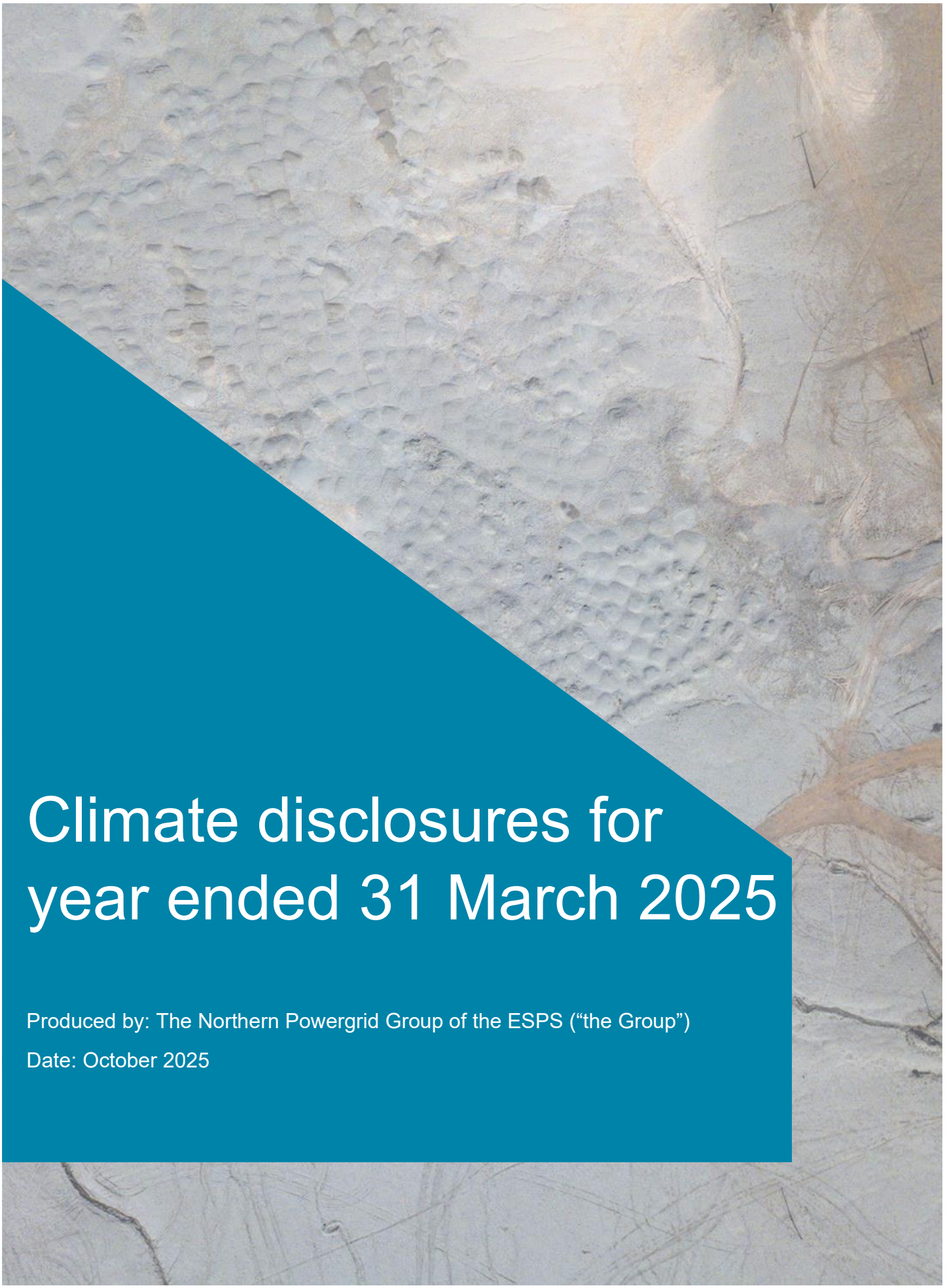
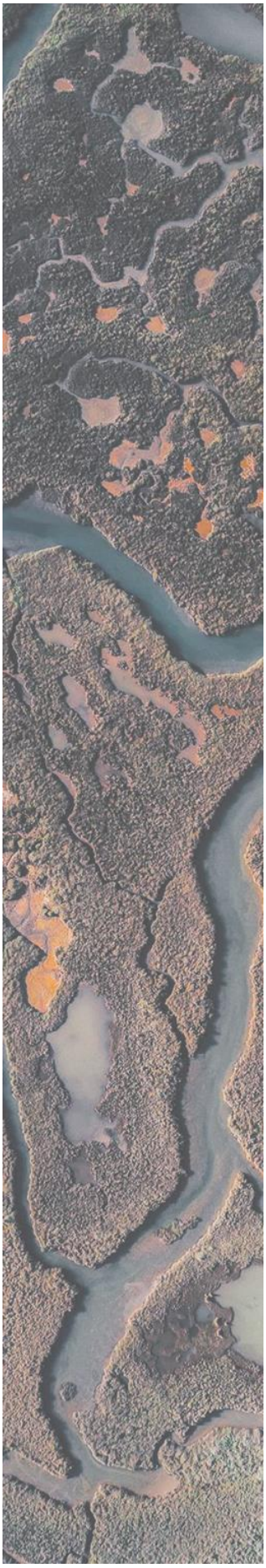


Climate disclosures for year ended 31 March 2025

Produced by: The Northern Powergrid Group of the ESPS (“the Group”)

Date: October 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 us to mitigate the risks and take advantage of any opportunities.

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

Better climate reporting should lead to better-informed decision-making on climate-related risks. In addition, 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 trustees of the Group (the "Group Trustees"). It is the third annual climate-related disclosure for the Group. It relates to the year ending 31 March 2025 and is aligned to the Taskforce for Climate-related Financial Disclosures ("TCFD") framework.

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 £32bn[1]. Each Group has its own Trustees who have 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 Trustees have exclusive responsibility for asset ownership and custody, have administrative control of assets, and implement the investment strategy decisions made by each Group's Trustees.

This report relates to the Northern Powergrid Group only. The contents of this report have been shared with the Scheme Trustee to help it produce an equivalent report for the ESPS. 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 Trustees in accordance with the regulations set out under The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 (the "Regulations").

[1] 31 March 2024

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Executive summary

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

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

Our overarching conclusion from preparing this report is that the portfolio is resilient to climate change and the Group's investment managers are properly allowing for climate-related risks and opportunities.

Overview of the Group

The Group's investment portfolio comprises a range of different asset classes including equities, bonds, property, and liability driven investments ("LDI"). Within this report we consider the impact of climate-related risks on those asset classes, the investment strategy, and the funding of the Group.

The Additional Voluntary Contributions ("AVCs") within the Group are small in size compared to the Group's defined benefit liabilities and, therefore, have been deemed to be immaterial for the purposes of this report.

The Group Trustees have been supported by their investment adviser, Aon Investments Limited ("Aon"), in producing this report.

Governance

- The Group is a Defined Benefit (DB) pension scheme with AVCs.
- The Group has an asset portfolio of £990m as at 31 December 2024 which is invested across a range of asset classes including equities, alternatives, and liability driven investments ("LDI").
- We, the Group Trustees, are ultimately responsible for the oversight of all strategic matters relating to the Group, including climate-related risks and opportunities.

Strategy

- Our qualitative analysis of climate-related risks showed that the asset classes in which the Group invests are expected to be impacted to some degree, and that over time the risk exposure is expected to increase.
- We have also identified potential climate-related opportunities for the Group's asset classes.

We carried out climate change scenario analysis in December 2023 to better understand the impact climate change could have on the Group's assets and liabilities. We have reviewed this existing analysis and concluded that it is still applicable for our portfolio.

The climate scenario analysis shows that the Group has a good degree of resilience against climate-related risks. The resilience is primarily driven by the high level of diversification in the

asset classes invested in, low risk in the investment strategy, and high levels of liability hedging in place.

Risk Management

- We have established a process to identify, assess and manage the Group's climate-related risks and opportunities. This is integrated into the Group's wider risk management framework.
- Our Climate Risk Management framework is set out on pages 23-28, which supports the ongoing management of climate-related risks and opportunities. Alongside this, the Group Trustees undertake periodic 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 this training over the last Group year are included in the Governance Section and Risk Management Section.

Metrics and Targets

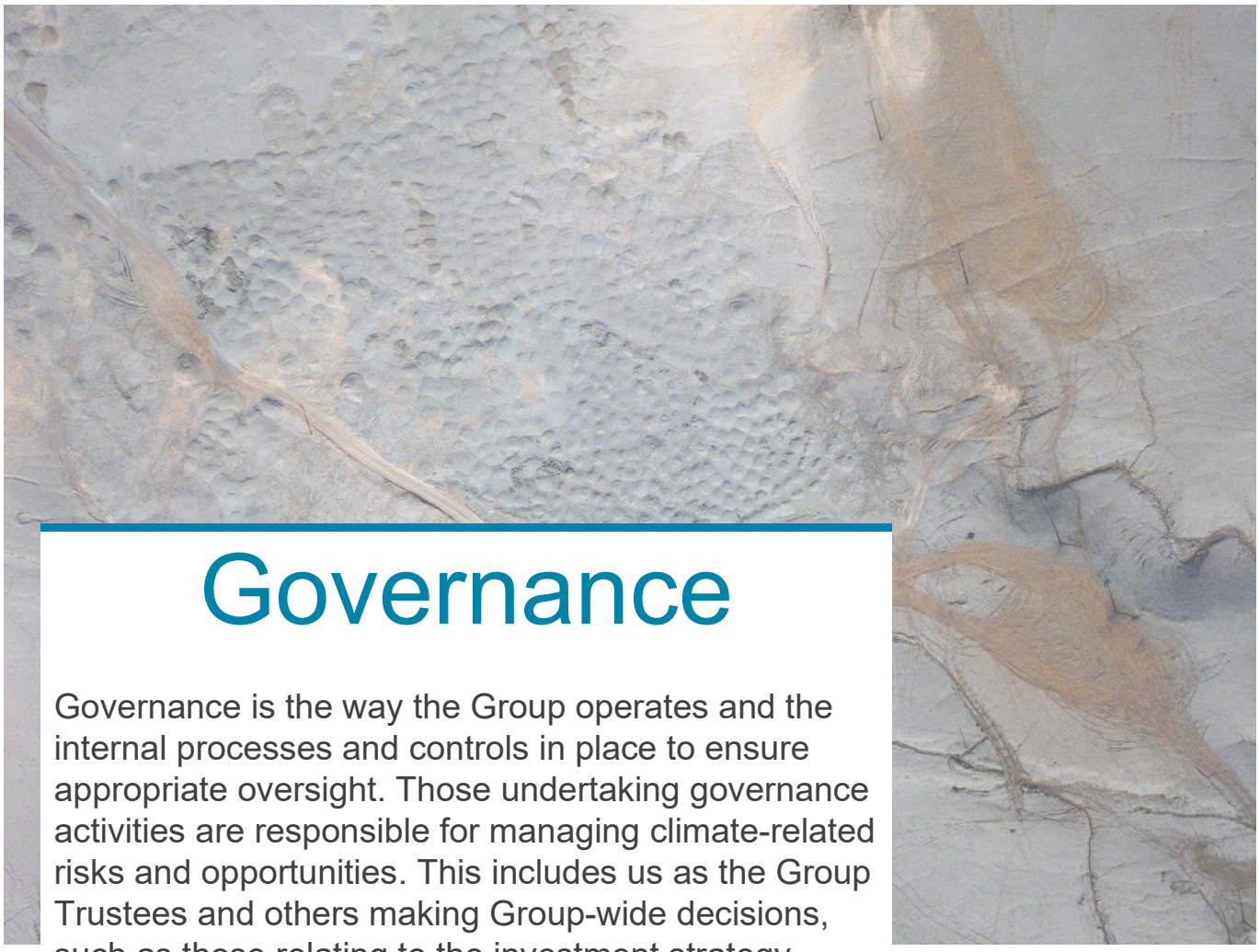
We have disclosed information on four climate-related metrics for the Group:

- Total Greenhouse Gas (GHG) Emissions.
- Carbon Footprint.
- Data Coverage.
- Portion of the portfolio with either declared net zero or Paris-aligned targets.

The Group Trustees have set a target for the Group to increase data coverage across the portfolio to 90% by 2028 for scope 1, 2 and 3 emissions. Data coverage has remained consistent over the year due to the inclusion of new data for a fund that previously did not provide emissions data. This can therefore be considered as an improvement to the data availability of the portfolio. More information can be found in the Targets section of the report set out on pages 34-35.

We hope you enjoy reading this report and understanding more about how we are managing climate-related risks and opportunities within the Group. Please see the Glossary at the end of this report for more information on some of the terms we have used.

on behalf of the Group Trustees of the Northern Powergrid Group of the ESPS.



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. This includes us as the Group Trustees and others making Group-wide decisions, such as those relating to the investment strategy, funding, and the ability of the sponsoring employer to support the Group.

Our Group's governance

As Group Trustees, we are 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.

We agreed our climate-related beliefs and our approach to managing climate change risk. These are set out in the Group's Statement of Investment Principles ("SIP"), which is reviewed annually.

Our climate beliefs

We believe that the risks associated with climate change could have a materially detrimental impact on the Group's investment returns.

We also believe that climate-related factors may create investment opportunities. We will seek to capture such opportunities through our investment portfolio where it is appropriately aligned with our strategic objectives and fiduciary duty.

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

We receive regular training on climate-related issues to ensure that we have the appropriate knowledge and understanding to support good decision-making.

We are ultimately responsible for oversight of all strategic matters related to the Group and for making Group wide decisions. This includes approval of the governance and management framework relating to ESG considerations and climate-related risks and opportunities.

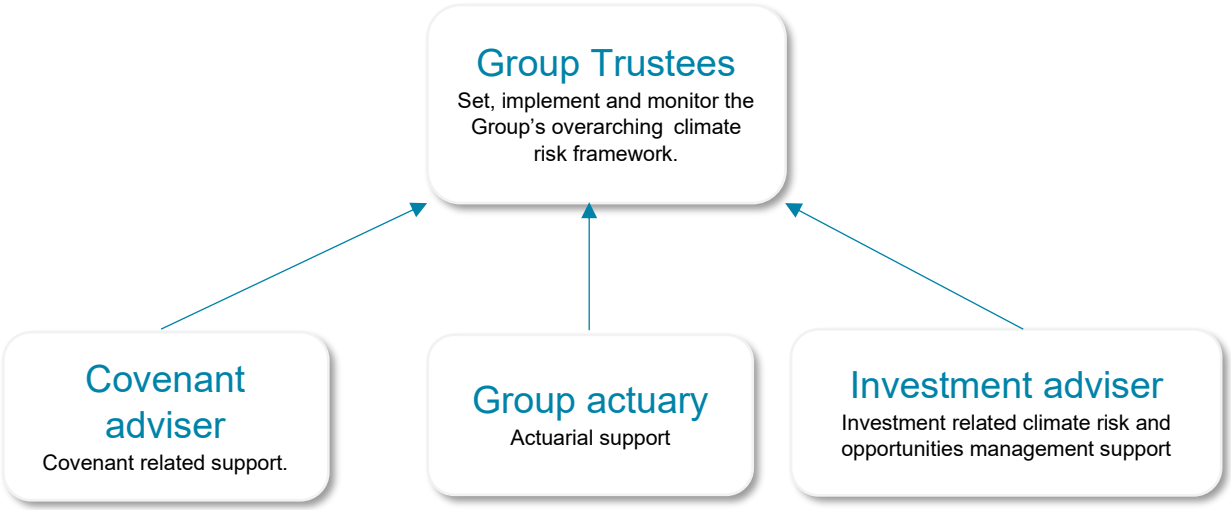
Group Trustees' update

During the year to 31 March 2025, the Group Trustees conducted a Responsible Investment (RI) survey to identify and articulate their most recent RI beliefs. The results of the survey have been reviewed by the Group Trustees and agreed upon as representative of the Group's beliefs.

The Group Trustees agreed that no changes to the Group's RI policy were needed but they will consider training on ESG themes such as biodiversity and nature risks, and social factors to better understand. the potential implications on the investment portfolio and support ongoing engagement with the Group's investment managers as deemed necessary.

Role of the Group Trustees

We illustrate our Group's structure below:



With support from our advisers, we seek to ensure that investment decisions include consideration of climate-related risks and opportunities within the context of the Group's wider risk and return requirements and are consistent with the RI policy as set out in the SIP.

We regularly monitor and review progress against the Group's climate change risk management objectives and any material developments.

Key climate-related activities include:

- Ensuring investment proposals explicitly consider the impact of climate risks and opportunities;
- Engaging with the investment managers to understand how climate risks are considered in their investment approach; and
- Working with the investment Adviser and investment managers to ensure that stewardship activities are being undertaken appropriately on the Group's behalf and relevant climate-related metrics as set out in the TCFD recommendations are disclosed.

Group Trustees' update

The Group Trustees have spent a considerable amount of time and resource in understanding the Group's climate-related risks and opportunities to be able to provide a comprehensive TCFD report.

This has been carried out through a series of engagements with investment managers and a review of climate-related information associated with the investment portfolio.

The Group Trustees expect the required time and resource to reduce in future years.

How we work with our advisors

We expect our advisers and investment managers to bring important climate-related issues and developments to our attention in a timely manner. We also expect our advisers and investment managers to have the appropriate knowledge on climate-related matters and seek to question or challenge information received from third-parties for reasonableness in line with our fiduciary duties. Such discussions are recorded in the minutes of meetings.

We review the quality of our advisers' provision of advice and support on climate-related issues annually. For our investment adviser this is part of the annual qualitative review of their objectives in respect of the service they offer to the Group.

Investment Adviser – Aon provides investment-related strategic advice and support on our climate-related risks and opportunities. This includes regular training and updates on climate-related issues, climate change scenario modelling and ESG ratings for investment managers. Aon have supported us on climate-related matters at numerous Group Trustee Board meetings as well as at meetings with our investment managers.

Aon has qualifications and expertise in this area, including their participation in cross-industry initiatives and being a signatory of both the Principles for Responsible Investment (PRI) and the UK Stewardship Code.

Group Actuary - the Group Actuary, Philip Dennis, helps us assess the potential impact of climate-related risks on the Group's funding where relevant.

As part of its assessment of its advisers' climate-related competence, the Group Trustees 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 Trustees' covenant adviser, Aon, helps the Group Trustees understand the potential impact of climate change risk on the covenant of the Principal Employer (Northern Electric plc) and each of the Participating Employers (Cal Energy Resources Limited, Integrated Utility Services Limited, Northern Powergrid (Northeast) plc, Vehicle Lease and Service Limited, Northern Powergrid (Yorkshire) plc.

As part of covenant advice sought, the Group Trustees 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 Trustees will seek information from the covenant adviser regarding its credentials in assessing climate-related factors.

Group Trustees' update

Throughout the year, the Group Trustees have met with their investment adviser to ensure that they are meeting the regulatory requirements and obligations expected from them with regards to reporting on climate-related risks and opportunities.

The TCFD report, SIP, RI Policy and Engagement Policy Implementation Statement (EPIS) all form evidence of the governance that the Group Trustees have in place.

The Group Trustees also receive a Responsible Investment dashboard that is updated annually and provides visibility of the climate-related risk credentials of the Group's investment managers to support further engagement activity.

Strategy

Assessing the climate-related risks and opportunities associated with the Group's chosen investment strategy is key to understanding the impact that climate change could have on the Group in the future.

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

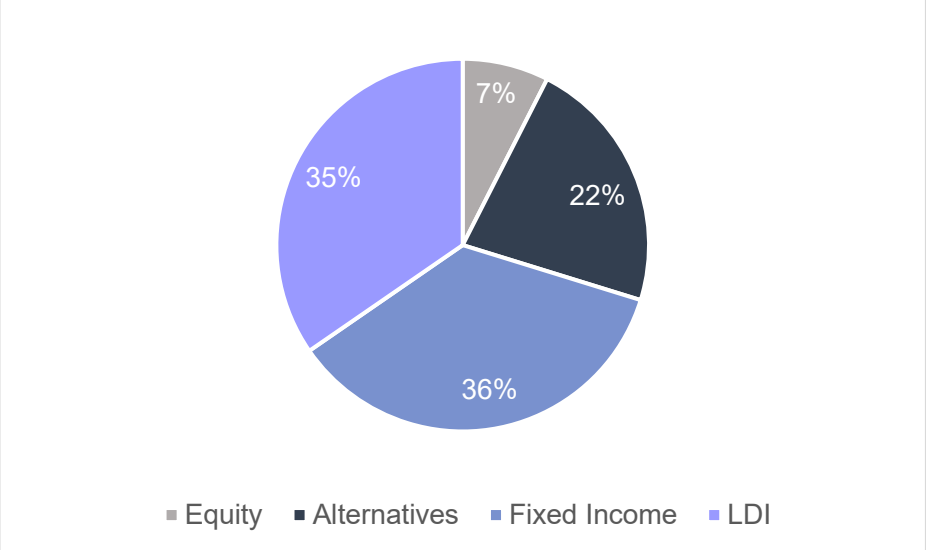
We carried out a qualitative risk assessment of the asset classes in which the Group is invested. From this, we identified which climate-related risks could have a material impact on the Group and identified suitable climate-related opportunities. Recent engagements with our investment managers show that the climate-related risks and opportunities have not changed significantly from those reported last year.

For this assessment, we surveyed our investment managers asking them to rate the climate-related risks and opportunities they believe their fund(s) is (are) exposed to. We will continue to engage with these managers, and we expect further improvements on how risks and opportunities are assessed to follow in future.

Our investments

The Group's investment portfolio is diversified across a number of strategies including equities, alternatives and liability matching assets.

The Group's asset allocation is as follows:



Asset allocation as at 31 December 2024. Alternatives include listed infrastructure, property and Insurance-Linked Securities ("ILS") funds. Graph excludes cash outside the LGIM SLF which is under 1% and not considered material.

Group Trustees' update

In 2023, we asked our investment managers to assess their exposure to climate-related risks for the funds the Group is invested in.

This year, we asked our managers to review their risk assessments and update them if necessary.

Our qualitative risk assessment is based on the latest information from the managers.

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

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

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

Climate-related risk assessment

Key conclusions

Overall, we are comfortable with the level of understanding that our managers have demonstrated in their responses to questions about climate-related risks. We are also comfortable that the risks posed to the Group are sufficiently mitigated against and/or taken into consideration.

Diversification across asset classes, sectors and regions is important to manage climate-related physical and transition risks for the Group. Investment managers take this into consideration in the construction of their respective risk mitigation frameworks.

The results of this year's analysis are in line with last year. Incremental differences are noted in each section.

The following tables summarise the physical and transition risk ratings for each asset class the Group is invested in. Each table is based on ratings and commentary provided by the manager(s).

Equities (7% of Portfolio)

- LGIM Global Passive Equity Index Funds

	Physical risks		Transition risks			
Time horizon	Acute	Chronic	*Policy and Legal*	Technology	Market	Reputation
Short (1-3 years)	Low	Low	Medium	Low	Low	Low
Medium (4-10 years)	Medium	Low	High	Medium	Medium	Medium
Long (11-20 years)	Medium	Medium	High	Medium	High	Medium

Physical Risks – physical risks are not expected to be material in the short term. Over time however, these risks are expected to become more prevalent as extreme weather events increase alongside their severity and frequency.

Transition Risks – transition risks are expected to increase in the medium and long term as pressure increases for companies not transitioning to a low carbon economy. Policy and legal risks are a particularly high risk for many companies due to the increased cost of changing regulations. These findings are in line with previous years.

Alternatives (22% of Portfolio)

- CBRE Global Investors UK Property PAIF
- Threadneedle Property Unit Trust
- Securis Non-Life Fund (ILS)
- LGIM Listed Infrastructure

Physical risks		
Time horizon	Acute	Chronic
Short (1-3 years)	Low to Medium	Low to Medium
Medium (4-10 years)	Low to Medium	Low to Medium
Long (11-20 years)	Low to Medium	Low to Medium

Transition risks			
Policy and Legal	Technology	Market	Reputation
Low to Medium	Low to Medium	Low	Low
Medium to High	Low to Medium	Low to Medium	Low to Medium
Medium to High	Low to Medium	Low to High	Low to Medium

Physical Risks – the materiality of physical risks vary across timeframes. Property funds are especially affected by extreme weather events and unpredictable climate events.

Transition Risks – The transition risks gradually increase over time. This is due to the increased regulatory pressures affecting real estate, changing consumer demands in the market, and potential reputational damage from not transitioning to a low carbon economy.

The results of the alternatives analysis are in line with the previous report. The Threadneedle Property Unit Trust experienced a marginal decrease in long term transition risks, Securis ILS experienced a minor decrease in the short-term policy risks.

Fixed Income – non LDI (36% of Portfolio)

- Insight Bond Plus
- BlackRock Absolute Return Bond Fund
- LGIM Sterling Liquidity Fund

	Physical risks		Transition risks			
Time horizon	Acute	Chronic	*Policy and Legal*	Technology	Market	Reputation
Short (1-3 years)	Low	Low	Low	Low	Low	Low
Medium (4-10 years)	Low	Low	Low to Medium	Low	Low to Medium	Low
Long (11-20 years)	Low to Medium	Low	Low to Medium	Low to Medium	Low to Medium	Low

Physical Risks – corporate bonds remain relatively unaffected from physical risks due to the risk mitigation processes that managers build into their portfolios. Some physical risks from extreme weather events and changes to the severity and frequency of these events are already being felt today. However, risks are relatively geographically concentrated.

Transition Risks – transition risks remain low throughout the timeframes. Managers noted that they consider such risks in their ESG risk analysis frameworks when constructing funds.

The results of the alternatives analysis are in line with the previous report. The LGIM Sterling Liquidity Fund received a slightly lower long term physical risk rating as part of the manager's view that physical risks are unlikely to affect this fund.

LDI (35% of Portfolio)

- BlackRock Passive QIAIF

Physical risks			Transition risks			
Time horizon	Acute	Chronic	*Policy and Legal*	Technology	Market	Reputation
Short (1-3 years)	Low	Low	Low	Low	Low	N/A
Medium (4-10 years)	Low	Low	Low	Low	Low	N/A
Long (11-20 years)	Low	Low	Low	Low	Low	N/A

Physical and Transition Risks – The LDI portfolio is resilient across all time horizons against the effects of both physical and transition risks associated with climate change and is, therefore, classed as low risk. The manager assigns risk ratings to securities depending on how the holdings today are exposed to physical and transition risks in different scenarios within the manager's underlying proprietary climate risk models.

The results of the LDI analysis are identical to the previous report.

Climate-related opportunities

We have identified some climate-related opportunities which may be suitable for the Group across the short, medium, and long-term time horizons.

These investment opportunities are considered on a case-by-case basis. However, at the time of writing, the Group's investment strategy demonstrates resilience to climate-related risks and no further action has been taken with regards to the climate opportunities below.

The opportunities identified by managers follow similar themes to the previous year, including green bonds, innovative climate technologies and improving the energy efficiency of real estate properties.

Equity	The manager noted opportunities stemming from renewables and associated climate technologies. Low carbon technologies may lead to many innovative solutions such as carbon capture and electric vehicles, which will require investment.
Alternatives	Property 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. ▪ Reducing reliance of fossil fuel energy and potential susceptibility shifts in energy policy, taxes and levies. ▪ Reputational gains of aligning to the Paris Commitment.
Fixed Income / LDI	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. These are funds that promote environmental or social characteristics.

Source: Managers

How resilient is the Group to climate change?

We carried out climate change scenario analysis in December 2023 to better understand the impact climate change could have on the Group's assets and liabilities. We have reviewed this existing analysis and concluded that is still applicable for our portfolio.

The analysis considers three climate change scenarios, designed to 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 Group when transitioning to a low carbon economy under different temperature-related environmental conditions. The scenarios aim to illustrate the climate-related risks the Group is currently exposed to, highlighting areas where risk mitigation could be achieved through changing the investment portfolio. These scenarios were developed by Aon and are based on detailed assumptions. They are only illustrative and are subject to considerable uncertainty.

Other relevant issues such as governance, costs, and implementation (including manager selection and due diligence) must be considered when making changes to the investment strategy.	Investment risk is captured in the deviance from the base case scenario, but this is not the only risk that the Group faces. Other risks include covenant risk, longevity risk, timing of member options, basis risks and operational risks.

Group Trustees' update

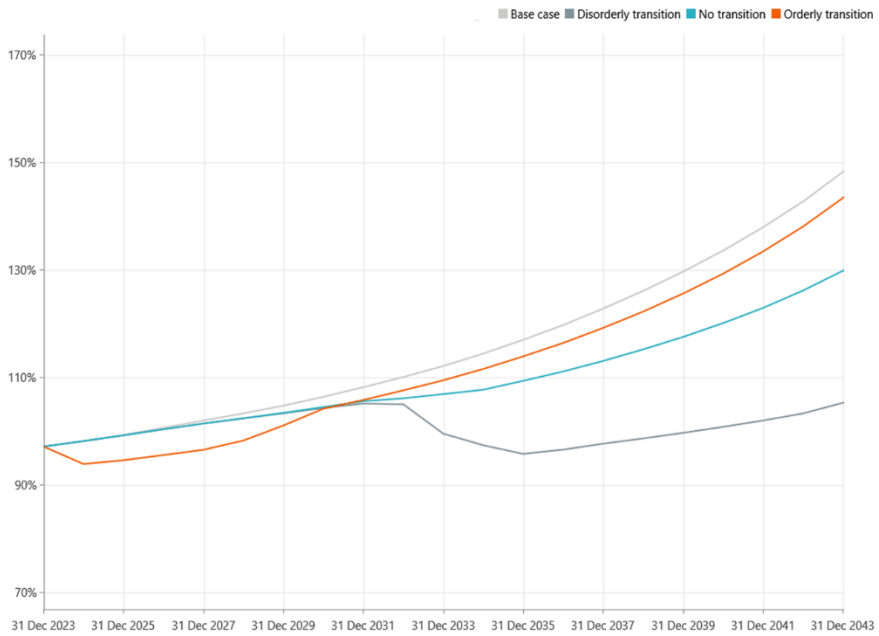
Under the Regulations, climate scenario analysis must be carried out at least every 3 years, with an annual review in interim years. Circumstances which may require the climate scenario analysis to be refreshed within the 3-year window include:

- a 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 Trustees reviewed the climate scenario analysis completed as at 31 December 2023 and have decided not to refresh the analysis, given no material changes to the above conditions.

Impact on the funding level

The Group Trustees reviewed scenario analysis which considered the potential impacts of climate change on the Group's strategic asset allocation and liabilities (measured on the Gilts+0.3% basis) and, therefore, its funding position. The analysis is shown in the chart below.



Source: Aon. Effective date of the impact assessment is 31 December 2023

What does the chart show?

The chart shows what might happen to the Group'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 Group 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.

Key conclusions

Overall, we are comfortable with the level of resilience exhibited by the investment portfolio, and we are not going to make any changes to the Group's investment strategy as a result of this analysis.

The Group's investment portfolio shows good resilience to climate-related risks in all three climate scenarios modelled. This is because of the low-risk investment strategy used by the Group. The portfolio is diversified across different asset classes, geographic regions and market sectors. Also, the Group invests in assets which provide protection against changes in interest rates and inflation expectations.

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

Over the long term, the worst-case scenario for the Group 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 and stays above 100% by the end of 20-year modelling period.

Climate scenarios in more detail

The table below describes the impact of each scenario on the Group over 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:** The Group experiences a mild increase in the funding level but increasing risks posed to the overall well-being of members and their beneficiaries. **In the medium term:** The funding level slightly lags some of the other scenarios modelled at the 10-year mark. **In the long term:** The funding level improves on a similar trajectory to the other scenarios modelled but at a slower pace. In the long term. This is the second worst-case scenario for the Group (albeit still resulting in a strong funding position).
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:**	Summary of the impact to the Group **In the short term:** The funding level improves in line with the other scenarios modelled in the short term. **In the medium term:** The funding level deteriorates after 10 years due to a disorderly transition shock, sending the funding level below the 100% mark. **In the long term:**

	After the costly implementation to tackle climate change and the resulting drag on risky assets, the transition to clean technologies and green regulation begins to boost economic growth when considering the very long-term. However, the late and disorderly climate transition means that physical climate risks remain prominent over the very long-term.	The funding level for the Group recovers and stays slightly above 100% by the end of the 20-year modelling period. This is the worst-case scenario for the Group.
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:** This is the worst scenario for the Group in the short term, due to an orderly transition shock taken from the immediate, coordinated action towards a low-carbon economy. **In the medium term:** Under this scenario, at the 10-year mark the Group has recovered its funding levels to be in line with/better than most other scenarios modelled. **In the long term:** The funding level remains well above 100%, this is the third best-case scenario for the Group, falling short of the Base Case.

Source: Investment Adviser. Effective date of the impact assessment is 31 December 2023.
Please note: The results of the scenario modelling are illustrative and rely on many assumptions. These are subject to considerable uncertainty.

Comparison with previous analysis

The scenario analysis in this report compared to that last run in 2021 shows a relatively similar funding level results across scenarios, as allocations to different asset classes have remained largely unchanged. In the long term, the smooth transition and disorderly transition scenarios remain the best and worst outcomes for the Group respectively.

We have 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. The Group Trustees are currently considering how to evolve the portfolio as the funding level improves and the liabilities mature, and we will consider relevant climate-related opportunities for the Group as part of that review.

Modelling limitations

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

Covenant Assessment

We have taken a proportionate approach to summarising the potential impacts on the covenant.

- NPg ("Northern Powergrid") [through its subsidiaries Northern Powergrid (Yorkshire) plc and Northern Powergrid (Northeast) plc] is the sole provider of electricity distribution in the north-east of England. It is regulated by the Office of Gas and Electricity Markets ("Ofgem") which requires the DNOs to operate within a regulatory framework, which protects consumers by limiting what Distribution Network Operators ("DNOs") can charge for the use of their networks. The RIIO-ED2 price control runs from 1 April 2023 to 31 March 2028.
- In preparing its 2023-28 business plan in 2021, NPg used the Meteorological Office's UK Climate Projections 2018 which focussed on two potential climate scenarios:
  - RCP2.6, which is roughly in line with the 2°C global warming considered in the Paris agreement (broadly speaking, the Group Trustees' Orderly Transition scenario); and
  - RCP8.5, which represents the highest greenhouse gas concentrations and has an increase in global mean temperature of c.4°C by 2080-2100 (broadly speaking, the Group Trustees' No Transition scenario).

NPg's infrastructure faces varied physical risks from climate change however, its 2024 assessment concluded that the risk status was generally low and mitigating actions are being taken.

- In December 2024, NPg published its latest Climate Change Adaptation report which sets out its assessment of identified risks to its assets and operations as a result of climate change and the actions being taken by Management to seek to mitigate the potential impacts.
- The report summarises the likelihood and potential impact of the assessed risks to conclude on an overall score for each risk.
- Higher-likelihood lower-impact risks include the potential interference with assets from higher vegetation growth during longer growing seasons and ground movements due to drought, while lower-likelihood higher-impact risks relate primarily to flooding from higher (and extreme) precipitation.
- As shown in the "Impact and Likelihood" matrix below, the overall score for all risks is generally considered to be low under the RCP2.6 (i.e. Orderly Transition) scenario through to the next century.
- We note that a higher risk status has been assigned to the flooding-related risks under the No Transition (4°C) scenario by the 2100s, but we suggest that this should be treated with caution given the limited confidence in predictions that far into the future.
- In response, NPg has developed various adaptation plans such as improving flood defences and also considered how it can best recover

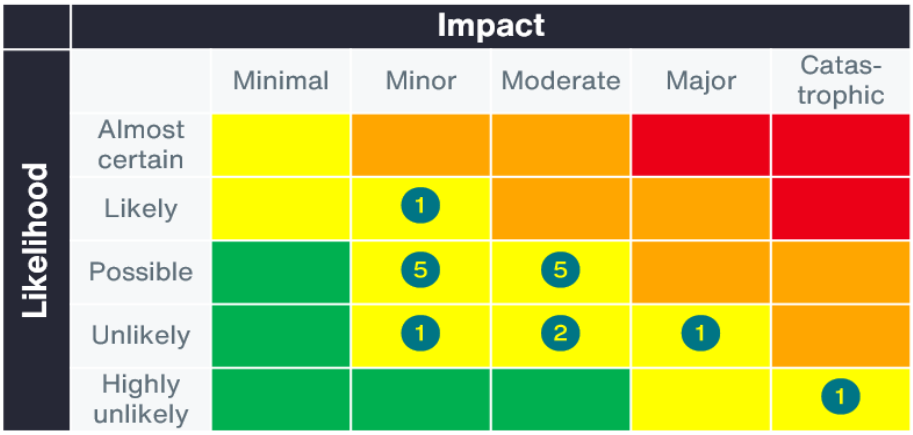
from events when they occur (noting some of the learnings from Storm Arwen in 2021).

- Implementation of mitigations remains in progress in many areas noting that, in some cases, these will require improving the design standards of the network when assets are next due for replacement.

Limitations of the assessment

- To the extent possible, we also set out potential timeframes of the impacts.
- We have adopted a pragmatic approach and summarise only the key issues. NPg publishes a significant amount of information on the risks stemming from climate change which we reference, together with its associated governance arrangements. Accordingly, we only present an abbreviated summary of the key points.
- Our comments are based only on public-level information. Accordingly, we have not engaged with Management in the preparation of this paper.
- This paper does not represent a full assessment of the employer covenant which will be prepared as part of the Group's 2025 Valuation.

NPg assessment of climate change risks, RCP2.6 to 2100s



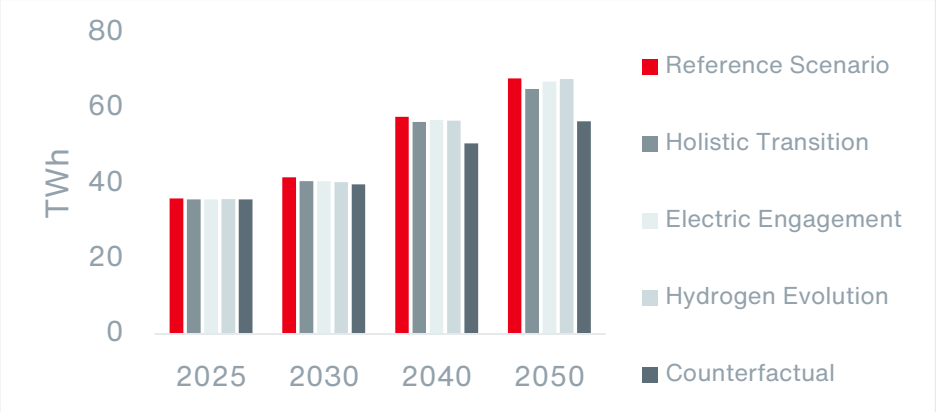
Source: NPg, Adapting to Climate Change, December 2024. Note: Number of risks identified in each category are shown.

Investment is required in response to changing energy demand

While this presents covenant risks and opportunities for NPg, the financial impact will be mitigated by the regulatory regime.

- The UK's target of achieving net-zero carbon emissions by 2050 is expected to have material consequences for the energy sector and Distribution Network Operators (such as NPg).
- In its Distribution Future Energy Scenarios 2024, NPg sets out the five potential transition pathways which have been used by the National Energy System Operator – all four that achieve net zero by 2050 are expected to result in a material increase in total energy consumption (from 36 to 68 TWh) and peak electrical demand (from 7 to 14 GW) in NPg's region by 2050.
- NPg plans to increase capacity and deliver a more flexible network with smart grid solutions that respond in real time to energy demand.
- The annual cost of this investment over the 2023-28 regulatory period is estimated at c.£170m p.a. (i.e. c.25% of total expenditure). The regulatory framework allows NPg to recover this investment from consumers, making it a long-term opportunity for the covenant.
- These costs are typically recovered over a long period of time meaning the significant up-front outlay could result in a near-term increase in debt and associated financing risks.
- However, Ofgem is expected to increase the scale of the permitted investment program in the determination period due to the new Accelerated Strategic Transmission Framework which will significantly limit the risk to the covenant as a result of the significant investment required to support the energy transition.

Total electrical energy consumption, NPg region



Source: Distribution Future Energy Scenarios, 2024.

Covenant consequences

While the energy transition brings significant investment requirements for NPg, the regulatory regime ultimately acts to limit the upside and the downside to the covenant.

Summary of potential covenant impact

Climate change is expected to have limited overall impact on the covenant. Accordingly, we conclude that the covenant is adequate to support the risks to the Group's investment strategy as a result of climate change.

- NPg continues to monitor the physical risks to its infrastructure and seeks to mitigate them where possible. While arguably some impacts are already being felt, the impacts are expected to be greater over the longer term (i.e. over 10 years).
- NPg publishes regular assessments of these risks (most recently in December 2024) and currently assesses the risk level to be low which indicates limited risks to the Group's covenant.
- While material investment will be required to support the transition the current regulatory environment both limits the financial risk to NPg and will likely allow it to earn to a financial return on this investment.
- While the regulatory periods are limited to five years and arrangements can, and do, change, wholesale changes to the regulation of electricity distribution in the UK are not expected.
- As such, we do not expect climate change to have a material impact on the covenant at this time.
- We note that the Group Trustees have previously considered the impact of climate change on the Group's investments (most recently as at 31 December 2023).
- This analysis concluded that the largest impact might be felt under a Disorderly Transition scenario with the funding level on a gilts + 0.3% basis falling to c.90%.
- However, the Group would recover to full funding by the end of the 20-year modelling period, demonstrating that reliance on the covenant is expected to be limited.
- We note that the Group's DNO employers retain strong credit metrics and ratings (Moody's: A3) indicating limited covenant risk and continued financial ability to support the Group if required.

Risk management

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

Our process for identifying and assessing climate-related risks

We have 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 we monitor the most significant risks to the Group in our efforts to achieve appropriate outcomes for members.

Qualitative assessment

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

Quantitative analysis

Climate scenario analysis, which is provided by our investment adviser and reviewed by us.

Together these give us a clear picture of the climate-related risks to which the Group is exposed.

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

Group Trustees' update

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

Our climate risk management framework

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

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

Governance

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Develop a climate change governance framework (this document)	Group Trustees	Investment Adviser	One off
Add / review climate risks and activity on key Plan documentation (risk register, work plan)	Group Trustees	Investment Adviser	Ongoing
Review advisor objectives to ensure advisors have appropriate climate capability, and bring important, relevant, and timely climate-related issues to the Group Trustees' attention	Group Trustees	Advisors	Annual
Train Group Trustees on climate-related topics including climate risks and opportunities	Group Trustees	Investment Adviser	Ongoing
Engage with the Group's investment managers to understand how climate risks are considered in their investment approach and stewardship activities are being undertaken appropriately	Group Trustees	Investment Adviser/ Investment Managers	Annual
Ensure investment proposals explicitly consider the impact of climate risks and opportunities, and seek investment opportunities	Group Trustees	Investment Adviser	Ongoing
Ensure that actuarial and covenant advice adequately incorporate climate-related risk factors where they are relevant and material	Group Trustees	Group Actuary, Covenant advisor	Triennial

Group Trustees' update for the year ending 31 March 2025

The Group Trustees met throughout the year with their investment advisors to discuss the requirements set out for the Group with regards to TCFD reporting and the statutory requirements relevant to the Group. The Group Trustees have a process in place to ensure that disclosure and compliance requirements are followed in relation to TCFD, SIP and EPIS.

Barring any regulatory changes, the ongoing requirements in the above plan are likely to continue on a routine basis. Similarly, covenant advice will be considered as part of the next actuarial valuation.

Strategy

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Identify climate-related risks and opportunities (over agreed time periods) for investment & funding strategy	Group Trustees	Investment Adviser/ Investment Managers	Annual
Conduct climate change scenario analysis to understand the impact of climate-related risks on the Group's portfolio	Group Trustees	Investment Adviser	Annual reviews. Triennial refreshed modelling thereafter

Group Trustees' update for the year ending 31 March 2025

This year, we did not refresh the climate scenario analysis given no material changes to the factors outlined on p17. Our scenario analysis informs us how our investment and funding strategy over the short, medium, and long term will fare across modelled scenarios. Tools such as the PCRIG Due Diligence Questionnaire and RAG Due Diligence Questionnaire are also deployed to our investment managers to help identify and assess climate related risks and opportunities.

Risk management

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

Group Trustees' update for the year ending 31 March 2025

We have processes in place for identifying and assessing climate-related risks. Climate risk management is integrated into the ongoing risk management activities of the Group via this climate risk management plan.

We carried out qualitative assessment of climate risks and quantitative climate scenario analysis, which combined helps us to focus on the risks that pose the most significant impact. Based on our analysis for this TCFD report, we do not need to make any further changes to the Group's investment strategy. Additionally, we conduct an annual review of our manager's rating across various climate-related risk criteria to ensure our climate beliefs are being aligned as much as possible.

Metrics and Targets

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Review and agree on metrics	Group Trustees	Investment Adviser/ Investment Managers	Annual
Review and agree target	Group Trustees	Investment Adviser/ Investment Managers	Annual
Obtain data for agreed metrics	Group Trustees	Investment Adviser/ Investment Managers	Annual

Group Trustees' update for the year ending 31 March 2025

For this report we have collected and reported on the carbon metrics associated with the Group's assets from the relevant managers. More information can be found in the *Metrics and Targets* section of the report.

Assessing our managers

To assess our managers' abilities to manage climate-related risks, we asked them 10 questions designed by the Pensions Climate Risk Industry Group[2]. A due diligence questionnaire asking investment managers to identify the most significant climate-related risks and opportunities affecting the Group was also populated with findings summarised on pages 12 to 15.

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

All of the Group's managers responded to the climate risk management questionnaire. Some key highlights include:

- All managers have produced their own TCFD report, setting out their approach to managing climate-related risks. The Group Trustees will continue monitoring the managers' alignment with the industry TCFD reporting in future.
- All managers conduct climate-related risk scenario analysis with a range of different scenarios involved.
- 5 out of 6 managers were able to provide meaningful carbon data for use within reporting. This is reflected in the metrics and targets section.
- 4 out of 6 managers have set temperature alignment targets which apply to the strategies employed by the Group. Managers will therefore invest in a way which is aligned with the Paris Agreement of limiting global temperature increases to below 2 degrees by the end of the century.

Compared to last year, there have been some improvements to the information collected. All managers now complete a TCFD, climate scenario analysis, and one additional manager now has a temperature alignment target.

Key conclusions

Overall, the Group Trustees conclude that the managers have adequate frameworks and processes in place to ensure climate-related risks and opportunities associated with the transition to low carbon economy are considered within their mandates.

In addition, the majority of the Group's investment managers are participating in market-leading industry initiatives and frameworks, such as United Nations supported Principles of Responsible Investment ("PRI"), Carbon Disclosure Project's ("CDP") climate change programme and Institutional Investors Group on Climate Change ("IIGCC").

In summary, the Group Trustees are comfortable with the investment managers' ability to act in the best interests of the Group and to account for climate-related risks and opportunities in the portfolios that they manage.

[2] Aligning your pension Group with the Taskforce on Climate-Related Financial Disclosures recommendations - GOV.UK (www.gov.uk)

Metrics & Targets

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

Our climate-related metrics

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

GHGs 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.

GHGs are categorised into three 'scopes' by the Greenhouse Gas Protocol, the world's most used GHG accounting standard.

Scope 1

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

Scope 2

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

Scope 3

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

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

For more explanation about GHG emissions, please see the Appendix.

Our climate-related metrics – in detail

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

Total Greenhouse Gas emissions

The total greenhouse gas (GHG) emissions associated with the portfolio. It is an absolute measure of carbon output from the Groups' 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 there is high quality data for (i.e. data which is based on verified, reported, or reasonably estimated emissions, versus that which is unavailable).

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

A metric which shows the extent to which 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.

Carbon metrics

In the table below are the climate-related metrics for the Group's assets. You will note that we have not aggregated metrics across the whole portfolio because the methodologies used for some asset classes are significantly different and therefore it is not appropriate to combine them.

The carbon metrics

Asset class		Scopes 1 and 2				Scope 3			Proportion of holdings with net zero or Paris-aligned targets (%)
		Asset Valuation (%)	Data coverage (%)	Carbon Footprint (tCO2e/£m)	Total GHG (tCO_2e)	Data coverage (%)	Carbon Footprint (tCO2e/£m)	Total GHG	
Equities	2024	14%	99%	66	4,857	98%	733	53,184	43%
	2023	15%	97%	72	5,200	96%	729	51,807	55%
Alternatives	2024	41%	54%	89	10,717	55%	221	27,035	43%
	2023	51%	43%	139	14,986	42%	289	30,155	8%
Corporate Bonds	2024	45%	36%	61	5,317	36%	853	75,623	15%
	2023	34%	51%	109	9,211	48%	523	41,971	6%
Total (ex LDI)	**2024**	**100%**	**52%**	**75**	**20,890**	**53%**	**550**	**155,841**	**31%**
	2023	100%	54%	111	29,397	52%	484	123,933	15%
LDI	2024		100%	141.2	**Physical** 49,716 **Synthetic** 47,288	Not applicable			
	2023		100%	170.2	**Physical & Synthetic*** 77,341				

Source: Investment managers. Numbers may not sum up due to rounding. Data as at 31 December 2024 and 31 December 2023. Growth (non-LDI) includes long physical emissions only. LDI includes UK government bonds and associated long derivatives. Data excludes cash. *Physical and Synthetic splits were not received at the time of writing the 2023 report. The 'Alternatives' asset class includes the underlying property and infrastructure investment managers as well as Insurance Linked Securities. Scope 3 metrics are not reported for LDI, as LDI contains primarily UK sovereign bonds and the calculation methodology for Scope 3 emissions is not yet widely accepted for sovereign bonds.

A number of metrics figures from 2023 have been updated to reflect our latest carbon calculation methodology. This includes:

- Inclusion of Securis Non-Life Fund as a material fund. The manager was not able to provide us with carbon data. We recognise the challenges associated with collecting carbon data for this asset class, however the fund remains carbon data eligible hence the inclusion.
- Update to the data coverage of the BlackRock Absolute Return Bond Fund to remove assumption surrounding scope 3 coverage.
- Update to methodology regarding the processing of cash within the LGIM Sterling Liquidity Fund such that the corporate bond allocation within the fund is reflected.

Commentary:

Equities:

- All data remained consistent with high data coverage and in line with expectations for the asset class.

Alternatives:

- Scope 1,2 & 3 coverage increased primarily due to a higher figure reported by Threadneedle Property.
- Scope 1 & 2 decrease in absolute and relative emissions is mostly attributed to a reduction in the asset values of the underlying funds.
- Scope 3 decrease in relative emissions is mostly attributed to the higher coverage figure reported for Threadneedle Property which affected the underlying aggregation.

Corporate Bonds:

- Scope 1,2 & 3 coverage decreased. This is largely due to the inclusion of the corporate bond investments of Insight Bonds Plus after the manager sent us new emissions data for the fund. The derivatives portion of the fund has been excluded due to the industry-wide challenges associated with defining a methodology for calculating carbon emissions associated with derivatives.
- Scope 1 & 2 decrease in absolute and relative emissions, and Scope 3 increase can be largely attributed to the BlackRock Absolute Return Bond Fund. BlackRock confirmed that this is due to their active and flexible allocation approach which influences the carbon footprint.

Notes on the metrics calculations

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

The carbon metrics

Aon collected carbon metrics data from managers before aggregating by asset class. 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 x C x 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")[3].

LDI

Aon requested the physical and synthetic split from the Group's LDI manager. The carbon footprint was calculated using UK GHG Emissions and PPP adjusted GDP and assumes data coverage to be 100%. 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.

- Sovereign GHG emissions provided by the Emissions Database for Global Atmospheric Research (EDGAR) as at 31 December 2023.
- PPP-adjusted GDP from the Organization for Economic Cooperation (OECD) as at 31 December 2023.

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

Aon requested a SBTi validated metric from our public investment managers for our binary target measurement metric and aggregated the results based on the portion of assets invested in each fund – i.e., the portion of the assets invested which have a net zero or Paris-aligned target. Aon does not make any estimates for missing data. The Group's SBTi validated metric only represents the portion of the portfolio for which there is data.

How we collected the data

Our investment adviser, Aon, collected the carbon emissions data from our managers on our behalf using the industry standard Carbon Emissions Template ("CET")[1]. 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 Groups meet their obligations under the Climate Change Governance and Reporting Regulations, and associated DWP Statutory Guidance.

[3] https://www.plsa.co.uk/Policy-and-Research/Document-library/Carbon-Emissions-Template

Looking to the future
Our climate-related target

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

In our first year of reporting, we set a target to improve scope 1 and 2 data coverage to above 90% coverage of carbon emissions data across all growth asset classes. Last year we expanded this target to include scope 3 emissions.

Without meaningful data from the investment managers, it is very hard for us to measure our climate-risk exposure, so it is important to set a target to improve the data quality of the GHG emissions data from the managers.

Group Trustees' update

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

Data Coverage Target
(ex LDI)

90%

By 2028 for all scopes

Our progress towards the target

The table below shows the data coverage metrics for this year and last year.

	Y1 Report	Y2 Report*	Y3 Report
Actual Data Coverage (ex LDI) Scope 1 and 2	45%	54%	52%
Actual Data Coverage (ex LDI) Scope 3	-	52%	53%

*These numbers have been updated to reflect our latest carbon calculation methodology. Please see more details in the footnotes of the metrics table.

The Group's performance against the target is measured 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 against the target. We have made progress towards our target based the assessment above since the first year. The data coverage excludes LDI.

Data coverage has remained mostly consistent over the year. This was due to the inclusion of the corporate bond element of the Insight Bonds Plus Fund in the Corporate Bonds asset class, upon receiving new information from the manager. We therefore do not see this lack of increase as a material issue given that it is related to new information from the manager, and not any underlying reduction in manager data reported.

Steps we are taking to reach the target

The Group Trustees will be taking the following steps to reach the target:

Step 1 **Increase data coverage**

Observation: data was unavailable for one mandate and the data coverage was limited for certain mandates, mainly within Alternatives and Corporate Bonds.

Solution: The Group Trustees will engage with managers directly, or through Aon to request improved data availability and coverage for the three mandates that lacked data. Through ongoing pressure from asset owners collectively and new regulatory requirements for asset managers, we expect data coverage to improve over time and will engage further with the managers if progress does not meet our expectations.

However, for some of the asset classes in which the Group invests, particularly in the alternative mandates, it may be some time before meaningful carbon data becomes available due to methodologies to calculate carbon emissions not yet being agreed. We will encourage these managers to participate in industry consultations to develop methodologies.

Step 2 **Facilitate consistent reporting**

Observation: The Group Trustees have relied on manager data but, due to the lack of industry-wide standard on calculating some of these metrics, the information may not be consistent year on year.

Solution: The Group Trustees will engage with the managers directly, or through Aon to ensure that the carbon information provided is consistent on the annual basis. However, the Group Trustees recognise that the reporting may change in line with evolving industry practices.

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.[4] 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.[5]
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.[6]
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.[7]
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.[8]
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

[4] A. Cadbury, Report of the Committee on the Financial Aspects of Corporate Governance, London, 1992.

[5] OECD, G20/OECD Principles of Corporate Governance, OECD Publishing, Paris, 2015.

[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

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

	region, market, and industry in which an organisation operates.[9]
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).[10]
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.[11]

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

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

[11] 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 Aon 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/liability values over the long-term.

Aon's model uses a deterministic projection of assets and liabilities, using standard actuarial techniques to discount and project expected cashflows.

It models the full yield curve as this allows for an accurate treatment of the liabilities and realistic modelling of the future distribution of interest rates and inflation. It also allows us to truly assess the sensitivities of the assets and liabilities to changes in interest and inflation rates.

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 projects using the following inputs as at 31 December 2023

- Market value of assets: £1,098M
- Present value of gilts +0.3% liabilities: £1,132M
- Funding Level (%): 97%
- Duration of liabilities: 12.4 years
- Real proportion of the liabilities: 85%
- 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 it the climate habitable. The problem is that human activity is making the blanket "thicker". For example, when we burn coal, oil, and natural gas we send huge amounts of carbon dioxide into the air. When we destroy forests, the carbon stored in the trees escapes to the atmosphere. Other 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[12] 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

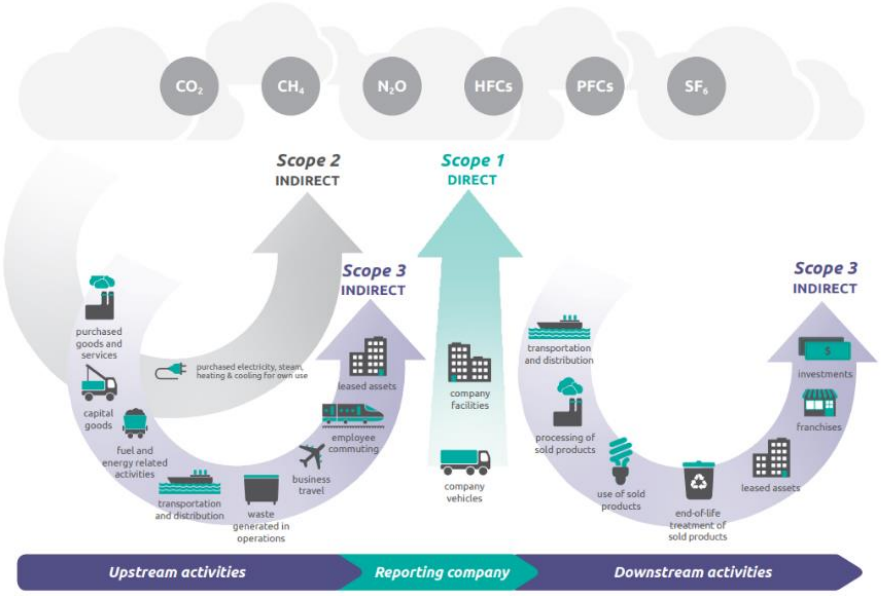
N_2O
Nitrous oxide

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

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