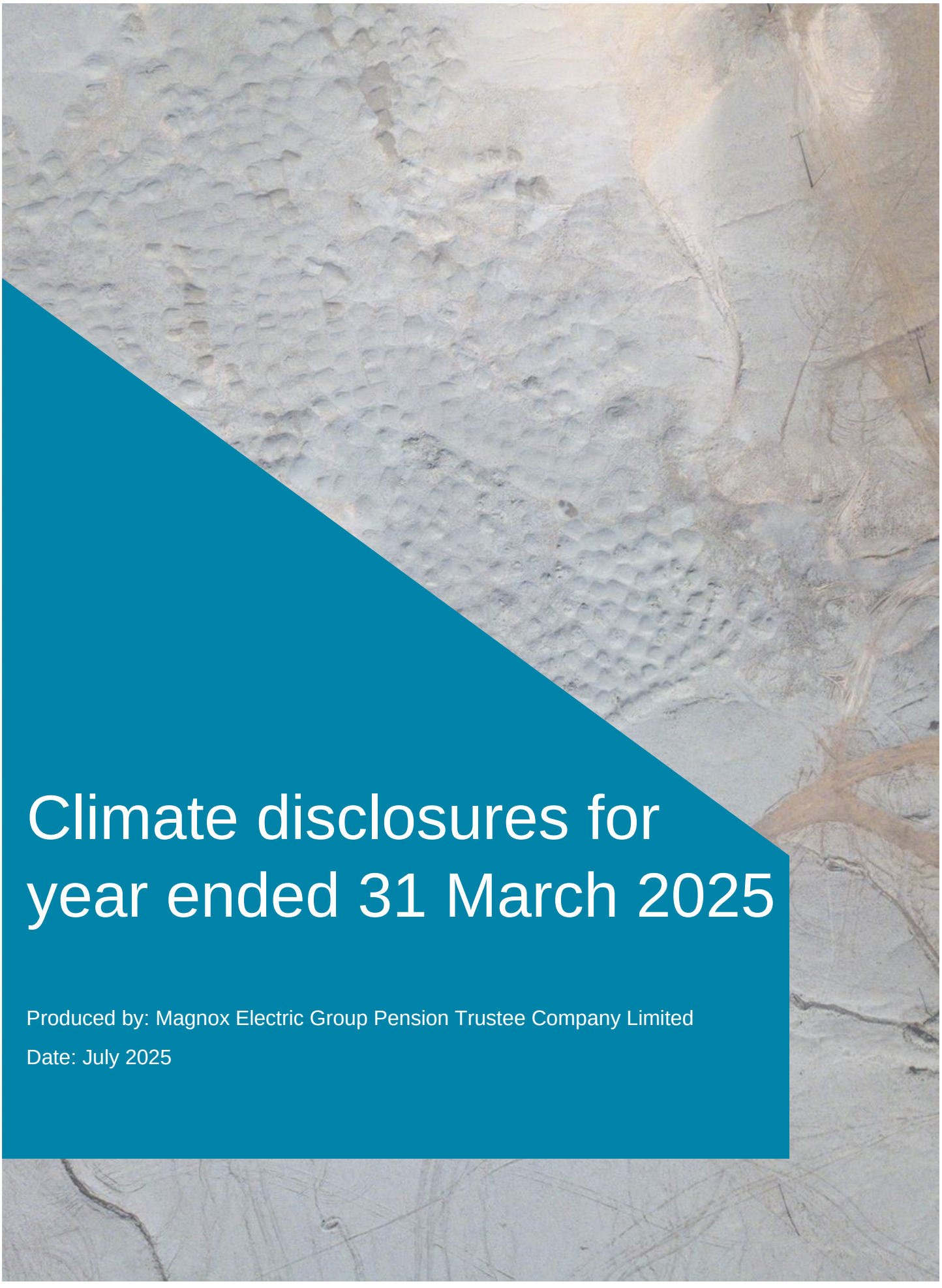
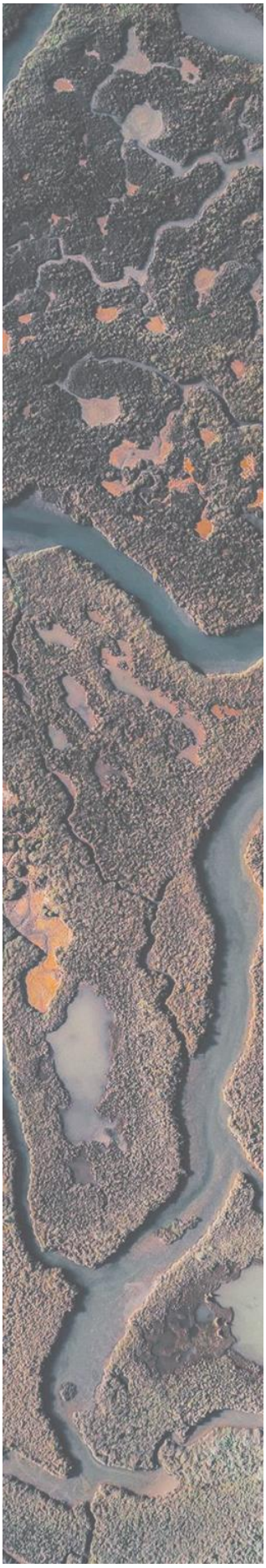


Climate disclosures for year ended 31 March 2025

Produced by: Magnox Electric Group Pension Trustee Company Limited

Date: July 2025

Introduction



Climate change is affecting the planet, causing extreme weather events, impacting crop production, and threatening Earth's ecosystems. Understanding the impact of climate change and the 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 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") for the year ended 31 March 2025 and is the third annual climate disclosure for the Group.

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 £32bn as at 31 March 2024. 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)

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 £2.4bn as at 31 March 2024.

Section	Assets (£m)	Percentage of Group's total assets (%)
SLC Section	2,304.7	95.4%
Cavendish Nuclear Section	52.7	2.2%
Atkins Section	48.7	2.0%
NNL Section	8.6	0.4%
Total Group	**2,414.7**	**100.0%**

Source: Investment Adviser/Managers. Data as at 31 March 2024. Totals may not sum due to rounding.

The four elements covered in the report are:

Governance	The Group's governance around climate-related risks and opportunities.
Strategy	The potential impacts of climate-related risks and opportunities on the Group'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.

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").

Table of contents

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 p6 onwards for further detail*

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

- The asset portfolio of approximately £2.4bn 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 p11 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. Further detail can be found on p17.
- The Group Trustee reviewed its climate scenario analysis, completed in the previous reporting period, and has decided to not refresh the analysis given there have been no material changes to the investment strategy or scenario modelling techniques. The results of the analysis 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 p27 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 emissions across all of the Group's asset classes.

The Group Trustee has decided to continue 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.

Group Trustee update

In July 2024, the Group Trustee received training on Net-Zero. This helped the Group Trustee understand the commitment required and how it could affect the broader investment strategy.

During Q2 2025, the Group Trustee received updated information from its Investment Adviser in relation to:

- the Group's exposure to climate-related risks and opportunities; and
- the Group's carbon emissions, including Scope 3.

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 Trustee Directors of the Group Trustee collectively take 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 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.

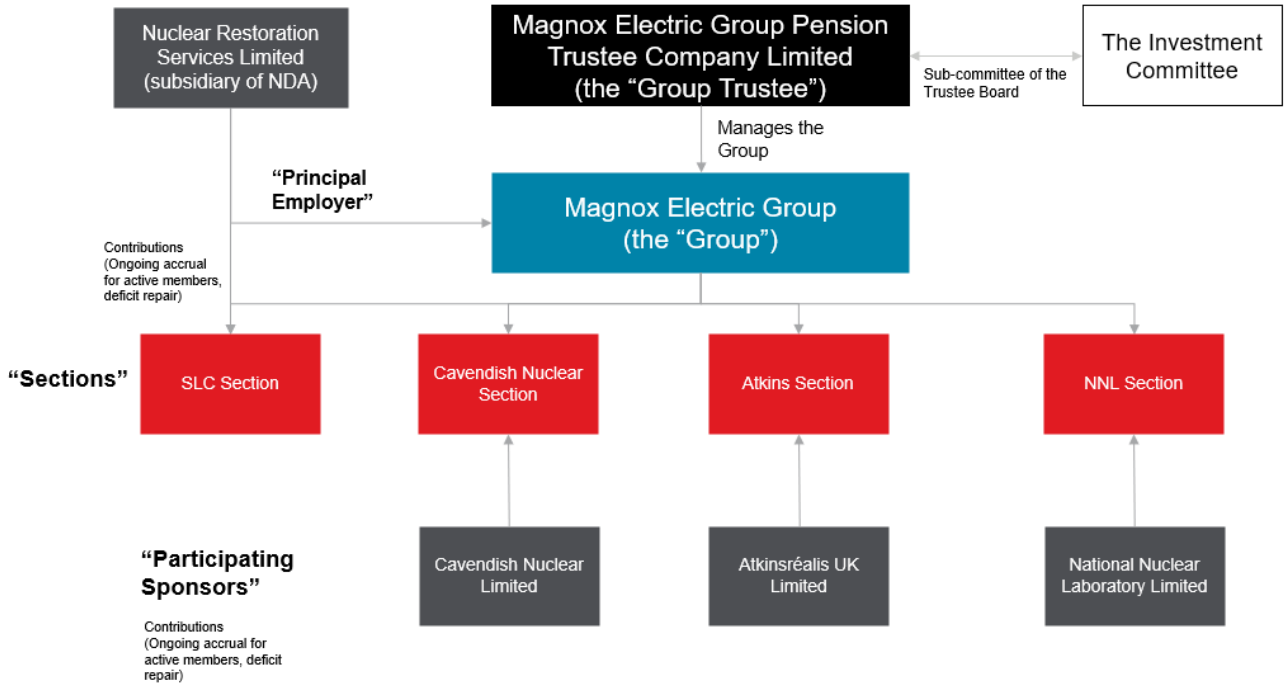
- The most appropriate time horizons for the Group are as follows:
  - Short-term: 1-3 years
  - Medium-term: 4-10 years
  - Long-term: beyond 10 years

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

Given a framework is now in place to better understand the Group's climate-related risks and opportunities, the Group Trustee noted the efficiency of producing this report compared to its previous disclosures.

The Group Trustee broadly expects the time and resource dedicated to producing the TCFD report to continue to reduce in future years, however, acknowledges there may be instances which would require additional work (e.g., re-do climate change scenario analysis).

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, Aon Investments Limited ("Aon"), 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 has noted Aon's qualifications and expertise in this area, including its participation in cross-industry initiatives such as the Investment Consultants' Sustainability Working Group ("ICSWG") and Cambridge Institute for Sustainability Leadership ("CISL").

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 (NRS)) 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, five of the Group's managers[1] across five funds were not able to provide complete information for the climate-related risks and opportunities assessment.

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 previously submitted and update them if necessary. The full assessment is set out on page 14 of this report.

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	-	-	37.9%	7.1%	14.1%	40.3%	-	0.6%
Cavendish Nuclear Section	8.7%	9.6%	-	10.5%	18.1%	53.2%	-	-
Atkins Section	-	-	-	-	-	35.5%	59.7%	4.8%
NNL Section	-	29.5%	-	-	-	64.8%	-	5.6%

Asset allocations as at 31 March 2024. Numbers may not sum up due to rounding.

[1] Includes the annuity manager Canada Life in the Atkins section.

How the qualitative risk assessment works

Risk categories

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

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

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

More details about transition and physical risks can be found in the *Appendix*.

Ratings

The analysis uses a RAG rating system where:

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

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

Green denotes a lower 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

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. This is due to the limited climate-oriented opportunities present and the long-term nature of property and infrastructure increasing exposure to climate-related physical risks. Illiquid Credit has also increased from being a low-to-medium risk area last year, to a higher risk area this year. This is driven by physical risks becoming increasingly critical and transition risks, such as market prices and reputational risks, being expected to increase over the long term.
- UK Equity and DGFs have been identified as low-to-medium risk areas, in relation to both the physical and transitional climate risks. Some risks increase over time as regulation tightens, and consumer demand shifts, giving reputational risks.

The Group Trustee is comfortable with the level of climate-related risks within the Group at this time. The Group Trustee expects the impact of these risks on the Group to reduce through time, as the funding levels improve within the Sections and the strategies de-risk. 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 was satisfied with the data provided by the Group's investment managers, noting improvements with some of the data collected in the process.

CTI was able to provide data to be included within the report for the first time.

Hayfin was not able to provide the requested data.

PIMCO was also unable to provide data for the PIMCO Tactical Opportunities Fund. The PIMCO Global Libor Plus Bond Fund remains unaffected.

The analysis excludes JP Morgan and Blackrock on the basis of materiality.

Further information on page 15.

Climate Risk Assessment – Summary Table

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.

		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	Low to Medium	Low	Low	Medium	Low	Medium	Low	Low	Low
	Medium-term	Low to Medium	Low to Medium	Low	Low	Medium	Low to Medium	Medium	Low	Low	Low
	Long-term	Low to Medium	Medium to High	Medium to High	Low	Low	Medium to High	Low	Low	Low	Low
Transition risks	Short-term	Low to Medium	Low to Medium	Low to Medium	Low to Medium	Medium	Low	Medium	Low	Low	Low
	Medium-term	Low to High	Low to High	Low to High	Medium	Low to Medium	Low to Medium	Low to Medium	Low	Low	Low
	Long-term	Low to High	Low to High	Low to High	Medium	Low	Medium to High	Low	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 2024. 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.

On behalf of the Group Trustee, the Group Trustee's Investment Adviser asked 20 asset managers (including the annuity provider Canada Life) to complete a RAG table. The request did not include BlackRock and JP Morgan, on the basis of materiality. Two of the Group's managers across two funds were not able to provide information for the climate-related risks and opportunities assessment.

CTI was able to provide a completed climate-related risks and opportunities assessment in the requested format, commenting that any adverse movements in gilt prices affects the assets and liabilities, so this is expected to have minimal financial impact on the Group. The Group Trustee notes that this is an improvement compared to last year, when CTI was not able to provide a completed template.

PIMCO, within the Cavendish Nuclear Section, was able to provide a more comprehensive RAG breakdown of risks affecting the Liquid Credit fund, compared to last year. However, PIMCO was once again unable to provide a response in regard to the private markets Tactical Opportunities Fund. The Group Trustee engaged with the manager to understand whether there are plans to provide this in future, with the manager stating it does not have plans to expand its TCFD reporting to this fund within the near future. The manager outlined this is due to the intricacy of the strategy and mix of underlying sectors, which limits the ability to track or report on climate-related risks and opportunities. The Group Trustee acknowledges this limitation and will not be taking any action because of this engagement, having been reassured by the manager's firm level capabilities and reporting of the Liquid Credit fund.

Similar to last year, 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. The manager did share a copy of its firm-level TCFD report, which reassured the Group Trustee of the manager's consideration of climate-related risks and opportunities.

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.

Equity	The Group's only equity manager identified opportunities in creating "carbon neutral" businesses, which are more resilient to the costly transitional risks of climate change.
Liquid Credit	Opportunities within the issuance of green bonds, sustainability-linked bonds, and loans with sustainability-linked margin ratchets have been identified, as well as the creation of Article 8 funds.
Diversified Growth Funds	The manager outlined that climate transition will demand significant investment in clean technologies, benefitting from the withdrawal of capital from high emission activities.
Property & Infrastructure	Managers principally identified opportunities within building transformation, stemming from the increased demand of tenants and the wider market. Managers can seek to create low carbon and climate resilient buildings and actively manage portfolios to contribute to the transition to a net-zero carbon economy, including working with underlying managers and operating partners to achieve the same goals. Wider opportunities included: ▪ Lowering operating costs through a focus on energy efficiency. ▪ Delivering returns on investment for technology procurement at assets. ▪ Reducing reliance of fossil fuel energy and potential susceptibility shifts in energy policy, taxes and levies. ▪ Reputational gains of aligning to the Paris Commitment.
Illiquid Credit	Managers identified a number of opportunities such as: ▪ Higher rental premiums from assets with Energy Performance Certificates or above or high green building certification. ▪ Emissions offsetting can lead to better returns on assets as more companies commit to net zero targets. ▪ Identification of biodiversity enhancing measures, such as green walls or roofs which also mitigate pluvial flood risk and heat stress. ▪ Access to green debt to support further improvements to these assets. Reducing emissions to increase positive social and environmental outcomes.

Source: Managers

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 may 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 updated the climate change scenario analysis for the SLC Section, as a proxy for the Group, during the previous year's reporting period. This helped the Group Trustee 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 September 2023 and has decided to not refresh the analysis, given no material changes to the above conditions.

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

	Base case	No transition	Disorderly transition
	Emission reductions start now and continue in a measured way in line with the objectives of the Paris Agreement and the UK government's legally binding commitment to reduce emissions in the UK to net-zero by 2050.	Considers the impact of climate change if no further action is taken to reduce greenhouse gas ("GHG") emissions leading to significant global warming.	Explores the impact if limited action is taken and insufficient consideration is given to sustainable long-term policies to manage global warming effectively.
Temperature rise by 2100	2ºC – 2.5ºC	+4ºC	<3ºC
Reach net-zero by	2050	After 2050, if at all	After 2050
Introduction of environmental regulation	-	None	Late and aggressive

	Abrupt transition	Orderly transition	Smooth transition
	Explores the impact of delayed action on climate change for five years with governments eventually forced to address greenhouse gas emissions due to increasing extreme weather events.	Considers the impact of immediate and coordinated action to tackle climate change using carbon taxes and environmental regulation.	Shows how rapid advancement of green technology, private innovation and tiered environmental regulation and greenhouse gas taxes could achieve a smooth transition to a low carbon world.
Temperature rise by 2100	1.5ºC – 2ºC	1.3ºC – 2ºC	<1.5ºC
Reach net-zero by	2050	2050	2045
Introduction of environmental regulation	Aggressive	Coordinated	High coordination

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%
Inflation Opportunities	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%

Data as at 30 September 2023.

The outcome of the analysis from the impact assessment is set out in the chart below and table on pages 24-26.

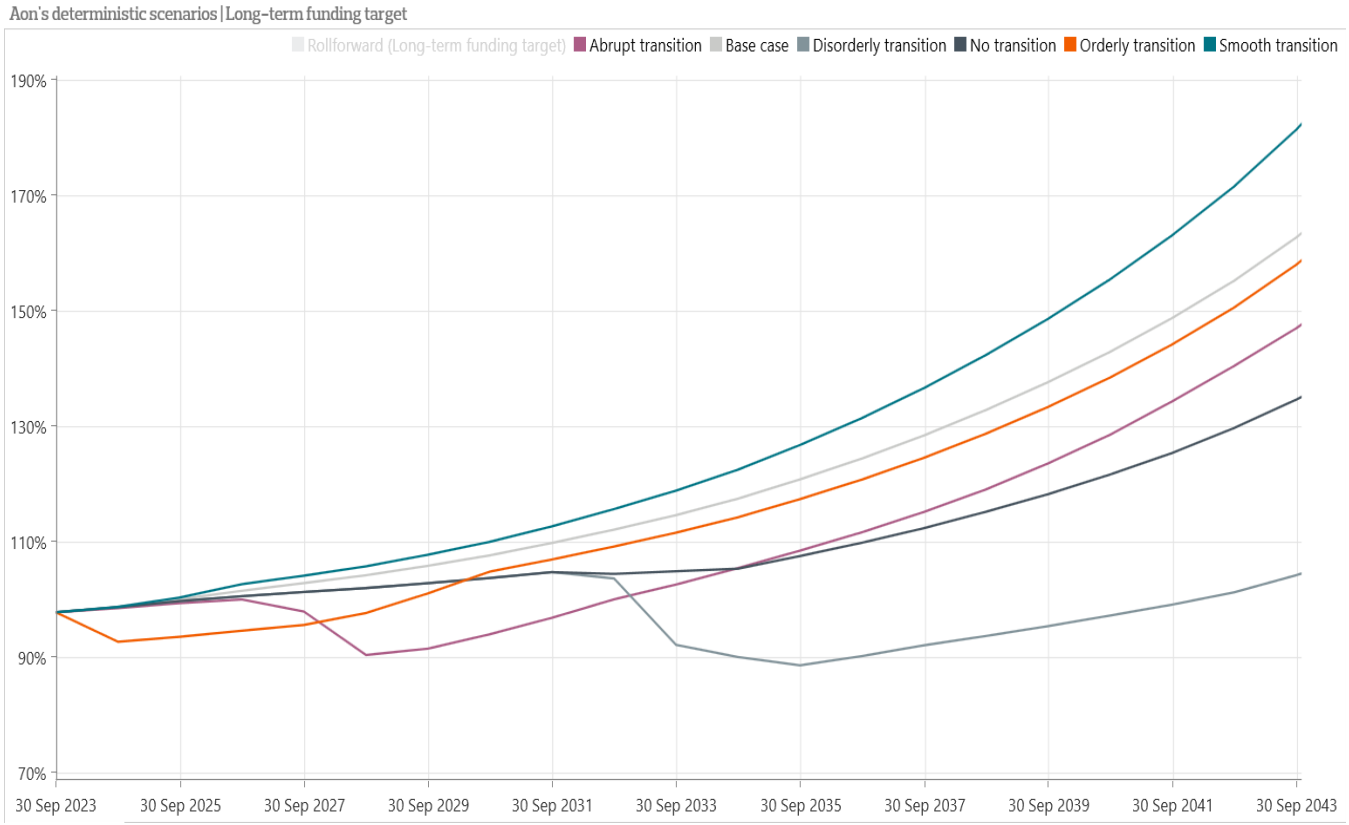
What does the chart show?

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.

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



Source: Investment Adviser. Scenario projections as at 30 September 2023.

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.

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 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. But in any case, the Group Trustee's covenant adviser has concluded that climate-related risks and opportunities are unlikely to impact the covenant of the Group's sponsoring employers (see more detail below), in the timescales and scenarios we have considered. In addition, 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.

The Group Trustee has previously commissioned an external review of the climate risk and opportunities for the employer(s), and an assessment of the climate risk impact on the covenant provided to each of the Group's Sections (in particular focusing on the SLC Section). This review found that climate-related risks are unlikely to affect the covenants of the Group's Sections given the government-backed nature of the principal employer and how the employers are managing the climate-related risks they are exposed to. In particular:

- Costs incurred by NRS in relation to nuclear decommissioning are reimbursed by the Nuclear Decommissioning Authority ("NDA") under a Service Agreement, meaning that no profit or loss is generated by NRS as the Group's principal sponsoring employer.

- NRS has committed to achieving net zero carbon emissions by 2050 (2045 for Scottish sites), with short-medium term energy efficiency actions outlined in its Carbon Management Plan. Key physical risks to the sites (e.g. flooding) are routinely considered and addressed, as part of Periodic Safety Reviews.

- Furthermore, forward looking strategic opportunities for NRS have been identified in relation to use of lower-emission inputs and renewable sources of energy, use of more energy efficient processes, and development of lower-emission technologies, products & services.

The Group Trustee therefore expects covenant risk to be low in all the scenarios and on the grounds of proportionality, has not commissioned full scenario analysis for the employer(s) to complement the funding analysis undertaken.

Impact on the funding level

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.

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.

Climate scenarios in more detail

The table below 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.

Base case Temperature rise +1.5ºC- 2.4ºC Reach net-zero 2050 Uncoordinated environmental regulation	Summary of the Scenario The base case is based on Aon's Capital Market Assumptions which consider what is currently priced into the market. This includes climate change related impact. In the base case, action is taken to tackle climate change, but the approach is fragmented. The transition to a low carbon economy is expected to happen in a slow but orderly fashion.	Summary of the impact to the Group The funding level gently increases, with an acceleration over time.
No Transition Scenario Temperature rise +4ºC 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	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

	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.	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 1.5ºC – 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 1.3ºC – 2°C Reach net-zero 2050 Environmental regulation Coordinated	Summary of the Scenario **In the short-term:** Immediate coordinated global action is taken to tackle climate change. Risky assets perform poorly. **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.	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 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	Summary of the impact to the Group
	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 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: The rapid technological advancement combined with government actions drives a smooth transition to a low carbon economy and enjoys growth.	**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 rapid technological advancement combined with government actions drives a smooth transition to a low carbon economy. Risk assets perform well.	**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.

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 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 established a climate risk management framework – set out in the tables below – 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. The Group Trustee delegates a number of key tasks to different committees but retains overall responsibility.

This gives 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.

Governance

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Approve climate risk management framework *(this document)*	Group Trustee	IC	Ad-hoc
Receive training on climate-related issues	Group Trustee	Advisers	Annual
Review adviser objectives to ensure advisers have appropriate climate capability, and bring important,	Group Trustee	Advisers	Investment Advisers: Annual;

relevant and timely climate-related issues to the Group Trustee's attention			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 previous TCFD disclosures and decided not to refresh the analysis, given there had been no material changes to the investment strategy, and no material changes to the scenarios.

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 climate-related target. Metrics have been collected in line with industry practice.

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 10 questions designed by the Pensions Climate Risk Industry Group 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 in the Strategy section of this report, on pages 14-16.

Key conclusions

Overall, the Group Trustee has seen a good response quality to the climate-related risk disclosures from its investment managers. Some of the key highlights include:

- This year the Group Trustee received responses from all 20 material investment managers[2].
- Most of the managers' report in-line with TCFD disclosures and have produced a TCFD-aligned report. 18 managers produce a TCFD report (an improvement from 13 last year), with 18 managers committed to providing carbon-related data (an improvement from 17 last year).
- All 20 managers outlined that they 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 (a fall from 21 last year, due to the Group having one less investment manager following a full redemption). The Group Trustee did, however, note that Chorus Capital stated it does not currently play a leading role in progressive public policy initiatives.
- 14 managers carry out climate-related scenario analysis (an improvement from 13 last year). Whilst not all managers carry this out, the Group Trustee was reassured that most managers do incorporate ESG considerations into their investment processes.
- 14 managers have made a formal science-based temperature alignment or a Net-Zero commitment (an improvement from 13 last year).

The Group Trustee acknowledges the good overall responses from managers, with the majority of managers fulfilling the majority of the questions asked. The questions with the lowest response rate were regarding scenario analysis and science-based temperature alignment, however, the Group Trustee acknowledges some managers are still working towards these objectives.

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.

[2] Excludes JP Morgan and Blackrock on the grounds of materiality.

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

The Group Trustee is required to report on all Scopes. 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 detail

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 this year's 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 carbon metrics – Section level

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

			Data Coverage (%)		**Total GHG emissions** (tCO_2e)		**Carbon footprint** (tCO_2e/£m)		**Binary Target Measurement** (%)
Section	**%**		Scope 1 & 2	Scope 3	Scope 1 & 2	Scope 3	Scope 1 & 2	Scope 3	Portion of portfolio SBTi aligned
SLC Section	95.4%	2024	77.8%	52.0%	52,084.5	110,775.7	47.7	151.8	33.6%
	95.6%	2023	45.1%	29.5%	42,819.8	123,298.5	65.4	288.5	22.1%
Cavendish Nuclear Section	2.2%	2024	33.2%	32.7%	194.0	1,483.8	23.8	184.8	26.2%
	2.1%	2023	48.1%	27.0%	613.9	1,435.3	56.5	235.3	36.8%
Atkins Section	2.0%	2024	99.7%	0.0%	2,490.7	-	85.9	-	0.0%
	2.0%	2023	95.0%	0.0%	2,188.2	-	73.5	-	0.0%
NNL Section	0.4%	2024	46.6%	46.1%	40.7	363.4	35.0	315.0	33.3%
	0.3%	2023	50.9%	49.0%	162.6	1,025.1	138.1	902.7	37.8%
Total Group (excl. LDI)	**100.0%**	**2024**	**77.2%**	**50.5%**	**54,800.7**	**112,622.8**	**48.5**	**152.4**	**32.7%**
	100.0%	**2023**	**46.2%**	**28.9%**	**45,784.5**	**125,758.9**	**65.8**	**289.3**	**21.9%**
LDI	100.0%	2024	100%	**-**	**Physical:** 136,697.7 **Synthetic:** 221,759.7	**-**	141.2	-	**-**
	100.0%	2023	100%	-	**Physical:** 181,972.8 **Synthetic:** 197,272.6	-	170.2	-	**-**

Source: Investment Adviser/Managers. Data as at 31 March 2024 or latest available. Figures may not sum due to rounding. Excludes cash and funds deemed immaterial or not applicable for carbon analysis.

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.

LDI is calculated using the following sources:

- *UK national emissions as at 31 December 2023 from the Emissions Database for Global Atmospheric Research.*
- *PPP-adjusted GDP as at 31 December 2023 from the Organization for Economic Cooperation and Development.*
- *For the LDI assets, carbon metrics are shown solely in relation to the Group's physical and repurchase (repo) gilt holdings.*

The carbon metrics – Asset class level

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

			Data Coverage (%)		**Total GHG emissions** (tCO_2e)		**Carbon footprint** (tCO_2e/£m)		**Binary Target Measurement** (%)
Asset Class	**%**		Scope 1 & 2	Scope 3	Scope 1 & 2	Scope 3	Scope 1 & 2	Scope 3	Portion of portfolio SBTi aligned
Equities	0.3%	2024	100.0%	97.8%	22.7	583.4	4.9	129.7	93.5%
	0.3%	2023	100.0%	96.0%	41.0	836.5	9.0	191.0	97.0%
Diversified Growth Funds	0.6%	2024	38.8%	38.5%	122.2	1,090.1	35.0	315.0	27.7%
	0.5%	2023	49.8%	34.9%	469.4	1,624.0	115.1	568.5	34.3%
Property & Infrastructure	60.0%	2024	88.6%	50.0%	30,830.9	26,127.5	39.8	59.8	42.5%
	61.1%	2023	38.4%	18.0%	15,821.6	37,433.2	44.8	225.8	20.7%
Liquid Credit	11.6%	2024	75.7%	75.7%	187.2	633.6	1.5	4.9	57.9%
	11.5%	2023	93.9%	91.3%	18,983.3	61,959.8	117.0	393.1	42.0%
Illiquid Credit	25.8%	2024	50.3%	43.8%	21,147.0	84,188.3	111.4	509.2	0.7%
	24.5%	2023	38.6%	28.2%	8,281.0	23,905.5	58.3	229.8	16.3%
Annuities	2.0%	2024	99.7%	0.0%	2,490.7	-	85.9	-	0.0%
	2.1%	2023	95.0%	0.0%	2,188.2	-	73.5	-	0.0%
Total Group (excl. LDI)	**100.0%**	**2024**	**77.2%**	**50.5%**	**54,800.7**	**112,622.8**	**48.5**	**152.4**	**32.7%**
	100.0%	**2023**	**46.2%**	**28.9%**	**45,784.5**	**125,758.9**	**65.8**	**289.3**	**21.9%**
LDI	100%	2024	100%	**-**	**Physical:** 136,697.7 **Synthetic:** 221,759.7	**-**	141.2	-	**-**
	100%	2023	100%	-	**Physical:** 181,972.8 **Synthetic:** 197,272.6	-	170.2	-	**-**

Source: Investment Adviser/Managers. Data as at 31 March 2024 or latest available. Figures may not sum due to rounding. Excludes cash and funds deemed immaterial or not applicable for carbon analysis.

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.

LDI is calculated using the following sources:

- *UK national emissions as at 31 December 2023 from the Emissions Database for Global Atmospheric Research (EDGAR).*
- *PPP-adjusted GDP as at 31 December 2023 from the Organization for Economic Cooperation and Development (OCIO).*
- *For the LDI assets, carbon metrics are shown solely in relation to the Group's physical and repurchase (repo) gilt holdings.*

Key observations:

The Group Trustee noted that the aggregated emissions are broadly in line with the previous year. The absolute emissions have increased marginally for Scope 1&2 and decreased marginally for Scope 3. These subtle movements can be principally attributed to the increased Data Coverage compared to the previous year with Scope 1&2 increasing by 31% and Scope 3 by 22% respectively. The Group Trustee is pleased with the increase in Data Coverage as it means the Group's investment managers are able to provide more information on the Group's assets. The Group Trustee is also pleased that the carbon footprint at the Group level across all scopes has reduced relative to the previous year, even with the increase in Data Coverage.

There are a number of significant movements in the underlying asset classes. Property & Infrastructure Scope 1&2 emissions increased due to M&G and Infrared providing data this year, improving the coverage of this asset class. Scope 3 emissions decreased despite more managers reporting overall, predominantly attributed to the fall in emissions reported by Innisfree. Liquid Credit Scope 1,2&3 emissions reduced significantly. This is attributed to the underlying data which Robeco provided, which experienced a significant fall in carbon footprint across all scopes. Illiquid Credit Scope 1,2&3 emissions increased significantly. This is attributed to a major increase in coverage reported by Chorus.

Scope 3 reporting is still limited across all asset classes apart from Equities and Liquid Credit, despite an overall increase compared to the previous report. This increase is encouraging and is in line with the Group Trustee's expectation that reporting is to improve as industry standards develop and evolve, however, there is still progress to be made. All asset classes, except for the Annuities, provided at least some assessment of Scope 3 emissions, with Canada Life (the Group's Annuity provider within the Atkins Section) advising that it does not report Scope 3 emissions data.

The portion of managers/funds with SBTi aligned targets has slightly improved since last year. This is driven by more managers being aligned to net-zero and/or the Paris Agreement across the Liquid Credit and Property & Infrastructure asset classes. Despite this overall increase, the Group did experience a fall in the underling portion of assets with SBTi aligned targets for Illiquid Credit, caused by Hayfin reporting a decrease in this metric, and ICG-Longbow not reporting data this year. There were also falls across Equities and DGFs, which are described in more detail later in this commentary. All underlying managers were followed up by the Group Trustee's Investment Adviser where they did not provide a SBTi metric in the first instance.

The emissions for LDI have decreased compared to the previous report. This is due to a reduction in the carbon footprint calculated from the data provided by OCIO and EDGAR. The Group Trustee has summarised this methodology two pages overleaf under "Notes on the metrics calculations".

Within the Cavendish Nuclear Section, PIMCO provided clarification on the proportion of public and private assets for which the manager has data. This led to a change in the methodology for calculating the climate-related metrics within this Section. The Scope 1&2 Data Coverage figure calculated this year

(33.2%) is not directly comparable to that calculated last year (48.1%), however, the updated methodology will be applied in future years, allowing for a more appropriate comparison of figures. This also contributed to a significant reduction in the Scope 1&2 Data Coverage of Liquid Credit at asset class level.

The Cavendish Nuclear Section also experienced a fall in the portion of the portfolio which is SBTi aligned (from 36.8% to 26.2%), driven in part by the change in methodology described above, as well as a minor decrease within the Section's underlying Lindsell Train UK Equity Fund (which was fully redeemed in June 2024). This minor decrease is not considered a significant concern by the Group Trustee, however, this will be monitored in future years.

The Group Trustee noted that the Atkins Section experienced an increase in the total absolute Scope 1&2 emissions, driven by an increase in the Scope 1&2 carbon footprint of the annuity portfolio. As noted earlier, the Group's Annuity provider, Canada Life, does not report Scope 3 emissions data.

There were also some notable changes in the climate-related metrics within the NNL Section, which experienced falls in Data Coverage, total GHG emissions and carbon footprint across all scopes, as well as the portion of the portfolio which is SBTi aligned. This was driven by the full redemption of the Ruffer DGF during the reporting period, which was rather carbon intensive but invested in underlying companies with SBTi aligned targets. Gaps in Data Coverage exist within the underlying Schroders DGF which remains within the portfolio – as shown by the fall in Data Coverage at asset class level – and the Group Trustee will continue to monitor any progress the manager is able to make in future years. Despite the year-on-year decrease in the Scope 3 carbon footprint of the NNL Section, it remains high compared to the Group's remaining Sections. This is driven by the exposure to the high Scope 3 carbon footprint of the underlying issuers within the Schroders DGF.

Notes on the metrics data

The Group Trustee's 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

No estimates have been made 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:

The following funds of managers did not provide the carbon emissions split by scopes, and therefore the Scope 1&2 emissions for this manager include Scope 3:

- ICG-Longbow UK Real Estate Debt Investments IV
- M&G Investments Inflation Opportunities Fund (Real Estate Only)

The following funds of managers did not provide any emissions data:

- DRC UK Whole Loan Fund II
- Invesco Real Estate Finance Fund (GAM II)

Cavendish Nuclear Section:

The following funds of managers did not provide any emissions data:

- PIMCO - Tactical Opportunities Fund

Atkins Section:

Data for Canada Life is based on an aggregated Scope 1&2 carbon footprint for all financed emissions within Canada Life's portfolio. This includes assets in listed bonds, listed equities, corporate real estate, mortgages, sovereign debt, private debt and private equity. Canada Life does not currently report Scope 3 emissions and the Group Trustee will monitor the Annuity provider's ability to do so in future.

NNL Section:

All managers provided climate-related metrics data for inclusion within this report.

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.

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 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 CET.
Annuities	The Group Trustee's Investment Adviser collected the metrics data from Canada Life.

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 379.3 tCO2e, divided by total UK government debt at 31 December 2023 of £2,687.2Bn.

=141.2tCO2/£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 (SBTi)

Overall, the SBTi was not provided by the majority of the Group's managers. All managers were queried where they did not provide a SBTi metric on first instance. Arcmont, BentallGreenOak, InfraRed and Innisfree responded that SBTi metrics are not available for the respective funds. The Group Trustee's Investment Adviser will continue to engage with all managers on SBTi.

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% (Scope 1&2)**

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	2023 Data Coverage (Scope 1 & 2)	2024 Data Coverage (Scope 1 & 2)	2025 Data Coverage Target (Scope 1 & 2)
Equity	100.0%	100.0%	c.100.0%
DGF	49.8%	38.8%	c.100.0%[1]
Property & Infrastructure	38.4%	88.6%	c. 65.0%
Liquid Credit	93.9.%	75.7%	c.100.0%[1]
Illiquid Credit	38.6%	50.3%	c.50.0%
Annuities	95.0%	99.7%	c.100.0%
Total	**46.2%**	**77.2%**	**c.90.0%**

Note: (1) Whilst the Group Trustee has agreed that 100% Data Coverage may not realistically be achievable for the Group's Illiquid Credit and DGF investments, the Group Trustee has agreed to aspire for Data Coverage at that level. (2) Data Coverage for LDI is 100% given latest methodology used to calculate, we have therefore removed this asset class.

Our progress towards the target

The table below shows the Data Coverage (Scope 1 & 2) metrics for last year and this year.

	2023	2024
Actual Data Coverage	46.2%	77.2%

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 (31% increase). Within the Group's Sections, the greatest improvement was in the SLC Section, and there were no material changes for the Atkins or NNL Sections. However, there has been a decrease in Data Coverage for the Cavendish Nuclear Section. The rationale for this decrease is described earlier within the Metrics and Targets section of the report.

At an asset class level, the main improvement in Data Coverage was within the Property & Infrastructure and Illiquid Credit asset classes, with increases in coverage principally attributed to new data for M&G and Infrared, and an increase in coverage for the Chorus fund.

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. Whilst Equities and Liquid Credit have good Scope 3 Data Coverage for this year of reporting (above 75%), 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 and Illiquid Credit asset classes over the next reporting year.

Appendices

Please see the appendices for additional information about our climate disclosures report.

01 Glossary

Governance	refers to the system by which an organisation is directed and controlled in the interests of shareholders and other stakeholders.[3] 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.[4]
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.[5]
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.[6]
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.[7]
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

3 A. Cadbury, Report of the Committee on the Financial Aspects of Corporate Governance, London, 1992.

4 OECD, G20/OECD Principles of Corporate Governance, OECD Publishing, Paris, 2015.

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

	opportunities will vary depending on the region, market, and industry in which an organisation operates.[8]
Greenhouse gas emissions scope levels[9]	Greenhouse gases are categorised into three types or 'Scopes' by the Greenhouse Gas Protocol, the world's most used greenhouse gas accounting standard.
	Scope 1 refers to all direct GHG emissions.
	Scope 2 refers to indirect GHG emissions from consumption of purchased electricity, heat, or steam.
	Scope 3 refers to other indirect emissions not covered in Scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions. Scope 3 emissions could include: the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g., transmission and distribution losses), outsourced activities, and waste disposal.[10]
Value chain	refers to the upstream and downstream life cycle of a product, process, or service, including material sourcing, production, consumption, and disposal/recycling. Upstream activities include operations that relate to the initial stages of producing a good or service (e.g., material sourcing, material processing, supplier activities). Downstream activities include operations that relate to processing the materials into a finished product and delivering it to the end user (e.g., transportation, distribution, and consumption).[11]
Climate scenario analysis	Climate scenario analysis is a process for identifying and assessing a potential range of outcomes of future events under conditions of uncertainty. In the case of climate change, for example, scenarios allow an organisation to explore and develop an understanding of how the physical and transition risks of climate change may impact its businesses, strategies, and financial performance over time.[12]
Net zero	means achieving a balance between the greenhouse gases emitted into the atmosphere, and those removed from it. This balance – or net zero – will happen when the amount of greenhouse gases add to the atmosphere is no more than the amount removed.[13]

[8] TCFD, Recommendations of the Task Force on Climate-related Financial Disclosures, 2017

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

[10] PCC, Climate Change 2014 Mitigation of Climate Change, Cambridge University Press, 2014.

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

[12] TCFD, Recommendations of the Task Force on Climate-related Financial Disclosures, 2017

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

02 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

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, and chronic risks are trends that appear over time.

Acute	Chronic
Examples	**Examples**
Extreme heat	Water stress
Extreme rainfall	Sea level rises
Floods	Land degradation
Droughts	Variability in temperature

03 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 gilts+0% 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

04 GHG emissions

Greenhouse gases in the atmosphere 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 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 activities, such as raising cattle and planting rice emit methane, nitrous oxide and other greenhouse gases.

The amount of greenhouse gases in the atmosphere has significantly increased since the Industrial Revolution. The Kyoto Protocol[14] 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. So, emissions are expressed as a carbon dioxide equivalent ("CO_2e"). 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:

CO_2
Carbon dioxide

CH_4
Methane

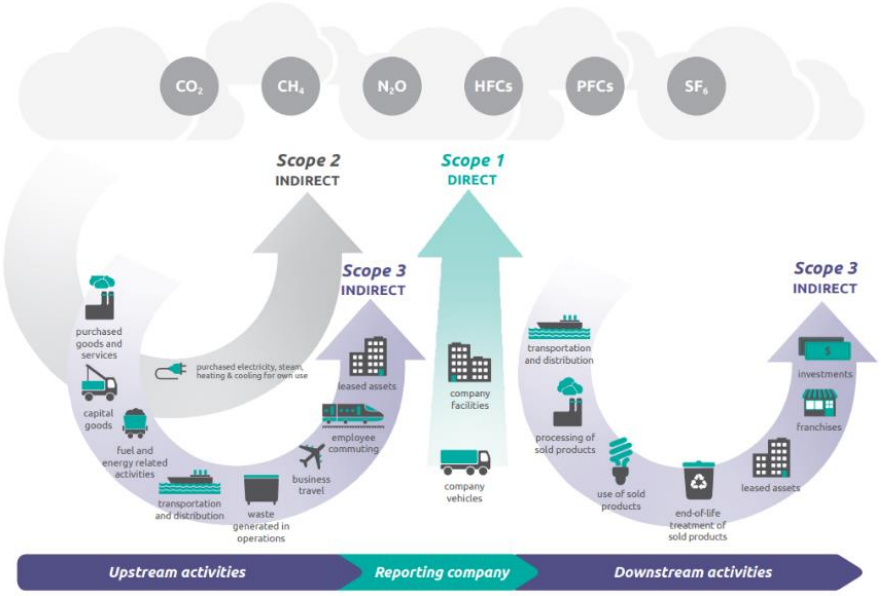
N_2O
Nitrous oxide

HFCs
Hydrofluorocarbons

PFCs
Perfluorocarbons

SF_6
Sulphur hexafluoride

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

[14] https://unfccc.int/kyoto_protocol