TCFD report for year ending 31 March 2023

Magnox Electric Group of the Electricity Supply Pension Scheme

1. Executive Summary

Regulatory Background

As part of the climate change governance reporting regulations, Magnox Electric Group Pension Trustee Company Limited (the "Group Trustee") must produce and publish a Taskforce on Climate-related Financial Disclosure ("TCFD") report for the Magnox Electric Group of the Electricity Supply Pension Scheme (the "Group") within seven months of the first Group year-end after the regulations apply. This is the Group's first report, which covers the period 1 October 2022 to 31 March 2023.

Thereafter, the Group Trustee will need to produce a report annually, which will be published online, within seven months of the Group year-end and be included within the Group's annual report and accounts.

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. The Trustee therefore seeks to integrate assessments of climate change risk into its investment risk management and strategy.

Strategy

After undertaking both qualitative and quantitative analysis, the Group Trustee has identified:

- Climate related risks and opportunities impact all the different asset classes in which the Group invests, although to varying degrees. Managers generally expect the impact of both physical and transition risks to increase over time, but also note that such risks also create opportunities.
- The Group is reasonably resistant to climate related risks. This is principally due to not holding equities while having large allocations to UK government bonds, for liability management purposes, and inflation-linked investments such as property and infrastructure, which are expected to perform well during a transition to a low carbon economy.

Risk management

The Group Trustee considers the prioritisation of climate-related risks and the management of the most significant in terms of potential loss and likelihood. Analysis performed over the year has identified no material risks which required immediate attention.

The Group Trustee will include consideration of climate-related risks in the Group's other risk processes and documents, such as the risk register and the Statement of Investment Principles ("SIP") for each Section, and will regularly review these. The Group Trustee's process for managing climate-related risks is documented in the Group's climate risk management plan, which is detailed later in this report.

Metrics and targets

The Group Trustee has agreed to report on Total Greenhouse Gas ("GHG") Emissions, Carbon Footprint, Data Quality and Binary Target Measurements, and will report on these metrics annually. Climate-related metrics were requested from all the Group's investment managers, not all of which were able to provide the requested data. The level of Data Quality varied significantly between managers, which was primarily driven by the asset class of the investments held.

The Group Trustee has set an intermediate target to encourage the investment managers of the Group to improve the Data Quality over the next 3 years in order to ensure any subsequent targets provide a material benefit to the climate-related risks and opportunities faced by the Group, subject to the Group Trustee's primary responsibility of ensuring that the liabilities of the Group are paid as they fall due. In due course the Group Trustee aspires to set a more stretching target for the Group (for example a reduction in carbon emissions), when the data is of sufficient quality to provide more reliable insights.

The rest of this report provides further detail. Please refer to the Glossary for further information on the terms used.

2. Introduction and background

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 >£40bn. 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:

https://www.espspensions.co.uk/~/media/document-libraries/esps/2022/espstcfdreport_31_march_2022.pdf?la=en&hash=2388077863FA55605D3038D0606F00757DE121BC

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 £3,599.5m as at 31 March 2022.

Section	Assets (£m)	Percentage of Group's total assets (%)
SLC Section	3,429.5	95.3
Cavendish Nuclear Section	86.6	2.4
Atkins Section	70.1	1.9
NNL Section	13.3	0.4
Total Group	**3,599.5**	**100.0**

Source: Aon/Managers

The Group's "relevant" assets as of 31 March 2021 were in excess of £1bn, meaning that the Group is required to comply with the climate change governance reporting regulations from 1 October 2022.

Regulatory Background

From 1 October 2021, the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations ("the climate change governance reporting regulations") introduces new reporting requirements in line with the TCFD recommendations[1].

The TCFD is an initiative that developed some best practice guidance for climate-risk reporting. New UK regulations require the trustees to meet climate governance requirements and publish an annual TCFD-aligned report on their pension 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 lead to more accountability and provide decision-useful information to investors and beneficiaries.

The TCFD Framework

The TCFD developed four recommendations on climate-related financial disclosures. These are governance, strategy, risk management and metrics and targets and form the core elements to be included within the TCFD report.

This report summarises the Group Trustee's work in respect of each of the four recommendations.

[1] Further guidance can be found under sections 41A and 41B of the Pensions Act 1995 and section 113 of the Pension Schemes Act 1993.

Governance	The organisation's governance around climate-related risks and opportunities.
Strategy	The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.
Risk management	The processes used by the organisation 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.

3. Governance

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.

Role of the Group Trustee

The Group Trustee is ultimately collectively responsible for oversight of all strategic matters related to the Group. This includes approval of the governance and management framework relating to Environmental, Social and Governance ("ESG") considerations and climate-related risks and opportunities. Given its importance, the Group Trustee has not identified one individual to specifically be responsible for the Group Trustee's response to climate risks and opportunities. Rather, the Group Trustee has collective responsibility for setting the Group's climate change risk framework.

The Group Trustee has discussed and agreed its climate-related beliefs and overarching approach to managing climate change risk. Details are set out in the SIP for each Section, which are reviewed and (re)approved every 3 years (or sooner in the event of a significant change in investment policy) by the Group Trustee.

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 as 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 expects its advisers to bring important and relevant climate-related issues and developments to the Group Trustee's attention in a timely manner.

The Group Trustee has delegated oversight of the Group's climate change risk management framework to the Investment Committee ("IC"), which is a sub-committee of the Group Trustee. Implementation and day-to-day oversight have been delegated to the TCFD Working Group.

The Group Trustee regularly monitors and reviews progress against the Group's climate change risk management approach.

Role of the Investment Committee

Ongoing oversight of the Group Trustee's climate risk management approach has been delegated to the IC.

The IC, supported by the TCFD Working Group, 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 regularly monitors and reviews progress against the Group's climate change risk management approach. The IC keeps the Group Trustee apprised of any material climate-related developments through regular updates as and when required.

Key activities delegated to the IC include:

- ensuring investment proposals explicitly consider the impact of climate risks and opportunities
- ensuring that stewardship activities are being undertaken appropriately on the Group's behalf

Role of the TCFD Working Group

Day-to-day responsibility for the initial implementation of the Group Trustee's climate risk management approach has been delegated to the TCFD Working Group.

The TCFD Working Group monitors and reviews progress against the Group's climate change risk management approach on a regular basis and keeps the IC and the Group Trustee apprised of any material climate-related developments through regular updates.

Key activities delegated to the TCFD Working Group include:

- engaging with the investment managers to understand how climate risks are considered in their investment approach
- working with investment managers to disclose relevant climate-related metrics as set out in the TCFD recommendations

Activity for the Group's Year 1 report

The TCFD Working Group met with its investment adviser 11 times to work through the TCFD recommendations and ensure a comprehensive understanding of the climate-related risks and opportunities that affect the Group. In addition, the TCFD Working Group met with each of its investment managers during 2021-2022 to challenge the information provided in respect of the climate-related risks and opportunities set out on pages 11-13 of this report, including how the managers utilised stewardship as a risk management tool.

The key outcomes from these meetings were communicated to the Investment Committee and Group Trustee as required (which both meet at least four times a year).

Changes expected for the Group's Year 2 report

The Group Trustee has spent a considerable amount and time and resource in understanding the Group's climate-related risks and opportunities as part of the Group's first TCFD report. The Group Trustee expects the required time and resource to reduce in future years given that a formal plan is now in place.

With this in mind, the TCFD Working Group will be disbanded following the production of the Group's first TCFD report, with the ongoing responsibilities for maintaining and reporting on the Group's climate change risk management approach to be taken-up by the IC, overseen by the Group Trustee. This includes all ongoing responsibilities currently owned by the TCFD Working Group set out in the Climate-Risk Management Plan on pages 15 and 16.

Role of other advisers or stakeholders deemed relevant

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

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**.**

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 (Atkins Limited, Cavendish Nuclear Limited, National Nuclear Laboratory Limited) and principal (Magnox Limited) employers of the Group.

4. Strategy

Portfolio resilience and scenario analysis

The Group Trustee has undertaken climate change scenario analysis to better understand the impact climate change could have on the Group's assets and liabilities.

The analysis looks at five climate change scenarios. Each scenario considers what might happen when transitioning to a low carbon economy under different conditions. The Group Trustee has chosen these scenarios because it believes that they provide a reasonable range of possible climate change outcomes. These scenarios were developed by Aon and are based on detailed assumptions. They are only illustrative and are subject to considerable uncertainty.

The Group Trustee established a "base case" scenario against which the five climate change scenarios are compared. The table below describes the scenarios that have been modelled, including the projected rise in global temperatures by 2100 in each scenario.

Base scenario	No transition	Disorderly transition	Abrupt transition	Orderly transition	Smooth transition
2ºC – +2.5ºC	**>4ºC**	**<4ºC**	**<2ºC**	**<2ºC**	**<1.5ºC**
Emission reductions start now and continue in a measured way in line with the objectives of the Paris Agreement and the UK government's legally binding commitment to reduce emissions in the UK to net zero by 2050.	No further action is taken to reduce greenhouse gas ("GHG") emissions leading to significant global warming.	Limited action is taken, and insufficient consideration is given to sustainable long-term policies to manage global warming effectively.	Action on climate change is delayed for five years at which point we experience more frequent extreme weather events and governments must address GHG emissions.	Immediate and coordinated action to tackle climate change is taken using carbon taxes and environmental regulation.	Rapid advancement of green technology and government action on climate change which achieves a smooth transition to a low carbon economy.

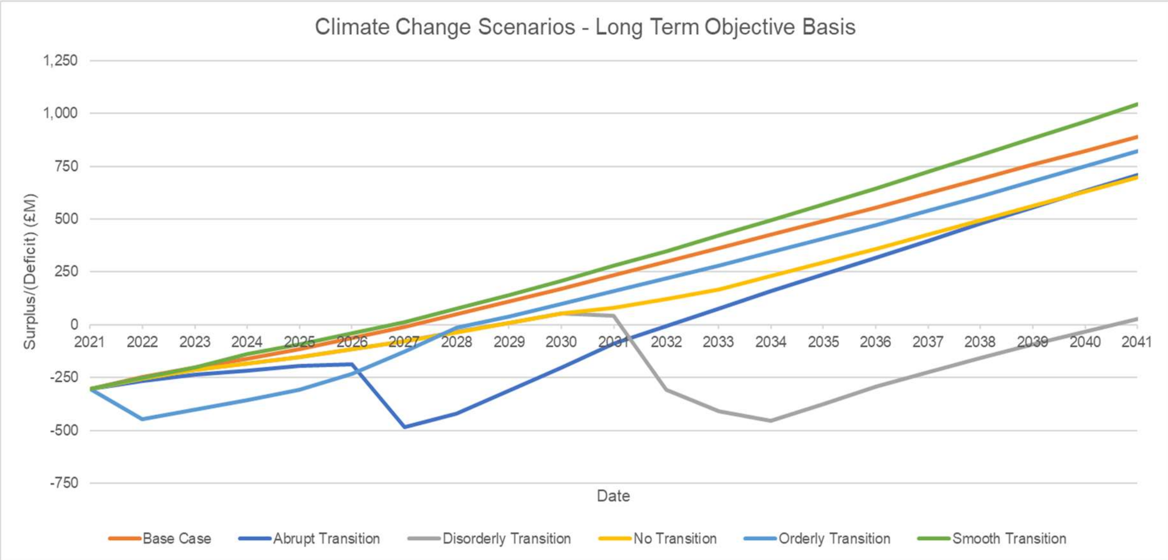
Further information on the scenario modelling can be found in the appendix of this report.

Results from scenario analysis

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. This is principally due to not holding equities, while having large allocations to UK government bonds, for liability management purposes, and inflation-linked investments such as property and infrastructure, which are expected to perform well during a transition to a low carbon economy. The current covenant strength also helps mitigate the risk.

Of the scenarios, the Group Trustee believes a Disorderly Transition scenario to be of most concern, given the potential for this scenario to impact on the SLC Section's funding level within the timeframe of the existing long-term funding plans. Under that scenario, the SLC Section is projected to experience a significant deficit shock within the next decade.

Funding level projections under the climate change scenarios (SLC Section)



Although the Group Trustee has not performed climate change scenario analysis for the other Sections, the overall results at 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.

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.

Assessing climate-related risks and opportunities

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

The Group Trustee has carried out a qualitative risk and opportunities assessment for each fund the Group invested in. From this the Group Trustee has identified which of the climate-related risks and opportunities could have a material impact on the Group.

Climate Risk Assessment

Risk categories

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

Transitional risks are associated with the transition towards a low-carbon economy.
For example, shifts in policy, technology or supply and demand in certain sectors.

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

Ratings

The analysis uses a RAG rating system where:

Red denotes a much higher level of financial exposure compared to the base case.

Amber denotes a slightly higher level of financial exposure compared to the base case.

Green denotes a similar level of financial exposure compared to the base case.

Time horizons

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

- short term: 1-3 years.
- medium term: 4-10 years
- long term: 11-30 years

When deciding the relevant time horizons, the Group Trustee considered the liabilities of the Group and its obligations to pay benefits.

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 including private markets, property and infrastructure. 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.

The Climate Risk Assessment extends to the Group's liabilities and covenants. Deterioration of the Section's funding level will place a strain on the covenant of that particular Section's sponsoring employer to the extent it results in higher deficit repair contributions. It may also require the Group Trustee to re-risk the Section's assets or to extend the time frame for achieving full funding. The Group Trustee therefore recognises that climate change may have an impact on the employer covenants to the Group/Sections. The Group Trustee monitors (with the support of its covenant adviser) the covenant of the Group's sponsoring employers on a regular basis, and maintains a regular dialogue with the Group's sponsoring employers

The Climate Risk Assessment excludes any fund holdings which are less than 2% of the Group's total assets (with the exception of Lindsell Train, Schroders and Ruffer as the analysis captured all of the Group's equity/multi-asset holdings) and also cash.

Climate Risk Assessment – Summary Table

		SLC Section			Cavendish Nuclear Section			NNL Section	Atkins Section	All Sections*	
	Asset class / Category	Property & Infrastructure	Illiquid Credit	Liquid Credit	UK Equity	Diversified Growth Funds	Liquid Credit	Diversified Growth Funds	Annuity	LDI	Covenant
Physical risks	Short term	Low to Medium	Low to Medium	Low to Medium	Low	Low	Low	Low	Low	Low	Low
	Medium term	Low to Medium	Low to Medium	Low to Medium	Low to Medium	Low	Low to Medium	Low	Low	Low	Low
	Long term	Low to Medium	Medium to High	Medium to High	Low to Medium	Medium	Medium to High	Medium	Low	Low	Low
Transition risks	Short term	Low to Medium	Low to Medium	Low to Medium	Low to Medium	Low to Medium	Low to Medium	Low to Medium	Low	Low	Low
	Medium term	Low to High	Low to High	Low to Medium	Medium	Medium	Medium to High	Medium	Low	Low	Low
	Long term	Low to High	Low to High	Low to High	Medium	Low to Medium	Medium to High	Low to Medium	Low	Low	Low

*Asset classes / categories have been assessed separately for each Section but collated together for presentational purposes.

Based on the analysis completed, the Group Trustee believes:

- The managers who engaged with the process provided insightful commentary on (and assessment of) climate risks.
- There were no mandates where significant concerns were raised needing immediate action.
- There were significant differences in the way managers assessed climate risk, which may represent methodological rather than real differences in risk exposure.

Investment Opportunities

Climate-related opportunities

The Group Trustee has identified a range of potential investment opportunities across the assets that the Group invests in. However, the Group Trustee recognises that not every opportunity may be suitable for each Section's investment strategy and is aware that there may be wider financial risks to consider before investing in such opportunities.

The opportunities identified mostly include investing in companies and industries that are set to profit from the transition to a low carbon economy. A summary by asset class is below:

- **Equities -** The scale of the investment required to decarbonise the global economy over the next 40 years is colossal. This ranges from existing technologies such as renewable and nuclear power, electric vehicles and green building materials, to others that remain in development today such as hydrogen and carbon capture and storage. Investment in all of these areas need to be at scale and pace, which will create a plethora of investment opportunities over the years ahead. More equity indices are in the process of being launched to take into account the risks associated with climate change whilst supporting the transition to a low carbon economy. Historically, climate-aware indices have been focused on exclusions (e.g. oil and gas, thermal coal, tar sands) but the market is evolving and there are now more sophisticated index products available.

- **Diversified Growth Funds ("DGF"s)** - One of the Group's DGF managers has an added allocation to the best performing companies involved in new clean energy systems, as the world transitions to lower-carbon energy. This allocation will target global resource emerging technologies and strategic industries integral to the global shift to cleaner energy, seeking opportunities across key value chains, including renewable energy, energy storage and electric vehicles. It will also selectively offer exposure to the underlying materials and technologies required for the transformation to take place. Further opportunities will become apparent as technologies and sectors that benefit from a low carbon economy and the energy transition increase in scale.

- **Property** - In most developed economies, only a small proportion of buildings are built new each year. This creates substantial investment opportunity for investors – through their fund managers – to actively engage with tenants (be that commercial or residential) to improve building performance. The Group can engage to promote more efficient building management by working with property managers and related parties to reduce overall energy use across a portfolio and gather information to target the most cost-efficient mechanism for achieving this goal. Such engagement can help mitigate the transition risk associated with property investments, wherein more stringent energy efficiency standards by governments are likely to be a key policy lever to aid the transition. Engagements can aim to encourage integration of energy efficient technologies into building operating systems or even to press for adoption of low-cost operations strategies (e.g. encouraging tenants to off the lights when empty).

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

- **LDI** - Green gilts provide LDI mandates with a climate related opportunity where the bonds they buy are specifically linked the financing of green initiatives.

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

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

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

5. Risk management

Our process for identifying and assessing climate-related risks

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

1

Qualitative assessment

The first element is a qualitative assessment of climate-related risks and opportunities which is prepared by the Group Trustee's investment adviser and reviewed by the Group Trustee.

2

Quantitative analysis

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

Our process for managing climate related risks

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

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

Training	The Group Trustee receives training on responsible investment to understand how ESG factors, including climate change, could impact the Group's assets and liabilities.
Advisers	The Group Trustee reviews its adviser objectives to ensure advisers have appropriate climate capability, and bring important, relevant and timely climate-related issues to the Group Trustee's attention.
Investment strategy	The Group Trustee ensures investment proposals explicitly consider the impact of climate risks and opportunities and seeks investment opportunities.
Actuarial and covenant	The Group Trustee ensures that actuarial and covenant advice adequately incorporate climate-related risk factors where they are relevant and material.
Managers	The Group Trustee engages with the investment managers to understand how climate risks are considered in their investment approach, and stewardship activities are being undertaken appropriately. This is completed annually alongside a review of the Group's Engagement Policy Implementation Statement. The IC also questions managers on ESG matters as part of its review of managers on an ad-hoc basis.

Climate-Risk Management Plan

Activity	Actions	Owner	Input	Frequency of review	First year schedule
Governance					
Framework	Agree Framework (Governance Statement and Climate Risk Management Plan)	Group Trustee	TCFD Working Group	One off	Agreed by the Group Trustee on 14 September 2022 by email and subsequently ratified at the 27 October 2022 Trustee Board Meeting.
Training	Receive training on climate-related issues	Group Trustee	Advisers	Annual	Schedule within existing training plan (where required).
Advisers	Review adviser objectives to ensure advisers have appropriate climate capability, and bring important, relevant and timely climate-related issues to the Group Trustee's attention	Group Trustee	Advisers	Annual	Incorporate climate objectives into existing annual review.
Investment strategy	Ensure investment proposals explicitly consider the impact of climate risks and opportunities, and seek investment opportunities.	TCFD Working Group*	Investment adviser	Ongoing	Aon to factor climate-related considerations into future investment proposals and advice.
Actuarial and covenant	Ensure that actuarial and covenant advice adequately incorporate climate-related risk factors where they are relevant and material.	TCFD Working Group*	Group Actuary, Covenant adviser	Triennial	Considered as part of the 2022 actuarial valuation and to be maintained as a consideration in future actuarial valuations.
Managers	Engage with the fund managers to understand how climate risks are considered in their investment approach, and stewardship activities are being undertaken appropriately	TCFD Working Group*	Fund managers, Investment adviser	Annual	Completed.

Strategy					
Climate Scenarios	Undertake quantitative scenario analysis to understand the impact of climate related risks	TCFD Working Group*	Investment adviser	First year, Triennial thereafter	Completed.
Risks and opportunities	Identify the climate-related risks and opportunities for investment & funding strategy and assess their likelihood and impact.	TCFD Working Group*	Advisers	Annual	Completed.
Risk prioritisation	Consider the prioritisation of those climate-related risks, and the management of the most significant in terms of potential loss and likelihood.	TCFD Working Group*	Advisers	Annual	Completed. No material risks identified.
Group documentation	Include consideration of climate-related risks in the Group's other risk processes and documents, such as the risk register and the SIPs, and regularly review these.	TCFD Working Group*	Advisers	One-off, ongoing thereafter	Review as part of the IC's regular review of the Group's SIPs. Consider inclusion of climate-related risks into risk register as part of regular review.
Covenant	Seek to understand the climate-related risks to the employers over the short, medium and long term.	Group Trustee, TCFD Working Group*	Covenant adviser	Annual	Considered as part of the 2022 actuarial valuation and to be maintained as a consideration in future actuarial valuations.
Metrics and Targets					
Metrics	Obtain data for metrics	TCFD Working Group*	Investment adviser, fund managers	Annual	Completed
Targets	Review continued appropriateness of metrics	TCFD Working Group*	Investment adviser	Annual	Completed

***Note:** The TCFD Working Group will disband once the Group's first TCFD report is published. From that point, the actions currently owned by the TCFD Working Group in the above table will be undertaken by the IC.

As part of the assessment of the managers' policies and processes to identify and assess climate related risks and opportunities, the Group Trustee has posed:

- A due diligence questionnaire asking its investment managers to identify the most significant climate-related risks and opportunities affecting the Group, and to quantify these risks as described on page 10 of this report; and

- The "top" questions as outlined in guidance from the Pensions Climate Risk Industry Group[2] ("PCRIG") to its investment managers, supplemented by some of its own questions. The questions were designed to assist the Group Trustee with its assessment of each managers' capabilities and approach to climate management and focused on areas such as TCFD reporting, managers ability to conduct climate scenario analysis, engagement and escalation policies, managers ability to provide carbon related data and align their strategies to a particular temperature level.

All the Group's investment managers displayed some understanding of climate related risks and most of the Group's managers can provide carbon intensity and carbon footprint data on their investments.

Of the Group's 21 investment managers:

- Thirteen managers completed their TCFD reporting in line with TCFD guidance and made their reports publicly available;

- Eighteen managers are signatories to various investor-led industry initiatives related to addressing climate change; and

- Twelve managers have made a formal science-based temperature alignment or net zero commitment (including those that are signatories to the Net Zero Asset Management initiative (NZAM).

The Group Trustee views the results from the questionnaire as a base line for future TCFD reporting years. Over time, the Group Trustee expects to see improvements from its managers in respect of the availability and quality of data and evidence that action is being taken to reduce carbon emissions.

[2] Aligning your pension scheme with the TCFD recommendations: Part II - Trustee governance, strategy and risk management: how to integrate and disclose climate-related risks (publishing.service.gov.uk)

6. Metrics and targets

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.

The Group Trustee has agreed that it's investment adviser, Aon, will collect information from the Group's managers on their greenhouse gas emissions. This information will be used to calculate climate-related metrics for the Group's portfolio. The Group's metrics are as follows:

Total Greenhouse Gas emissions (p.a.)	551,921 tons CO_2e	The total greenhouse gas ("GHG") emissions associated with the portfolio. It is an absolute measure of carbon output from the Group's investments
Carbon footprint (p.a.)	111[3] tons CO_2e/£m	Carbon footprint is an intensity measure of emissions that takes the total GHG emissions and normalises it to take account of the size of the investment made.
Data quality (p.a.)	63%	A measure of the proportion of the portfolio that the Group Trustee has high quality data for. For this report, due to the lack of data availability on which assessments could be made, the Group Trustee has focussed on the data coverage; in future it will also consider the % of emissions which are estimated / verified / reported.
Binary Target Measurement (p.a.)	48%	A measure of alignment of portfolio with a given climate outcome, based on the % of investments in that portfolio with a declared net zero or Paris-aligned target that is SBTi validated.

Measuring greenhouse gas emissions

Measuring greenhouse gas emissions is a key means to enable pension schemes to assess their 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 and 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	Scope 2	Scope 3
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	These are the indirect emissions from the generation of electricity purchased and used by an organisation	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

[3] Figure is based on the full leveraged gilt exposure for LDI assets.

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.

The table below shows a more detailed breakdown of the scope 1 and scope 2 emissions from each Section of the Group (where available).

Section	Total material assets as at 31 March 2022 (£m)	Carbon Footprint (tCO2e/£m invested)	Total GHG Emissions calculated (Tonnes CO2e)[1]	Data Quality (%)	Binary Target Measurements (%)
SLC Section	3,264.6 (95.2%)	111.0	526,847.7	61.9%	45.8%
Cavendish Nuclear Section	83.2 (2.4%)	128.8	15,352.7	79.6%	80.1%
Atkins Section	67.4 (2.0%)	107.1	7,216.6	95.5%	100.0%
NNL Section	12.9 (0.4%)	118.8	2,504.2	80.7%	64.8%
Total Group	**3,428.1 (100.0%)**	**111.4**	**551,921.2**	**63.0%**	**47.8%**

Source: Investment managers. Investment managers provided carbon emissions data in line with the Investment Association's ("IA") Carbon Emissions Template (CET)[4]. Where managers provided information in USD terms, Aon converted it to GBP terms using the applicable exchange rate as at 31 March 2022. Figures may not sum due to rounding. Notes: (1) Total GHG emissions for the LDI assets is based on the leveraged gilt exposure.

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

Asset Class	Total material assets as at 31 March 2022 (£m)	Carbon Footprint (tCO2e/£m invested)	Total GHG Emissions calculated (Tonnes CO2e)[1]	Data Quality (%)	Binary Target Measurements (%)
Equities	6.7 (0.2%)	7.6	49.0	96.5%	97.9%
Diversified Growth Fund (DGF)	17.1 (0.5%)	71.6	499.0	57.0%	56.6%
Property & Infrastructure	990.0 (28.9%)	19.7	18,060.4	36.3%	6.4%
Liquid Credit	577.4 (16.8%)	94.1	31,986.5	54.3%	14.5%
Illiquid Credit	362.7 (10.6%)	Currently Unavailable			0.0%
LDI	1,432.1 (41.8%)	168.4	498,358.3	100.0%	100.0%
Annuity[2]	42.1 (1.2%)	75.9	2,968.1	92.8%	100.0%
Total Group	**3,428.1 (100.0%)**	**111.4**	**551,921.2**	**63.0%**	**47.8%**

Source: Investment managers. Investment managers provided carbon emissions data in line with the Carbon Emissions Template (CET). Where managers provided information in USD terms, Aon converted it to GBP terms using the applicable exchange rate as at 31 March 2022. Figures may not sum due to rounding. Notes: (1) Total GHG emissions for the LDI assets is based on the leveraged gilt exposure. (2) The annuity manager, Canada Life, provided climate-related metrics as at 31 December 2021.

Key observations

Whilst all managers responded, not all of these, as expected, were in a position to report on carbon and portfolio alignment metrics as at 31 March 2022. The majority of assets have no net zero or Paris-aligned targets; this is an industry-wide issue.

The data quality from the Group's equity managers was much higher than the Group's other growth asset classes, reflecting the available of data from listed companies who also have TCFD disclosure

[4] Full information on the CET, including all underlying methodology can be found in the relevant section of the IA's Data Delivery Framework: Data Delivery Frameworks | The Investment Association (theia.org)

requirements. Due to variability in the methodology used to calculate carbon-related metrics for LDI, the reported emissions of these assets may vary significantly over time.

There was a significant amount of variability in the data quality of the remaining assets, with the availability of data in private markets being particularly poor.

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. Given the coverage for the Group's carbon metrics data at the current time, the Group Trustee has agreed to set a target of improving Data Quality for the Group.

The Group Trustee believes that without meaningful data from the investment managers, it is difficult for the Group Trustee to measure its climate-risk exposure. Therefore, in setting an ambitious target to improve Data Quality, the Group Trustee expects the data received from the Group's investment managers to improve thereby providing better insights on the climate-related risks and opportunities impacting the Group. This will in turn enable the Group Trustee to make more informed investment decisions. In addition, the Group Trustee expects better Data Quality to enable them to consider other targets in future, such as a reduction in carbon emissions, a dedicated net-zero goal, or alignment with the objectives of the Paris Agreement.

Based on the Group Trustee's observations of the Data Quality summarised in the previous section, **the Group Trustee has agreed to achieve a Data Quality target of 90% for scope 1, 2 and 3 emissions across all of the Group's asset classes.** In doing so, the Group Trustee has agreed to focus initially on improving the Data Quality for asset classes which have the least data coverage, such as illiquid credit, property and infrastructure. The Group Trustee has therefore agreed targets for each asset class in three years' time as follows:

Asset Class	Current Data Quality (%)	3-year Data Quality target (%)
Equities	96.5%	c.100.0%
Diversified Growth Fund (DGF)	57.0%	c.100.0%[1]
Property & Infrastructure	36.3%	c.65.0%
Liquid Credit	54.3%	c.100.0%[1]
Illiquid Credit	0.0%	c.50.0%
LDI	100.0%	100.0%
Annuity	92.8%	c.100.0%
Total	**63.0%**	**c.90.0%**

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

Progress against the target will be measured and reported on each year, which the Group Trustee expect to improve through continued engagement with the managers.

Glossary

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

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.[7]

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.[8]

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.[9]

Climate-related opportunity refers to the potential positive impacts related to climate change on an organisation. Efforts to mitigate and adapt to climate change can produce opportunities for organisations, such as through resource efficiency and cost savings, the adoption and utilization of low-emission energy sources, the development of new products and services, and building resilience along the supply chain. Climate-related opportunities will vary depending on the region, market, and industry in which an organisation operates.[10]

[5] A. Cadbury, Report of the Committee on the Financial Aspects of Corporate Governance, London, 1992.
[6] OECD, G20/OECD Principles of Corporate Governance, OECD Publishing, Paris, 2015.
[7] TCFD, Recommendations of the Task Force on Climate-related Financial Disclosures, 2017
[8] Ibid
[9] Ibid
[10] Ibid

Greenhouse gas emissions ("GHG") scope levels[11]	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.[12]
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).[13]
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.[14]
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.[15]

[11] World Resources Institute and World Business Council for Sustainable Development, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), March 2004.
[12] PCC, Climate Change 2014 Mitigation of Climate Change, Cambridge University Press, 2014.
[13] TCFD, Recommendations of the Task Force on Climate-related Financial Disclosures, 2017
[14] Ibid
[15] Energy Saving Trust, What is net zero and how can we get there? - Energy Saving Trust, October 2021

Appendix – climate scenario modelling assumptions

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

The scenario modelling assumes a deterministic projection of assets and liabilities on the Long-Term Objective basis, using standard actuarial techniques to discount and project the SLC Section's expected future cashflows.

i. It models the full yield curve as this allows for a more accurate treatment of the liabilities and more realistic modelling of the future distribution of interest rates and inflation.
ii. The modelling parameters vary deterministically for each scenario.

The liability projections are approximate, but they are appropriate for this analysis. However, a full actuarial valuation carried out at the same date may produce a materially different result.

The scenario modelling focusses on the impact of climate change on the SLC Section's assets and liabilities. It does not consider the impact climate change could have on the covenant risk or mortality risk.

The scenario modelling reflects market conditions and market views at the time of the analysis. The model may produce different results for the same strategy under different market conditions.

Key Assumptions

	Temperature risk by 2100	**Reach net zero by**	**Carbon price (2030/2050)**	**Introduction of environmental regulation**
No transition	>4C	After 2050	$40/$50	None
Disorderly transition	<3C	After 2050	$65/$340	Late and aggressive
Abrupt transition	1.5C – 2C	2050	$135/$280	Aggressive
Orderly transition	1.3C – 2C	2050	£100/$215	Coordinated
Smooth transition	<1.5C	2045	$80/$165	High coordination

The physical costs of climate change are eventually expected to be transferred to the individuals and companies generating the GHG emissions. The carbon price represents the cost in US Dollars per ton of GHG emissions that are associated with the physical impacts of climate change, and so can be considered as the price individuals and companies pay for GHG emissions.

Carbon prices are expected to increase in line with the associated costs of addressing the physical impacts of climate change. This may happen through "green" policies such as taxation, incentives and levies, as well as increased expenditure by global governments.

The scenarios modelled assume varying degrees of "green" policies and government expenditure:

- Carbon prices are lowest in the no transition scenario, in which no new climate policies are assumed to be implemented beyond 2021.
- Under the orderly transition, immediate, coordinated global action is taken to aggressively tackle climate change, which pushes up climate prices in the short term.
- Long term carbon prices are highest in the disorderly and abrupt transition scenarios, reflecting the delayed actions taken and consideration to sustainable long-term policies, which are less effective and more costly to implement in future.