



# NatWest Group Pension Fund: Climate disclosures for year ending 31 December 2022

Produced by: Trustee of the NatWest Group Pension Fund

Date: July 2023

# Introduction

Climate change is affecting the Earth, causing extreme weather events, impacting crop production, and threatening our planet's ecosystems. Understanding climate change and the impact it may have on the NatWest Group Pension Fund (the Fund) may help us to mitigate climate-related risks and take advantage of any opportunities from the transition to a low-carbon economy.

The Task Force on Climate-related Financial Disclosures (TCFD) is an initiative that developed guidance for climate-risk reporting. UK regulations require pension trustees to meet climate governance requirements and publish an annual TCFD-aligned report on their pension scheme's climate-related risks (Climate Report).

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

This document is the second annual Climate Report for the Fund and has been prepared by NatWest Pension Trustee Limited (the Trustee) for the Fund year ending 31 December 2022.

## What is TCFD?

The Financial Stability Board created the Task Force on Climate-related Financial Disclosures (TCFD) to develop recommendations on the types of information that entities should disclose to support investors, lenders, and insurance underwriters in appropriately assessing and pricing risks related to climate change.

The TCFD has developed a framework to help public companies and other organisations, including pension schemes, more effectively disclose climate-related risks and opportunities through their existing reporting processes.



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# Executive summary

This report sets out the approach of the Trustee with regards to identifying and managing climate-related risks and opportunities in the context of the Trustee's broader regulatory and fiduciary responsibilities to Fund members.

The Trustee supports the requirement for mandatory climate governance and reporting (in line with TCFD recommendations) on the basis that this framework should allow the Trustee to more closely assess, monitor and mitigate climate-related risks on behalf of Fund members. This is the Trustee's second disclosure under the framework and this report is expected to evolve over time.

This report has been prepared in accordance with the regulations set out under The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 (the "Regulations") and provides a status update on how the Fund is currently taking account of each of the four elements set out in the Regulations. The four elements covered in the report are:

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

In preparing this report, the Trustee has been supported by its responsible investment adviser, Aon Investments Limited (Aon).

## Strategy

Through analysis, the Trustee has identified that climate-related risks and opportunities potentially impact to some extent all the different asset classes in which the Fund invests. Over time the potential impact of both physical and transition climate risks increases. During the reporting period, climate change may have provided investment opportunities in different asset classes. Though the Trustee is not currently allocating capital to new assets, it continues to assess climate investment opportunities and allocate further capital to existing assets to take advantage of these opportunities.

The Trustee also identified that the Fund has a reasonable degree of resilience to climate-related risks, this was a key outcome of last year's quantitative climate scenario analysis based on the three different investment strategies considered, and under all five climate scenarios. The resilience was primarily driven by the high level of diversification of assets. Scenario analysis was not repeated in 2022. The Fund's portfolio has changed during the reporting period as the Trustee has gradually de-risked. It is expected that this de-risking activity has further reduced the Fund's exposure to climate risks.



## Risk Management

The Trustee has integrated the consideration of climate related risks into its investment, funding and risk processes and documentation. This includes a well-developed policy on stewardship, including the impact of climate change, as outlined in its Responsible Ownership Policy (“ROP”). The ROP describes the Trustee’s approach to voting and engagement, the results of which are reported in the Fund’s Implementation Statement, which is produced annually.

The Trustee has outlined how it integrates climate related risks within the Fund’s overall strategy on page 27 and 31.

Trustee directors and the investment team supporting the Trustee undertake periodic training on responsible investment to understand how Environmental, Social and Governance (ESG) factors, including climate change, may impact the Fund’s assets and liabilities.

## Metrics and Targets

The Trustee gathered the carbon metrics data from a range of different sources, including its investment managers and third-party data vendors. As required, the Trustee has, as far as it is able, collated the data for total greenhouse gas (GHG) emissions, carbon footprint, data quality and the portion of the assets with net zero targets which are verified by the Science Based Targets Initiative (SBTi). The Trustee has also chosen to report on an implied temperature rise measure, which is an additional metric selected this year. More detail is provided on pages 35.

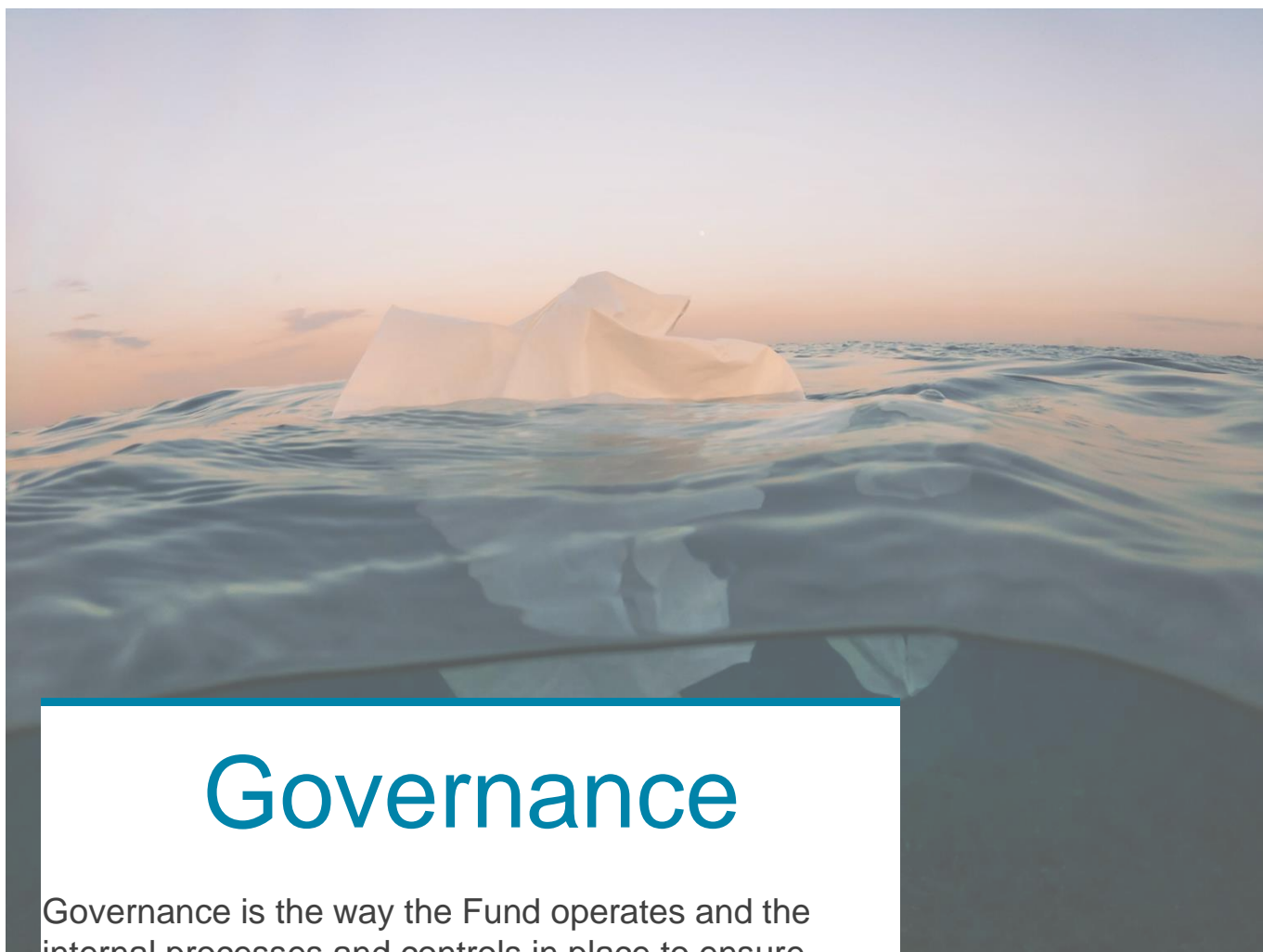
The Trustee is keen to understand the carbon emissions in the Fund’s portfolio, and notes that the data availability has remained comparable to the previous year’s reporting on equivalent assets except for credit assets where availability improved in 2022. As per the Trustee’s expectation, the overall GHG emissions increased. The Trustee has examined this and does not view this as a “real” increase, and notes that the increase is an expected output as the availability of data expands, and as there is a “settling down” in the methodologies used for evaluating emissions for investments. In addition, managers were able to provide scope 3 emission data which contributed to the overall emission’s “increase”. More detail on how emissions are defined is provided on page 34.

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

*Joanna Matthews*

on behalf of NatWest Pension Trustee Limited as trustee of NatWest Group Pension Fund





# Governance

Governance is the way the Fund 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 the directors of the Trustee and others making decisions impacting the Fund. This includes decisions relating to investment strategy and implementation, funding, the ability of the sponsoring employer to support the Fund and of the Fund to meet its liabilities.





# Our Fund's governance

As the Trustee of the Fund, we are responsible for overseeing all strategic matters related to the Fund. This includes the governance and management frameworks relating to Environmental, Social and Governance (ESG) considerations and climate-related risks and opportunities.

The Trustee's climate beliefs and approach to managing climate change risk are set out in the Fund's Statement of Investment Principles ("SIP"), which is reviewed annually.

## Our climate beliefs and approach

We believe that ESG performance, including management of the impact of climate change, is fundamental to a company's enduring success and therefore to its long-term financial returns. We have articulated our approach to asset ownership in our Responsible Ownership Policy (ROP).

We take account of, and instruct our Investment Managers to take account of, financially material considerations in the Fund's investment programme, including climate-related risks.

We believe that climate-related factors may create investment opportunities. Where possible, and where appropriately aligned with our strategic objectives, we will seek to capture such opportunities through investment in appropriate assets.

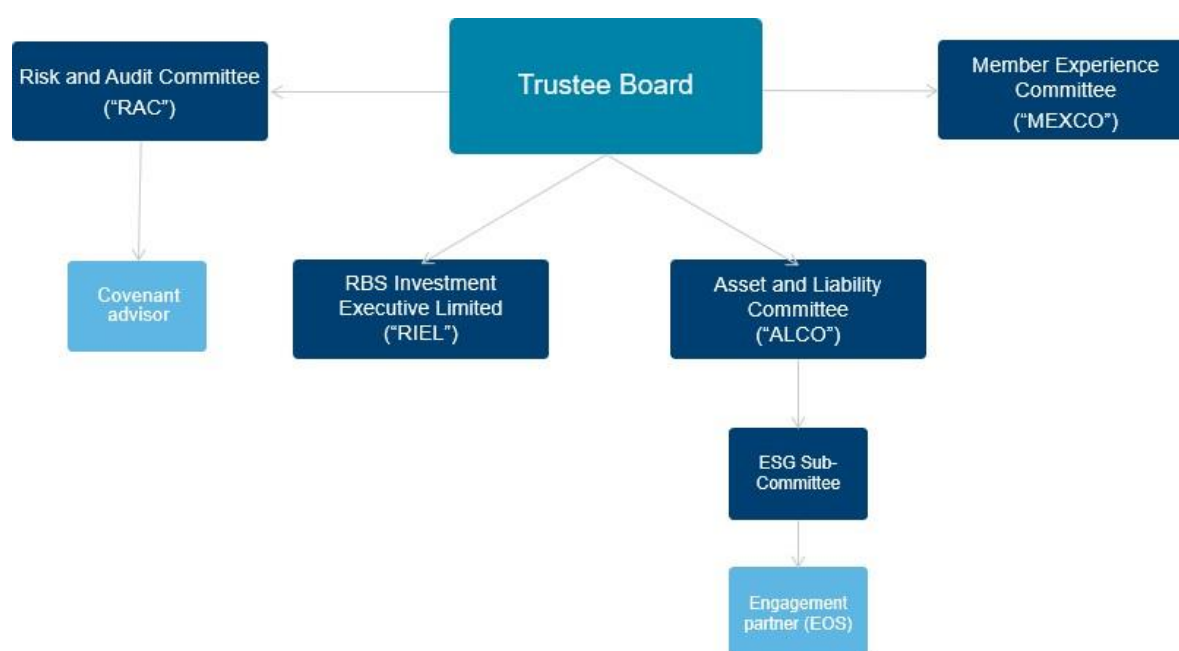
We believe that the relevant time horizons over which climate change will be relevant for the Fund's sections are as follows:

	Main	AA	NWM	RBSI
<b>Short term</b>	2025	2025	2025	2025
<b>Medium term</b>	2035	2035	2035	2035
<b>Long term</b>	2050	2050	2050	2050



The Trustee directors receive training at least on an annual basis on climate-related issues to ensure that they have the appropriate knowledge and understanding to support good decision-making. During the reporting period training on climate-related risks took place in May for everyone on the Trustee Board and the Trustee's investment team.

The Trustee is ultimately responsible for oversight of all strategic matters related to the Fund. This includes approval of the governance and management framework relating to ESG considerations and climate-related risks and opportunities. Certain functions within the Trustee's climate governance framework have been delegated to committees of the Trustee Board. The relevant committees are the Asset and Liability Committee (ALCO), the Environmental, Social and Governance Sub-Committee of ALCO (ESGC), the Risk and Audit Committee (RAC) and the Member Experience Committee (MEXCO). These delegations are summarised below.



## Role of the Trustee Committees

The committees of the Trustee Board have the following key roles:

- Asset and Liability Committee:** Responsible for the Fund's investment strategy, including climate and other ESG risks and opportunities. Reviews the Trustee's ROP at least annually to adapt to changes in the Fund, changes to regulation, industry guidance and best practice. ALCO is responsible for ensuring that investment and actuarial advice adequately incorporates climate-related risk factors where they are relevant and material which it does with assistance from its strategic investment adviser RBS Investment Executive Limited (RIEL). ALCO will monitor and review climate-related investment opportunities.
- Member Experience Committee:** Responsible for ensuring the Trustee delivers a high-quality service to all members and their representatives. It monitors the administration of the Fund and communication to members, including correspondence on climate-related matters.
- Risk and Audit Committee:** Responsible for risk oversight, covenant monitoring, audit and assurance. RAC ensures that covenant advice adequately incorporates climate-related risk factors where they are



relevant and material. The RAC will monitor and review progress against the Fund's climate change risk management objectives.

- **ESG Sub-Committee:** The ESGC is responsible for supporting ALCO by developing and overseeing the approach to responsible ownership and climate risk management and reporting (described further below).

## Role of the ESG Sub-Committee

The overriding responsibility of the ESGC is to oversee and support ALCO and the Trustee Board on all responsible ownership matters, including engagement, climate change risk and compliance with mandatory climate disclosure requirements. The ESGC reports to the ALCO, which then reports to the Trustee.

The ESGC meets and reports to the Trustee on at least a quarterly basis and ad-hoc as required to address ESG (including climate-related) risk and opportunities for the Fund. With the support of the Trustee's advisers, and the engagement partner, the ESGC is responsible for the following key activities:

- Ensuring climate risks and opportunities are considered in the management of the Fund.
- Regularly reviewing the ROP and proposing any changes to ALCO; approving annual engagement activity which is carried out by the Fund's engagement partner.
- Identifying any risks that could impact the Trustee's adherence to the ROP and on identification, recommending any remedial actions; ensuring such risks and actions are notified to the RAC.
- Ensuring that stewardship activities are being undertaken appropriately on the Fund's behalf.
- Strategic decisions in relation to the Trustee's disclosures on climate, ESG and responsible ownership matters.
- Working with investment managers to disclose relevant climate-related data as required by the TCFD recommendations.

## How we work with our advisers and relevant stakeholders

RIEL maintains a regular dialogue with our advisers and investment managers to ensure we identify any important climate-related issues and developments in a timely manner. We expect our advisers and investment managers to have the appropriate knowledge on climate-related matters.

**RBS Investment Executive Limited** is responsible for:

- Advising the Trustee on its long-term objectives and strategy and supporting the implementation of that strategy with delegated responsibility in relation to investment management.
- Reviewing all significant asset purchases, including reviewing whether they are more at risk of climate change or represent a climate opportunity.
- Responsible for oversight of fund manager activities and reporting including climate reporting.
- Responsible for agreeing the exclusions list at asset level, subject to policy decisions taken by the ESGC.
- Reporting to the ALCO annually on the implementation of the ROP.

**Aon Investments Limited (Aon)** - provide reporting support to the Trustee in respect of climate-related risks and opportunities and ensuring compliance

## Trustee's update

The Trustee completed training in May 2022 on the importance of climate-related risk governance and reporting.

The Trustee collected additional carbon data, including Scope 3 emissions and portfolio alignment metrics from its investment managers to meet the additional requirement under the TCFD framework. The Trustee has considered the responses which will be covered later in this report.

Later in the month, the ESGC met to review and challenge carbon data provided by the managers. The Trustee notes that while the data received has improved, there is not yet an industry-wide standard on calculating some of the metrics.

These issues are common across the industry at the current time and highlight the importance of TCFD-aligned reporting to improve transparency. The Trustee expects that in the future better information will be available from managers as the industry aligns to expectations and best practice standards.

with the recommendations set out by the Regulations. The Trustee regularly assesses its consultants on their ability to carry out climate-related risk and opportunities assessment for the Fund's assets, through competency-based questions and consultants' prior experience.

**Engagement partner and voting adviser** - EOS at Federated Hermes (EOS) provides engagement services for the Fund's listed investments which now mainly comprise investment grade corporate bonds but little or no quoted equities. It monitors the performance of companies against the United Nations Global Compact Principles, engages on relevant government policy initiatives and promotes collaboration between asset owners on behalf of the Trustee. EOS reports to the Trustee and RIEL on engagement activity. In turn, the Trustee monitors the engagement programme through review of EOS reporting which summarises key milestones achieved with underlying managers on a quarterly basis.

**Scheme Actuary** - we work with the Scheme Actuary to ensure that appropriate consideration is given to the impact of climate change on the valuation of the liabilities and on the key funding assumptions such as demographics and investment returns for the Main, AA, NWM and RBSI sections. Aon, as the Scheme Actuary, considers the extent to which climate change will impact on the actuarial assumptions as part of the triennial actuarial valuation process. The Scheme Actuary also considers the possible impact on the wider funding strategy, which is influenced by the results of climate change scenario analysis.

**Covenant adviser** - our covenant adviser, Penfida Limited, provides advice on the ability of the sponsoring employers to continue to meet their obligations to the Fund taking account of all material risk factors, including climate risk.

## Trustee's update

When working with its investment advisers, the Trustee sets clear expectations around the need to bring important and relevant climate-related issues and developments to the Trustee's attention in a timely manner.

Over the year The Trustee dedicated circa 24 hours of management time and resource on governance of climate-related risks and opportunities, which involved working closely with RIEL and its investment advisers.



# Strategy

It is crucial to think strategically about the climate-related risks and opportunities that will impact the Fund if we are to stand a chance of mitigating the effects of climate change.

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





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

Each year we carry out a qualitative risk assessment of the asset classes the Fund is invested in. From this we identify which climate-related risks and opportunities could have a material impact on the Fund.

This is an extensive exercise given the broad range of assets in the Fund. To help us with our assessment, we surveyed our investment managers asking them to rate the climate-related risks and opportunities they believe their Fund assets are exposed to.

The Fund's defined benefit (DB) investment portfolio is diversified across a range of different asset classes including hedging assets, private and public credit, public (residual) and private equity, property and insurance assets. There are also defined contribution (DC) assets held in the Fund, however these DC arrangements are for a very small number of members and assets and are considered to be immaterial for the purpose of this analysis.

## DB Sections asset allocations

Asset class	Main Section	AA Section	NWM Section	RBSI Section
<i>Allocation (%) as at 31 Dec 22</i>				
Hedging assets	45%	41%	47%	57%
Credit <sup>1</sup>	26%	34%	28%	31%
Equity <sup>2</sup>	9%	2%	6%	6%
Property	6%	0%	5%	4%
Insurance	3%	6%	0%	0%

<sup>1</sup>Includes quoted and private credit securities.

<sup>2</sup>Includes residual quoted equity as well as private and alternative equity securities.

## DC Section asset allocation

As mentioned above, the Fund has a very small number of DC members and DC assets represent a small proportion of Fund assets. For this reason, DC assets have been excluded from the analysis on the basis that they are not material to overall Fund strategy.

## How the risk assessment works



### Risk categories

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

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

For example, shifts in policy, technology or supply and demand in certain sectors.

**Physical risks** are associated with the physical impacts of climate change on companies' operations. For example, extreme temperatures, floods, storms or wildfires.



### 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

The Trustee assessed the climate-related risks and opportunities over multiple time horizons. The Trustee has decided the most appropriate time horizons for the Fund are:

- short term: up to year 2025
- medium term: up to year 2035
- long term: up to year 2050

When deciding the relevant time horizons, the Trustee has taken into account the liabilities of the Fund and its obligations to pay benefits.

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## Key conclusions

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

Hedging assets, which are a significant part of the Fund's assets, are deemed a low-risk area in terms of exposure to climate-related risks, indicated by the green and amber ratings over all time horizons.

Overall, the Trustee has taken proactive steps over the year to mitigate climate-related risks across different asset classes, including:

- Close monitoring of stewardship activities for credit securities carried out by EOS on behalf of the Trustee with its investment managers (to ensure they are appropriately engaging with investee companies on the management of climate risks);
- Utilising actively managed strategies, such as alternative equity investments into forestry and renewable energy, where appropriate (allowing greater scope to select investments whilst accounting for climate-related risks and opportunities); and
- Integrating climate considerations into all fund reviews and selections, including the appointment of managers with specific sustainability and climate objectives.

Property is a high-risk area, particularly in relation to physical climate risks. The static nature of property investments presents a risk to the Fund, particularly if they are in regions that are vulnerable to climate change. The Trustee has chosen to diversify its investments globally which will help mitigate these risks. All of the Fund's property managers have provided assurance to the Trustee that they are accounting for these physical risks by not investing in properties in high-risk regions.

The Trustee is also cognisant of the effects climate-related risks may have on the strength of its sponsor covenant. The Trustee's covenant adviser, Penfida, monitors covenant strength on an ongoing basis, reporting to the Trustee quarterly, and are increasingly considering climate-related risks in their assessment and advice.

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For more a detailed risk assessment by asset class please read see below.





## Climate-related risk assessment – in detail

### Hedging assets

	Physical risks		Transition risks			
	Acute	Chronic	Regulatory	Technology	Market	Reputation
Short	G	G	G	G	G	G
Medium	G	G	A	G	A	A
Long	A	A	A	A	A	A

The Fund's hedging assets are invested in UK Government bonds, cash instruments and swaps to manage risk versus the Fund's liabilities. These assets provide a good level of protection against interest and inflation rate changes that might arise from climate related risks (for example, inflation caused by higher asset costs that could arise from climate-related transition risks).

The above risk assessment has been updated from the previous year to reflect the hedging manager's climate related views. There are no substantial changes since last year's assessment. The manager does not see material financial impacts in the short-term and medium-term. These risks are relatively geographically concentrated and not expected to have material financial impact on UK sovereign bonds, although there is some risk over the longer-term. Policy changes such as carbon pricing will cause demand patterns to shift over the medium and long-terms and may be accompanied by changing market sentiment independent of policy change. It is likely that many fossil fuel exporting countries see relatively larger losses in GDP, depending on the ambition of global policy and resulting demand patterns. As a result, they may see their credit ratings fall and yields increase, with some impact on investors' global sovereign bond portfolios.

In light of the analysis above, the Trustee is comfortable with the current hedging strategy and is of an opinion that hedging instruments (UK gilts in particular) are less affected by climate-related risks compared to other return seeking assets classes.

### Credit

	Physical risks		Transition risks			
	Acute	Chronic	Regulatory	Technology	Market	Reputation
Short	G	G	G	G	G	G
Medium	A	A	A	A	A	A
Long	A	R	R	A	R	A

Credit is the Fund's second-largest allocation and includes a broad spectrum of investments, such as investment grade securities, distressed credit, real estate debt and infrastructure debt investments.

Credit markets have a high exposure to transition risk. Issuers that are slower to participate in the transition to a low carbon economy are likely to face reputational damage. Also, the potential for unexpected and aggressive emissions regulation may create higher costs (e.g., carbon taxes) for

companies. Unanticipated regulation could leave some sectors with significant stranded assets. These and other transition risks could lead to increased risk of downgrade or default.

In the near term, transition risks are far less evident for emerging markets assets and entities, where solid legislation and regulation around greenhouse gas emissions (GHG) are generally not yet present. Substitution and transition to cleaner energy require alternatives and these are still in the early stages of development. However, the risks are anticipated to be more pronounced in the future, as efforts to reduce climate change are embraced globally and not just in the developed world.

The Trustee mitigates transition risk by not owning investment grade oil and gas debt with a maturity greater than 2025 and not lending to entities where more than 50% of revenue is derived from extraction of thermal coal.

There have been some changes in credit managers' climate risk assessment since last year, for example, all six risk factors identified now have an amber rating for the medium-term (where previously, acute, chronic, technology, and reputation were rated green). Over the medium-term, acute, chronic, technology and reputation risks have received amber ratings (compared to green ratings last year). Over the long-term period, technology has received an amber risk rating (where this was red previously) and chronic has received a red risk rating (which was amber last year).

Overall, the Trustee recognises that physical events due to climate change are becoming more frequent and more impactful and the Trustee is ultimately comfortable with the analysis and the Fund's allocation to credit strategies.

## Equity

	Physical risks		Transition risks			
	Acute	Chronic	Regulatory	Technology	Market	Reputation
Short	G	G	A	G	G	G
Medium	G	G	A	G	A	G
Long	G	A	A	A	A	G

The assessment has been undertaken in relation to private and 'alternative' equity, which taken together, are the Fund's third largest asset class exposure. The Fund has divested from the majority of its quoted equity holdings reducing the Fund's exposure to market and reputation risks associated with climate change.

Of relevance from a climate risk and opportunity perspective is the Fund's allocation to global forestry, within alternative equity. Alongside the return and diversification benefits of this asset class, it also provides two valuable climate-related features. Firstly, by employing sustainable harvest practices, the forests provide a carbon sink which offsets emissions elsewhere in the portfolio, and secondly the value of the other (harvested) forests is expected to benefit from both increasing carbon prices and demand for timber as a lower-carbon substitute for other materials. Nonetheless, the Trustee also recognises that forestry is becoming more exposed to wildfires. The Trustee believes that the forest management to mitigate climate-related risks may call for adaptation of silvicultural practices, as well as technological interventions, to enable improved prediction and identification of extreme weather events.

Another opportunity the Fund benefits from is in relation to renewable energy via wind farms, waste to energy and anaerobic digestion. The Trustee values these investments due to their positive environmental benefits and contribution to reducing the UK's reliance on fossil-fuel energy generation.

Following the equity managers' reassessment of climate-related risks, short term regulatory risk, medium term market risk, and long-term chronic and technology risks have now been rated amber, in comparison to a green rating assigned last year. This indicates higher prevalence of climate-related risks for the alternative equity.

## Property

	Physical risks		Transition risks			
	Acute	Chronic	Regulatory	Technology	Market	Reputation
Short	G	G	A	G	G	A
Medium	A	G	A	A	A	A
Long	A	A	A	A	A	A

Property exposure is diversified across the UK, the US and Europe and are likely to be impacted by a combination of physical and transition risks. Physical risks arising from climate change could lead to property damage and material financial impacts, particularly in geographically vulnerable areas.

The principal physical climatic risk experienced in the UK is fluvial flooding. Through its holdings in the US, the property portfolio is also exposed to other physical risks such as hurricanes and wildfires.

Transition risks, such as tenants preferring 'green' buildings and therefore making some buildings effectively 'un-rentable', are significant climate-related issues. Other examples include energy efficiency regulations, increases in energy costs, carbon taxes, and valuation considerations that could lead to increased costs.

The Trustee prohibits new investments in properties that have a high flood risk. The Trustee encourages managers to design new properties with the objective of producing zero emissions once they are operational, such as its investment in the construction of retirement villages in the UK. Managers of existing commercial properties are required to continually improve the operational efficiency of the buildings owned by the Fund and put a plan in place to attain higher energy efficiency ratings in order to mitigate the risk of stranded assets.

There have been some updates to the property managers' climate risk assessment since the previous year. Mainly, short-term regulatory risk has now been rated amber, where this was previously green. Medium-term market, technology and reputation risk have now been rated amber, where they were previously green. The medium-term chronic risk rating on the other hand has been allocated a green risk rating (compared to amber last year). Over the long-term, both the acute and chronic risks have received amber ratings (compared to red ratings last year), and technology has received an amber rating (which was previously green). Property managers are exhibiting greater levels of climate change considerations in their constructions and management of properties, which has been positively reflected in their exposure to climate related risks over longer time horizons. Overall, the



Trustee is comfortable with the analysis and the Fund's allocation to its property investments.

### Insurance

	Physical risks		Transition risks			
	Acute	Chronic	Regulatory	Technology	Market	Reputation
Short	G	A	A	G	G	R
Medium	G	A	A	A	R	A
Long	G	R	R	A	A	G

The Fund invests in insurance-related funds covering a wide range of insurance risks.

Due to the nature of most insurance contracts the Fund invests in, there are no notable climate-related risks. However, the strategy has indirect immaterial exposure to physical risks through its holdings of catastrophe insurance linked securities. The Trustee does not believe these pose material issues in terms of its climate-related risks considerations.

## Climate-related opportunities

The Fund has been closed to new members since 2006 and therefore the assets and liabilities will decline significantly over the next 30 years. The Trustee employs a low-risk investment strategy with high levels of hedging and has approved a strategy targeting buy-in for its Main and AA Sections which limits the Trustee's ability to make new investments. The Trustee believes that the best way to access climate opportunities is through improving the operations of its existing assets and making selected capital expenditure in existing assets where this will provide a financial return over the Fund's expected investment period.

The Trustee does recognise that there is a vast array of climate-related opportunities available, which are summarised below. The Trustee has already taken advantage of some of these opportunities as part of its investment strategy.



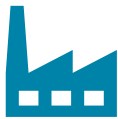
### Cleaner energy

Green power generation,  
clean technology innovation,  
sustainable biofuels



### Environmental resources

Water,  
agriculture,  
waste management



### Energy and materials efficiency

Advanced materials,  
building efficiency,  
power grid efficiency



### Environmental services

Environmental protection,  
business services

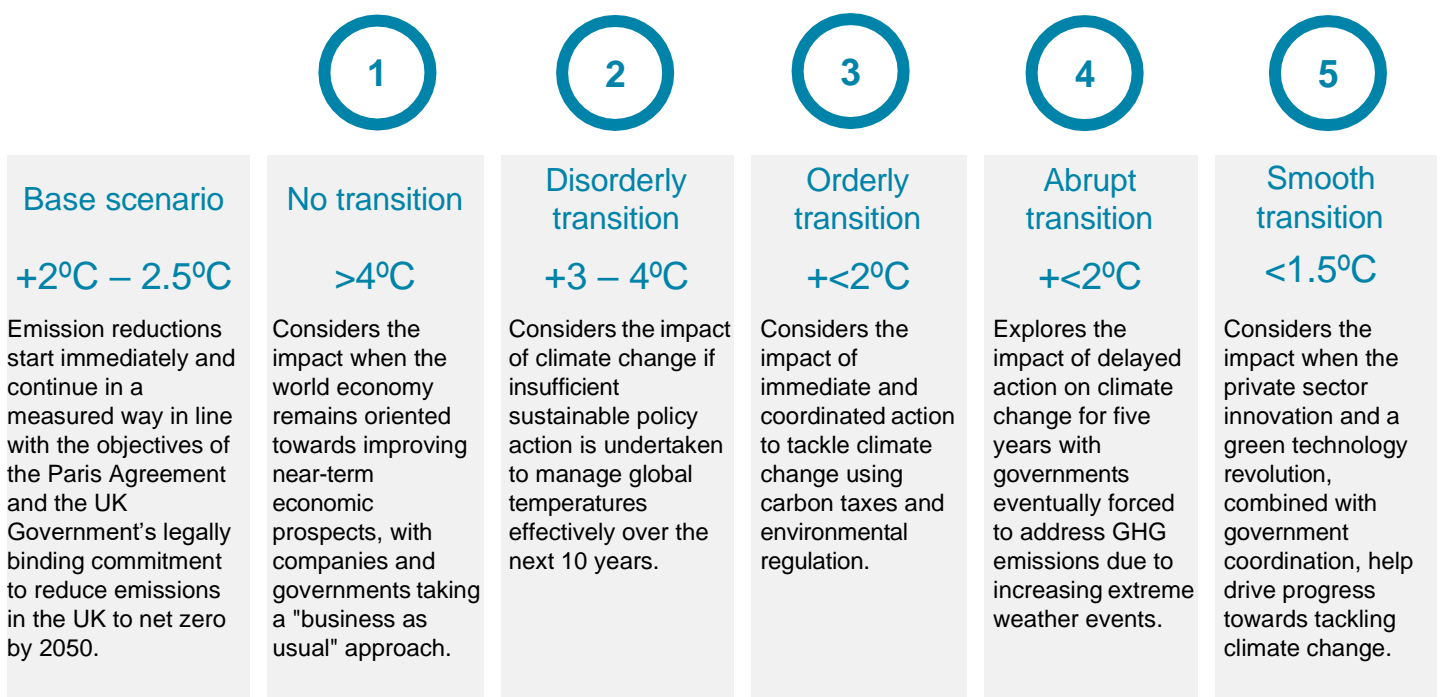


# How resilient is the Fund to climate change?

To get a better understanding of the impact climate change could have on the Fund's assets and liabilities, the Trustee has looked at how the Fund might perform under different climate change scenarios.

The Trustee has looked at five different climate change scenarios. Each scenario considers what might happen when transitioning to a low carbon economy under different conditions. The Trustee chose these scenarios because it believes that they provide a reasonable range of possible climate change outcomes.

These scenarios were developed by Aon and are based on detailed assumptions. They are only illustrative and are subject to considerable uncertainty. Aon established a "base case" scenario against which the five climate change scenarios are compared.



## Climate Impact Assessment – Main Section

The Fund's investment portfolio exhibits good resilience under the climate scenarios over the 30-year projection period. This is due to the diversification of assets, low proportion of equities<sup>1</sup> and high levels of hedging against changes in interest rates and inflation.

The worst-case scenario for the Main Section is the disorderly transition. Although initially the funding level improves (albeit at a slower rate than the base case), after 10 years the funding level deteriorates modestly. Although the Section is left materially worse off relative to the base case by the end of the modelling period, there is still expected to be a positive funding surplus. The strong starting position and diversified strategy reduces the downside impact of the disorderly scenario on the Fund.

Despite the resilience of the investment strategy, the funding level is volatile under some of the scenarios. For example, under the abrupt transition the Fund experiences a c. 4% fall in the funding level, which leads to a lag in the time taken to reach full funding, relative to the base case, of around seven years. Deterioration of the funding level may place a strain on the sponsor covenant as they may have to make up a bigger shortfall through deficit contributions. It may also require the Fund to re-risk in order to stay on track to achieve the funding target, or extend the timeframe for achieving this.

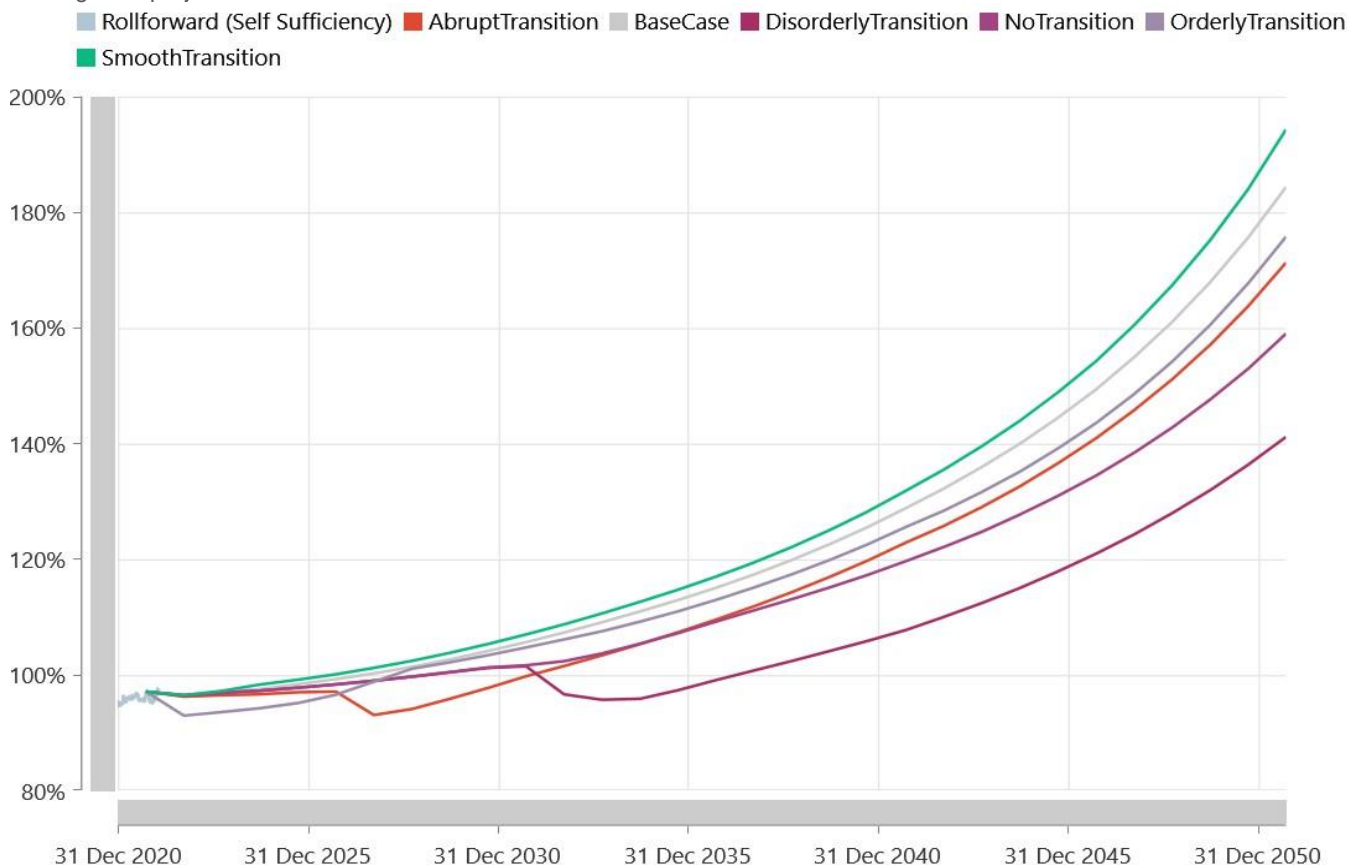
### What does the chart show?

The chart shows what might happen to the Fund's DB funding level under each climate scenario up to 30 years into the future. Each line represents a different scenario.

The funding level is a measure of how much surplus assets (or deficit) the Fund has above the cost of the pension liabilities.

Depending on the scenario, the funding level increases more or less. Under some scenarios the funding level experiences sudden falls.

Funding level projections under each climate scenario



Source: Aon. Scenario projections as at 30 September 2021.

<sup>1</sup>Equities were divested from over the year.

**Note that the modelling assumes the current investment strategy remains unchanged over time. It does not allow for future changes the Trustee might make as the liabilities mature.**

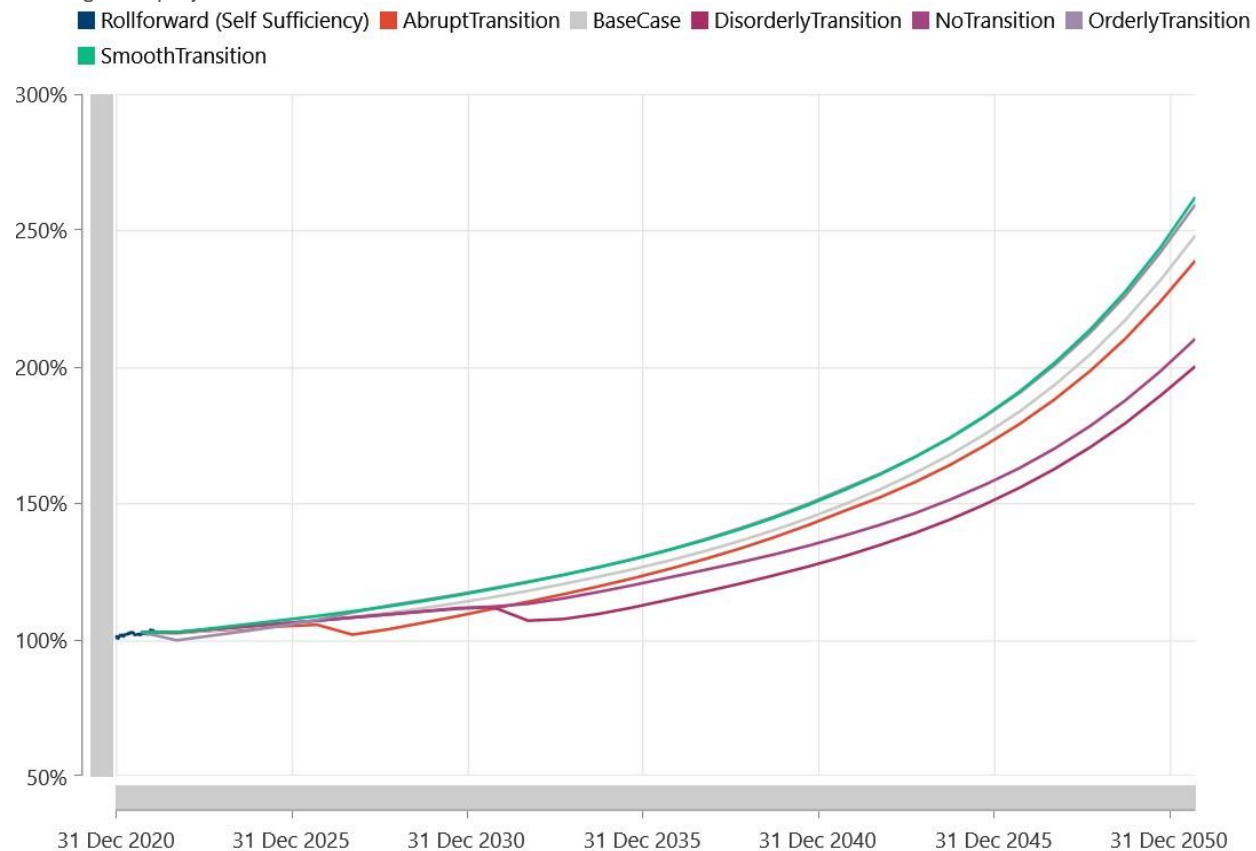
## Climate Impact Assessment – AA Section

The AA Section's investment portfolio displays strong resilience to climate change risk over the 30-year projection period. This is due to the absence of traditional equity in the portfolio, as well as the high levels of hedging to protect against changes in interest rates and inflation.

As with Main Section, the worst-case scenario for the AA Section is the disorderly transition. However, owing to the strong starting funding position and the more defensive investment strategy, the downward shock is not sufficient to reduce funding to below 100% after several years of growing surplus. Although the Fund is again left materially worse off relative to the base case by the end of the modelling period, the strong starting position and low risk strategy mitigates the downside impact on the Fund.

One key difference relative to the Main Section is the muted impact of the orderly transition scenario. This reflects the smaller allocation to non-credit growth assets (and notably the absence of traditional equity). The muted funding drop leaves the Fund in a strong position to benefit from stronger post-transition returns, with funding (under the orderly scenario) overtaking the base case from year 5 onwards. Given the full funding position on this Section, the climate scenario analysis suggests that the impact on the funding level will be muted.

Funding level projections under each climate scenario



Source: Aon. Scenario projections as at 30 September 2021.

**Note that the modelling assumes the current investment strategy remains unchanged over time. It does not allow for future changes the Trustee might make as the liabilities mature.**



## Climate Impact Assessment – NWM Section

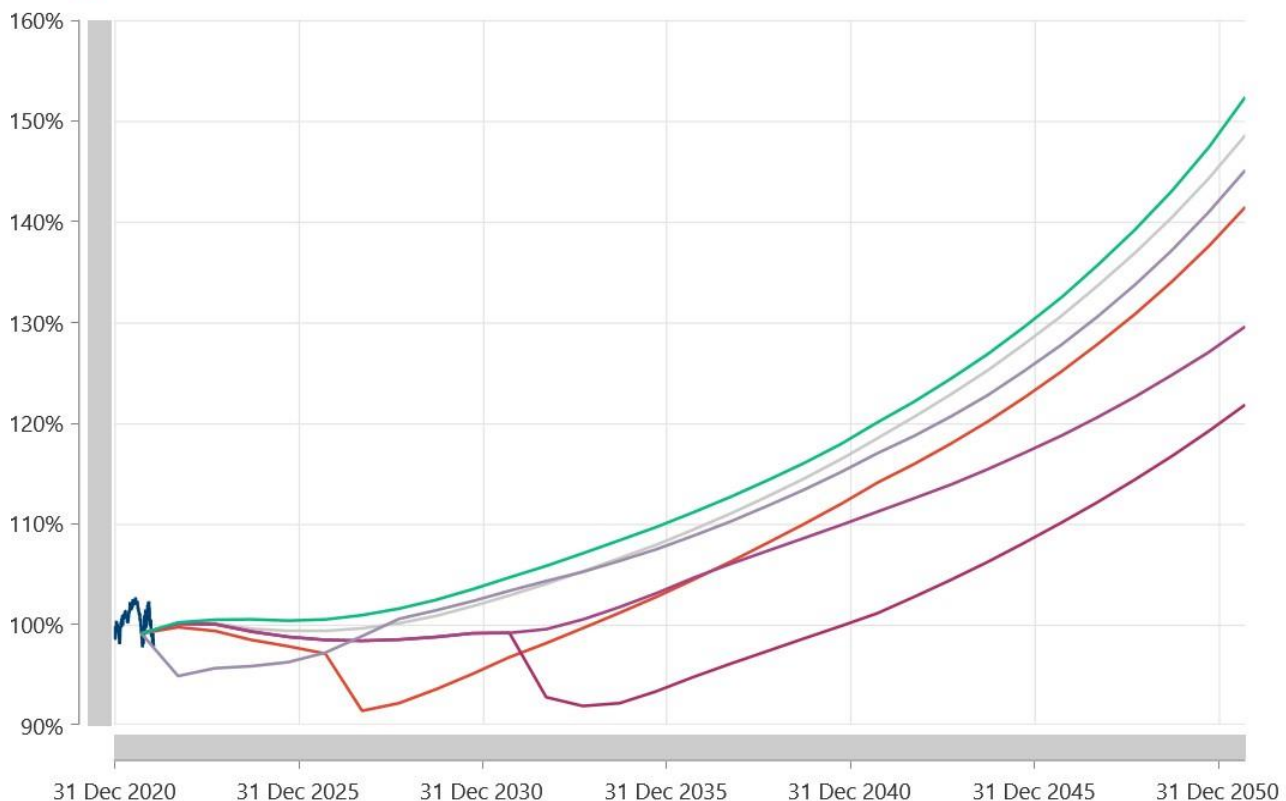
The Fund’s investment portfolio exhibits some resilience under the climate scenarios. As with the Main Section, this is due to the low proportion of equities<sup>1</sup> and high levels of hedging to protect against changes in interest rates and inflation.

As with the Main and AA Sections, the worst-case scenario for the NWM Section is the disorderly transition. However, the higher proportion in growth assets results in the Fund being more exposed to climate risks than the other two Sections (even though much of the growth allocation is in credit). This results in a slightly larger funding drop under the disorderly transition scenario than is seen for the other two Sections, with the funding level falling significantly during the transition.

The downside climate risk is also demonstrated under the orderly/abrupt transition scenarios, but subsequent recoveries are borne out much earlier than under the disorderly transition. This allows funding to recover much closer to the base case by the end of the 30-year modelling period. Deterioration of the funding level may place a strain on the sponsor covenant as they may have to make up a bigger shortfall through deficit contributions. It may also require the Fund to re-risk in order to stay on track to achieve the funding target, or extend the timeframe for achieving this.

Funding level projections under each climate scenario

■ Rollforward (Self Sufficiency) ■ AbruptTransition ■ BaseCase ■ DisorderlyTransition ■ NoTransition ■ OrderlyTransition  
■ SmoothTransition



Source: Aon. Scenario projections as at 30 September 2021.

<sup>1</sup>Equities were divested from over the year.

**Note that the modelling assumes the current investment strategy remains unchanged over time. It does not allow for future changes the Trustee might make as the liabilities mature.**

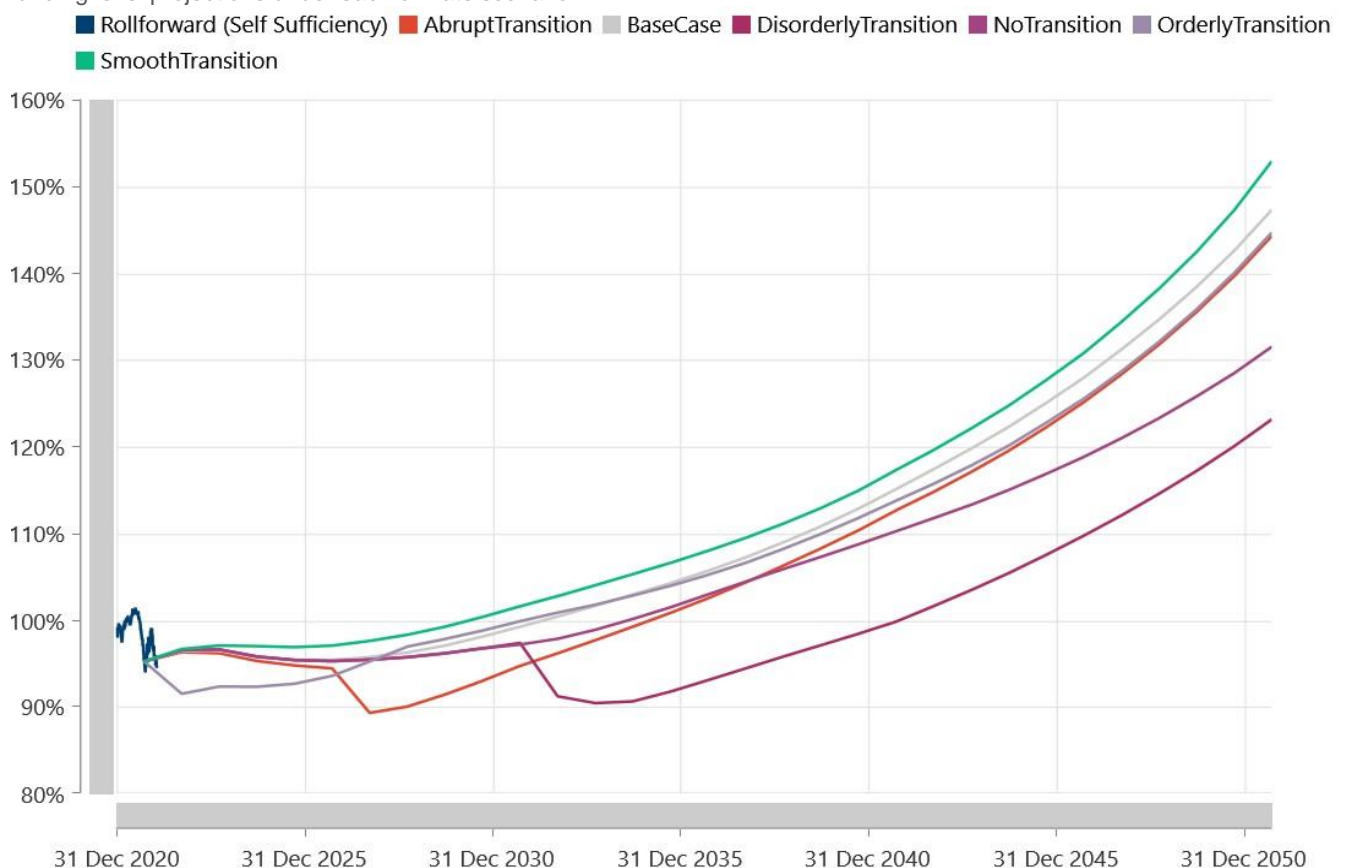
## Climate Impact Assessment – RBSI Section

The RBSI Section’s investment portfolio exhibits some resilience under the climate scenarios. As with the Main and NWM sections, this is due to the low proportion of equities<sup>1</sup> and high levels of hedging to protect against changes in interest rates and inflation.

As with the Main, AA and NWM Sections, the worst-case scenario for the RBSI Section is the disorderly transition. The pattern seen is very similar to the NWM Section, with the funding level dropping significantly as the transition occurs. Again, this reflects the higher proportion of growth assets when comparing to the Main or AA Sections.

The slightly higher exposure to climate risks is also seen under the abrupt transition scenario, with full funding delayed relative to the base case after the transition shock. Deterioration of the funding level may place a strain on the sponsor covenant as they may have to make up a bigger shortfall through deficit contributions. It may also require the Fund to re-risk in order to stay on track to achieve the funding target, or extend the timeframe for achieving this.

Funding level projections under each climate scenario



Source: Aon. Scenario projections as at 30 September 2021.

**Note that the modelling assumes the current investment strategy remains unchanged over time. It does not allow for future changes the Trustee might make as the liabilities mature.**

## Summary of the analysis

Based on the climate scenario analysis, the following conclusions were drawn:

- The Main Section's investment portfolio and funding level exhibits good resilience under the climate change scenarios due to high diversification of assets, low proportion of equities and high levels of hedging against changes in interest rates and inflation.
- NWM and RBSI Sections also demonstrate reasonable resilience under the climate change scenarios.
- Overall, climate risks are the lowest for the AA Section due to the absence of quoted/private equity.

After reviewing the climate scenario analysis, the Trustee is comfortable that the Sections display sufficient resilience to the potential impacts of climate change as envisaged by Aon's proprietary models, and at this stage are not proposing any material changes to investment strategy as a result.

Whilst the scenario analysis indicates that, even under adverse climate scenarios, the funding level of the various Sections is relatively resilient, the Trustee will use the analysis when considering sponsor covenant and the impact of possible future funding shocks.

The Trustee will review the appropriateness of the climate scenario analysis on an annual basis with the next review expected to take place in January 2024. The Trustee expects to update the climate scenario analysis at least triennially – this may be undertaken sooner if there are material developments affecting the Fund (or each Section), which would include any changes to the strategic asset allocation.

*Please note that the key scenario analysis assumptions have been set out in the 'Appendix - Climate scenario modelling assumptions.'*

## Developments

Main, NWM and RBSI Sections reduced their allocations to quoted equities over 2022. Rising interest rates resulted in improved funding levels for all Sections of the Fund. Accordingly, funding risk has improved significantly, reducing Trustee exposure to climate risks and to its sponsor. As a consequence, the Trustee has approved a change in strategy for the Main and AA Section(s) to target a buy-in at some point in the future. A buy-in would involve the Trustee passing the assets over to an insurer. In return the Trustee would receive an insurance policy which would deliver cashflows matching the benefit payments the Fund makes to members. This ultimately means that the Trustee would have substantially fewer assets over which it has direct control. Nonetheless, the Trustee has reviewed the appropriateness of the climate scenario analysis from last reporting period and believes that with its new strategic imperative and plans to de-risk the Fund, carrying out further scenario analysis at this stage would not inform its strategic decision making going forwards.

### **Data limitations**

Please note that the Fund has a limited amount of DC members and DC assets represent only a small proportion of Fund assets. For this reason, DC assets have been excluded from the climate scenario analysis on materiality grounds.



# Risk management

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

Reporting on risk management processes provides context for how the Trustee thinks about and addresses the most significant risks to efforts to achieve appropriate outcomes for members.





# Trustee process for identifying and assessing climate-related risks

The Trustee has established a process to identify, assess and manage the climate-related risks that are relevant to the Fund. This is part of the Fund's wider risk management framework and is how the Trustee monitors the most significant risks to the Fund to achieve appropriate outcomes for members.



## Qualitative assessment

The first element is a qualitative assessment of climate-related risks and opportunities which is prepared by Aon and reviewed by the Trustee.



## Quantitative analysis

The second element is quantitative in nature and is delivered by means of climate change scenario analysis, which is provided by Aon and reviewed by the Trustee.

Both qualitative and quantitative analysis give the Trustee a clear picture of the climate-related risks that the Fund is exposed to. Where appropriate, we distinguish between transition and physical risks. All risks and opportunities are assessed with reference to the time horizons that we have identified as relevant to the Fund.

When prioritising the management of risks, the Trustee assesses the materiality of climate-related risks relative to the impact and likelihood of other risks to the Fund. This helps the Trustee focus on the risks that pose the most significant impact.

# Trustee process for managing climate-related risks

The Trustee recognises the long-term risks posed by climate change and has taken steps to integrate climate-related risks into the Fund's risk management framework.

The Trustee has taken the following steps to integrate climate-related risks into their risk management framework and processes.



## Training

The Trustee completes annual training on responsible investment to understand how ESG factors, including climate change, could impact the Fund's assets and liabilities.



## Monitoring

As part of ongoing monitoring of the Fund's investment managers, RBS Investment Executive Limited (RIEL) receives quarterly ESG reporting in addition to stewardship reporting from EOS at Federated Hermes (EOS).



## Annual ESG assessment

On an annual basis, the Trustee requests that investment managers provide their responsible investment policy; details of how ESG is integrated within their decision-making process; and details of outstanding ESG issues within portfolios.



## Integrated into risk framework

Climate-related risks are included in the Fund's wider risk management framework, which is overseen the Environmental, Social and Governance Sub-Committee (ESGC) on a quarterly basis



## ESG focussed investments

The Trustee has already committed significant capital to ESG focused investments, such as forestry and renewable energy. RIEL keeps the Trustee informed on the progress of these investment opportunities and their contribution to the Trustee's ESG aims.



## Climate initiatives

The Trustee supports climate initiatives such as Climate Action 100+ and the Institutional Investors Group on Climate Change (IIGCC). The Trustee has set a net zero 2050 target for its portfolio.

## Assessing our managers

As part of the assessment of the managers' policies and processes to assess climate-related risks, the Trustee has posed "top" questions as outlined in guidance from the Pensions Climate Risk Industry Group<sup>1</sup> to its investment managers. The questions were designed to assist the Trustee with its assessment of each manager's capabilities and approach to climate management and focused on areas such as TCFD reporting, manager's ability to conduct climate scenario analysis, engagement and escalation policies, manager's ability to provide carbon related data and align their strategies to a particular temperature level.

The table below summarises the responses from the most material investment managers.

### Net Zero

17



Seventeen out of twenty-eight managers (72.0% of total AUM) have committed to net zero emissions by 2050 or aligned their portfolios with Paris Alignment or Net Zero Asset Managers Initiative.

### SBTi

7



Seven out of twenty-eight (66.7% of total AUM) managers have provided data relating their underlying portfolios' Science Based Targets initiative (SBTi) targets.

### TCFD

12



Twelve out of twenty-eight (69.0% of total AUM) managers completed their climate risk disclosures in line with TCFD guidance and made their reports publicly available.

### Initiative

70%



Over 70% of managers are signatories to various investor-led industry initiatives related to addressing climate change.

*Note: The Fund had reduced its allocation to public equity investments, hence the number of total managers has decreased since the last year's reporting period.*

<sup>1</sup> Aligning your pension scheme with the Taskforce on Climate-Related Financial Disclosures recommendations - GOV.UK ([www.gov.uk](http://www.gov.uk))

## Summary of the analysis

### **Managers**

Twenty-eight managers were asked to answer questions regarding their processes for identifying, assessing, and managing climate-related risks.

### **SBTi**

Seven managers across alternative equity and credit reported the proportion of holdings aligned with the SBTi. For example, 48% of holdings in the PIMCO credit portfolio have either committed to or are aligned with Science Based Targets (SBTs).

New Forest, a manager within the alternative equity asset class is currently working towards the SBTs.

### **TCFD**

Twelve managers have published their TCFD reports on a public platform. Many of the remaining managers are either working towards publishing their TCFD reports in 2023 and / or publicly support the TCFD recommendations.

### **Industry initiative**

Over 70% of managers are signatories to various investor-led industry initiatives related to addressing climate change, such as Paris Aligned Investment Initiative, Global ESG Benchmark for Real Assets (GRESB), IIGCC, Net Zero Asset Managers Initiative (NZAMI) etc.

## Integration into overall risk management

The Trustee considers and manages climate-related risks within its wider investment strategy to ensure that the overall investment objective and its principal duty to Fund members (to pay pensions as they fall due) remains achievable. The Trustee ensures that climate-related risks are embedded into the Fund's overall risk management in two main ways.

### **Governance approach to integrating climate-related risks**

As outlined in the Governance section, the Trustee Board and its various committees have clearly defined areas of responsibility for ESG and climate risk. In particular, the ESGC is responsible for developing and overseeing the approach to responsible ownership and climate management and reporting while the Risk and Audit Committee (RAC) is responsible for monitoring the employer covenant taking into account relevant factors including ESG and climate. These arrangements ensure that climate risk is considered alongside the Trustee's other risk considerations so that they can be identified, assessed and managed in a proportionate way, coherently with the Fund's other risks.

Where significant concerns arise, these will be addressed by the ESGC, or other committee as relevant, on a case-by-case basis and appropriate actions are agreed.

The Trustee Directors and RIEL have arranged to receive regular training on climate-related issues, at least annually, to ensure that they have the appropriate degree of knowledge and understanding of these issues to support good decision-making. The Trustee also expects its advisers to bring important and relevant climate-related issues and developments to its attention in a timely manner.

The expectation is that the Trustee's ESGC will use the analysis conducted in 2022 as a basis for monitoring investment manager progress towards the Trustee's stated climate objectives. The ESGC will escalate any material climate-related developments to the Asset and Liability Committee (ALCO), RAC or the Trustee Board, as appropriate, as and when they arise.

The Trustee also maintains a regular dialogue with the employer, which includes issues related to climate risk, both in relation to the Fund itself and in relation to the employer covenant.

### **Investment approach to integrating climate-related risks**

The climate scenario analysis undertaken for the Trustee considered the funding position based on the effect of climate risk on the Fund assets and liabilities. The Trustee has determined that no change is currently required to investment strategy based on the results of its scenario analysis. This is one of the methods by which the evaluation and consideration of climate risk is integrated into its framework for investment strategy decisions.

Climate risk considerations are integrated into asset-level decision making – as appropriate to each asset class – through the Trustee's stewardship and application of each investment manager's policy on climate change which is evaluated by the Trustee. The Trustee focuses on the engagement with the managers to encourage higher SBTi verified net zero targets for the appropriate asset classes. Further detail can be found in the Metrics and Targets pillar.





## Metrics & Targets

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



# Our climate-related metrics

The Trustee uses some quantitative measures to help it understand and monitor the Fund's exposure to climate-related risks.

Measuring GHG emissions related to the Trustee's assets is a key way to assess its exposure to climate change. Aon collected information from the Fund's managers on their GHG emissions. Aon collated this information to calculate the following climate-related metrics for the Fund's portfolio of assets.

## Measuring GHG emissions

Measuring GHG emissions is a key way for pension schemes to assess their exposure to climate change. GHGs are produced by burning fossil fuels, meat and dairy farming, and some industrial processes. When GHGs are released into the atmosphere, they trap heat in the atmosphere causing global warming and contributing to climate change.

GHGs are categorised into three types or 'scopes' by the Greenhouse Gas Protocol, the world's most used GHG 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 information, please see the appendix.

## The metrics the Trustee uses



### Total GHG emissions

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

This year the Trustee was able to obtain Scopes 1&2 and Scope 3 emissions from the managers separately.



### 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).

This year the Trustee was able to obtain Scopes 1&2 and Scope 3 emissions from the managers separately.



### Data quality

A measure of the proportion of the portfolio that the Trustee has 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.

This year the Trustee made less estimations as it relied on more data being provided directly by the managers. Please note some managers used estimates of their data, details of which are not shared as part of this document.



### Portion of portfolio SBTi aligned

A metric which gives the alignment of the Fund's assets with the 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 declared net-zero or Paris-aligned targets that have been verified by the SBTi.



### Implied temperature rise<sup>2</sup>

Implied temperature rise (ITR) is a forward-looking metric that considers the pledges, commitments and business strategy changes that underlying investee companies/issuers have made. It provides a prediction of the potential temperature rise over the rest of the century based on the activities of those companies and issuers as a temperature score.

This metric gives the alignment of the Fund's assets with the 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 potential global temperature rise associated with the GHG emissions from a portfolio, expressed in degrees Celsius.



<sup>2</sup> Please note DWP guidance states that the trustee should not be aggregating the ITR, unless the same methodology has been used across the scheme's investments. We have relied on the individual manager data, hence the consistency of methodology cannot be guaranteed. [Statutory guidance: Governance and reporting of climate change risk: guidance for trustees of occupational schemes - GOV.UK \(www.gov.uk\)](#)

## Methodology for Data Collection

The Trustee, supported by its adviser, Aon, collected the carbon emissions data using the industry standard Carbon Emissions Template (CET)<sup>3</sup>. The CET was developed by a joint industry initiative by the Pension and Life Savings Association (PLSA), Association of British Insurers (ABI) 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 Department for Work and Pensions's (DWP) Statutory Guidance, and to help insurers and investment managers fulfil their obligations under the Financial Conduct Authority's (FCA) new Environmental, Social and Governance (ESG) Sourcebook as set out in PS21/24.

When collecting the data, the Trustee also noted the following:

Asset Class	Approach
Private Equity	The managers were not able to provide this data. Carbon metrics data was estimated by Aon by applying MSCI equity sector carbon data to the managers sector breakdown as at 31 December 2022. Based on estimates, coverage is assumed to be 100%.
Alternative Equity	Carbon metrics data has been provided by the managers. Where total pooled fund emissions were provided, Aon inferred carbon footprint by dividing total emissions by the total pooled fund's AUM. The calculated carbon footprint was then applied to the Trustee's share of invested capital in the pooled fund to infer the Fund's total GHG emissions.
Offsetting assets	This data was provided directly by the managers. Carbon offsetting associated with forestry includes tree growth over the year and long-term storage in harvested wood products. Wind farm carbon avoidance includes carbon savings resulting from the energy generated by wind turbines.
Total Credit	Carbon metrics data has been provided by the managers for majority of the mandates. Where total pooled fund emissions were provided, Aon inferred carbon footprint by dividing total emissions by the total pooled fund's AUM. The calculated carbon footprint was then applied to the Trustee's share of invested capital in the pooled fund to infer the Fund's total GHG emissions.
Property	Carbon metrics data has been provided by the managers for some mandates. Where total pooled fund emissions were provided, Aon inferred carbon footprint by dividing total emissions by the total pooled fund's AUM. The calculated carbon footprint was then applied to the Trustee's share of invested capital in the pooled fund to infer the Fund's total GHG emissions.
Insurance	This asset class was excluded due to lack of carbon data associated with the nature of this asset class.
Hedging assets	The manager provided carbon footprint for each mandate, which Aon then applied to the Trustee's portfolio value to infer the Fund's total GHG emissions.
Cash	The manager provided carbon footprint for each mandate, which Aon then applied to the Trustee's portfolio value to infer the Fund's total GHG emissions.

<sup>3</sup> Data Delivery Frameworks | The Investment Association ([theia.org](https://theia.org))

## The Fund's climate-related metrics

The table below summarises reported carbon metrics over 2021 and 2022.

To ensure consistency of data across all asset classes the Trustee reported Scope 1 and 2 carbon emissions and Scope 3 emissions separately.

### Key observations

The Trustee acknowledges that the reported level of total GHG emissions have increased over the year considerably. This is in part attributed to the inclusion of Scope 3 emissions in the 2022 data calculation which were not included in the 2021 data. It also reflects the expanding availability of data and some changes in the methodologies used for evaluating emissions for some investments.

The reported carbon footprint per £ of assets (/carbon intensity) has also increased substantially, although the Trustee notes that this metric is sensitive to changes in the market value of the assets. The assets used to hedge the liabilities comprise mainly cash and gilts, and carbon emissions for these assets are currently assumed to be lower than for most other asset classes. The increase in the carbon footprint per £ of assets over the last year is largely because of significant falls in the value of those hedging assets.

Over the year, the Trustee divested from the quoted equity mandate, leaving fewer managers who have reported SBTi alignment data this year, resulting in a marginal decrease in the percentage of aligned assets in comparison to last year. Quoted equities also had the highest data quality and coverage associated with the underlying holdings, which has also reduced as part of the de-risking exercise.

These metrics capture defined benefit (DB) assets only, since the defined contribution (DC) assets are relatively immaterial and have been excluded from the analysis on materiality grounds.

Year	Fund's AUM (£)	Total Emissions (tCO2e)	Offset emissions (tCO2e)	Carbon Footprint (tCO2e/£m)	Data coverage (%)	SBTi Alignment <sup>1</sup> (%)	ITR <sup>2</sup> (°C)
2022	35.7bn	3,797,737 (Scope 1 & 2)	-1,185,892 (Scope 1 & 2)	73.2* (Scope 1 & 2 tCO2e/£m)	83	20	1.9 – 3.7
		3,682,040 (Scope 3)	-82,921 (scope 3)	100.9 (Scope 3 tCO2e/£m)			
2021	51.9bn	2,204,746 (Scope 1 & 2)	-969,000 (Scope 1, 2 and 3)	23.8* (Scope 1 & 2)	86	21	N/A
		Scope 3 data not available		Scope 3 data not available			
Change 2021 to 2022	▼ -31%	▲ +72% (scope 1&2)  ▲ +100% (scope 3)	▲ +31% (scope 1, 2 and 3)	▲ +208% (scope 1&2)  ▲ +100% (scope 3)	▼ -3%	▼ -1%	-

Source: Investment managers / Aon/ MSCI. Data is as at YE 2021 and YE 2022 respectively.



<sup>1</sup>SBTi alignment has been restated for 2021. This metric is based on assets excluding hedging assets, insurance, property and currency hedging assets. These assets were excluded on the basis of materiality and lack of SBTi appropriateness due to the nature of the asset classes.

<sup>2</sup>ITR is a new metric which was not sourced during the first reporting year. ITR is presented as a range based on the manager responses. Please note that DWP guidance recommends not to aggregate ITR information unless consistent methodology has been used across the investment funds. [Governance and reporting of climate change risk: guidance for trustees of occupational schemes \(publishing.service.gov.uk\)](#)

\* These figures account for the offset emissions associated with the Fund's investments in wind farms and forests.

## Detailed breakdown - Total GHG emissions

The table below shows a more detailed breakdown of the emission data from each asset class across the four Sections of the Fund's portfolio (where available). The Trustee notes that:

- Main and AA Sections have significant offsetting and carbon-avoiding assets (forests and windfarms) which reduce the total carbon emissions of the overall Fund's portfolio by c. 48%.
- The carbon emissions for both the NWM and RBSI Sections are broadly comparable, with the slight difference due to their slightly differing asset allocation.

Asset Class	Main Section (tCO <sub>2</sub> e)		AA Section (tCO <sub>2</sub> e)		NWM Section (tCO <sub>2</sub> e)		RBSI Section (tCO <sub>2</sub> e)		Total (tCO <sub>2</sub> e)	
	Scope 1 & 2	Scope 3	Scope 1 & 2	Scope 3	Scope 1 & 2	Scope 3	Scope 1 & 2	Scope 3	Scope 1 & 2	Scope 3
Private equity	105,451	-	-	-	-	-	-	-	105,451	-
Alternative equity	238,359	1,112,148	70	39,862	0	0	0	0	238,429	1,152,010
Total credit	1,646,625	2,478,434	48,769	44,437	1,963	-	3,468	-	1,700,824	2,522,871
Property	35,893	7,050	-	-	7	87	2	22	35,902	7,159
Hedging assets	1,398,335	-	27,926	-	6,455	-	2,492	-	1,435,208	-
Cash	280,806	-	851	-	254	-	11	-	281,922	-
<b>Total (w/o offsetting) (2022)</b>	<b>3,705,470</b>	<b>3,597,632</b>	<b>77,616</b>	<b>84,299</b>	<b>8,679</b>	<b>87</b>	<b>5,973</b>	<b>22</b>	<b>3,797,737</b>	<b>3,682,040</b>
Offsetting assets (forests)	-951,576	-80,995	-51,316	-1,925	-	-	-	-	-1,002,892	-82,921
Offsetting assets (wind farm)	-183,000	-	-	-	-	-	-	-	-183,000	-
<b>Total (w offsetting) (2022)</b>	<b>2,570,894</b>	<b>3,516,637</b>	<b>26,299</b>	<b>82,373</b>	<b>8,679</b>	<b>87</b>	<b>5,973</b>	<b>22</b>	<b>2,611,845</b>	<b>3,599,119</b>
Total (2021)	1,166,952	n/a	55,412	n/a	10,106	n/a	3,275	n/a	1,235,746	-
<b>YoY % change</b>	<b>+120%</b>	<b>n/a</b>	<b>-53%</b>	<b>n/a</b>	<b>-14%</b>	<b>n/a</b>	<b>+82%</b>	<b>n/a</b>	<b>+111%</b>	<b>n/a</b>

Source: MSCI/ Investment managers / Aon.

Note 1: Residual quoted equity portfolio was excluded from the analysis on the basis of materiality.

Note 2: Scope 3 emissions were not available in 2021 reporting year.

### Year-on-year change

Scope 3 emissions is new data for all Sections as it is the first year of reporting on this metric.

In terms of Scope 1 & 2 emissions:

- Main Section has seen an increase driven by higher emissions and availability of data for credit assets. This year, the hedging assets portfolio manager was able to provide the emissions for the associated portfolios, which were higher than the estimated emissions used last year. Hedging assets make up the largest proportion of the assets, magnifying its contribution to higher emissions for the Fund as a whole.
- AA Section has seen a fall in its Scope 1 & 2 emissions due to lower emissions within the alternative equity, total credit and property asset classes. The Section also benefited from a relatively higher carbon offsetting associated with the investments in forests.
- Similarly, the NWM Section has seen a drop in the emissions due to lower emissions within total credit and property assets, however it has also seen a fall in emissions due to divestment from quoted equity securities.
- RBSI Section has seen an increase in the total emissions due to higher emissions associated with the hedging assets which make up the largest part of the portfolio.

## Detailed breakdown – Carbon footprint per asset class

The table below summarises latest available carbon footprint (tonnes CO<sub>2</sub>e/£m invested) for the four Sections and each asset class. As previously stated, the Trustee has reported Scope 1 and 2 carbon footprint and Scope 3 carbon footprint separately.

Asset class	Main Section		AA Section		NWM Section		RBSI Section	
Assets as at 31/12/2022 (£m)	34,691		765		154		51	
	Scope 1&2 (tCO <sub>2</sub> e/£m)	Scope 3 (tCO <sub>2</sub> e/£m)	Scope 1&2 (tCO <sub>2</sub> e/£m)	Scope 3 (tCO <sub>2</sub> e/£m)	Scope 1&2 (tCO <sub>2</sub> e/£m)	Scope 3 (tCO <sub>2</sub> e/£m)	Scope 1&2 (tCO <sub>2</sub> e/£m)	Scope 3 (tCO <sub>2</sub> e/£m)
Private equity	124.0	0.0	-	-	-	-	-	-
Alternative equity	166.9	623.4	0.3	150.1	-	-	-	-
Offsetting asset (forests)	-2,019.6	-144.2	-3,221.2	-120.9	-	-	-	-
Total credit	205.2	471.7	190.7	173.8	46.0	-	65.4	-
Property	17.9	3.7	-	-	1.0	12.0	1.0	12.0
Hedging assets	89.1	-	89.1	-	89.1	-	84.7	-
Cash	68.9	-	11.3	-	11.5	-	11.5	-
<b>Carbon footprint (tCO<sub>2</sub>e/£m invested)</b>	<b>74.1</b>	<b>101.4</b>	<b>34.4</b>	<b>107.7</b>	<b>56.5</b>	<b>0.6</b>	<b>116.6</b>	<b>0.4</b>

Source: MSCI/ Investment managers / Aon.

Note 1: Residual quoted equity portfolio was excluded from the analysis on the basis of materiality.

The year-on-year comments for total carbon emissions highlighted above, are also appropriate when looking at carbon footprint. In addition to this, the Trustee notes that as carbon footprint is a metric that looks at emissions per value unit of investment (i.e., per £1m invested), it is also sensitive to changes in the market value of assets. Given that market values have fallen by around a third

over the last 12 months then – all other things being equal – the Trustee would expect the carbon footprint to increase by around 50%.

## Detailed breakdown – SBTi alignment

A Science Based Target (SBT) provides a clearly defined pathway for companies to reduce GHG emissions, helping prevent the worst impacts of climate change and future-proofing business growth. GHG reduction targets are considered "science-based" if they are in line with the latest climate science data necessary to meet the goals of the Paris Agreement – limiting global warming to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C.

The long-term nature of SBTs provides a clear direction of travel and can offer insight into important market trends that will be shaped by the low carbon transition. The targets are created by the Science Based Targets initiative (SBTi) and are scientifically confirmed requirements that will set the path for transitioning to a low (preferably zero) carbon economy.

The table below summarises latest available SBTi alignment data for the Fund across the applicable asset classes<sup>1</sup>.

	2022 (%)	2021 (%)	YoY % change
Quoted equity*	0%	21%	Not applicable (all managers divested)
Alternative equity*	0%	3%	-3%
Total Credit	24%	24%	0%
Cash	4%	-	+4%

Source: Managers, as at 31 December 2022.

<sup>1</sup>Applicable assets exclude insurance, property, private equity, hedging assets.

\*The Trustee divested from its quoted equity holdings over the year. The Trustee also divested from a mandate within the alternative equity portfolio which has SBTi target. As such, the SBTi alignment within these asset classes fell to zero.

Over the year, the Trustee has restated its SBTi alignment metric to better represent assets in scope for the percentage of assets with a net zero target. As represented in the table above, assets in scope are quoted equities, alternative equities, total credit and legacy cash account. Assets such as wind farms and forests are naturally aligned with net zero but have not yet developed SBTs.

Quoted and alternative equity SBTi percentage alignment fell due to a divestment from the applicable portfolios over the year. Credit and legacy cash investment managers continue to report on this data. Overall, the Trustee is comfortable with the metrics observed over the year.

## Detailed breakdown – ITR

ITR is used to show the potential increase in global temperature due to the GHG emissions produced by companies. It is expressed as a range of temperatures, with higher levels of GHG emissions leading to a higher predicted temperature rise.

This year the Trustee has chosen to report on ITR, which provides a more sophisticated measure of the Fund's impact on climate change and can also be used to better align its investments with reaching its net zero goals. The table below shows the available ITR data for the Fund across the applicable asset classes.

Asset class	ITR (°C)
Alternative equity	1.50 – 5.25
Total Credit	2.32 – 3.80
Property	0.00 – 3.80
Hedging assets	1.90
Cash	2.70

Source: Managers, as at 31 December 2022.

<sup>1</sup>Applicable assets exclude insurance and private equity.

Quoted equities have been excluded due to materiality. ITR data was not provided by the private equity managers, this due to the nature of the asset class, where there is currently not a robust methodology in place to collect this data. Insurance has been excluded due to the nature of the asset class.

## Data observations and limitations

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

The Trustee expects that in the future better information will be available from managers and this improvement will be reflected in the coming years' reporting.

The Trustee's responsible investment adviser, Aon, requested data from all the Fund's managers:

- 11 managers provided Scopes 1, 2 and 3 GHG emissions.
- 8 managers provided Scopes 1 and 2 only.
- 7 managers did not provide any information.

The Trustee notes that a number of its managers had made commitments to net zero emissions by 2050, but had not yet begun tracking its portfolio emissions, or alignment with SBTi. For example, none of the private equity managers have been able to provide PAM data, additionally, some of the alternative (Tufton, New Forest), credit (Man, Axa) and property managers (Partners) were also unable to disclose figures for their respective funds, though managers have stated they would be able to demonstrate (timely) carbon metric estimate data moving forward.

Other managers such as Navis, Pathway, Gramercy and Polus have not yet set a top-down target (at assets under management or strategy level) for net zero emissions by 2050 target and the Trustee will engage with the manager to better understand their rationale. The Trustee also plans to engage with its managers that were unable to supply emissions data for this analysis.

The Trustee notes that there is not yet an industry-wide standard on calculating some of these metrics and that different managers may use different methods and assumptions when providing data to the Trustee, and this may also impact year-on-year comparison where different methodologies may be used.

These issues are common across the industry at the current time and highlight the importance of TCFD-aligned reporting to improve transparency. The Trustee expects that in the future better information will be available from managers as the industry aligns to expectations and best practice standards.

# Looking to the future

## Our climate-related target

Climate-related targets help the Trustee track its efforts to manage the Fund's climate change risk exposure.

The Trustee has decided to not only set the trajectory for the Fund's assets in line with its net zero commitment, but also measure the proportion of portfolio companies, by allocation weight, that have aligned to SBT using 2021 assessment as a baseline year.

Given the current portfolio has 20% of assets aligned with SBT, the Trustee has set a target using a linear scaling up required year on year to reach 100% target by 2050 (as per the SBTi's guidance for Financial Institutions), on all assets excluding hedging assets, property, insurance, hedging assets and currency hedging assets.

This is the Trustee's principal target.



**By 2030**  
**57%**  
of Fund's AUM to be aligned  
with net zero SBTi targets

**By 2050**  
**100%**  
of Fund's AUM to be aligned  
with net zero SBTi targets

As of 2022, 20% of the Fund's AUM is aligned with SBT, which is a 1% decline in comparison to 2021 data. This is primarily due to the divestment from the quoted equities and a mandate from the alternative equity portfolio. The Trustee expects to see improvement in the future as the investment managers are developing their methodologies in collecting SBT data and are working towards reaching their own net zero targets.

The Trustee has also chosen to set an additional target, with respect to achieving net zero carbon emissions. The Trustee shares the market view that to achieve net zero by 2050, interim targets for 2030 should be set and they should reflect that the latter emissions reductions will be harder and require more time:



**By 2030 achieve total  
emission reduction by**  
**57%**  
Using 2021 carbon data as a  
base year

**By 2050 achieve a net zero  
emission target**  
**100%**  
Using 2021 carbon data as a  
base year

Despite total emissions being higher this year, the Trustee is comfortable with the progress being made in relation to carbon reduction target. The inclusion of Scope 3 data signifies a positive development in the effort from the managers in reporting carbon emissions.

### Trustee's update

The Trustee believes that in order to achieve the 1.5 °C temperature reduction, which is in line with the Paris Agreement goals, a more rapid reduction in the carbon emission is required in the near-term future.



The Fund's performance against the target will be measured and reported on every year. Over time, this will show the Fund's progress against the target. The Trustee will review the appropriateness of its targets against the upcoming buy-in exercise and other relevant strategic changes where relevant.

## What is the Trustee doing to reach the target?

To reach its target, the Trustee plans to engage with the Fund's managers to improve their SBT and net zero targets. The Trustee anticipates doing this via an annual questionnaire to assess managers' progress against the implementation of the SBTs, while also utilising its engagement partner to encourage investee companies to adopt SBTs across the Fund's invested portfolio.

The Trustee acknowledges that if it implements buy-ins then this would involve the Trustee passing the assets over to an insurer. In return the Trustee would receive an insurance policy which would deliver cashflows matching the benefit payments the Fund makes to members. This ultimately means that the Trustee would have substantially fewer assets over which it has direct control.

# Appendices

# Glossary

- Governance** refers to the system by which an organisation is directed and controlled in the interests of shareholders and other stakeholders.<sup>4</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>5</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>6</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.
- 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.
- 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.

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<sup>4</sup> A. Cadbury, [Report of the Committee on the Financial Aspects of Corporate Governance](#), London, 1992.

<sup>5</sup> OECD, [G20/OECD Principles of Corporate Governance](#), OECD Publishing, Paris, 2015.

<sup>6</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

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<b>Greenhouse gas emissions (GHG) scope levels<sup>7</sup></b>	<p>Greenhouse gases are categorised into three types or ‘Scopes’ by the Greenhouse Gas Protocol, the world’s most used GHG accounting standard.</p> <p>Scope 1 refers to all direct GHG emissions.</p> <p>Scope 2 refers to indirect GHG emissions from consumption of purchased electricity, heat, or steam.</p> <p>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>8</sup></p>
<b>Value chain</b>	<p>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>9</sup></p>
<b>Climate scenario analysis</b>	<p>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>10</sup></p>
<b>Net zero</b>	<p>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 added to the atmosphere is no more than the amount removed.<sup>11</sup></p>

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<sup>7</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>8</sup> PCC, [Climate Change 2014 Mitigation of Climate Change](#), Cambridge University Press, 2014.

<sup>9</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>10</sup> Ibid

<sup>11</sup> Energy Saving Trust, [What is net zero and how can we get there? - Energy Saving Trust](#), October 2021

## Appendix – climate scenario modelling assumptions

The purpose of the climate scenario modelling is to consider the impact of climate-related risks on the Fund's assets and liabilities over the long-term.

- i. In particular, the model considers different climate change scenarios and the approximate impact on asset/liability values over the long-term (for each Section).

Our model assumes a deterministic projection of assets and self-sufficiency liabilities for each section, using standard actuarial techniques to discount and project expected cashflows.

- i. It models the full yield curve as this allows for an accurate treatment of the liabilities and realistic modelling of the future distribution of interest rates and inflation. It also allows us to truly assess the sensitivities of the assets and liabilities to changes in interest and inflation rates.
- ii. The parameters in the model vary deterministically with the different scenarios.
- iii. Note no allowance is made for expenses, with modelled asset/liability cashflows left unaffected by these factors.

The liability updates and projections are considered appropriate for the analysis. However, they are approximate and full actuarial valuations carried out at the same date may produce materially different results. The liability updates 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 Fund is currently exposed to, highlighting areas where risk mitigation could be achieved through changing the portfolio allocation.

- i. 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 only captured in the deviance from the Base Case, but this is not the only risk that the Fund 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 strategies under different market conditions.

This report, and the work relating to it, complies with 'Technical Actuarial Standard 100: Principles for Technical Actuarial Work' (TAS 100). The model complies with TAS 100.

## Key Assumptions

	<b>Temperature risk by 2100</b>	<b>Reach net zero by</b>	<b>Carbon price (2030/2050)</b>	<b>Introduction of environmental regulation</b>
No transition	+4°C	After 2050	\$40 / \$50	None
Disorderly transition	< 3°C	After 2050	\$65 / \$340	Late Aggressive
Abrupt transition	1.5°C - 2°C	2050	\$135 / \$280	Aggressive
Orderly transition	1.3°C - 2°C	2050	\$100 / \$215	Coordinated
Smooth transition	<1.5°C	2045	\$80 / \$165	Highlycoordinated

Source: Aon



## Appendix – Greenhouse gas emissions in more detail







Greenhouse gases (GHGs) 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 GHGs to the atmosphere makes it even more effective at preventing heat from leaving the Earth's atmosphere.

GHGs 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 GHGs.

The amount of GHGs in the atmosphere has significantly increased since the Industrial Revolution. The Kyoto Protocol<sup>12</sup> identifies six GHGs which human activity is largely responsible for emitting. Of these six gases, human-made carbon dioxide is the biggest contributor to global warming.

Each GHG 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.

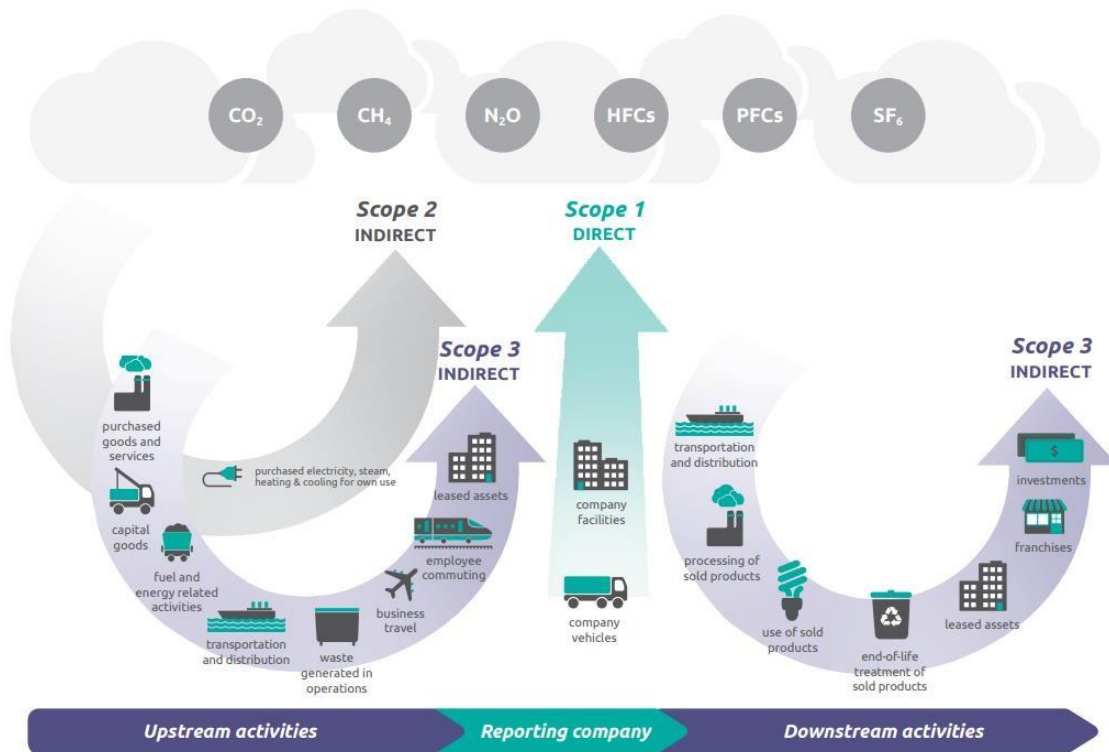
### Six main GHGs identified by the Kyoto Protocol

					
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>12</sup> [https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol)

GHGs are categorised into three types or 'Scopes' by the Greenhouse Gas Protocol, the world's most used GHG 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