



Climate disclosures for year ended 31 March 2024

Produced by: Magnox Electric Group Pension Trustee Company Limited

Date: August 2024

Introduction

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

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

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

This report has been prepared by the Group Trustee of the Magnox Electric Group of the Electricity Supply Pension Scheme (the "Group Trustee" and the "Group") and is the second annual climate disclosures for the Group for the year ended 31 March 2024.

The Group is one of the segregated Groups within the Electricity Supply Pension Scheme (the "ESPS"), which is a UK occupational pension scheme with assets of in excess of £34bn. Each Group has its own Group Trustee which has defined responsibilities in relation to a particular Group, including the setting of investment strategy. There is a separate Scheme Trustee which has defined responsibilities for the whole of the ESPS. In particular, the Scheme Trustee has exclusive responsibility for ownership and custody, has administrative control of assets, and implements investment strategy decisions made by each Group Trustee.

This report relates to the Group only, although the contents of this report have been shared with the Scheme Trustee to help it produce an equivalent report for the ESPS:

[The Electricity Supply Pensions Scheme \(espspensions.co.uk\)](https://www.espspensions.co.uk)

While this report is in relation to the Group, parts of the report do focus on specific segregated sections within the Group ("Sections"). The Group comprises four Sections with total assets of approximately £2.7bn as at 31 March 2023.

What is the TCFD?

The Financial Stability Board created the Taskforce on Climate-related Financial Disclosures ("TCFD") to develop recommendations on the types of information that entities should disclose to support investors, to assess and price risks related to climate change.

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

Section	Assets (£m)	Percentage of Group's total assets (%)
SLC Section	£2,532.6	95.5%
Cavendish Nuclear Section	£56.4	2.1%
Atkins Section	£52.1	2.0%
NNL Section	£9.3	0.4%
Total Group	£2,650.4	100.0%

Source: Investment Adviser/Managers. Totals may not sum due to rounding.

The four elements covered in the report are:

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

This report has been prepared by the Group Trustee in accordance with the regulations set out under The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 (the "Regulations").



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Executive summary

This report sets out the actions that the Group Trustee has taken to understand the potential impact climate change could have on the Group.

The Group Trustee has worked closely with its Investment Adviser to identify the climate-related risks and opportunities faced by the Group, and to understand ways the Group Trustee can manage and mitigate the risks and access the opportunities.



Governance *See p7 onwards for further detail*

The Group is a Defined Benefit (“DB”) pension scheme.

- The asset portfolio of approximately £2.7bn is invested in a range of asset classes including Equities, Diversified Growth Funds (“DGF”s), Property & Infrastructure, Liquid Credit, Illiquid Credit and Gilts (via Liability Driven Investments, or “LDI”). There is also an annuity within the Atkins Section of the Group.
- The Group Trustee is ultimately responsible for the oversight of all strategic matters relating to the Group, this includes climate-related risks and opportunities.
- The Group Trustee delegates the day-to-day oversight of the Group’s climate change risk management to the Investment Committee (“IC”).



Strategy *See p12 onwards for further detail*

- The Group Trustee’s qualitative analysis of climate-related risks and opportunities showed that the asset classes in which the Group invests are impacted to some degree by climate-related risks, and over time, the risk exposure is expected to increase.
- The Group Trustee identified numerous investment opportunities as part of the transition to a low carbon economy. These opportunities lie within new and existing asset classes.
- The Group Trustee updated its climate scenario analysis and the results indicate that the Group has a reasonable degree of resilience relative to climate-related risks. The resilience is primarily driven by running a relatively low-risk investment strategy with a low allocation to Equities.



Risk Management *See p26 onwards for further detail*

- The Group Trustee has established a process to identify, assess and manage the climate-related risks and opportunities to which the Group is exposed. This is integrated into the Group’s wider risk management framework.

- The Group Trustee’s Climate Risk Management framework is set out on pages 28-30, which sets out the process for the ongoing management of climate related risks and opportunities. Alongside this, the Group Trustee undertakes annual training on responsible investment to understand how Environmental Social and Governance (“ESG”) factors, including climate change, may impact the Group’s assets and liabilities. Details of training the Group Trustee has undertaken through the Group’s year are included in the Governance and Risk Management Sections of this report.



Metrics and Targets *See p32 onwards for further detail*

The Group Trustee has disclosed information on four climate-related metrics for each asset class across the Sections within the Group, as far as it is able to.

- Total Greenhouse Gas (“GHG”) Emissions.
- Carbon Footprint.
- Data Coverage.
- Binary Target Measurement

The Group Trustee has also set the following target for the Group:

Achieve a Data Coverage target of 90% for Scope 1, 2 and 3 emissions across all of the Group's asset classes.

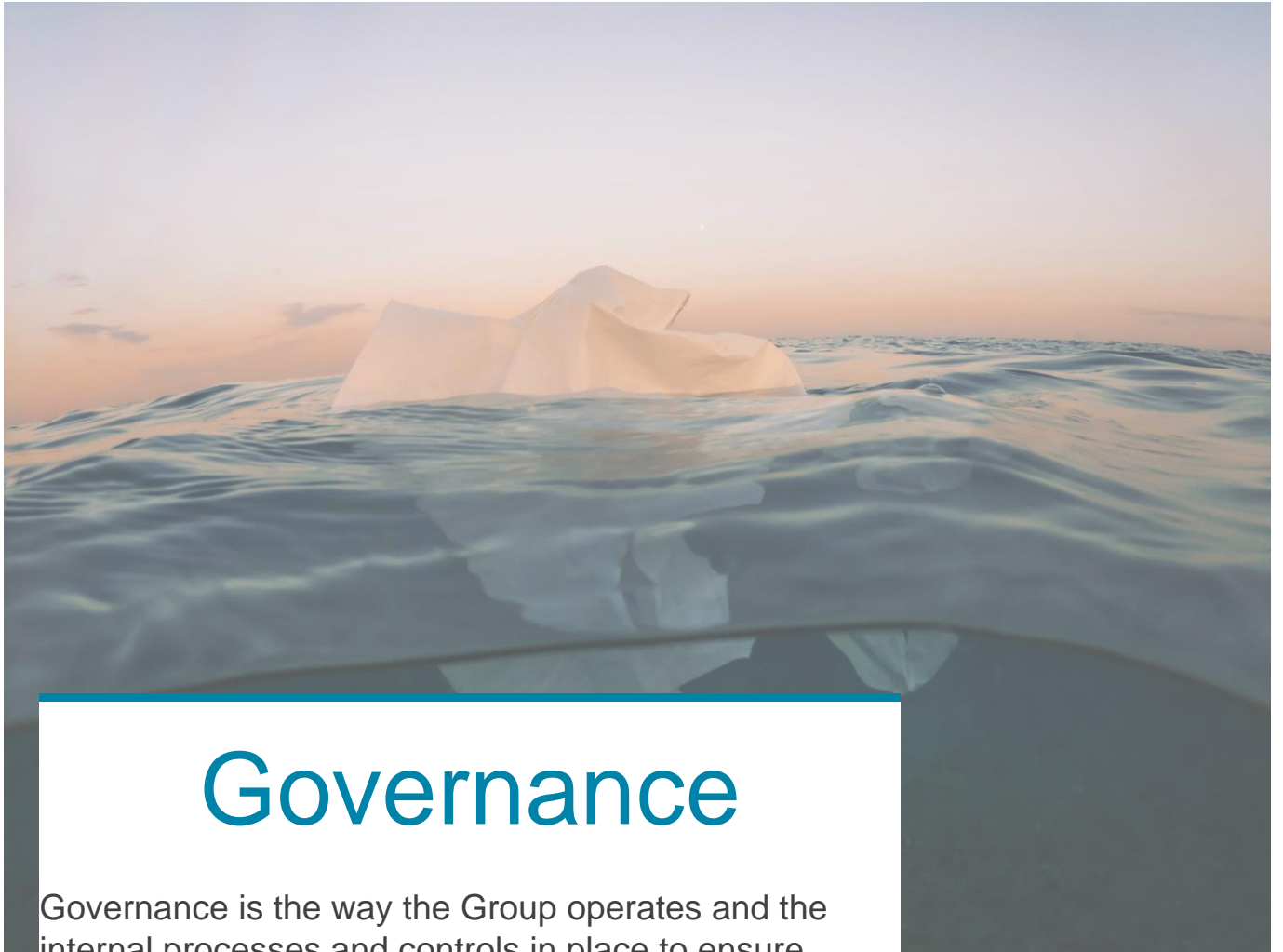
The Group Trustee has decided to prioritise the following actions over the next 12 months:

- Continue to engage with investment managers to ensure their reporting on climate-related risks allows the Group Trustee to ensure the Group is sufficiently resilient.
- Enhance analysis of climate-related opportunities to incorporate the time-horizons that are relevant to the Group.

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

Chair’s signature

on behalf of the Group Trustee of the Magnox Electric Group of the Electricity Supply Pension Scheme (the “Group”)



Governance

Governance is the way the Group 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.



Our Group's Governance

The Group Trustee is responsible for overseeing all strategic matters related to the Group. This includes the governance and management frameworks relating to environmental, social and governance ("ESG") considerations and climate-related risks and opportunities.

The Group Trustee has discussed and agreed its climate-related beliefs and overarching approach to managing climate change risk. These are set out in the Statement of Investment Principles ("SIP") for each Section, which are reviewed and (re)approved every three years (or sooner in the event of a significant change in investment policy) by the Group Trustee.

Climate Mission Statement

The Group Trustee believes that the risks associated with climate change could have a materially detrimental impact on the Group's investment returns within the timeframe that the Group Trustee is concerned about. Because of this risk, the Group Trustee seeks to integrate assessments of climate change risk into its investment risk management and strategy.

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

The Group Trustee continues to balance time and resource in a manner which best meets its fiduciary duty, including a proportionate amount of time and resource spent on climate-related risks and opportunities. While this involved spending a considerable amount of time and resource to understand the Group's climate-related risks and opportunities as part of the Group's first TCFD report, the Group Trustee expects the required time and resource to reduce in future years now a framework has been agreed.

Role of the Group Trustee

Given its importance, the Group Trustee has not identified one individual to specifically be responsible for the Group Trustee's response to climate risks and opportunities. Rather, the Group Trustee collectively takes responsibility for setting the Group's climate change risk framework.

Climate-related risks and opportunities are integrated into the Group Trustee's risk management framework so the Group Trustee can maintain oversight of the climate-related risks and opportunities that are relevant to the Group.

In summary, the Group Trustee believes that:

- The risks associated with climate change can have a materially detrimental impact on the Group's investment returns within the

Group Trustee update

During September 2023, the Group Trustee completed further training on the regulatory changes under Year 2 TCFD statutory guidance.

The training also covered key lessons learnt from the industry's first wave of TCFD reporting from the Pensions Regulator ("TPR").

During April-June 2024, the Group Trustee received updated information from its Investment Adviser in relation to:

- Climate scenario analysis using membership data and assumptions from the 2022 actuarial valuation;
- the Group's carbon emissions, including for the first time Scope 3 emissions; and
- the Group's exposure to climate-related risks and opportunities.

In July 2024, the Group Trustee received training on Net-Zero to understand what commitment this would entail and how this may impact on the wider investment strategy.

timeframe that the Group Trustee is concerned about and, as such, the Group Trustee seeks to integrate assessments of climate change risk into its investment decisions.

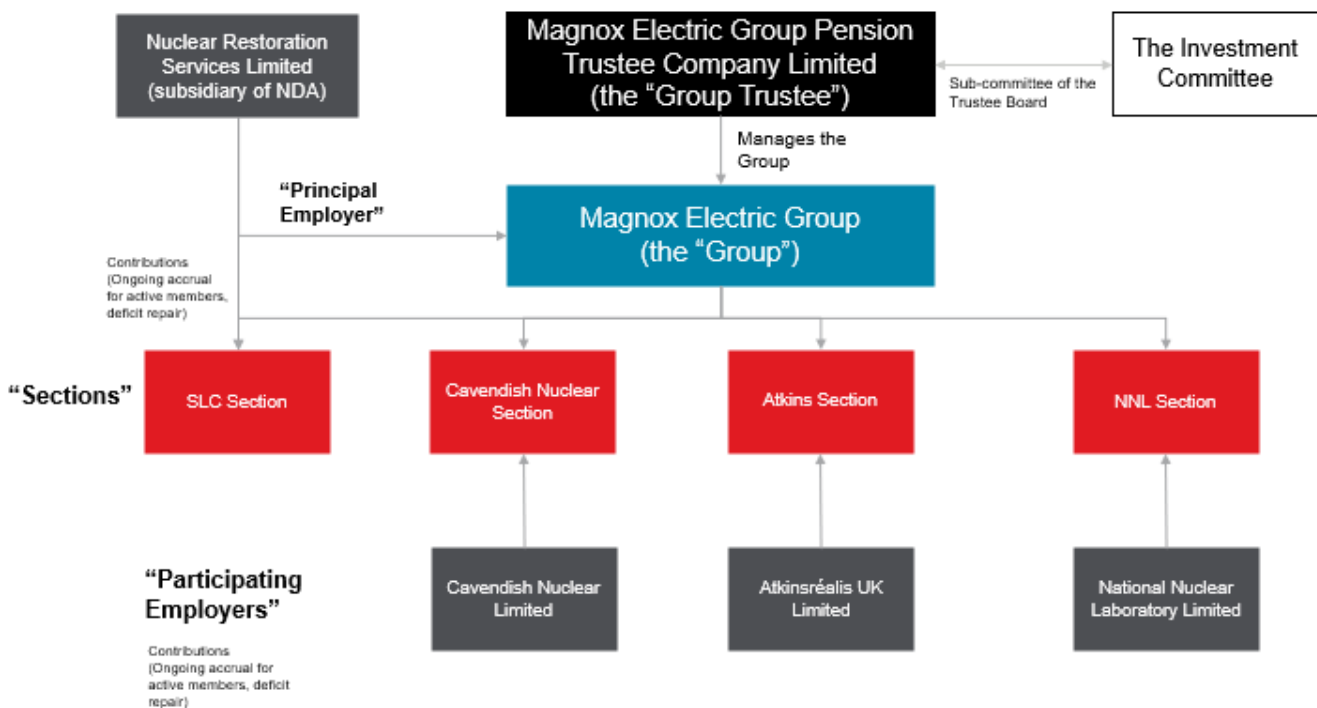
- Climate-related factors may create investment opportunities. Where possible, and appropriately aligned with the Group Trustee’s strategic objectives and fiduciary duty, the Group Trustee will proactively seek to capture such opportunities through its investment portfolio.
- The most appropriate time horizons for the Group are as follows:
 - Short-term: 1-3 years
 - Medium-term: 4-10 years
 - Long-term: beyond 10 years

Climate-related risks and opportunities are assessed over the above time horizons. Where appropriate, the Group Trustee considers transition and physical risks separately.

The Group Trustee receives training on an annual basis (or more frequently if required) on climate-related issues as part of its TCFD reporting process, to ensure that it has the appropriate degree of knowledge and understanding on these issues to support good decision-making.

The Group Trustee also annually monitors and reviews progress against the Group’s climate change risk management approach.

The diagram below shows the structure of the Group.



The Group Trustee and Investment Committee share a range of advisers which are omitted from the diagram for simplicity.

Role of the Investment Committee

The Group Trustee has delegated day-to-day oversight of the Group's climate change risk management framework to the Investment Committee ("IC"), which is a sub-committee of the Group Trustee. All Trustee Directors of the Group Trustee are permitted to attend meetings of the IC.

The IC seeks to ensure that any investment decisions appropriately consider climate-related risks and opportunities within the context of the Group's wider risk and return requirements and are consistent with the climate change policy as set out in the SIP.

The IC annually monitors and reviews progress against the Group's climate change risk management approach. The IC will keep the Group Trustee apprised of any material climate-related developments through regular updates as and when required.

The key activities undertaken by the IC, with the support of the Group Trustee's advisers, are:

- Ensure the investment strategy or any implementation proposals consider the impact of climate risks and opportunities.
- Consider investment opportunities which enhance the ESG and climate change focus of the Group's portfolio in the context of each Section's investment strategy.
- Engage with the Group's investment managers to understand how climate-related risks are considered in their investment approach.
- Work with the investment managers to disclose relevant climate-related metrics as set out in the TCFD recommendations.
- Ensure stewardship activities are being carried out appropriately by the investment managers on the Group's behalf.
- Monitor and review progress against the Group's risk management framework annually.

While this report is produced on an annual basis, the IC meets at least once a quarter with its Investment Adviser and some of its investment managers to discuss investment matters, including climate-related risks and opportunities. The IC relies on information from its Investment Adviser and investment managers to progress its activities.

The Group Trustee receives quarterly updates from the IC to ensure that tasks delegated to IC are being completed in line with expectations and on time.

Group Trustee update

The Group Trustee created a temporary TCFD Working Group to support the preparation of the Group's first TCFD report. The TCFD Working Group was disbanded after the production of the Group's first year TCFD report, with the ongoing responsibilities previously undertaken by the TCFD Working Group, now delegated to the IC.

The Group Trustee expects the time and resource dedicated to producing the TCFD report to reduce in future years given a framework is now in place to better understand the Group's climate-related risks and opportunities.

The Group Trustee was pleased with the work completed by the IC over the year and no material changes to this report were made by the Group Trustee as part of its review.

Working with advisers

The Group Trustee expects its advisers and investment managers to bring important climate-related issues and developments to its attention in a timely manner. The Group Trustee expects its advisers and investment managers to have the appropriate knowledge on climate-related matters and will seek to question or challenge information received from third-parties for reasonableness in line with its fiduciary duties. Such questioning or challenging will be recorded in the minutes of meetings.

The Group Trustee will review the support advisers provide on climate-related issues as part of its wider review of the quality of its advisers' provision of advice and assess the credentials and competence of advisers to provide such advice. This is performed on an annual basis for the Investment Adviser and on an ad hoc basis for the Scheme Actuary and Covenant adviser (typically every 3 years).

Investment Adviser - The Group Trustee's Investment Adviser provides strategic and practical support to the Group Trustee and the IC in respect of the management of climate-related risks and opportunities and ensuring compliance with the recommendations set out by the TCFD. This includes provision of regular training and updates on climate-related issues and climate change scenario modelling to enable the IC and Group Trustee to assess the Group's exposure to climate-related risks and the attractiveness of any potential opportunities.

The Group Trustee will monitor the quality of climate-related support and advice from its Investment Adviser as part of an annual review against the Investment Adviser's objectives.

Scheme Actuary - The Group's Scheme Actuary will help the Group Trustee assess the potential impact of climate change risk on the Group's funding assumptions.

As part of its assessment of its advisers' climate-related competence, the Group Trustee will seek to understand how climate-related factors affect the funding assumptions used for the Group, and which sources of expertise the Scheme Actuary has used in determining the appropriate assumptions to use.

Covenant Adviser - The Group Trustee's covenant adviser will help the Group Trustee understand the potential impact of climate change risk on the sponsor covenant of the participating (Atkinsréalis UK Limited, Cavendish Nuclear Limited, National Nuclear Laboratory Limited) and principal (Nuclear Restoration Services Limited) employers of the Group.

As part of covenant advice sought, the Group Trustee will seek to understand how climate-related factors could affect the sponsoring employers' strategies over time and consider this in light of the Group's de-risking journey. In doing so, the Group Trustee will seek information from the covenant adviser regarding its credentials in assessing climate-related factors.

Group Trustee update

The Group Trustee reviewed its Investment Adviser over the year and was comfortable with the level of support provided on climate-related issues.

The Group Trustee also noted that its Investment Adviser is a signatory of the Principles for Responsible Investment (PRI) and the UK Stewardship Code, offering some external credibility to its credentials and competence.



Strategy

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



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

The Group Trustee carries out a qualitative risk assessment of the asset classes the Group is invested in. From this the Group Trustee identifies which climate-related risks could have a material impact on the Group. The Group Trustee also identifies suitable climate-related opportunities.

Given the number of asset classes and Sections used in the Group, the Group Trustee completed this exercise to the best of its ability. To help the Group Trustee with its assessment, the Group Trustee surveyed its investment managers and asked them to rate the climate-related risks and opportunities they believe their fund(s) are exposed to. At the time of writing four of the Group's managers across 5 funds were not able to provide complete information for the risk assessment.

Our investments

The Group's investment portfolio is split into four Sections which are diversified across a range of different asset classes including Equities, Diversified Growth Funds ("DGF"s), Property & Infrastructure, Liquid Credit, Illiquid Credit and Gilts (via Liability Driven Investments, or "LDI").

The Group's asset allocation, within each Section, is as follows:

Strategic allocation	Equities	DGF	Property & Infrastructure	Liquid Credit	Illiquid Credit	LDI	Annuities	Cash
SLC Section	-	-	36.6%	6.7%	14.2%	40.5%	-	2.0%
Cavendish Nuclear Section	8.2%	8.4%	-	9.2%	14.8%	46.8%	-	12.5%
Atkins Section	-	-	-	-	-	33.2%	60.3%	6.5%
NNL Section	-	37.0%	-	-	-	41.0%	-	22.0%

Asset allocations as at 31 Mar 2023. Numbers may not sum up due to rounding.

How the risk assessment works

Group Trustee update

In 2022, the Group Trustee asked its investment managers to assess the Group's exposure to climate-related risks.

This year, the Group Trustee asked its managers to review the risk assessments previous submitted and update them if necessary. The full assessment is set out on pages 16-17 of this report.



Risk categories

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

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

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



Ratings

The analysis uses a RAG rating system where:

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

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

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



Time horizons

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

- short-term: 1-3 years
- medium-term: 4-10 years
- long-term: 10+ years

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



Climate-related risk assessment

Key conclusions

The climate-related risks and opportunities identified are broadly in-line with last year. Diversification across asset classes, sectors and regions is important to manage climate-related physical and transition risks for the Group and the Group continues to have a diversified asset pool.

Property & Infrastructure, and Liquid Credit have been identified as higher risk areas, in relation to both physical and transitional climate risks due to the limited climate-oriented opportunities present and the long-term nature of property and infrastructure increasing exposure to climate-related physical risks.

Equities, DGFs and Illiquid Credit have all been identified as low to medium risk areas, in relation to both the physical and transitional climate risks. A number of the investments within these asset classes are explicitly targeting opportunities that may come from the transition, including renewable energy.

The Group Trustee is comfortable with the level of climate-related risks within the Group at this time and expects the risks to reduce through time as the funding levels improve within the Sections and the strategies are de-risking. The Group Trustee therefore believes that no further mitigation actions and/or changes to the investment strategy are necessary at this time.

Group Trustee update

The Group Trustee noted an improvement in the responsiveness of the Group's investment managers being able to provide further detail in relation to the climate risks within their portfolios.

The following managers have been able to provide data to be included within the report for the first time:

- CBRE
- Innisfree

Information was also received from PIMCO however this was not in the format requested and therefore has been excluded from the analysis.

CTI, JP Morgan and Hayfin were not able to provide the requested data.

The Group Trustee has separated out the climate-related risks by Section given that each Section has a different investment strategy. The Group's assets are well diversified across a range of different asset classes.

Given the number of funds that the Group has invested in the Group Trustee has assessed the key risk factors by aggregating the fund level responses into broad asset classes. Where a range is shown in the risk ratings the underlying managers within the asset class have categorised risk differently, rather than there being real differences in risk exposure.

The following table summarises the transition and physical risks for the asset classes within each Section in which the Group is invested in.

Climate Risk Assessment – Summary Table

		SLC Section			Cavendish Nuclear Section			NNL Section	Atkins Section	All Sections	
	Asset class / Category	Property & Infrastructure	Illiquid Credit	Liquid Credit	UK Equity	DGF	Liquid Credit	DGF	Annuities	LDI	Covenant
Physical risks	Short-term	Low to Medium	Low to Medium	Low	Low	Medium	Low	Low to Medium	Low	Low	Low
	Medium-term	Low to Medium	Low to Medium	Low	Low	Medium	Low	Low to Medium	Low	Low	Low
	Long-term	Medium to High	Medium	Low to High	Low	Low	Low	Medium	Low	Low	Low
Transition risks	Short-term	Low to Medium	Low to Medium	Low to Medium	Low to Medium	Medium	Medium	Low to Medium	Low	Low	Low
	Medium-term	Low to High	Low to Medium	Low to High	Medium	Medium	Medium	Medium	Low	Low	Low
	Long-term	Low to High	Low to Medium	Low to High	Medium	Low	Medium	Low to Medium	Low	Low	Low
	Impact on Group	High	Medium	Low	Low	Low	Very low	Low	Very low	Low	Low

Source: Investment Adviser/Managers as at 31 March 2023. 'N/P' = Not provided. Asset Classes / categories have been assessed separately for each Section but collated for presentational purposes. Cash & cash equivalents are excluded due to the lack of relevance of climate risk for this asset class.

Commentary

The impact assessment broadly incorporates how significant movements in the asset classes noted above would impact the funding level of the Group as a whole, by analysing the relevant climate-risks against the proportion of the Group's assets within each asset class.

CTI was unable to complete the Climate-Related Risk Management Questionnaire in the requested format due to the nature of LDI assets. However, the Group Trustee does not have reason to believe that the risk profile has materially deteriorated compared to last year.

PIMCO, within the Cavendish Section, provided a limited RAG breakdown of risks affecting the Liquid Credit fund. PIMCO was also unable to provide a response in regard to Illiquid Credit fund. The manager stated that, given the complexity of the fund, initiatives are underway to continue to build out infrastructure that will assist the Group Trustee in completing the necessary climate-risk analysis. The Group Trustee, with the support of its Investment Adviser, is engaging with the manager to receive the analysis in-line with the Group Trustee's requirements. As part of this engagement, the manager confirmed that while only a single number had been provided for the Liquid Credit fund, the methodology incorporated all risks considered in the Group Trustee's analysis.

Hayfin, an Illiquid Credit investment manager within the SLC Section, could not provide a Climate-Related Risk Management Questionnaire as the strategy predates its ESG processes. While it is disappointing that the manager is unable to provide an assessment of the climate-related risks within fund, the investment period of the fund expired in 2021 and therefore the manager no longer has the ability to place new loans. The risk profile of the fund is therefore unlikely to have changed over the year.

Covenant risk

The Group Trustee's covenant adviser has assessed the exposure of each of the Group's sponsoring employers with respect to climate-related risks as 'low' in the short and long-term.

Key covenant risks identified include policy and legal risks, which are likely to incur higher costs to the sponsoring employers through higher capital expenditure to meet higher climate-related regulations and operational costs associated with staff retention and increased climate risk reporting.

In terms of physical climate risk, National Nuclear Laboratory Limited manages the various laboratory sites, which have potential risk of flooding. Albeit this is partially mitigated by coastal defences in place.

Nuclear is seen as a solution to low carbon energy generation and therefore achieving net zero, and the Group's sponsoring employers are well placed to capitalise on opportunities associated with the UK's "Ten Point Plan for a Green Industrial Revolution" and subsequent energy strategy, as well as the UK's approach to building new reactors.

Climate-related opportunities

The Group Trustee relies on its investment managers to take into account climate-related risks and opportunities applicable for their mandates. Based on the qualitative assessment, the Group's managers identified the following opportunities which are valid over the short-, medium and long-term time horizons.

Equities – The scale of the investment required to decarbonise the global economy over the next 40 years is colossal. This ranges from existing technologies such as renewable and nuclear power, electric vehicles, and green building materials, to others that remain in development today such as hydrogen and carbon capture and storage. Investment in all of these areas need to be at scale and pace, which will create a plethora of investment opportunities over the years ahead.

Diversified Growth Funds (“DGF”s) – One of the Group's DGF managers has an added allocation to the best performing companies involved in new clean energy systems, as the world transitions to lower-carbon energy. This allocation will target global resource emerging technologies and strategic industries integral to the global shift to cleaner energy, It will also selectively offer exposure to the underlying materials and technologies required for the transformation to take place.

Property – In most developed economies, only a small proportion of buildings are built new each year. This creates substantial investment opportunity for investors – through their fund managers – to actively engage with tenants (be that commercial or residential) to improve building performance. The Group can engage to promote more efficient building management by working with property managers and related parties to reduce overall energy use across a portfolio and gather information to target the most cost-efficient mechanism for achieving this goal.

Infrastructure – Climate-related investment opportunities in infrastructure can include low-carbon power generation assets (nuclear, solar, wind, and other clean power), clean technologies (e.g., carbon capture and storage), natural assets (e.g., forestry and farmland) and, on the debt side, green bonds for which the proceeds are earmarked for infrastructure projects.

Liquid Credit – Green bonds, as well as companies that are transitioning like those setting Science Based Targets or companies focusing on or generating revenues from climate change solutions such as renewable energy, energy efficiency, electric vehicles, circular economy etc. Many financial sector firms issue green bonds, which present an opportunity for fixed income climate - related investment opportunities. Although climate solutions-oriented opportunities will be limited in low climate impact sectors, many companies can be enablers of the transition such as those within the financing, technology and communications sectors.

Illiquid Credit – Given the highly active character of property debt, direct lending and bank capital relief funds – and the more bilateral nature of the investments – opportunities in these areas arise principally by selecting managers which have the depth of expertise needed to identify, capture and structure investments in assets which are emerging or nascent from a climate perspective. These can include investments in agricultural technologies, food technologies and nascent technologies (carbon capture and storage).



The Group Trustee considers investment opportunities on a regular basis as part of investment strategy reviews and new manager appointments. The Group Trustee encourages its managers to take advantage of the transition to a low carbon economy where appropriate to do so within the investment guidelines it has agreed with the relevant manager. The investment opportunities that arise through the transition to a low carbon economy are considered by the Group Trustee on a case-by-case basis.

The Group Trustee will look to enhance its analysis of the climate-opportunities available to the Group in future years by incorporating the time horizons into this analysis however, at this time, the Group's investment strategy demonstrates resilience to climate-related risks and hence no action has been taken with regards to the climate opportunities identified above.

How resilient is the Group to climate change?

The Group Trustee carried out new climate change scenario analysis for the SLC Section, as a proxy for the Group, to better understand the impact climate change could have on the Group's assets and liabilities.

The analysis looks at five climate change scenarios. The Group Trustee chose these scenarios because it believes that they provide a reasonable range of possible climate change outcomes. The climate scenarios are compared to a "base case" scenario.

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

The climate scenarios intend to illustrate the climate-related risks the Group is currently exposed to, using the SLC Section as a proxy for the Group as a whole. This analysis highlights areas where risk mitigation could be achieved through changing the investment portfolio.

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

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

Group Trustee update

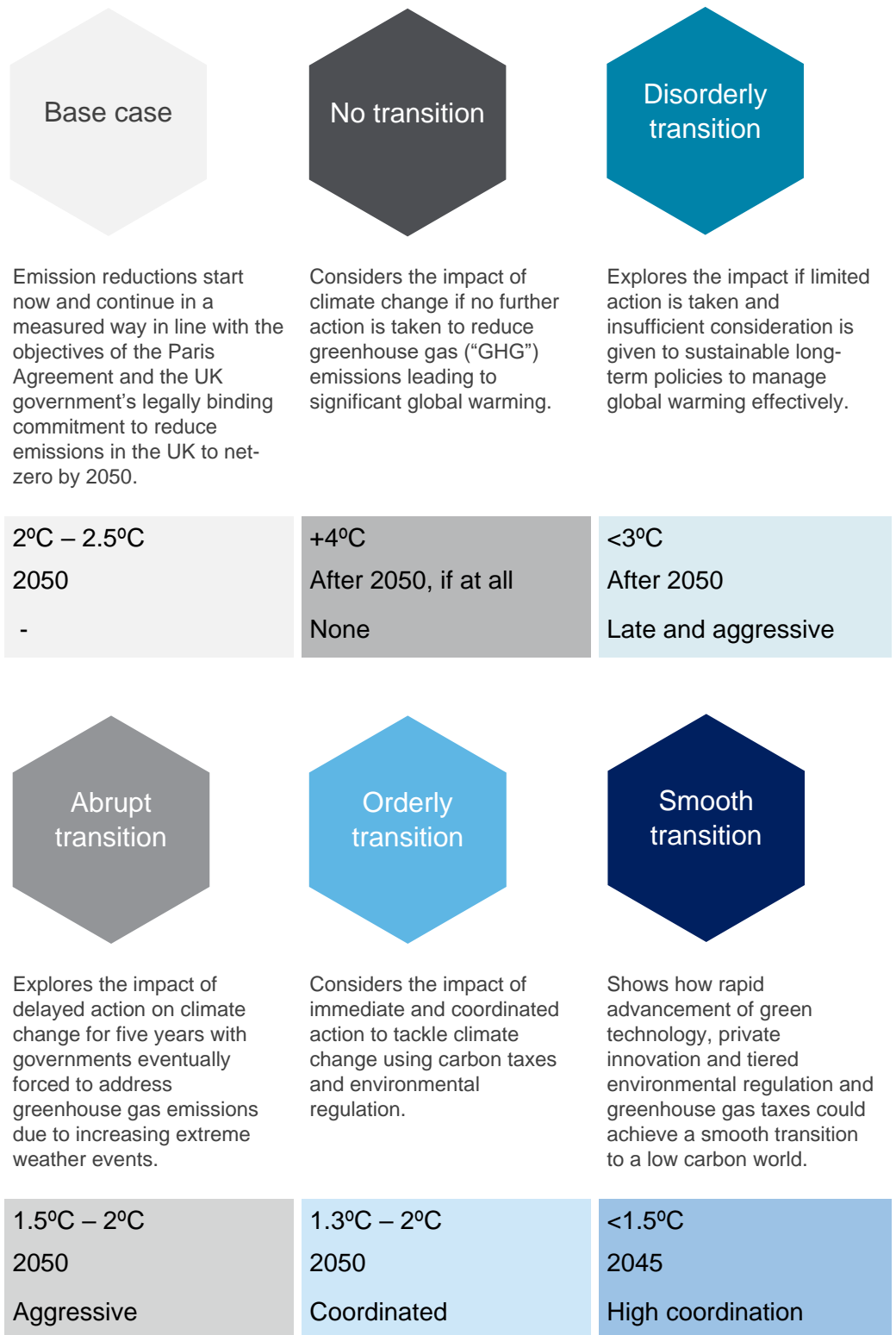
Under the Regulations, climate scenario analysis must be carried out at least every three years, although there are circumstances which may require the climate scenario analysis to be re-done sooner than three years. This may be as a result of, but not limited to:

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

The Group Trustee reviewed the scenario analysis completed as at 30 June 2021 and has decided to refresh the analysis. This decision was driven by the availability of new membership data, assumptions from the 2022 actuarial valuation and the significant changes in the investment allocation following the gilt market crisis in late 2022.

The SLC Section has been used as a proxy for the Group given it is the largest Section and running for all Sections would incur disproportionate costs.

Five scenarios + base case



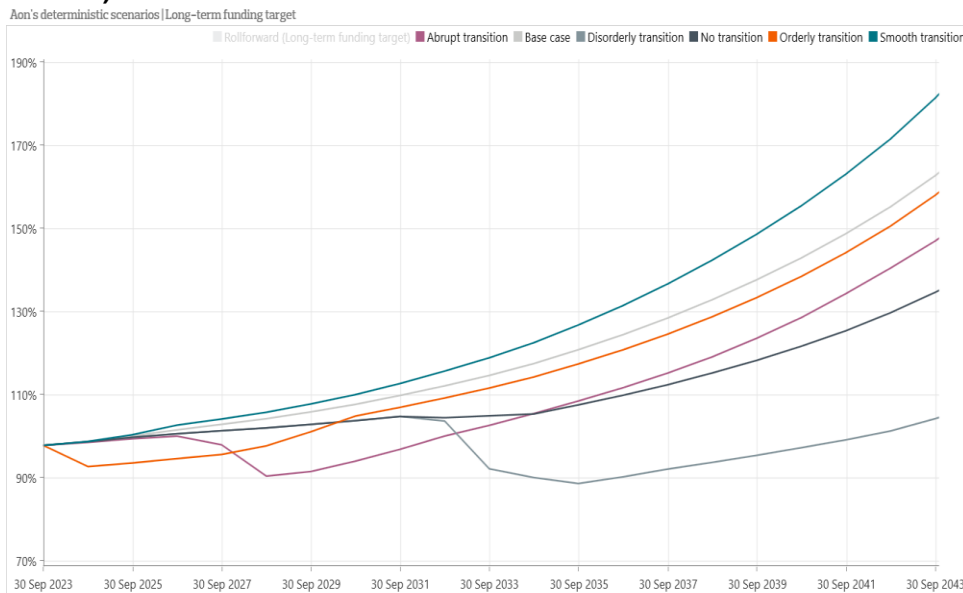
Impact Assessment

The Group Trustee has undertaken the climate scenario analysis based on the SLC Section's strategic allocation which is outlined below.

Asset Class	Strategic weighting (%)
Multi Asset	0.1%
Bank Loans	0.1%
Property Debt	4.9%
PFI Infrastructure	11.1%
MG Inflation	7.9%
Property	5.0%
Long Lease	3.7%
Global Infrastructure	5.0%
PRS Property	7.3%
Direct Lending	5.7%
Bank Capital Relief	3.7%
Robeco Credit	7.0%
LDI and Cash*	38.5%

The outcome of the analysis from the impact assessment is set out in the chart below and table on pages 22-25.

Funding Level Projections under the climate change scenarios (SLC Section)



The impact assessment shows that the SLC Section's investment strategy exhibits resilience under most of the climate scenarios. This is due to the high funding level at the start of the modelling period, high levels of hedging against changes in interest rates and inflation, and a relatively low risk investment strategy.

What does the chart show?

The chart shows what might happen to the SLC Section's funding level under each climate scenario up to 20 years into the future. Each line represents a different scenario. The actual funding experience is likely to be different in reality.

The funding level is a measure of how much surplus assets (or deficit) the SLC Section 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.

Over the short-term, the worst-case scenario for the SLC Section is the orderly transition, due to an orderly transition shock (from the immediate, coordinated action taken). However, the SLC Section recovers, and stays well-funded.

Over the long-term, the worst-case scenario for the SLC Section is the disorderly transition. Although initially the funding level improves, after 10 years the funding level deteriorates due to a disorderly transition shock. However, it recovers above 100% by the end of 20-year modelling period.

Although the Group Trustee has not performed climate change scenario analysis for the other Sections, the overall results at a Group level are expected to be similar as the SLC Section represents the majority of the Group's assets and liabilities. The Group is therefore also expected to be fairly resilient to climate change risk.

The Group Trustee expects covenant risk to be low in all the scenarios and therefore, on the grounds of proportionality, has not commissioned scenario analysis for the employer(s) to complement the funding analysis undertaken. However, given that the most significant risks posed to the funding level in the long term are projected to materialise in the disorderly scenario, we expect that in this scenario there will likely be more reliance on the covenant. That said, the funding level is projected to improve thereafter to well above full-funding and so reliance on the covenant is expected to be minimal in the long-term. In the four other scenarios modelled, the reliance on the covenant is expected to be more limited relative to the disorderly scenario, given that a less material impact on funding is expected.

Impact on the funding level

Key conclusions

Based on the analysis, **the Group Trustee considers that the SLC Section's investment strategy is reasonably resilient to climate change risk**, acknowledging that there are scenarios that could lead to a material deterioration in the funding level. As is consistent with the funding projections on the previous page, the largest short-term risk faced by the SLC Section is reflected by the orderly transition scenario. This is due to high inflation in early years having a pronounced negative impact on asset returns; however, this is followed by a material recovery in later years.

Longer-term risks are illustrated by the disorderly transition scenario, where a large shock to asset returns takes place in later years. This is following very limited action to reduce GHG emissions in earlier years, resulting in a much larger impact once action is belatedly taken.

The table on the following page describes the impact of each scenario on the Group (having used the results from the SLC Section as a proxy for overall Group level exposure) over the short, medium and long-term time horizons.

No Transition Scenario

Temperature rise
+4°C

Reach net-zero
After 2050, if at
all

Environmental
regulation
None

Summary of the Scenario

In the short-term:

No action is taken to combat climate change.

In the medium-term:

No action is taken to combat climate change.

In the long-term:

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

Summary of the impact to the Group

In the short-term:

There is no initial risk to the Group, the funding level is expected to broadly follow the base case.

In the medium-term:

There continues to be little impact on the Group's funding level, however as time passes the funding level starts to lag behind the base case.

In the long-term:

The funding level begins to lag the other scenarios and is relatively worse off to the base case and other scenarios, but still remains in a surplus.

Disorderly Scenario

Temperature rise
<3°C

Reach net-zero
After 2050

Environmental
regulation
Late and
Aggressive

Summary of the Scenario

In the short-term:

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

In the medium-term:

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

In the long-term:

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

Summary of the impact to the Group

In the short-term:

There is no impact on the Group's funding level, as it is expected to follow the base case.

In the medium-term:

There continues to be little impact on the Group's funding level, however as time passes the funding level starts to lag behind the base case.

In the long-term:

In the long-term, this scenario has the worst impact on the Group's funding level. The funding level experiences a sudden fall after 10 years. Whilst the funding level starts to slowly recover by the end of the 20-year modelling period, the Group's funding level is still materially worse off relative to the base case and all other scenarios.

Abrupt Scenario

Temperature rise
1.5°C – 2°C

Reach net-zero
2050

Environmental
regulation
Aggressive

Summary of the Scenario

In the short-term:

Despite growing public awareness, material action is not undertaken to combat climate change.

In the medium-term:

Increasing effects of extreme weather lead to a rapid introduction of policies to tackle climate change. The delayed action leads to higher costs to tackle climate change and risky assets perform poorly as a result. The higher costs are the result for the economy being forced to transition away from fossil fuels.

In the long-term:

Following rapid action in the medium-term, the longer-term benefits from tackling climate change lead to higher growth.

Summary of the impact to the Group

In the short-term:

In the short-term, this scenario has the second-worst impact on the Group's funding level. The funding level experiences a sudden drop before recovering in the medium-term.

In the medium-term:

The funding position begins to recover following the initial fall in funding, with the Group now remaining back in surplus.

In the long-term:

The funding level continues to rise but never catches up to the base case over the 20-year modelling period.

Orderly Scenario

Temperature rise

Summary of the Scenario

In the short-term:

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

Summary of the impact to the Group

In the short-term:

In the short-term, this scenario has the worst impact on the Group's funding level. The Group suffers a

1.3°C – 2°C

Reach net-zero
2050
Environmental
regulation
Coordinated

In the medium-term:

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

In the long-term:

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

deterioration in its funding level, dropping below the base case.

In the medium-term:

The funding position begins to recover following the initial fall in funding and starts to catch up with the base case.

In the long-term:

The funding level continues to rise but never catches up with the base case over the 20-year modelling period.

Smooth transition

Temperature rise
<1.5°C
Reach net-zero
2045
Environmental
regulation
High coordination

Summary of the Scenario

In the short-term:

Collective and coordinated action in the short-term, despite initial costs of funding the structural costs to transition the economy, leads to innovation and green technology development which boosts growth.

In the medium-term:

The rapid technological advancement combined with government actions drives a smooth transition to a low carbon economy and enjoys growth.

In the long-term:

The rapid technological advancement combined with government actions drives a smooth transition to a low carbon economy. Risk assets perform well.

Summary of the impact to the Group

In the short-term:

There is no impact on the Group's funding level, as it is expected to follow the base case.

In the medium-term:

There continues to be no impact on the Group's funding level as it continues to rise and even rises above the base case.

In the long-term:

The funding level rises above the base case, this is the best outcome from all the scenarios shown in the long-term.

Source: Investment Adviser. Effective date of the impact assessment is 30 Sep 2023.

Action taken following the scenario analysis

The Group Trustee has not taken any action as a result of the climate change scenario modelling given that the Group is expected to be fairly resilient to climate change.

Modelling Assumptions

Please refer to the [Appendix](#) for further details in relation to the assumptions used for the scenario analysis and its limitations.



Risk management

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



Our process for identifying and assessing climate-related risks

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



Qualitative assessment

A qualitative assessment of climate-related risks and opportunities which is prepared by the Group Trustee's Investment Adviser and reviewed by the Group Trustee.



Quantitative analysis

The second element is quantitative in nature and is delivered by means of climate change scenario analysis, which is provided by Group Trustee's Investment Adviser and reviewed by the Group Trustee.

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

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

Group Trustee update

This process of identifying and assessing climate-related risks has been reviewed in the process of producing this TCFD report and the Group Trustee believes it is still suitable.

The Group Trustee reviewed the stewardship activities of the Group's investment managers and summarised its finding in its latest Engagement Policy and Implementation Statement ("EPIS").

The Group Trustee and its Investment Adviser will continue to encourage investment managers to improve their reporting on climate-related risks and disclosure of carbon emissions. This will be communicated verbally as part of the IC's regular monitoring of investment managers.

Our climate risk management framework

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

The Group Trustee has developed a climate risk management framework to manage climate-related risk and opportunities. The climate risk management framework set out in the tables below clearly describes who is involved, the risk tools used to identify, assess and manage climate-related risks and opportunities and how often these activities take place. The Group Trustee delegates a number of key tasks to different committees but retains overall responsibility.

Governance

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Approve climate risk management framework	Group Trustee	IC	One-off
Receive training on climate-related issues	Group Trustee	Advisers	Annual
Review adviser objectives to ensure advisers have appropriate climate capability, and bring important, relevant and timely climate-related issues to the Group Trustee's attention	Group Trustee	Advisers	Investment Advisers: Annual Scheme Actuary: Triennial Other Advisers: At tender
Ensure investment proposals explicitly consider the impact of climate risks and opportunities and seek investment opportunities.	IC	Investment adviser	Ongoing
Ensure that actuarial and covenant advice adequately incorporate climate-related risk factors where they are relevant and material.	IC	Scheme Actuary / Covenant Adviser	Triennial
Engage with the investment managers to understand how climate risks are considered in their investment approach, and stewardship activities are being undertaken appropriately	IC	Investment adviser / Investment managers	Annual

Group Trustee update

The Group Trustee monitors the above activities as part of its climate-related risks and opportunities management. The Group Trustee has delegated the majority of the day-to-day responsibilities to the IC. Details of the training the Group Trustee has received are set out in the Governance section within the report.

The Group Trustee continues to monitor the progress of the IC, receiving regular updates from the IC and querying information as and when required.

Strategy

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Undertake quantitative scenario analysis to understand the impact of climate-related risks	IC	Investment adviser	At least triennial, with an annual review
Identify the climate-related risks and opportunities for investment & funding strategy and assess their likelihood and impact.	IC	Advisers	Annual

Group Trustee update

Climate-related risks and opportunities are included in the Group's wider risk management framework, which is overseen by the IC on an annual basis. The IC refreshed its risk and opportunities analysis, asking each material investment manager for details on how these are assessed (using the Pensions Climate Risk Industry Group (PCRIG) Due Diligence Questionnaire and a Magnox tailored RAG Due Diligence Questionnaire).

Alongside this, the Group Trustee has reviewed the appropriateness of the climate change scenario analysis carried out within the Group's initial TCFD disclosures and has decided to refresh the analysis given there had been a material change in the investment strategy and updated membership data and actuarial assumptions

Risk management

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Consider the prioritisation of those climate-related risks, and the management of the most significant in terms of potential loss and likelihood.	IC	Advisers	Annual
Include consideration of climate-related risks in the Group's other risk processes and documents, such as the risk register and the SIP	IC	Advisers	Annual
Seek to understand the climate-related risks to the employer over the short-, medium- and long-term.	Group Trustee	Covenant Adviser	Triennial

Group Trustee update

The Group Trustee has processes in place for identifying and assessing climate-related risks as part of the annual TCFD Process. Climate risk management is integrated into the ongoing risk management activities of the Group via the Group's climate risk management plan.

The Group Trustee delegates responsibility to the IC to review the underlying investment managers and how ESG is integrated within their decision-making processes, including climate change.

Metrics and Targets

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Obtain data for metrics	IC	Investment adviser / investment managers	Annual
Review continued appropriateness of metrics	IC	Investment adviser	Annual

Group Trustee update

The Group Trustee, supported by its Investment Adviser, collects metrics data on an annual basis, in order to understand the current state of the portfolio regarding its emissions, data coverage and portfolio alignment metric. This data is evaluated to produce a metrics related target.

Metrics have been collected in line with industry practice. This year, the Group Trustee was mandated to also report on Scope 3 emissions, as it is the second year of TCFD reporting for the Group.

In addition, the Group Trustee has reviewed its target, which was set in the first year's TCFD report, and considered whether this remains appropriate for the Group. More details can be found in the Metrics and Targets section of the report.

Assessing the Group's managers

To assess the ability of the Group's investment managers to manage climate-related risks, the Group Trustee asked them 10 questions designed by the Pensions Climate Risk Industry Group¹ to help trustees to assess their investment managers capabilities to manage climate-related risks. The questions cover a range of topics including their approach to climate management, whether they produce their own TCFD reporting, their ability to conduct climate scenario analysis, their engagement policies, and their ability to provide GHG emissions data. A due diligence questionnaire asking investment managers to identify the most significant climate-related risks and opportunities affecting the Group was also populated with findings summarised on page 19.

Key conclusions are on the next page.

¹ Aligning your pension scheme with the Taskforce on Climate-Related Financial Disclosures recommendations - GOV.UK (www.gov.uk)

Key conclusions

Overall, the Group Trustee has seen an improvement in climate-related risk disclosures from its investment managers. Some of the key highlights include:

- This year the Group Trustee received responses from all 21 investment managers.
- Most of the managers' report in-line with TCFD disclosures and have produced a TCFD-aligned report. 13 managers had produced TCFD-aligned reports last year, and this has now increased to 16 managers, with 17 managers committed to providing carbon-related data.
- All 21 managers now participate in several industry initiatives such as the Net-Zero Asset Manager Initiative ("NZAM"), Climate Action 100+ ("CA100+"), Institutional Investors Group on Climate Change ("IIGCC"), United Nations Principles for Responsible Investment ("UN PRI"), Science Based Targets Initiative ("SBTi") etc.
- 13 managers carry out climate-related scenario analysis. Although this remains relatively low most managers do incorporate ESG considerations into their investment processes.
- 13 managers have made a formal science-based temperature alignment or a Net-Zero commitment, with a target of either 2040 or 2050. The remaining managers are currently working towards setting a commitment or becoming aligned with the Paris Agreement.

Whilst there has been a general enhancement in managers' responses and quality of evidence to the questionnaire, the Group Trustee acknowledges not all managers align with TCFD reporting requirements and progress is still needed for managers to align their strategies towards an explicit temperature alignment goal.

The Group Trustee is committed to ongoing engagement to ensure compliance with the broader regulatory landscape and expects to see improvements from its managers in following years.



Metrics & Targets

Quantitative measures of the Group's climate-related risks, in the form of both greenhouse gas emissions and non-emissions-based metrics, help the Group Trustee to identify, manage and track the Group's exposure to the financial risks and opportunities that climate change may bring.



Our climate-related metrics

The Group Trustee uses some quantitative measures to help it understand and monitor the Group's exposure to climate-related risks. Measuring the greenhouse gas emissions related to the Group's assets is a key way for the Group Trustee to assess the Group's exposure to climate change.

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

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



Scope 1

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



Scope 2

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



Scope 3

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

Last year, the Group Trustee reported on Scope 1 & 2 emissions only. This year the Group Trustee is required to report on Scope 3 emissions as well. Scope 3 emissions are often the largest proportion of an organisation's emissions, but they are also the hardest to measure. The complexity and global nature of an organisation's value chain make it hard to collect accurate data.

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

Our climate-related metrics

In the Group Trustee's first year of TCFD reporting, the Group Trustee decided what metrics to report on each year. These are described below. The Group Trustee has reviewed these metrics and believes they continue to be suitable for the year 2 report.



Total Greenhouse Gas emissions

The total greenhouse gas ("GHG") emissions associated with the portfolio. It is an absolute measure of carbon output from the Group's investments and is measured in tonnes of carbon dioxide equivalent ("tCO₂e").



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 ("tCO₂e/£m").



Data Coverage

A measure of the proportion of the portfolio that the Group 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.







Binary Target Measurement

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

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

The table below shows a more detailed breakdown of the climate-related metrics from each Section of the Group (where available).

The carbon metrics – Section level

Section	%	2023	 Data Coverage (%)		 Total GHG emissions (tCO ₂ e)		 Carbon footprint (tCO ₂ e/£m)		 Binary Target Measurement (%)	
			2022	Scopes 1 & 2	Scope 3	Scopes 1 & 2	Scope 3	Scopes 1 & 2	Scope 3	Portion of portfolio SBTi aligned
				Scopes 1 & 2	Scope 3	Scopes 1 & 2	Scope 3	Scopes 1 & 2	Scope 3	
SLC Section	95.6%	2023	45.1%	29.5%	42,819.8	123,298.5	65.4	288.5	22.1%	
	95.2%	2022	35.0%	-	50,010.6	-	74.5	-	7.64%	
Cavendish Nuclear Section	2.1%	2023	48.1%	27.0%	613.9	1,435.3	56.5	235.3	36.8%	
	2.4%	2022	42.6%	-	264.5	-	21.0	-	44.0%	
Atkins Section	2.0%	2023	95.0%	0.0%	2,188.2	-	73.5	-	0.0%	
	2.0%	2022	95.5%	-	7,216.6	-	107.1	-	100.0%	
NNL Section	0.3%	2023	50.9%	49.0%	162.6	1,025.1	138.1	902.7	37.8%	
	0.4%	2022	69.2%	-	319.7	-	103.1	-	43.9%	
Total Group (excl. LDI)	100.0%	2023	46.2%	28.9%	45,784.5	125,758.9	65.8	289.3	21.9%	
	100%	2022	36.5%	-	53,519.11	-	14.7	-	10.3%	
LDI	100%	2023	100%	-	564,246	-	170.2	-	-	
	100%	2022	100%	-	498,358.3	-	168.4	-	-	





Source: Investment Adviser/Managers. Data as at 31 March 2023 unless specified otherwise.

Figures may not sum due to rounding.

- The annuity manager, Canada Life, provided climate-related metrics as at 31 December 2022.
- Scope 3 emissions are not available for 2022 because 2023 is the first year of reporting for Scope 3 emissions.
- Scope 3 is not applicable to LDI, as it contains primarily UK sovereign bonds and scope 3 emissions are not yet widely available for UK sovereign bonds.
- Within the segregated mandate managed by Ruffer, emissions data in relation to the allocation to sovereign bonds have been excluded on grounds of materiality

The table below shows a more detailed breakdown of the climate-related metrics from each asset class of the Group (where available).

The carbon metrics – Asset class level

Asset Class	%									
			Data Coverage (%)		Total GHG emissions (tCO ₂ e)		Carbon footprint (tCO ₂ e/£m)		Binary Target Measurement (%)	
			Scopes 1 & 2	Scope 3	Scopes 1 & 2	Scope 3	Scopes 1 & 2	Scope 3	Portion of portfolio SBTi aligned	
Equities	0.3%	2023	100.0%	96.0%	41.0	836.5	9.0	191.0	97.0%	
	0.2%	2022	96.5%	-	49.0	-	7.6	-	97.9%	
Diversified Growth Funds	0.5%	2023	49.8%	34.9%	469.4	1,624.0	115.1	568.5	34.3%	
	0.5%	2022	57.0%	-	499.0	-	71.6	-	56.6%	
Property & Infrastructure	61.1%	2023	38.4%	18.0%	15,821.6	37,433.2	44.8	225.8	20.7%	
	28.9%	2022	36.3%	-	18,060.4	-	19.7	-	6.4%	
Liquid Credit	11.5%	2023	93.9%	91.3%	18,983.3	61,959.8	117.0	393.1	42.0%	
	16.8%	2022	54.3%	-	31,986.5	-	94.1	-	14.5%	
Illiquid Credit	24.5%	2023	38.6%	28.2%	8,281.0	23,905.5	58.3	229.8	16.3%	
	10.6%	2022	Unavailable at time of reporting							
Annuities	2.1%	2023	95.0%	0.0%	2,188.2	-	73.5	-	0.0%	
	1.2%	2022	92.8%	-	2,968.1	-	75.9	-	100.0%	
Total Group (excl. LDI)	100.0%	2023	46.2%	28.9%	45,784.5	125,758.9	65.8	289.3	21.9%	
	100.0%	2022	36.5%	-	53,519.11	-	14.7	-	10.3%	
LDI	100%	2023	100%	-	-	-	170.2	-	-	
	100%	2022	100%	-	498,358.3	-	168.4	-	-	

Source: Investment Adviser/Managers. Data as at 31 March 2023 unless specified otherwise.

Figures may not sum due to rounding.

- The annuity manager, Canada Life, provided climate-related metrics as at 31 December 2022. Scope 3 emissions are not available for 2022 because this is the first year of reporting for Scope 3 emissions.
- The 2023 LDI carbon footprint corresponds to tCO₂e/£m PPP-adjusted GDP as at 31 December 2022..
- Scope 3 is not applicable to LDI, as it contains primarily UK sovereign bonds and Scope 3 emissions are not yet widely available for UK sovereign bonds.
- Within the segregated mandate managed by Ruffer, emissions data in relation to the allocation to sovereign bonds have been excluded on grounds of materiality

Key observations – Group-level:

- There has been a decrease in the total GHG emissions of the Group due to a fall in the valuation of the Group's assets. However, there has been an increase in the Group's Carbon Footprint given that the quality of reporting provided by the Group's managers has improved over the reporting year (all asset classes improved Data Coverage except for Annuities).
- Almost all asset classes have experienced an increase in Data Coverage since last year, in particular Illiquid Credit where data was not provided in 2022 and Liquid Credit where Data Coverage has

improved by 39.6%. Diversified Growth Funds have experienced a decline in Data Coverage since 2022. This was due to lower Data Coverage from Ruffer and Schroders (Ruffer has since been divested for strategic reasons). This is because the Schroders DGF now has reduced exposure to corporate bonds which accounted for a significant proportion of the Data Coverage previously.

- Scope 3 reporting is limited across all asset classes apart from Equities and Liquid Credit. This is due to the difficulty to obtain and calculate Scope 3 data for most asset classes, however, the Group Trustee expects reporting to improve in the future years as industry standards develop and evolve. All asset classes, except for the Annuities, provided at least some assessment of Scope 3 emissions. The NNL Section's Scope 3 emissions are relatively high compared to the others Sections because c.3.4% of the Ruffer Segregated Mandate portfolio is allocated to oil majors, meaning even though this is significantly higher it is not unexpected.
- The portion of managers/funds with SBTi aligned targets has improved since last year. This is driven by more managers being aligned to net-zero and/or The Paris Agreement across the Liquid Credit, Illiquid Credit and Property & Infrastructure asset classes. As BTM is becoming an industry wide metric the volume of managers reporting on this metric is increasing, therefore an improvement is expected. However, there has been a decline in BTM for Equities (15%) and Diversified Growth (22%) assets since last year. Lindsell Train's change in BTM was due to the allocation within the fund changing over the year. Schroder's change in BTM was due to an incorrect categorisation by Schroders for the previous reporting year, where the figure included the percentage of corporate bond holdings in scope for a net zero commitment rather than those that had a net zero target. Schroders has now corrected the data and so the lower BTM is not representative of an actual change in the proportion of the fund with net zero targets.
- The methodology for the calculation of emissions and Data Coverage in relation to gilts, held within the LDI mandates, has evolved and there is now a widely accept industry-standard methodology for the calculation of the carbon footprint of gilts. The Data Coverage of 100% is not based on the figures that were reported by the LDI manager; but calculated in line with the industry-standard methodology (set out below).

Notes on the metrics data

Our Investment Adviser collected information from the Group's investment managers about their greenhouse gas emissions and used this information to calculate the climate-related metrics for the Group's portfolio of assets.

Availability of data

Our Investment Adviser does not make any estimates for missing data.

Overall, Data Coverage has improved relative to the previous reporting year. However, there are some data availability points to note with respect to each Section (outlined below). The Group Trustee's Investment Adviser will continue to engage with managers where data has not been provided with the aim of data being available for future reports.

SLC Section:

- JP Morgan Multi-Strategy Fund could not provide GHG emissions due to the fund being in liquidation with only a small handful of residual assets remaining.
- No data has been received from InfraRed and M&G with respect to the InfraRed Infrastructure Yield Fund and the M&G inflation Opportunities Fund.
- Innisfree could not provide metric data in the correct format using industry-standard methodology. The two Innisfree funds (PFI and ISF2) have therefore been excluded from the overall calculation.
- Invesco stated that it is not able to collect carbon emission information for the Invesco Real Estate Finance Fund at the time of writing (Invesco did however, provide information for the UK Residential Fund).

Cavendish Nuclear section:

- PIMCO stated that it is not in a position to collect carbon emission information for the Tactical Opportunities Fund at the time of writing.

Atkins Section:

- The data provided by Canada life was similar to the last year reporting. Annuity providers do not yet report on Scope 3 emissions or BTM but are planning to report in future years.

NNL Section:

- All managers provided carbon metric data.
- Within the segregated mandate managed by Ruffer, emissions data in relation to the allocation to sovereign bonds have been excluded on grounds of materiality, which represents less than 1% of total Group assets.

Notes on the metrics calculations

There is not an industry-wide standard for calculating some of these metrics yet and different managers may use different methods and assumptions. These issues are common across the industry and highlight the importance of

How we collected the data

The Group Trustee's Investment Adviser collected the carbon emissions data from the Group's managers on the Group Trustee's behalf using the industry standard Carbon Emissions Template ("CET").

The CET was developed by a joint industry initiative of the Pension and Life Savings Association, the Association of British Insurers and Investment Association Working Group. The CET provides a standardised set of data to help pension schemes meet their obligations under the Climate Change Governance and Reporting Regulations, and associated DWP Statutory Guidance.

climate reporting to improve transparency. The Group Trustee expects that in the future better information will be available from managers as the industry aligns to expectations and best practice standards.

The carbon metrics

Our Investment Adviser aggregated and calculated the carbon metrics for the Group based on information provided by the managers. The methodology used for this aggregation does not make any assumptions or estimations about the carbon emissions for assets for which data was unavailable. The aggregation methodology is as set out below:

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

G = Total GHG expressed as (tCO₂e).

A = Assets expressed in £ Millions.

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

F = Carbon Footprint expressed as (tCO₂e/£M invested).

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

The table below shows the approach used to collect information from managers for each asset class.

Asset Class	Approach
All apart from the Annuities	The Group Trustee’s Investment Adviser collected the carbon emissions data from the Group’s managers on the Group Trustee’s behalf using the industry standard Carbon Emissions Template (“CET”).
Annuities	The Group Trustee’s Investment Adviser collected the metrics data from Canada Life through a ‘Bulk Annuity ESG Questionnaire’ in which the manager filled out carbon emission data, with regards to the underlying fund, in line with TCFD recommendations.

How are emissions calculated for LDI?

The emissions for the matching assets are a material portion of the Group’s total GHG emissions. This is mainly down to the method used to calculate the emissions, which is different to other asset classes.

The LDI portfolio contains mainly UK government bonds, also known as “gilts” or “index-linked gilts”. Carbon metrics for UK government bonds are based on the total GHG emissions for the whole of the UK, which are high. By contrast, carbon emissions for equities, for example, are based on the emissions associated with the underlying companies invested in, which are relatively lower. Hence, the carbon metrics for matching assets are higher than many other asset classes.

The carbon emissions for the UK government bonds are driven by the total UK greenhouse gas emissions and the total amount of UK public debt. This uses publicly available information, published by the UK Government:

– The Annual UK greenhouse gas emissions data (Scopes 1 & 2) for 2023, published as a provisional figure by the UK government, of 426.5m tCO₂e, divided by total UK government debt at 31 December 2023 of £2,506.1Bn.

=170.2tCO₂/£M

Given this difference in methodology to the other emissions figures reported, the matching assets have been split out from the other emissions figures.

Binary Target Measurement

Overall, the BTM was not provided by the majority of Group's managers and, if provided, the value for the BTM was lower than the metric reported for the previous reporting year.

The Group Trustee's Investment Adviser will continue to engage with all managers on BTM.

Looking to the future

Our climate-related target

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

In the first year of reporting, the Group Trustee set a target to improve Data Coverage. Without meaningful data from the investment managers, it is very hard for the Group Trustee to measure its climate-risk exposure.



Data Coverage target:
90.0%

Group Trustee update

Each year the Group Trustee reviews the suitability of the target it has set. Based on the data collected and the metrics calculated this year, the Group Trustee believes the target continues to be suitable.

Asset class	2022 Data Coverage (scopes 1 & 2)	2023 Data Coverage (scopes 1 & 2)	2025 Data Coverage Target (scopes 1 & 2)
Liquid Credit	54.3%	93.9%	c.100.0% ¹
Property & Infrastructure	36.3%	38.4%	c. 65.0%
Illiquid Credit	0.0%	39.0%	c.50.0%
Annuities	92.8%	95.0%	c.100.0%
Equity	96.5%	100.0%	c.100.0%
DGF	57.0%	49.8%	c.100.0% ¹
Total (excluding LDI)	36.5%	46.2%	n/a
LDI	100.0%	100.0%	100.0%

Note: (1) Whilst the Group Trustee has agreed that 100% Data Coverage may not realistically be achievable for the Group's Liquid Credit and DGF investments, the Group Trustee has agreed to aspire for Data Coverage at that level.

Our progress towards the target

The table below shows the Data Coverage metrics for last year and this year.

	2022	2023
Actual Data Coverage	36.5%	46.2%

The Group's performance against the target is measured and reported on every year. Over time, this will show the Group's progress against the target.

The Group's performance against the Data Coverage target set is monitored and reported on every year by collecting and evaluating metrics data from investment managers across the portfolio. This data is then assessed and benchmarked against the previous year's Data Coverage to determine how the Group has performed relative to the target set. Over time, this will show the Group's progress. The Group Trustee also reviews the target annually to ensure that it is appropriately stretching.

Overall, there has been an improvement in Data Coverage since last year (9.7% increase), with the main improvement seen in the Property & Infrastructure and Illiquid Credit asset classes.

Within the Group's Sections, there have been improvements in Data Coverage within the SLC and Cavendish Nuclear Sections and no change within the Atkins Section. However, there has been a decline in Data Coverage for the NNL Section. This is because the Schroders DGF now has reduced exposure to corporate bonds which previously accounted for a significant proportion of the Data Coverage.

While the current target is based on Scope 1 & 2 emissions, the Group Trustee has an aspiration to set a target based on Scope 3 emissions in the future. Scope 3 reporting across all asset classes is expected to be weaker due to the difficulty to obtain and calculate Scope 3 carbon emissions. While Equities and Liquid Credit have a strong Scope 3 Data Coverage for this year of reporting (above 90%), the Group's other asset classes have poor coverage. The Group Trustee expects reporting to improve in the future years, across all asset classes, in line with industry standards, and will consider setting a Scope 3 emissions target once the Scope 3 data becomes more reliable and complete.

Steps being taken to reach the target

The Group Trustee expects that data availability and reporting will improve through time in response to regulatory requirements and industry initiatives. However, the Group Trustee, supported by its Investment Adviser, plans to request improved data availability and coverage for funds within the DGF, Property & Infrastructure and Illiquid Credit asset classes over the next reporting year.

Appendices

Glossary

Governance refers to the system by which an organisation is directed and controlled in the interests of shareholders and other stakeholders.² 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.³

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.⁴

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.⁵

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.⁶

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.⁷

² A. Cadbury, [Report of the Committee on the Financial Aspects of Corporate Governance](#), London, 1992.

³ OECD, [G20/OECD Principles of Corporate Governance](#), OECD Publishing, Paris, 2015.

⁴ TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

⁵ TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

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

⁷ TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

Greenhouse gas emissions scope levels⁸	<p>Greenhouse gases are categorised into three types or 'Scopes' by the Greenhouse Gas Protocol, the world's most used greenhouse gas 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.⁹</p>
Value chain	<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).¹⁰</p>
Climate scenario analysis	<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.¹¹</p>
Net-zero	<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 add to the atmosphere is no more than the amount removed.¹²</p>

⁸ World Resources Institute and World Business Council for Sustainable Development, [The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard \(Revised Edition\)](#), March 2004.

⁹ PCC, [Climate Change 2014 Mitigation of Climate Change](#), Cambridge University Press, 2014.

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

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

¹² Energy Saving Trust, [What is net zero and how can we get there? - Energy Saving Trust](#), October 2021

Appendix – An explanation of climate risk categories

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

Transition risks

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

Policy and legal

Examples

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

Potential financial impacts

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

Technology

Examples

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

Potential financial impacts

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

Market

Examples

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

Potential financial impacts

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

Reputational

Examples

Stigmatisation of sector
Increased stakeholder concern or negative stakeholder feedback

Potential financial impacts

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

Physical Risks

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

Acute	Chronic
<p>Examples</p> <ul style="list-style-type: none">Extreme heatExtreme rainfallFloodsDroughtsStorms (e.g., hurricanes)	<p>Examples</p> <ul style="list-style-type: none">Water stressSea level risesLand degradationVariability in temperatureVariability in precipitation



Appendix – Climate scenario modelling assumptions

The climate scenarios were developed by the Group Trustee's Investment Adviser and are based on detailed assumptions. They are only illustrative and are subject to considerable uncertainty. They consider the exposure of the Group to climate-related risks and the approximate impact on asset and liability values over the long-term.

Our Investment Adviser's model uses a deterministic projection of assets and liabilities, 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 the Group Trustee 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.

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

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

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

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

Data used

The model uses the following inputs, as at 30 September 2023:

- Market value of assets: £2,252m
- Present value of gilts+0.5% liabilities: £2,308m
- Duration of liabilities: 12.3 years
- Real proportion of the liabilities: 87%
- Deficit Contributions: Nil

Appendix – Greenhouse gas emissions in more detail







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

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

The amount of greenhouse gases in the atmosphere has significantly increased since the Industrial Revolution. The Kyoto Protocol¹³ identifies six greenhouse gases which human activity is largely responsible for emitting. Of these six gases, human-made carbon dioxide is the biggest contributor to global warming.

Each greenhouse gas has a different global warming potential and persists for a different length of time in the atmosphere. Therefore, emissions are expressed as a carbon dioxide equivalent (CO₂e). This enables the different gases to be compared on a like-for-like bases, relative to one unit of carbon dioxide.

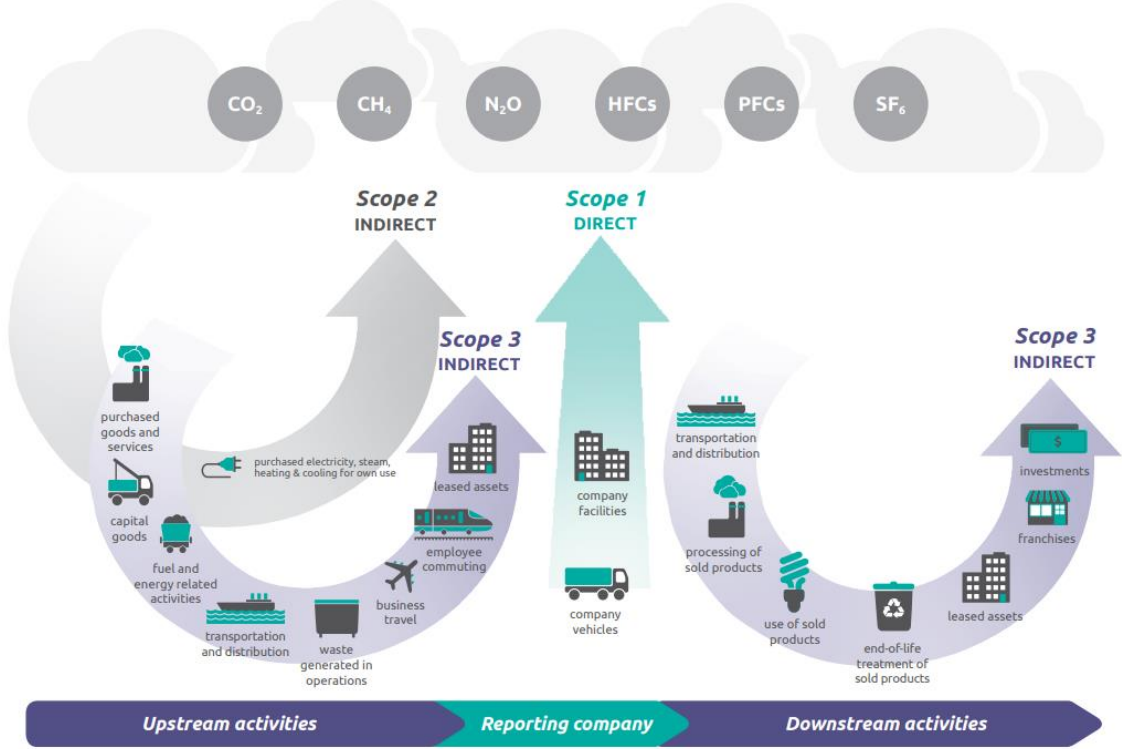
Six main greenhouse gases identified by the Kyoto Protocol

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

¹³ https://unfccc.int/kyoto_protocol

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

Overview of GHG Protocol Scopes and emissions across the value chain



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