pricing.
- We note<sup>3</sup> that the Group has signed various long-term renewable energy purchase agreements during 2024.

That said, demand should rise for the Group's solutions that enhance energy efficiency with opportunities arising as follows:

### **Driving production efficiencies**

- Recognising the Group's significant demand for energy and virgin raw materials (e.g. gypsum, sand, water), it is actively taking steps to improve its operating efficiency.
- For instance, energy recovery, use of recycled materials, and reducing water consumption are all steps the Group is taking that should improve margin.
- The Group has set targets of a 30% increase in avoided virgin raw materials through increased use of recycled inputs, an 80% reduction in unrecovered waste and for more than 30% of packaging to come from recycled inputs.
- As a result of the R&D and capital investments referenced earlier, the Group anticipates it would realise net benefits of €256m p.a. over the medium term (calculated as 0.5% of revenue).

### **Demand for low-carbon technologies**

- The Group expects to benefit from increased consumer focus on climate-related activities and demand for products with lower carbon footprints.
- As such, it expects to benefit from higher demand for its products from the production efficiencies set out above.
- The Group has set a target that by 2025, 75% of its sales should come from products that provide sustainability benefits to its customers. This equates to a €0.6bn increase in revenue p.a. from current levels which should be achieved over the medium term.
- The Group estimates that 17% of its total R&D budget relates to activities to directly or indirectly to low carbon products, equivalent to €89m p.a.

### **Demand for solutions to improve energy efficiency**

- Updating the aging building stock in Europe is an important component of the EU's plan to cut net carbon emissions by 2030.

---

<sup>3</sup> Saint-Gobain Universal Registration Document, 2025

- Europe's building stock is old, and buildings in Europe account for 40% of total energy consumption and 36%<sup>4</sup> of greenhouse gas emissions from energy.
- Around €275bn p.a. of additional investment in building renovations will be required by 2030 (compared to c.€90bn in 2022<sup>5</sup>).
- The Group's building materials and solutions contribute to energy-efficient construction meaning it is well-placed to benefit from the renovation wave sweeping across Europe.
- Accordingly, the transition to a lower carbon-economy presents a substantial opportunity for the Group which it estimates as being worth between €0.5-€1bn p.a. in the near term with no incremental investment required.

### **Covenant conclusions**

In summary, we consider that the Group is well-positioned to be a net beneficiary from the transition to a lower carbon economy. It is expected to benefit from sustained demand for its solutions to support the expected need for substantial building renovations across Europe in particular.

This may be supplemented in the longer term through cost savings from investment in improving efficiency and consumer focus on products with a lower carbon footprint.

In a no transition scenario, the physical risks could be more substantial (noting that the Group is already experiencing some impacts). However, in all cases, the costs and benefits are not assessed as being particularly material in the context of the current size of the Group (current revenue of c.€50bn).

Furthermore, in the context of the strong funding position of the Scheme, these impacts are not expected to have a material impact on the covenant within the timeframe that the Scheme are materially reliant upon it.

---

<sup>4</sup> State Street Global Advisors, March 2024

<sup>5</sup> Moody's, March 2022



# Risk management

We must have processes to identify, assess and manage the climate-related risks that are relevant to the Scheme, and these must be integrated into the overall risk management of the Scheme.

Reporting on our risk management processes provides context for how we think about and address the most significant risks to our efforts to achieve appropriate outcomes for members.



# Our process for identifying and assessing climate-related risks

We have established a process to identify, assess and manage the climate-related risks that are relevant to the Scheme. This is part of the Scheme's wider risk management framework and is how we monitor the most significant risks to the Scheme in our efforts to achieve appropriate outcomes for members.



## Qualitative assessment

A qualitative assessment of climate-related risks and opportunities which is prepared by our investment adviser and reviewed by the Trustee.



## Quantitative analysis

Climate scenario analysis, which is provided by our investment adviser and again, reviewed by the Trustee.

Together these give us a clear picture of the climate-related risks that the Scheme is exposed to. Where appropriate, we distinguish between transition and physical risks. And all risks and opportunities are assessed with reference to the time horizons that are relevant to the Scheme.

When prioritising the management of risks, we assess the materiality of climate-related risks relative to the impact and likelihood of other risks to the Scheme. This helps us focus on the risks that pose the most significant impact.

## Trustee update

This process of identifying and assessing climate related risks has been reviewed in the process of producing this TCFD report and we believe it is still suitable.

Throughout the year, we monitored the stewardship activities of the Trustee's investment managers through the production of our annual Engagement Policy and Implementation Statement ("EPIS"). In particular, we established an engagement action plan to undertake throughout the year based on our observations of the stewardship activity conducted by our investment managers.

# Our climate risk management framework

We recognise the long-term risks posed by climate change and have taken steps to integrate climate-related risks into the Scheme's risk management processes.

We have a climate risk management framework to manage climate-related risk and opportunities. The climate risk management framework set out in the tables below clearly describes who is involved, what is done and how often.

## Governance

Activity	Owner	Adviser / supplier support	Frequency of review
Climate change governance framework ( <i>this document</i> )	Trustee	Investment Adviser/ Investment Managers	Annual
Publish TCFD report and implementation statement	Trustee	Investment Adviser/ Investment Managers	Annual
Add / review climate risks and activity on key Scheme documentation (risk register, work plan)	Trustee	Investment Adviser/ Investment Managers	Ongoing
Establish ESG beliefs (including climate change)	Trustee	Investment Adviser/ Investment Managers	Triennial
Undertake training on climate-related topics	Trustee	Investment Adviser/ Investment Managers	Ongoing
Review adviser objectives to ensure they have appropriate climate capability, and bring important, relevant and timely climate-related issues to our attention	Trustee	Investment Adviser/ Investment Managers	Annual
Ensure investment proposals explicitly consider the impact of climate-related risks and opportunities, and seek investment opportunities	Trustee	Investment Adviser	Ongoing
Ensure that actuarial and covenant advice adequately incorporate climate-related risk factors where they are relevant and material	Trustee	Scheme Actuary, Covenant adviser	Triennial

### Trustee update for year ending 5 April 2025

We receive training annually to understand how ESG factors, including climate change, could impact the Scheme's assets and liabilities. A summary of the training we received this year has been set out in the Governance section within this report.

We engage with our investment managers through our investment adviser, Aon, to understand how climate-related risks are considered in their investment approach, and stewardship activities are being undertaken appropriately.

## Strategy

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Identify climate-related risks and opportunities (over agreed time periods) for investment & funding strategy	Trustee	Investment Adviser/ Investment Managers	Annual
Climate scenario analysis - annual review for the continuing suitability of previous results	Trustee	Investment Adviser/ Investment Managers	Annual
Climate scenario analysis - refresh modelling	Trustee	Investment Adviser/ Investment Managers	At least triennially with an annual review

### Trustee update for year ending 5 April 2025

Climate-related risks and opportunities were analysed during the year. With support from Aon, we asked our investment managers to rate the climate-related risks and opportunities that they believe the Scheme's investments are exposed to. Detailed findings shared by our managers can be found above in the Strategy section of this report.

We also reviewed the climate scenario analysis conducted in the last reporting year in line with TCFD requirements and concluded that the analysis remains appropriate for this year's reporting, given there have been no significant changes to the investment strategy.

## Risk management

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Identify, assess, and manage key climate-related risks	Trustee	Investment Adviser/ Investment Managers	Ongoing
Include consideration of climate-related risks in the Scheme's other risk processes and documents, such as the risk register and the SIP, and regularly review these	Trustee	Investment Adviser	Ongoing

### Trustee update for year ending 5 April 2025

We have processes in place for identifying and assessing climate-related risks as part of the annual TCFD process. Climate risk management is integrated into the ongoing risk management activities of the Scheme via our climate risk management framework, and we have incorporated climate-related risks into the Scheme's risk register.

As part of regular quarterly monitoring of the Scheme's investment managers, we also receive ESG ratings from our investment adviser, Aon. This gives us an indication of how ESG considerations, including climate-related risks, are being considered by our investment managers.

## Metrics and Targets

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Agree/review approach for metrics	Trustee	Investment Adviser	Annual
Agree/review target	Trustee	Investment Adviser	Annual
Obtain data for agreed metrics	Trustee	Investment Adviser/ Investment Managers	Annual

### Trustee update for year ending 5 April 2025

We collect metrics data on an annual basis supported by Aon and the Scheme's investment managers, to understand the Scheme's current portfolio emissions, data coverage and other reported metrics. This data is evaluated to produce a metrics-related target. More details can be found in the Metrics and Targets section of the report.

---

## Assessing our managers

To assess our managers' abilities to manage climate-related risks, we ask the managers a series of questions as outlined by the Pensions Climate Risk Industry Group<sup>6</sup>.

The questions cover a range of topics including the manager's approach to climate management, whether they produce their own TCFD reporting, their ability to conduct climate scenario analysis, their engagement policies, and their ability to provide GHG emissions data.

We took a similar approach to last year when asking the Scheme's underlying managers to complete the firm-level questionnaire. Managers who responded to the questionnaire last year were asked if any material changes had taken place since. Where a response was not given last year, we asked managers to complete a new questionnaire.

---

## Key conclusions

We have seen improved climate risk disclosures from our investment managers. Some of the key highlights include:

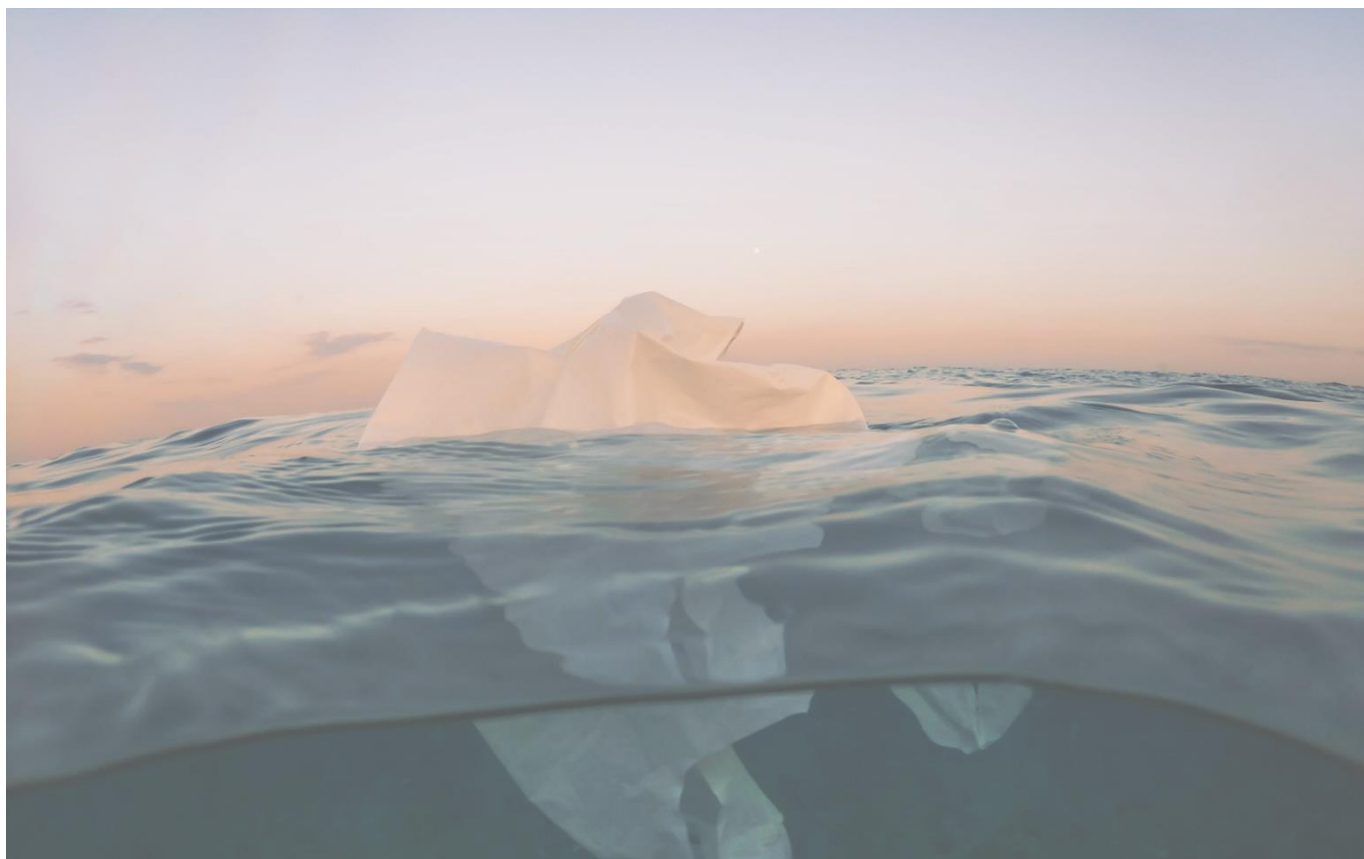
- This year, all 12 managers have provided responses to our questionnaire.
- Ten managers were producing TCFD reports previously, this figure has now risen to eleven.
- Compared to six last year, nine of the Scheme's managers conduct climate change scenario analysis and one manager is in the process of commencing this type of analysis.
- Ten of the managers participate in industry wide initiatives, demonstrating their commitment to play a leading role in progressive policy on climate change relative to nine last year.
- 11 managers have committed to providing carbon emissions data, while five of the managers decided to align themselves with a net zero commitment.

In summary, all of the investment managers displayed understanding of climate related risks, with the majority of the managers supporting TCFD-aligned reporting, committed to providing carbon emissions data and participate in industry initiatives.

We will continue to engage with our managers to encourage best practice relating to the consideration of climate change and the associated risks and opportunities in the future.

---

<sup>6</sup> Aligning your pension scheme with the Taskforce on Climate-Related Financial Disclosures recommendations - GOV.UK ([www.gov.uk](http://www.gov.uk))



# Metrics & Targets

Metrics help to inform our understanding and monitoring of the Scheme's climate-related risks. Quantitative measures of the Scheme's climate-related risks, in the form of both greenhouse gas emissions and non-emissions-based metrics, help us to identify, manage and track the Scheme's exposure to the financial risks and opportunities climate change will bring.



# Our climate-related metrics

We use some quantitative measures to help us understand and monitor the Scheme's exposure to climate-related risks. Measuring the greenhouse gas emissions related to our assets is a way for us to assess our exposure to climate change.

Greenhouse gases are produced by burning fossil fuels, meat and dairy farming, and some industrial processes. When greenhouse gases are released into the atmosphere, they trap heat in the atmosphere causing global warming, contributing to climate change.

Greenhouse gases are categorised into three types or 'scopes' by the Greenhouse Gas Protocol, the world's most used greenhouse gas accounting standard.



## Scope 1

All direct emissions from the activities of an organisation which are under their control; these typically include emissions from their own buildings, facilities and vehicles



## Scope 2

These are the indirect emissions from the generation of electricity purchased and used by an organisation



## Scope 3

All other indirect emissions linked to the wider supply chain and activities of the organisation from outside its own operations – from the goods it purchases to the disposal of the products it sells

Scope 3 emissions are often the largest proportion of an organisation's emissions, but they are also the hardest to measure. The complexity and global nature of an organisation's value chain make it hard to collect accurate data.

For more explanation about GHG emissions, please see the [Appendix](#).



## Our climate-related metrics

In our first year of TCFD reporting, we decided what metrics to annually report on. These are described below. This year, we reviewed the metrics, and believe they continue to be suitable for us to report against in this report.



### Total Greenhouse Gas emissions

The GHG emissions associated with the portfolio. It is an absolute measure of carbon output from the Scheme's investments and is measured in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e).



### Carbon footprint

Carbon footprint is an intensity measure of emissions that takes the total GHG emissions and weights it to take account of the size of the investment made. It is measured in tonnes of carbon dioxide equivalent per million pounds invested (tCO<sub>2</sub>e/£m).



### Data coverage

A measure of the proportion of the portfolio that we have high quality data for (i.e., data which is based on verified, reported, or reasonably estimated emissions, versus that which is unavailable).

This has been selected on the basis that it provides a consistent and comparable measure of the level of confidence in the data.



### Portion of the portfolio with net zero or Paris-aligned targets

A metric which shows how much of the Scheme's assets are aligned with a climate change goal of limiting the increase in the global average temperature to 1.5°C above pre-industrial levels.

It is measured as the percentage of underlying portfolio investments with a declared net-zero or Paris-aligned target or are already net-zero or Paris-aligned.

In the tables below are the climate-related metrics for the Scheme's assets. The metrics are shown separately for the LDI and the other investments because the methodology used for each are different so aggregating the metrics would not make sense.

## Detailed breakdown of the Scheme's carbon metrics

Asset class	AUM (%)	Year	Data coverage (%)		Total GHG emissions (tCO <sub>2</sub> e)		Carbon footprint (tCO <sub>2</sub> e/£m)		Net zero or Paris-aligned (%)
			Scopes 1 & 2	Scope 3	Scopes 1 & 2	Scope 3	Scopes 1 & 2	Scope 3	
Other assets (excl. LDI)*	38	2025*	59	35	27,557	65,677	106.9	424.6	4.7
	46	2024	55	33	29,649	71,524	91.3	370.4	5.2

Source: Investment managers / Aon. 2025 emissions data as at 31/03/2025 unless specified otherwise. 2024 emissions data is as at 31/03/2024 unless specified otherwise. This has been revised in this year's report to ensure alignment of dates between valuation figures and emissions data reported on. Due to methodological advances, the 2024 data coverage figures have been restated to reflect all data eligible assets.

- \*One manager was unable to provide data as at 31/03/25, but instead at 31/12/2024.
- \*One manager provided carbon data for multiple areas of its investment, but only public and private investments have been considered based on a materiality basis. For another manager, only public investments have been considered for the same reason.

## LDI/Sovereigns

	Year		AUM (%)	Data Coverage (%)	Scopes 1 & 2	
					Total GHG emissions (tCO <sub>2</sub> e)	Carbon footprint (tCO <sub>2</sub> e/£GDP)
LDI	2025	Physical	48	100	78,343	141.2
		Synthetic			53,640	
	2024	Physical	41	100	86,975	170.2
		Synthetic			121,867	
Sovereigns	2025	Physical	6	100	6,230	234.5
		Synthetic			5,175	
	2024	Physical	7	100	16,059	255.6
		Synthetic			15,881	

Source: Investment Managers/Aon. Emissions data as at 31/03/2025. 2024 emissions data is as at 31/03/2024 unless specified otherwise. This has been revised in this year's report to ensure alignment of dates between valuation figures and emissions data reported on.

Sovereigns above refers to the Scheme's risk parity investment. Emissions associated with LDI have been calculated as follows:

- The split between physical and synthetic as provided by the Scheme's LDI manager.
- UK national emissions as at 31 Dec 2023 from the Emissions Database for Global Atmospheric Research.

PPP-adjusted GDP as at 31 Dec 2023 from the Organization for Economic Cooperation and Development. Further details on the methodology used to calculate LDI emissions can be found overleaf.

---

## Data observations

At the time of writing, some of the managers were unable to provide the requested data due to the nature of the investment strategies they employ on our behalf. For example, very limited emissions data was provided by the Scheme's private equity managers.

Additionally, the total GHG emissions for "other assets" have decreased compared to last year. This is mostly due to a decrease in asset values in this reporting period. Carbon footprint on the other hand increased slightly. This is mostly due to an increase in data coverage.

Carbon metrics for UK government bonds are based on the total GHG emissions for the whole of the UK, which are extremely high. By contrast, carbon emissions for equities, for example, are based on the emissions associated with the underlying companies invested in, which are smaller. Hence, the carbon metrics for LDI are higher than other asset classes. Emissions associated with the LDI portfolio have decreased since last year, largely due to a decrease in carbon footprint, which is an improvement driven by a reduction in UK public GHG emissions. The asset values for the sovereign investment decreased significantly this year, hence the reduction in total GHG emissions.

### **Private equity**

Only one private equity manager provided the requested information this year, noting the same data coverage across scopes 1, 2 and 3. Relative to last year, however, there has been a slight improvement in data coverage from 2% to 4%. Whilst there has been an improvement, data coverage is still very low for this asset class, albeit this is not unexpected as challenges pertaining to data availability are common across the industry, particularly for non-core credit and diversified funds. For this reason, private equity data has been excluded on materiality basis.

Through ongoing engagement, we expect that in future the availability of information will improve as the industry aligns on methodology and best practice for alternative investments.

Overall, given the relatively small proportion of the Scheme's assets allocated to private equity, the data coverage of the Scheme's private equity investments does not materially impact the Scheme's reported figures above.

## Notes on the metrics data

Our investment adviser, Aon, collected information from the Scheme's investment managers about their greenhouse gas emissions. Aon collated this information to calculate the climate-related metrics for the Scheme's portfolio of assets.

This year, the Scheme's 2024 carbon emissions have been restated to align the dates of carbon emissions data and asset values. This is to remove the historic lag in data reporting and provide a more updated view of the Scheme's carbon emissions profile. The restatement will therefore enable more decision-useful reporting. Although this means slight revisions in carbon emissions, data coverage and the Scheme's progress towards its target last year, it also provides a more comprehensive view of the Scheme's emissions profile and year-on-year changes.

### Availability of data

- Seven managers provided scopes 1, 2 and 3 GHG emissions, one of which the provided metrics information for one of the two funds the Scheme is invested in. Another provided the value of zero as its scope 3 emissions and footprint.
- Two managers provided scopes 1 and 2 only, due to the nature of the asset class Scope 3 data is not applicable.
- Three managers did not provide any information, all of which are private equity managers.

Aon does not make any estimates for missing data.

The ILF Fund and currency hedging funds have been excluded on the grounds of materiality.

Because not all the Scheme's managers were able to provide all the requested data, the reported emissions metrics do not include all the Scheme's GHG emissions. And so, the metrics depict the Scheme's GHG emissions as lower than they really are.

We note the improvement in the data coverage during the reporting year. We will consider reviewing our climate-related target in future as the data coverage continues to improve, in line with the ongoing development of best practice approaches to reporting on carbon emissions across the wider asset management industry.

## Notes on the metrics calculations

There is currently no industry-wide standard for calculating some of these metrics yet and different managers may use different methods and assumptions. These issues are common across the industry and highlight the importance of climate reporting to improve transparency. We expect that in the future better information will be available from managers as the industry aligns to expectations and best practice standards.

### How we collected the data

Our investment adviser, Aon, collected the carbon emissions data from our managers on our behalf using the industry standard Carbon Emissions Template ("CET"). The CET was developed by a joint industry initiative of the Pension and Life Savings Association, the Association of British Insurers and Investment Association Working Group. The CET provides a standardised set of data to help pension schemes meet their obligations under the Climate Change Governance and Reporting Regulations, and associated DWP Statutory Guidance.

## The carbon metrics

Aon calculated the carbon metrics for the Scheme based on information provided by the managers. The table below shows for each asset class the broad approach used to calculate each metric.

The methodology used for this aggregation does not make any assumptions or estimations about the carbon emissions for assets for which data was unavailable. The aggregation methodology is as set out below:

$$G = A \times C \times F$$

G = Total GHG expressed as (tCO<sub>2</sub>e).

A = Assets expressed in £ Millions.

C = Data Coverage expressed as a decimal between 0 and 1.

F = Carbon Footprint expressed as (tCO<sub>2</sub>e/£M invested).

The methodology used follows the industry-standard best-practice established within the Carbon Emissions Template (“CET”)<sup>7</sup>.

The table below shows for each asset class the broad approach used to calculate each metric.

### Asset Class

All assets  
(excl. LDI)

#### Carbon footprint

The investment managers provided the carbon footprint metrics for the funds.

#### Total GHG emissions

Using the carbon footprint, we calculated the Scheme’s proportion of each investment fund’s emissions by calculating:

*carbon footprint x £m Scheme assets invested in the fund x data coverage.*

#### Data coverage

The investment managers provided data coverage.

LDI

The manager provided the value of the Scheme’s physical and synthetic exposures. Aon calculated the emissions for the Scheme’s physical and synthetic exposure separately.

#### Carbon footprint

$$\frac{UK\ national\ emissions\ scopes\ 1\ and\ 2}{PPP-adjusted\ GDP}$$

#### Total GHG emissions

*£m value of Scheme investment x carbon footprint x data coverage*

<sup>7</sup> <https://www.plsa.co.uk/Policy-and-Research/Document-library/Carbon-Emissions-Template>

## LDI

Aon collected the physical and synthetic split from the Scheme's LDI manager. Data coverage is estimated to be 100%. Scope 3 is not applicable to LDI, as it contains primarily UK sovereign bonds and scope 3 emissions are currently not available for UK sovereign bonds.

### **Portion of the portfolio with net zero or Paris-aligned targets**

Aon requested the portion of the portfolio with net zero or Paris-aligned target each fund from our investment managers and aggregated the results based on the portion of assets invested in each fund.

Aon does not make any estimates for missing data. The Scheme's portfolio with net zero or Paris-aligned targets only represents the portion of the portfolio for which we have data. Currently, there is no standard approach for calculating this metric for government bonds. Hence reporting on this metric is not applicable for the Scheme's LDI assets.

# Looking to the future

## Our climate-related target

Climate-related targets help us track our efforts to manage the Scheme climate-change risk exposure.

In our first year of reporting, we set a target to improve data coverage. Without meaningful data from the investment managers, it is very hard for us to measure the Scheme’s climate-risk exposure. So, it is important to set a target to improve the data coverage of the GHG emissions data from the managers.

The Scheme’s performance against the target is measured and reported on every year. Over time, this will show the Scheme’s progress against the target. Our current target focuses only for the Growth Assets of the Scheme (excluding the legacy private equity holdings, which are in run-off), as the emissions data of the Scheme’s LDI portfolio is already covered in full and in any case largely out of the Scheme’s control (effectively related to emissions associated with the UK’s Gilts issuance).

We note the improvement in the data coverage during the reporting year. We will consider reviewing our climate-related target in future as the data coverage continues to improve, in line with the ongoing development of best practice approaches to reporting on carbon emissions across the wider asset management industry.

### Trustee update

Each year we review the suitability of the target we have set. Based on the data collected and the metrics calculated this year, we believe the target continues to be suitable.



**Data coverage target**

**90%**

By 2027 for all asset classes (excl. LDI and private equity)



**Current Data Coverage**

**59%**

Scopes 1 & 2 (excl. LDI and private equity)

### Our progress towards the target

The table below shows the data coverage metrics for this year and previous years of reporting. Since last year, good progress has been made with data coverage improving by 4%.

	Year 1	Year 2*	Year 3
Actual Data Coverage on assets excluding private equity and LDI	25%	55%	59%

\*Year 2 figures have been restated in this report to ensure alignment of dates between asset values and carbon emissions data.

## Steps we are taking to reach the target

To improve data coverage, we will engage with the Scheme's investment managers to improve the availability and reporting of emissions data for each asset class in which the Scheme is invested. Through ongoing pressure from asset owners collectively and new regulatory requirements for asset managers, we expect data coverage to improve over time and will engage further with the managers if progress does not meet our expectations.

# Appendices

# Glossary

- Governance** refers to the system by which an organisation is directed and controlled in the interests of shareholders and other stakeholders.<sup>8</sup> Governance involves a set of relationships between an organisation's management, its board, its shareholders, and other stakeholders. Governance provides the structure and processes through which the objectives of the organisation are set, progress against performance is monitored, and results are evaluated.<sup>9</sup>
- Strategy** refers to an organisation's desired future state. An organisation's strategy establishes a foundation against which it can monitor and measure its progress in reaching that desired state. Strategy formulation generally involves establishing the purpose and scope of the organisation's activities and the nature of its businesses, taking into account the risks and opportunities it faces and the environment in which it operates.<sup>10</sup>
- Risk management** refers to a set of processes that are carried out by an organisation's board and management to support the achievement of the organisation's objectives by addressing its risks and managing the combined potential impact of those risks.<sup>11</sup>
- Climate-related risk** refers to the potential negative impacts of climate change on an organisation. Physical risks emanating from climate change can be event-driven (acute) such as increased severity of extreme weather events (e.g., cyclones, droughts, floods, and fires). They can also relate to longer-term shifts (chronic) in precipitation and temperature and increased variability in weather patterns (e.g., sea level rise). Climate-related risks can also be associated with the transition to a lower-carbon global economy, the most common of which relate to policy and legal actions, technology changes, market responses, and reputational considerations.<sup>12</sup>
- Climate-related opportunity** refers to the potential positive impacts related to climate change on an organisation. Efforts to mitigate and adapt to climate change can produce opportunities for organisations, such as through resource efficiency and cost savings, the adoption and utilization of low-emission energy sources, the development of new products and services, and building resilience along the supply chain. Climate-related opportunities will vary depending on the region, market, and industry in which an organisation operates.<sup>13</sup>

<sup>8</sup> A. Cadbury, [Report of the Committee on the Financial Aspects of Corporate Governance](#), London, 1992.

<sup>9</sup> OECD, [G20/OECD Principles of Corporate Governance](#), OECD Publishing, Paris, 2015.

<sup>10</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>11</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>12</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>13</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

**Greenhouse gas emissions scope levels**<sup>14</sup> Greenhouse gases are categorised into three types or 'scopes' by the Greenhouse Gas Protocol, the world's most used greenhouse gas accounting standard.

Scope 1 refers to all direct GHG emissions.

Scope 2 refers to indirect GHG emissions from consumption of purchased electricity, heat, or steam.

Scope 3 refers to other indirect emissions not covered in Scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions. Scope 3 emissions could include: the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g., transmission and distribution losses), outsourced activities, and waste disposal.<sup>15</sup>

**Value chain** refers to the upstream and downstream life cycle of a product, process, or service, including material sourcing, production, consumption, and disposal/recycling. Upstream activities include operations that relate to the initial stages of producing a good or service (e.g., material sourcing, material processing, supplier activities). Downstream activities include operations that relate to processing the materials into a finished product and delivering it to the end user (e.g., transportation, distribution, and consumption).<sup>16</sup>

**Climate scenario analysis** is a process for identifying and assessing a potential range of outcomes of future events under conditions of uncertainty. In the case of climate change, for example, scenarios allow an organisation to explore and develop an understanding of how the physical and transition risks of climate change may impact its businesses, strategies, and financial performance over time.<sup>17</sup>

**Net zero** means achieving a balance between the greenhouse gases emitted into the atmosphere, and those removed from it. This balance – or net zero – will happen when the amount of greenhouse gases add to the atmosphere is no more than the amount removed.<sup>18</sup>

<sup>14</sup> World Resources Institute and World Business Council for Sustainable Development, [The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard \(Revised Edition\)](#), March 2004.

<sup>15</sup> PCC, [Climate Change 2014 Mitigation of Climate Change](#), Cambridge University Press, 2014.

<sup>16</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>17</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>18</sup> Energy Saving Trust, [What is net zero and how can we get there? - Energy Saving Trust](#), October 2021

# Appendix A – An explanation of climate risk categories

Climate-related risks are categorised into physical and transition risks. Below are examples of transition and physical risks.

## Transition risks

Transition risks are those related to the ability of an organisation to adapt to the changes required to reduce greenhouse gas emissions and transition to renewable energy. Within transition risks, there are four key areas: policy and legal, technological innovation, market changes, and reputational risk.

### Policy and legal

#### Examples

Increased pricing of GHG emissions  
Enhanced emissions-reporting obligations  
Regulation of existing products and services

#### Potential financial impacts

Increased operating costs (e.g. higher compliance costs, increased insurance premiums)  
Write-offs, asset impairment and early retirement of existing assets due to policy changes

### Technology

#### Examples

Cost to transition to lower emissions technology  
Unsuccessful investments in new technologies

#### Potential financial impacts

Write-offs and early retirement of existing assets  
Capital investments in technology development  
Costs to adopt new practices and processes

### Market

#### Examples

Changing customer behaviour  
Uncertainty in market signals  
Increased cost of raw materials

#### Potential financial impacts

Reduced demand for goods and services due to shift in consumer preferences.  
Abrupt and unexpected increases in energy costs.  
Re-pricing of assets (e.g., fossil fuel reserves, land valuations, securities valuations).

### Reputational

#### Examples

Stigmatisation of sector  
Increased stakeholder concern or negative stakeholder feedback

#### Potential financial impacts

Reduced revenue from decreased demand for goods and services.  
Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply chain interruptions)  
Reduced revenue from negative impacts on workforce management and planning

## Physical Risks

Physical risks refer to the physical impacts of climate change on a firm's operations. They directly impact a firm's ability to perform its function due to climate disruption. They fall into two subcategories: acute and chronic. Acute risks are extreme climate events such as flooding and wildfires, and chronic risks are trends over time such as an increase in temperature or ocean acidification.

### Acute

#### Examples

- Extreme heat
- Extreme rainfall
- Floods
- Droughts
- Storms (e.g., hurricanes)

### Chronic

#### Examples

- Water stress
- Sea level rises
- Land degradation
- Variability in temperature
- Variability in precipitation

---

# Appendix B – Climate scenario modelling assumptions

The climate scenarios were developed by Aon and are based on detailed assumptions. They are only illustrative and are subject to considerable uncertainty. They consider the exposure of the Scheme to climate-related risks and the approximate impact on asset/liability values over the long-term.

The purpose of the model is to consider the long-term exposure of the Scheme to climate-related risks and the pattern of asset returns over the long term. In particular, the model considers different climate change scenarios and the approximate impact on asset/liability values over the long-term. Our model assumes a deterministic projection of assets and gilts+0% liabilities, using standard actuarial techniques to discount and project expected cashflows.

- It models the full yield curve.
- The parameters in the model vary deterministically with the different scenarios.
- Note no allowance is made for expenses, with modelled asset/liability cashflows left unaffected by these factors.
- The model assumes a real sensitivity of the liabilities based on the approximate delta sensitivity as at 31 March 2024 and assumes returns on LDI exposures are in line with the return on the liabilities. It therefore does not accurately capture the impact of pension increase caps/floors over time, however this is not considered material to the comparisons shown, and in practice the relative performance of the LDI portfolio may vary under any given scenario.

The liability update and projections are considered appropriate for the analysis. However, they are approximate, and a full actuarial valuation carried out at the same date may produce a materially different result. The liability update and projections are not formal actuarial advice and do not contain all the information you need to make a decision on the contributions payable or investment strategy.

The model intends to illustrate the climate-related risks the Scheme is currently exposed to, highlighting areas where risk mitigation could be achieved through changing the portfolio allocation. Other relevant issues such as governance, costs and implementation (including manager selection and due diligence) must be considered when making changes to the investment strategy.

Climate-related risks are considered on an asset class level, and do not consider the specific geographical locations which will have a strong influence on the climate-related risk the Scheme is exposed to.

Investment risk is only captured in the deviance from the Base Case, but this is not the only risk that the Scheme faces; other risks include covenant risk, longevity risk, timing of member options, basis risks and operational risks.

The model has been set up to capture recent market conditions and views; the model may propose different solutions for the same strategy under different market conditions.

This report, and the work relating to it, complies with 'Technical Actuarial Standard 100: General Actuarial Standards' ('TAS 100') (updated July 2023). The model complies with TAS 100.

## Data used

### **Construction Products Section:**

The model projects using the following inputs as at 31 March 2024:

Market value of assets: £890.4m

Present value of gilts+0% liabilities: £894.6m

Benefit outgo in year 1: £39m

Duration of gilts+0% liabilities: 14.5 years

Real proportion of the liabilities: 45%

No allowance for accrual on grounds of materiality

### **Other modelling assumptions for assets**

Both sections are assumed to approximately maintain the hedge up to the assets on the Technical Provisions basis. In practice after reaching fully funded on Gilts-flat the hedge may be fixed at 100% of liabilities, producing slightly different outcomes when in a material surplus, however this is not considered material to the comparison of the downside outcomes.

## Appendix C – Greenhouse gas emissions in more detail







Greenhouse gases in the atmosphere, including water vapour, carbon dioxide, methane, and nitrous oxide, keep the Earth's surface and atmosphere warm because they absorb sunlight and re-emit it as heat in all directions including back down to Earth. Adding more greenhouse gases to the atmosphere makes it even more effective at preventing heat from leaving the Earth's atmosphere.

Greenhouse gases are vital because they act like a blanket around the Earth making it the climate habitable. The problem is that human activity is making the blanket "thicker". For example, when we burn coal, oil, and natural gas we send huge amounts of carbon dioxide into the air. When we destroy forests, the carbon stored in the trees escapes to the atmosphere. Other basic activities, such as raising cattle and planting rice, emit methane, nitrous oxide, and other greenhouse gases.

The amount of greenhouse gases in the atmosphere has significantly increased since the Industrial Revolution. The Kyoto Protocol<sup>19</sup> identifies six greenhouse gases which human activity is largely responsible for emitting. Of these six gases, human-made carbon dioxide is the biggest contributor to global warming.

Each greenhouse gas has a different global warming potential and persists for a different length of time in the atmosphere. Therefore, emissions are expressed as a carbon dioxide equivalent (CO<sub>2</sub>e). This enables the different gases to be compared on a like-for-like bases, relative to one unit of carbon dioxide.

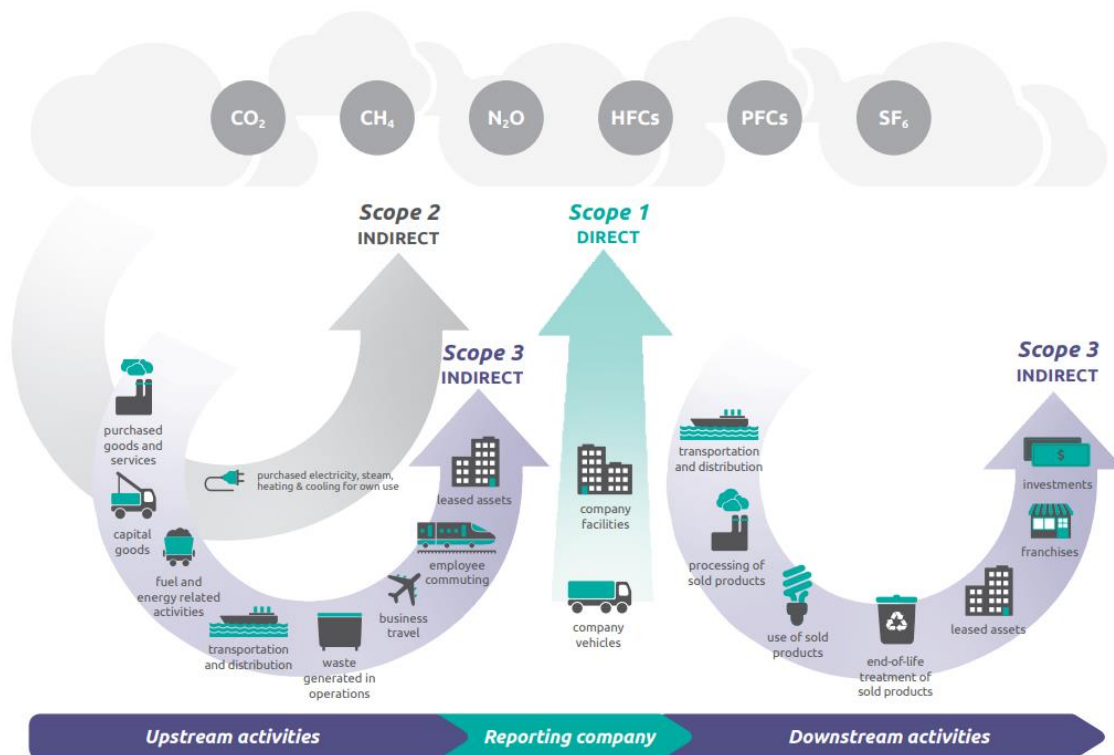
### Six main greenhouse gases identified by the Kyoto Protocol

					
Carbon dioxide	Methane	Nitrous oxide	Hydro-fluorocarbons	Per-fluorocarbons	Sulphur hexafluoride
CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>

<sup>19</sup> [https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol)

Greenhouse gases are categorised into three types or 'scopes' by the Greenhouse Gas Protocol, the world's most used greenhouse gas accounting standard.

Overview of GHG Protocol scopes and emissions across the value chain



Source: Greenhouse Gas Protocol, [Corporate value chain \(scope 3\) Accounting and Reporting Standard](#), 2011