

TCFD disclosures report for year ending 31 March 2022

Combined Nuclear Pension Plan

Produced by: The Trustee of the Combined Nuclear Pension Plan

Date: 26 September 2022

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 Plan’s vulnerability to climate-related risks will help us to mitigate the risks and take advantage of any opportunities.

The Taskforce on Climate-related Financial Disclosure (“TCFD”) is an initiative that developed some best practice guidance for climate-risk reporting. New UK regulations require 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.

This document is the first annual TCFD report for the Combined Nuclear Pension Plan Trustees Limited (the “Trustee”) as Trustee of the Combined Nuclear Pension Plan (the “Plan”).

The TCFD disclosures report has been prepared by Trustee for the Plan year ending 31 March 2022.

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Executive summary

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

The Trustee supports the recommendations set out by the TCFD on the basis that they will allow the Trustee to more closely assess, monitor and mitigate climate-related risks on behalf of its members. This is the Trustee's first disclosure under the framework and this statement is therefore expected to evolve over time.

This statement has been prepared in accordance with the regulations set out under "The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021" (the "Regulations") and provides a status update on how the Plan is currently aligning with each of the four elements set out in the regulations (and in line with the recommendations of the TCFD). The four elements covered in the statement are detailed below:

- **Governance:** The Plan's governance around climate-related risks and opportunities.
- **Strategy:** The actual and potential impacts of climate-related risks and opportunities on the Plan'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.

The following pages summarise the Trustee's current position with regards to the TCFD recommendations and those set out in the Regulations. The Trustee has been supported by its investment advisers, Aon Solutions UK Limited ("Aon") (DB Structure investment adviser) and Redington Limited ("Redington") (DC Structure investment adviser) with the production of its TCFD disclosures report and also the data contained within it.

Strategy

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

DB Structure

- From the qualitative analysis, it became apparent that climate related risks and opportunities impact all the different asset classes in which the Plan invests. Over time, there was a general expectation that the impact of both physical and transition risks increases. Alongside this, climate change provided numerous investment opportunities for the different asset classes.
- The Plan has a reasonable degree of resilience relative to climate related risks, which was a key outcome from the quantitative climate scenario analysis based on the three different strategies considered. This was demonstrated under all three climate scenarios. The resilience of the three strategies considered was primarily driven by the high level of diversification in the assets.

DC Structure

- As both default strategies are Target-Date Funds, the Trustee is more limited in the DC Structure than in the DB Structure in relation to the climate-related enhancements they can directly implement. However, where possible, the portfolio manager has switched to an Environmental, Social and Governance ("ESG") screened index. Additionally, the LifePath strategies are invested in "building blocks" with explicit ESG related considerations.
- Although it is not yet a requirement, the Trustee believed that it is important to show the analysis for the CNPP Global Equity Fund given it is the most popular self-select fund and many members have invested in this fund.

Risk Management

The Trustee has integrated climate related risks into its various documents and processes. For example, the Trustee has a clear policy on stewardship, including the impact of climate change, as outlined in its Statement of Investment Principles. In addition to this, the Trustee receives data on voting and engagement from its managers annually (as outlined in its Implementation Statement, which is produced annually).

The Trustee has outlined a Risk Management Plan, on page 23 and 24, which assists with the ongoing management of climate related risks and opportunities. Alongside this, the Trustee undertakes periodic training on responsible investment to understand how ESG factors, including climate change, may impact the Plan's assets and liabilities.

Metrics and Targets

The Trustee gathered the carbon metrics data from a range of different sources, including its investment managers, investment advisers and other data vendors. As required, the Trustee has, as far as it is able, collated the data for the total greenhouse gas emissions and carbon footprint.

The Trustee is keen to understand the carbon emissions in the Plan's portfolio, but notes that at the current time, data is limited for certain asset classes. The Trustee expects over time, that this data will become more meaningful as more data is collected for each reporting year, enabling comparisons to be made. Alongside this however, the Trustee is aware that it is likely that its reporting of greenhouse gas emissions and carbon footprint may "increase". The Trustee does not view this as a real increase, and notes that the increase is an expected output as the availability and coverage of data expands. In addition, the Trustee expects the total GHG emissions to increase in its second year report, as it begins to collate and report on scope 3 emissions, which are often the largest proportion of an organisation's emissions. More detail how emissions are defined is provided on page 28.

DB Structure

Whilst all of the Plan's investment managers and underlying asset portfolios were contacted for carbon metrics information, not all of the investment managers were able to provide the data requested. The Trustee observed that there were also differences in the methodologies for calculating the carbon metrics and also availability of information for scopes 1, 2 and 3. This varied between investment managers and also asset classes.

It became apparent that there is much room for improvement in the carbon metrics data, to enable the Trustee to obtain a clear overview of the Plan's total greenhouse gas emissions and carbon footprint. With that in mind, the Trustee has opted to report on data quality for its third metric and has focused its target on improving the data quality over the next 5 years. Once carbon data is of a reasonable quality, the Trustee will consider setting any further targets.

DC Structure

As said above in the DB Structure, it is apparent that there is much room for improvement in the availability of carbon metrics. There is better coverage for the CNPP Global Equity Fund due to the equity fund having better availability of carbon data from their underlying securities.

To combat the low coverage for the default strategies, the Trustee, with Redington's assistance, will engage with Aegon and BlackRock¹ to understand the challenges of splitting out scope 1, 2 and 3² data and find an appropriate solution.

¹ Please refer to page 7 for more details on Aegon and BlackRock.

² Please refer to page 28 for more details of the scopes.



Governance

Governance

Role of the Trustee Board

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

The Trustee has discussed and agreed its climate-related beliefs and overarching approach to managing climate change risk. Details are set out in the Statement of Investment Principles ("SIP") for the DB and DC Structures, which are reviewed and (re)approved annually (or sooner in the event of a significant change in investment policy) by the Trustee.

The Trustee receives regular training on climate-related issues, when appropriate, to develop the appropriate degree of knowledge and understanding on these issues to support good decision-making. The Trustee has informed its advisers to bring important and relevant climate-related issues and developments to the Trustee's attention in a timely manner, informing the Trustee of its relevance to the Plan and incorporating climate related issues into advice.

The Trustee has delegated oversight and day-to-day implementation of the Plan's climate change risk management framework to the Investment Sub Committee ("ISC"), which is a sub-committee of the Trustee.

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

Role of the Investment Sub Committee

The Trustee has delegated the ongoing monitoring, and day-to-day implementation, of the Plan's climate change risk management framework to the ISC.

The ISC seeks to ensure that any investment decisions appropriately consider climate-related risks and opportunities within the context of the Plan's wider risk and return requirements, and are consistent with the climate change policy as set out in the SIP. The ISC will incorporate this into future manager selection exercises, and also as part of the ongoing monitoring of investment managers.

Once the Plan's climate change risk management framework has been implemented, the ISC will also be responsible for the ongoing monitoring and implementation of the framework.

The expectation is that the ISC will monitor and review progress against the Scheme's climate change risk management approach on a biannual basis, once the initial framework has been agreed with the Trustee Board. The ISC will keep the Trustee Board apprised of any material climate-related developments through regular (typically biannual) updates.

Implementation is detailed later in this report but key activities undertaken by the ISC, with the support of the Trustee's advisers, are:

- ensuring investment proposals consider the impact of climate risks and opportunities.

- seeking investment opportunities which enhance the ESG and climate change focus of the Plan's portfolio.
- engaging with the Plan's investment managers to understand how climate risks are considered in their investment approach.
- working with the investment managers to disclose relevant climate-related metrics as set out in the TCFD recommendations
- ensuring that stewardship activities are being undertaken appropriately on the Plan's behalf.

Role of the Other Advisers or Stakeholders Deemed Relevant

- **Investment advisers:** the Trustee's investment advisers, Aon for the DB Structure and Redington for the DC Structure, provide strategic and practical support to the Trustee and the ISC 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 ISC and Trustee to assess the Plan's exposure to climate-related risks.

- **Scheme actuary:** the Scheme Actuary will help the Trustee assess the potential impact of climate change risk on the Plan's funding assumptions for the DB Structure.
- **Covenant adviser:** the Plan's covenant adviser, will help the Trustee understand the potential impact of climate change risk on the sponsor covenant of the participating employers.

Governance of the DC Structure

The Trustee has delegated day-to-day management of the DC assets to BlackRock, Aegon Asset Management and M&G Prudential, via a number of pooled funds accessed through investment platforms from Scottish Equitable plc (branded as Aegon) and Prudential Assurance Company Limited ("Prudential").

The statutory guidance issued by the Department for Work and Pensions ("DWP") requires trustees to undertake climate strategy activities for each 'popular arrangement offered'. A 'popular arrangement' is defined as one in which £100m or more is invested, or which accounts for 10% or more of the assets used to provide money purchase benefits. For the Plan, this would mean that the two main default arrangements would be in scope.

The ISC has requested that the Global Equity fund be included in this scope as it has been chosen by a large proportion of members. If applicable, the ISC may also monitor and undertake climate strategy activities for any ESG focused funds to be included in the Plan's self-select range.

As the DC assets are invested exclusively in pooled funds, the ISC has worked closely with both Aegon and BlackRock to understand how they can support in providing the necessary information and data required to meet the requirements of the TCFD. Aegon has confirmed that it has set up an internal project team which will be defining how it can support its key trust-based clients, which include CNPP and the Aegon master trust.

Both Aegon and BlackRock's strategy to managing climate change risk and opportunities will continue to align closely to that of the CNPP Trustee. Aegon has confirmed that it will be able to provide key emissions data to support reporting for the metrics and target pillar, but will not be able to undertake the scenario analysis.



Strategy




Assessing climate-related risks and opportunities

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

The Trustee has carried out a qualitative risk assessment on each asset class the Plan is invested in. From this the Trustee has identified which climate-related risks and opportunities could have a material impact on the Plan.

The DB Structure’s investment portfolio is diversified across a range of different asset classes including equities, active credit, property, private debt, illiquids and hedging assets.

There is also a DC Structure which offers two lifestyle strategies, both of which are default options. The Plan also offers a range of self-select funds.

 <p>Risk categories</p> <p>In the analysis, the climate-related risks have been categorised into physical and transitional risks.</p> <p>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.</p> <p>Physical risks are associated with the physical impacts of climate change on companies’ operations. For example, extreme temperatures, floods, storms or wildfires.</p>	 <p>Ratings</p> <p>The analysis uses a RAG rating system where:</p> <p>Red denotes a high level of financial exposure to a risk.</p> <p>Amber denotes a medium level of financial exposure to a risk.</p> <p>Green denotes a low level of financial exposure to a risk.</p>	 <p>Time horizons</p> <p>The Trustee assessed the climate-related risks and opportunities over multiple time horizons. The Trustee has decided the most appropriate time horizons for the Plan are:</p> <ul style="list-style-type: none"> ▪ short term: 1-3 years. ▪ medium term: 4-10 years ▪ long term: 11+ years <p>When deciding the relevant time horizons, the Trustee has taken into account the liabilities of the Plan and its obligations to pay benefits.</p>
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Climate-related risk assessment

The notion that there are “climate risks” in financial portfolios is now a well-established one. So, what are climate risks? In short, the idea is that climate change impacts the financial performance of companies and therefore also the risk-return profile of the securities they issue. Climate risks are typically categorised along two dimensions described above.

Transition risks

Transition risks relate to the need to transition to a low-carbon economy, including development of, and investment in, new technologies and services that support this transition as well as government policy to aid in the transition. Specific market-based activities comprise the mitigation of carbon emissions, and/or adaptation to be resilient against climate change:

- **Mitigation:** technologies and services that increase energy efficiency, relate to increased renewable energy uptake and decreased demand for fossil fuels, and/or capture or sequester carbon dioxide.
- **Adaptation:** infrastructure resiliency efforts, business model shifts (e.g. changing geographic location of production and/or sales, introduction of new products and services and aligning business models with new environmental conditions).

Potential financial impacts from this transition include:

- **Revenue loss (demand contraction):** reduced demand for fossil fuels, related services, and energy consuming products.
- **Stranded assets:** devaluation/impairment or “asset stranding” of fossil fuel reserves.
- **Revenue growth:** growth in renewable energy, emergence of new industries, including carbon capture and sequestration, smart grid technologies, energy-efficient products, infrastructure adaptations, and green chemistry solutions.
- **Long-term cost reductions:** operational cost reduction from investments in updated infrastructure and technologies that facilitate the transition to a low-carbon, resilient economy.

Furthermore, the transition comes with policy and legal risks, including:

- **Carbon pricing mechanisms** (e.g. carbon taxes), already implemented in over 25 countries.
- **Litigation risk:** driven by the failure of companies to mitigate impacts of climate change, failure to adapt to climate change, and the insufficiency of disclosure around material financial risks.

Physical risks

A changing climate can lead to changes in the frequency and severity of extreme or incremental hazards. The TCFD recommendations refer to these hazards as acute and chronic, respectively. Acute hazards represent severe and extreme events and are location specific (e.g. droughts, heatwaves, storms, wildfire, etc). Chronic climate change represents the background incremental changes in, for example: temperature, precipitation and sea-level rise over several decades.

Acute and chronic climate-related hazards

Acute

- Extreme heat
- Extreme rainfall
- Floods
- Droughts
- Storms (e.g., hurricanes)

Chronic

- Water stress
- Sea level rises
- Land degradation
- Variability in temperature
- Variability in precipitation

Climate-related risk assessment (on asset class level)

Given the number of asset classes in which the Plan invests, the Trustee has completed a best endeavours exercise to analyse the climate-related risks of each asset class. The Plan invests across a range of different asset classes and investment managers via pooled funds. As such, the Trustee's ability to influence how each manager incorporates climate related issues is limited. However, the Trustee asked its managers for details how they were incorporating climate risks and opportunities into the funds and asset classes in which the Plan invests; the responses from its investment managers are summarised below.

DB Structure

The Trustee received detailed responses from two of its investment managers, which are summarised below. At the time of writing four managers were not able to provide information for the risk assessment, or only able to provide limited details.

Diversified Credit

The table below is applicable for the Plan's investments in Diversified Credit.

Time horizon	Physical risks		Transition risks			
	Acute	Chronic	Policy and Legal	Technology	Market	Reputation
Short (1-3 years)	Green	Green	Yellow	Green	Yellow	Yellow
Medium (4-10 years)	Green	Green	Yellow	Yellow	Yellow	Yellow
Long (11+ years)	Red	Red	Green	Red	Yellow	Yellow

Source: Managers.

Physical risks

The Plan's investment manager does not see material physical risks in short or medium term for loans or high yield. However, over the long-term, the manager believes that tools to assess and analyse these risks will improve, and incorporating the pricing of these risks within the investment decisions will become increasingly important.

Transition risks

Technology

The investment manager believes that energy related companies will have to invest in new technologies to reduce their carbon footprint in the short-term, and companies from other sectors will

have more time to adjust their business model. However, on the medium and particularly on the long-term, the risk that will come from not adopting new technologies will be severe.

Policy and legal

The investment manager considers the risk being higher on the short-term rather than long-term. For example, companies that do not integrate new policy and legal constraints related to a low-carbon economy into their business model will most likely not remain competitive within the next five years.

Property

The table below is applicable for one of the Plan’s property investment managers. The Plan has three property managers, one was not able to provide risks and opportunities data, and one was excluded from the analysis due to divestment plans from this fund.

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

Source: Managers.

Physical risks

Risks associated with increased severity of extreme weather events such as cyclones and floods, are likely to reduce business continuity and reduce revenues due to transport difficulties and damage to facilities. Remote access and travel insurance can reduce this risk in the future.

Transition risks

The property investment manager identified potential financial impacts from changing consumer demands. This is driven by sentiment, as demand increases for alternative/ greener investments. There is a higher challenge, and associated costs, in making property assets greener in short term.

Illiquid Growth

The Plan’s private equity manager demonstrated general awareness of the types of physical and transitional risks and the corresponding financial impacts and opportunities. However, the manager has not quantified risks (either physical or transition) applicable to the strategy in which the Plan invests, nor specific opportunities that they look to implement within its investment portfolios.

The private equity manager commented that it includes the following environmental considerations as part of investee due diligence process:

- Carbon management programme
- Energy efficiency
- Recycling programme

Other Assets

The Plan invests with another manager in UK Credit bonds and liability driven investments. This manager did not provide details of the climate related risks and opportunities. However, it was able to provide details of commitments made at a business level to address climate risks.

- The investment manager has made a Climate Impact Pledge, which may involve divestment should underlying companies in which it invests do not take required action towards the transition to a low-carbon world.
- Its parent company has pledged to align its business with the 1.5°C temperature goal of the Paris Agreement, with the commitments outlined in its latest TCFD report.
- The manager has shown evidence of corporate engagement on issues it deems to be the most material long-term issues. As a large asset manager, it uses its scale to make a positive impact on the companies and markets which it invests in.
- The manager has policies and documents dedicated to how it manages climate-related risk.

DC Structure

The statutory guidance issued by DWP requires trustees of DC schemes to undertake climate strategy activities for each 'popular arrangement offered'. For the Plan this would mean the two default arrangements – the BlackRock LifePath Flexi & Capital Funds – would be in scope.

Although it does not meet the requirements for a popular arrangement the ISC has made the decision for the reporting to cover the CNPP Global Equity Fund. This the fund with the greatest interest within the Plan's self-select range, chosen by hundreds of members, and as such the Trustee believes it warrants more detailed monitoring

The Plan's default arrangements – BlackRock LifePath Flexi & Capital – are Target Date Funds in which the asset allocation de-risks over time as members approach retirement. Day-to-day management of assets and ongoing asset allocation decisions are delegated to BlackRock as asset manager of the Target Date Fund. As such, the Trustee is more limited in the DC Structure than in the DB Structure in relation to the climate-related enhancements they can directly implement.

LifePath Funds

The underlying building blocks of the BlackRock LifePath strategy are index tracking funds, however the strategy retains the ability to change the asset allocation and indices being tracked. BlackRock take a long-term strategic asset allocation view (10yrs+) in terms of the implementation of their portfolios. BlackRock do this through their climate aware market assumptions generated by 'Aladdin Climate' a BlackRock portfolio management tool, which is used to calculate climate risk in portfolios. It allows portfolio and risk managers to see climate-adjusted analytics alongside standard datasets as they make decisions regarding the asset allocation's exposure to climate risks.

Climate risk is considered across all asset classes included within the LifePath funds. Where possible the portfolio manager has switched to an ESG-screened index. As at 31st March 2022 c.63% of the LifePath strategies were invested in "building blocks"³ with explicit ESG related considerations, such as the following:

- ACS World ESG Equity Tracker Fund
- ACS World ESG Screened Index Fund
- ACS World Small Cap ESG Screened Fund
- iShares ESG Sterling Corporate Index Bond Fund

The underlying indices of these funds are constructed through an optimisation process that aims to maximise exposure to ESG factors by targeting companies with high MSCI ESG ratings⁴ in each

³ A "building-block" provides one piece of a broader portfolio. It typically references a benchmark, focuses on a specific universe of securities, and contribute to the goals of the overarching portfolio.

⁴ MSCI ESG Ratings are a rules-based methodology to identify industry leaders and laggards according to their exposure to ESG risks and how well they manage those risks relative to peers. Source: <https://www.msci.com/our-solutions/esg-investing/esg-ratings>

sector. The MSCI ESG Rating are created by MSCI, a global financial markets data provider and seeks to measure and assess a company's management of financial ESG risks.

CNPP Global Equity Fund

This fund is a white labelled name for the Aquila Life (50:50) Global Equity Fund. The aim of the fund is to track a range of underlying indices, which are baskets of geography specific global equities, each weighted on a market capitalisation basis.

For index tracking investment mandates such as this, the manager does not have discretion to add or remove securities. Integration of climate-related risks is therefore addressed through:

- Engagement and collaboration with index providers.
- Transparency, including reporting on sustainability-related characteristics of all strategies.
- Investment stewardship activities, which are undertaken across all investment strategies invested in corporate equity and debt issuers.

If the Trustee were to look to further address ESG risk within this white-labelled fund, they may in the future consider reviewing the underlying index that is being tracked.

Climate-related opportunities (on asset class level)

The Trustee has identified some climate-related opportunities:



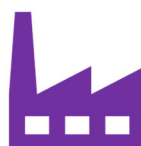
Cleaner energy

Green power generation, clean technology innovation, sustainable biofuels



Environmental resources

Water, agriculture, waste management



Energy and materials efficiency

Advanced materials, building efficiency, power grid efficiency



Environmental services

Environmental protection, business services

The Trustee also relies on its investment managers to take into account climate related risks and opportunities applicable for their mandates. Based on the qualitative assessment, the Trustee's managers identified the following opportunities.

DB Structure

Diversified Credit

Following assessment of the physical and transitional risks, the Plan's managers outlined the following areas for potential investment opportunities:

1. Green bonds allow lenders to work with clients to help achieve a wide range of sustainability goals, including climate change. The Plan's managers expect this segment of the market to grow in the future providing additional climate-related investment opportunities.
2. Sustainability-linked loans which incentivise borrowers to achieve meaningful, predetermined sustainability objectives. Similar to green bonds, these instruments allow lenders to work with clients to help achieve a wide range of sustainability goals, including climate change.

Property

Multiple opportunities exist with regards to the physical impacts of climate change and the response to transitional climate change risks

Following assessment of the physical and transitional risks, the Plan's managers are focusing their efforts on minimising the risks via the following channels:

- Identifying potential financial impacts from changing consumer demands. This is driven by sentiment, as demand increases for alternative/ greener investments. There is a higher challenge, and associated costs, in making property assets greener in short term.
- Expanding and automating 'carbon footprinting' tools and climate change scenario analysis to meet client demand for climate reporting driven by regulatory requirements. This is primarily to alleviate policy and legal transition risks.

Private Equity

The following were highlighted as areas of consideration for future investments within the portfolios:

1. Carbon management programme
2. Energy efficiency
3. Recycling programme

DC Structure

ESG integration: A whole portfolio approach is taken to any investment decisions with any changes guided by a set of principles which include but are not limited to avoiding any significant divestments from any single asset class or region, improving the carbon emissions intensity of the portfolios and considering the broader sustainable features (S and G) whilst meeting the current investment objective, and limiting associated costs.

Sustainable building blocks: LifePath's ESG approach focuses on selecting investment vehicles such that the risk and performance do not significantly deviate from that of the traditional benchmark over the long-term. Optimised strategies aim to maximise portfolio exposure to better ESG performers while closely tracking parent indices, whilst screened indices avoid exposure to specific companies and/ or sectors associated with objectionable activities.




Portfolio decarbonisation: BlackRock's research priority for LifePath UK is focused on assessing portfolio emissions at the whole portfolio level to assist the ongoing reduction in the carbon emissions intensity of the portfolio. Much of the focus so far has been on deepening their understanding and developing their data and analytical capabilities to be able to facilitate further ESG integration and portfolio decarbonisation in the coming months and years.

Portfolio resilience and scenario analysis

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

The analysis looks at three climate change scenarios. Each scenario considers what might happen when transitioning to a low carbon economy under different conditions. The 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 (DB Structure) and Redington (DC Structure) and are based on detailed assumptions. They are only illustrative and are subject to considerable uncertainty.

For the DB Structure, the Trustee established a “base case” scenario against which the three climate change scenarios are compared.

			
Base scenario	Late Action	Early Action	No additional action taken
+2°C – 2.5°C	+3 – 4°C	+1.3°C – 2°C	+4°C
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.	Limited action is taken and insufficient consideration is given to sustainable long-term policies to manage global warming effectively.	Immediate and coordinated action to tackle climate change is taken using carbon taxes and environmental regulation.	No further action is taken to reduce greenhouse gas (“GHG”) emissions leading to significant global warming.

Impact Assessment – DB Structure

To undertake the scenarios in an efficient manner, the analysis undertaken was based on the following strategic allocations, reflective of the asset allocations for various underlying sections within the Plan.

Asset Class	Group 1	Group 2	Group 3
Equity	30.0%	25.0%	20.0%
UK Property	15.0%	12.5%	10.0%
Investment Grade Credit	5.0%	7.5%	10.0%
Illiquid Credit	15.0%	12.5%	10.0%
Private Equity	15.0%	12.5%	10.0%
Gilts	20.0%	30.0%	40.0%

Notes: illiquid credit includes multi asset credit and direct lending. Gilts also includes inflation linked gilts.

Additional information

Please note that the projection of the Groups are approximate, based on the current position of each underlying section and assuming a 30-yr projection where the Plan remains unchanged.

These projections are therefore approximate for the purposes of comparing outcomes under the different climate scenarios.

Group 1 – Sellafield, DSRL, LLWR and Magnox Sections

The Plan's investment portfolio exhibits reasonable resilience under two of the climate scenarios. This is due, primarily to, to the high level diversification of assets.

The worst-case scenario for the Plan is the Late Action transition. Although initially the funding level moves in line with the base case and remains at the same level, after 10 years the funding level deteriorates sharply. With the high level of growth assets, the No additional action taken scenario, saw the Plan experience a steady deterioration of the funding level, which does not recover within the time period assessed (i.e. time periods in excess of 30 years). Both the Late Action and No additional action leave the Plan materially worse off in terms of surplus relative to the base case.

Another key risk is volatility of the funding level. Under the Early Action transition, the Plan experiences large falls in the funding level of around 10% before recovering. Deterioration of the funding level will place a strain on the Sponsor covenant (and participating employers) as they may have to make up a bigger shortfall through deficit contributions. It may also require the Plan to re-risk in order to stay on track to achieve the funding target or extend the timeframe for achieving this.

Group 2 – DRS and SLC Sections

The Plan's investment portfolio exhibits reasonable resilience under two of the climate scenarios. This is due, primarily to, the high level of diversification within the assets.

The worst-case scenario for the Plan is the Late Action transition. Although initially the funding level moves in line with the base case and remains at the same level, after 10 years the funding level deteriorates sharply. This leaves the Plan materially worse off in terms of surplus relative to the base case.

The Plan also experiences a decline in surplus relative to the base case from the No additional action taken, albeit this is not as extreme as the Late Action scenario.

Another key risk is volatility of the funding level. Under the Early Action transition, the Plan experiences large falls in the funding level of around 10% before recovering. Deterioration of the funding level will place a strain on the Sponsor covenant (and participating employers) as they may have to make up a bigger shortfall through deficit contributions. It may also require the Plan to re-risk in order to stay on track to achieve the funding target, or extend the timeframe for achieving this.

Group 3 – Nirex, Closed and GPS Nexia Sections

The Plan's investment portfolio exhibits reasonable resilience under two of the climate scenarios. This is due to the high level of diversification within the assets and the low proportion of equities.

The worst-case scenario for the Plan is the Late Action transition. Although initially the funding level moves in line with the base case and remains at the same level, after 10 years the funding level deteriorates sharply. This leaves the Plan materially worse off in terms of surplus relative to the base case.

Similar to Groups 1 and 2, the Plan also experiences a decline in surplus relative to the base case from the No additional action taken. The outcome for this scenario is ahead of the Late Action, but behind the Early Action and base case.

Another key risk is volatility of the funding level. Under the Early Action transition, the Plan experiences large falls in the funding level of around 10% before recovering. Deterioration of the funding level will place a strain on the Sponsor covenant (and participating employers) as they may have to make up a bigger shortfall through deficit contributions. It may also require the Plan to re-risk in order to stay on track to achieve the funding target, or extend the timeframe for achieving this.

Additional information on Group 3

Note that the majority of this Group 3 is closed to future accrual and therefore these sections mature more quickly than the other groups. As the group starts from a position of surplus overall, the sharper increase in funding level reflects the overall level of cashflows being proportionally higher than the other groups. This maturing of the group is approximate based on limited data.

Business, strategy, and financial planning

The Trustee recognises the importance of climate change and the risk it poses to the Plan. The Trustee takes climate-related risks into account in determining its investment strategy.

Another key risk identified from the analysis is the volatility of the funding level. Under the Late Action transition, the Plan experiences sudden falls in the funding, only recovering for Group 1 towards the end of the period under analysis. Deterioration of the funding level will place a strain on the sponsor covenant and participating employers, if they must make up a bigger shortfall through deficit contributions.

The Trustee therefore recognises that climate change may have an impact on the sponsor covenant. The Trustee monitors the covenant on a regular basis, with the support of its covenant adviser, and maintains a regular dialogue with the participating employers.

The Trustee is currently undertaking the triennial actuarial valuation as at 31 March 2022. As part of this the Scheme Actuary will help the Trustee assess the potential impact of climate change risk on the Plan's funding assumptions for the DB Structure. The results of the assessment are expected to be included within the TCFD Disclosures Report next year.

Impact Assessment – DB Structure – Covenant Assessment

The Plan's covenant adviser, Cardano Advisory, has provided an impact assessment.

The sections of the Plan are supported by different entities within the NDA Group. However, the majority are supported by the NDA, which is charged on behalf of the UK government with the mission to clean-up the UK's nuclear sites safely, securely and cost effectively. There are other pension liabilities of the NDA Group, with Direct Rail Services responsible for GPS DRS liabilities. In order to be proportionate and to focus on the most material elements, the covenant adviser therefore focused its climate exposure analysis on NDA (Group 1) and Direct Rail Services "DRS" (Group 2).

The covenant adviser undertook its analysis by considering two bookend scenarios covering a plausible range of scenarios which could materialise. These bookends are an Early Action scenario ("Early Action"), which broadly equates to Paris alignment where temperature rises are limited to 1.5°C with the corresponding bookend being a Current Policies scenario ("Current Policies"), which is aligned to a scenario with temperature increases of 3-4°C. In future years the scenarios analysed by advisers should be aligned wherever possible.

Conclusion of analysis

The Group's key employers (NDA - Group 1; and DRS - Group 2) are, to an extent, shielded from the financial impact of climate risks by virtue of their quasi-governmental nature. However, to inform the Trustee in setting climate strategy and risk management, the covenant adviser adopted a risk-focused approach to identify potential downside climate exposure.

Group 1: Principle climate risks identified

The key risks identified by the covenant adviser included:

1. **Early Action:**
 - a. Cost of greenhouse gas emissions – potential risk of more onerous carbon pricing mechanisms and higher carbon prices impacting the cost of operations;
 - b. Cost and scarcity of key raw materials – for example, the risk of sand, a key concrete component, becoming more difficult and costly to source with increased restrictions and reduced availability; and
 - c. Climatic impact on operations – risk that operations are disrupted by climatic changes such as changing water levels and temperature.
2. **Current Policies:**
 - a. More pronounced physical risk exposure, with lower transition risks.

Group 1: Timing of identified risks

- **Near-term:** Greater risk in the Early Action scenario – for example due to potential increased costs associated with transition risks such carbon pricing
- **Mid-term:** Transition risks continue to increase, particularly in the Early Action scenario; and
- **Long-term:** The risks associated with the physical impact of a warming climate are more pronounced in the Current Policies scenario

The covenant adviser assessed that the risks were generally greater over the longer-term as compared to the near-term.

Group 2: Summary risk analysis

In addition to transition risks related to carbon pricing and supply chain, the covenant adviser highlighted that increased climatic change (such as flooding and heat waves) over the longer-term could put pressure on the robustness of the rail network and disrupt operations, or result in higher ongoing costs to mitigate these impacts. These physical risks were assessed to be greater in the Current Policies scenario and over the longer-term.

Impact Assessment – DC Structure

CNPP's two default arrangements are both target-date funds in which the asset allocation changes overtime. To demonstrate the impact of each climate scenario⁵ on member outcomes, Redington undertake the analysis on relevant asset allocation for three cohorts of CNPP members. These cohorts relate to three key stages of the DC retirement journey: 'asset growth', 'volatility management' and 'retirement planning'.

They were identified for the DC New Joiners Section (where LifePath Flexi is used as the default) as part of the DC investment strategy review in December 2020 and are as follows:

- Asset Growth – Age 28
- Volatility Management – Age 47
- Retirement Planning – Age 58

The same analysis was undertaken for the SPPP Section (where LifePath Capital is used as the default) as part of the DC investment strategy review in December 2020 and the membership cohorts are as follows:

- Asset Growth – Age 35
- Volatility Management – Age 49
- Retirement Planning – Age 57

Redington have therefore conducted climate-scenario analysis on the 3 stages of each LifePath default, relevant to the average member cohorts as outlined above.

Interpreting the results

LifePath Flexi:

- Under the Asset Growth Stage, the LifePath Flexi is expected to suffer from loss of 7.9% to 9.2% under the different scenarios. The expected loss for Volatility Management Stage range from 6.9% to 7.6%, while the range of expected loss for Retirement Planning Stage is 5.9% to 6.2%. The lowest expected loss under all three cohorts has been seen to be under the Early Action scenario.
- Climate Stress Tests measure the impact in % terms on each asset allocation under the three scenarios outlined above.
- The LifePath Flexi default strategy de-risks out of equities into less risky assets with a large allocation to cash at retirement.
- These assets also have less climate-risk associated with them. Therefore, as expected the Climate Stress is lower for members at retirement than those in the asset growth stage.
- The large allocation to cash – which has no climate risk associated with it – at retirement explains why climate risk is lower for the Capital default than the Flexi default.

⁵ Scenario analysis has been completed as per the undertakes scenario analysis consistent with the PRA's Life Insurance Stress Tests ("the PRA stress test scenarios"). The stress tests have been mapped to that used by the Bank of England - 2021 Climate Biennial Exploratory Scenario (CBES).

LifePath Capital:

- Under the Asset Growth Stage, the LifePath Capital is expected to suffer from loss of 7.7% to 9.1% under the different scenarios. The expected loss for Volatility Management Stage range from 6.6% to 7.2%, while the range of expected loss for Retirement Planning Stage is 5.3% to 5.6%, with the Late Action and No Action scenarios returning the same expected loss at 5.6%. The lowest expected loss under all three cohorts has been seen to be under the Early Action scenario, as with the LifePath Flexi portfolio.
- Climate Stress Tests measure the impact in % terms on each asset allocation under the three scenarios outlined on above.
- The LifePath Capital default strategy de-risks out of equities into less risky assets such as government and corporate bonds as members near retirement.
- These assets also have less climate-risk associated with them. Therefore, as expected the Climate Stress is lower for members at retirement than those in the asset growth stage.



Risk management

Trustee's process for identifying and assessing climate-related risks

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



Qualitative assessment

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



Quantitative analysis

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

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

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

Trustee's process for managing climate related risks

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

The Trustee has developed the following risk management plan, to help with its ongoing management of climate related risks and opportunities. The Trustee delegated a number of tasks, but still retains the final approval responsibility.

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review	Last completed
Governance				
Climate change governance framework (<i>this document</i>)	ISC	Aon / Redington	Annual	n/a
Publish TCFD report	ISC	Aon / Redington	Annual	n/a
Add / review climate risks and activity on key Plan documentation (risk register, work plan)	ISC		Annual	n/a
ESG beliefs (including climate change)	ISC	Aon / Redington	Triennial	May 2021
Trustee training	Secretariat	Aon / Redington / SPB	Annual	Apr 2021
Review SIP	ISC	Aon / Redington	Annual	n/a
Publish Implementation Statement	ISC	Aon / Redington	Annual	31 Oct 2020
Strategy				
Identify climate-related risks and opportunities (over agreed time periods) for investment & funding strategy	ISC	Aon / Redington / Cardano	Annual	n/a
Scenario analysis - agree approach	ISC	Aon / Redington	Annual	n/a
Scenario analysis - undertake modelling	ISC	Aon / Redington	Triennial	n/a
Actuarial valuation	ISC	Deloitte	Triennial	n/a ⁶
Risk management				
Identify, assess and manage key climate related risks	ISC	Aon / Redington / investment managers	Triennial	n/a

⁶ The Trustee is currently undertaking the triennial actuarial valuation as at 31 March 2022. As part of this the Scheme Actuary will help the Trustee assess the potential impact of climate change risk on the Plan's funding assumptions for the DB Structure. The results of the assessment are expected to be included within the TCFD Disclosures Report next year.

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review	Last completed
Metrics and targets				
Agree/review approach for metrics	ISC	Aon / Redington / investment managers / Aegon	Annual	n/a
Agree/review target	ISC	Aon / Redington / investment managers / Aegon	Annual	n/a
Obtain data for agreed metrics	ISC	Aon / Redington / investment managers / Aegon	Annual	n/a

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



Training

The Trustee Board receives regular training on climate-related issues, when appropriate, to develop the appropriate degree of knowledge and understanding on these issues to support good decision-making.



Monitoring

As part of ongoing monitoring of the Plan's investment managers, the Trustee monitors the level of ESG integration within managers, including climate related risks.



Annual ESG assessment

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



Integrated into risk framework

Climate-related risks are included in the Plan's wider risk management framework, which is overseen by, which is overseen the ISC on a quarterly basis



ESG focussed investments

The Trustee's investment advisers keep the Trustee informed on investment opportunities that could contribute to the Trustee's ESG aims.

As part of the assessment of the managers' policies and processes to assess climate related risks, the Trustee has posed "top" questions as outlined in guidance from the Pensions Climate Risk Industry Group⁷ to its investment managers. The questions were designed to assist the 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.

The table below summarises the responses from the most material investment managers in the DB and DC Structures.

DB Structure

Manager	TCFD report	Climate-related risks analysis	Industry initiatives	Carbon reporting	Temperature alignment
Aberdeen Standard	✓	In progress	✓	✓	✓
Barings	In progress	-	✓	✓	-
Blackstone	In progress	-	✓	In progress	-
Insight	In progress	✓	✓	✓	-
LGIM	✓	✓	✓	✓	✓
Partners Group	In progress	-	✓	In progress	-

Source: Managers.

The Trustee will engage with its managers to understand future changes to the management of the Plan's assets, including the integration of climate related risk analysis, improvements in carbon reporting and temperature alignment and the associated timescales involved with these.

DC Structure

The Plan's default arrangements – BlackRock LifePath Flexi & Capital – are Target Date Funds in which the asset allocation de-risks over time as members approach retirement. Day-to-day management of assets (including climate risk management) is delegated to BlackRock⁸ as asset manager of the Target Date Fund. BlackRock do this through their climate aware market assumptions generated by 'Aladdin Climate'⁹ a BlackRock portfolio management tool which is used to calculate climate risk in portfolios. Having undertaken a "climate risk management assessment" of BlackRock and the default Target Date Funds, the Trustee is confident in BlackRock's ability to manager climate risk on its behalf.

⁷ [Aligning your pension scheme with the Taskforce on Climate-Related Financial Disclosures recommendations - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/672223/Aligning_your_pension_scheme_with_the_Taskforce_on_Climate-Related_Financial_Disclosures_recommendations_-_GOV.UK.pdf)

⁸ As mentioned on page 7

⁹ As mentioned on page 13



Metrics and Targets

Trustee's climate-related metrics

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

The Trustee, supported by its investment advisers, Aon and Redington, collected information from the Plan's investment managers on their greenhouse gas emissions. The investment advisers have collated this information to calculate climate-related metrics for the Plan's portfolio.

Measuring greenhouse gas emissions

Measuring greenhouse gas emissions is a key way for 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

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

Scope 2

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

Scope 3

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

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

The Trustee is keen to understand the carbon emissions in the Plan's portfolio, but notes that at the current time, data is limited for certain asset classes. In particular this has been noted for certain types of fixed income (liquid and illiquid credit), private equity and property. The Trustee expects over time, the carbon emissions data will become more meaningful as more data is collected for each reporting year, enabling comparisons to be made. Alongside this however, the Trustee is aware that it is likely that its reporting of greenhouse gas emissions and carbon footprint may "increase". The Trustee does not view this as a real increase, and notes that the increase is an expected output as the availability and coverage of data expands – particularly where coverage is currently low. In addition, the Trustee expects the total GHG emissions to increase in its second year report, as it begins to collate and report on scope 3 emissions, which are often the largest proportion of an organisation's emissions (as noted above).

DB Structure

These are the Plan's metrics – more granular detail is provided on the next page:

Total Greenhouse Gas emissions

268,351
tonnes CO₂e

The total greenhouse gas (“GHG”) emissions associated with the portfolio. It is an absolute measure of carbon output from the Plan's investments. Whilst the Trustee has endeavoured to calculate this based on scopes 1 and 2, some of its managers were only able to provide data covering scopes 1, 2 & 3 combined, and unable to split this data.

Carbon footprint

72.4
tonnes CO₂e/£m

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.

Data coverage

78%

This metric shows the proportion of the Plan's assets which the Trustee was able to obtain carbon data for. Within this, the Trustee was also able to break this down further based on the quality of data. High quality data was received from investment managers covering 46% of the Plan's portfolio. The remainder has been obtained via estimates, for example, through MSCI and government data.

Source: Aon. Managers

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

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

The Trustee's DB investment adviser, Aon, requested data from all the Plan's managers. The table below summarises observation of data for DB Structure.



Current position

Aon requested emissions data from managers that cover **99%** of the Plan's asset portfolio, which represented all of the assets except for the cash in the Trustee bank account, cash held at the custodian and for assets that are in the process of being disinvested.



Data availability

Data was received from the managers covering **46%** of the portfolio. Aon obtained further data (using MSCI) covering **49%** of the portfolio. Data was not available for around **4%** of the assets.



Data consistency

Emissions data that came from the Plan's investment managers covered **46%** of the assets. However, some of this data include scope 3 emissions since the managers were not able to split them out between scope 1 & 2 and 3 (definitions of which can be found on page 28 and in appendix B).

The Trustee plans to engage with its managers that were unable to supply emissions data for this analysis

The tables below show a more detailed breakdown of the emissions for DB Structure from each asset class on the fund level in the Plan's portfolio (where available).

DB – Total GHG emissions (tonnes CO2e)

Asset class	Growth Fund	Illiquid growth fund	Liquid credit fund	Gilt fund	Hedging fund	Total
Equity	42,522	6,917	-	-	-	49,439
Property	57,566	-	-	-	-	57,566
Active Credit	1,796	-	-	-	-	1,796
Private Equity/ Debt	16,307	54,096	-	-	-	70,403
Fixed Income	-	-	11,416	-	-	11,416
Gilts	-	-	-	68,202	-	68,202
Hedging	-	-	-	-	9,529	9,529
Total	118,192	61,013	11,416	68,202	9,529	268,351

Source: Investment managers/ Aon / MSCI.

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

Asset Class	Approach
Equity	MSCI data was used to gather Scope 1&2 carbon footprint and total emissions for the equity portfolios.
Property	Carbon metrics data was provided by the managers. Some managers were not able to provide scope 3 data separately, hence total GHG and carbon footprint was provided for scopes 1, 2 and 3. Reported data covered 65.1% of the portfolio. There remains no coverage for the remainder of the property holdings.
Active Credit	Carbon metrics data was provided by the manager. Some managers were not able to provide scope 3 data separately, hence total GHG and carbon footprint was provided for scopes 1, 2 and 3.
Private Equity / Debt	Carbon metrics data was provided by the manager. Some managers were not able to provide scope 3 data separately, hence total GHG and carbon footprint was provided for scopes 1, 2 and 3 (for private debt). No data was available for the private equity holdings. However, the Trustee expects to receive data for these holdings in future years, albeit coverage may continue to be low for some time (and as a result, total GHG emissions may increase as a result, until data is available for the majority of the holdings).
Fixed Income	MSCI data was used to gather Scope 1&2 carbon footprint and total emissions for the liquid credit fund.
Gilts/ Hedging assets	Carbon metrics data was provided by the investment manager.

Other notes:

1. Where carbon data was supplied in USD terms, Aon converted it to GBP terms as at 31 December 2021 FX rate.
2. Cash was excluded from carbon data analysis on the materiality basis.

DB – Carbon footprint (tonnes CO₂e/£m)

Asset class	Growth Fund	Illiquid growth fund	Liquid credit fund	Gilt fund	Hedging fund
Equity	34.1	34.1	-	-	-
Property	11.3	-	-	-	-
Active Credit	165.5	-	-	-	-
Private Equity/ Debt	n/a ¹	365.2	-	-	-
Fixed Income	-	-	114.3	-	-
Gilts	-	-	-	97.7	-
Hedging	-	-	-	-	92.9

Source: Investment managers/ Aon / MSCI.

¹A private debt manager was not able to provide carbon footprint figure. However, the manager provided carbon intensity figures (tCO₂e/£M revenue) which can be shared upon request.

DB – Data coverage

The table below shows data coverage for the total GHG emissions on the asset class level.

Asset class	Growth Fund	Illiquid growth fund	Liquid credit fund	Gilt fund	Hedging fund	Total
Equity	98.8%	98.8%	-	-	-	98.8%
Property	65.1%	-	-	-	-	65.1%
Active Credit	22.9%	-	-	-	-	22.9%
Private Equity/ Debt	94.9%	60.0%	-	-	-	66.8%
Fixed Income	-	-	27.5%	-	-	27.5%
Gilts	-	-	-	100.0%	-	100.0%
Hedging	-	-	-	-	97.0%	97.0%
Total	78.7%	77.6%	27.5%	100.0%	97.0%	78.1%

Source: Investment managers / Aon / MSCI.

The Trustee noted that overall, the availability of data for equity was very high, whereas this was much lower for other asset classes such as active credit, private debt and fixed income. The Trustee expects to see significant improvement in carbon data reporting over the next 5 years.

DC Structure

These are the Plan's metrics:

	LifePath Flexi	LifePath Capital	Global Equity Fund
Total Greenhouse Gas emissions	193,109 tonnes CO ₂ e	46,937 tonnes CO ₂ e	58,558 tonnes CO ₂ e
Carbon footprint¹⁰	265.5 tonnes CO ₂ e/£m	262.7 tonnes CO ₂ e/£m	555.8 tonnes CO ₂ e/£m
Data quality	42.6%	46.8%	95.2%

Sources: Aegon/MSCI

The table above outlines the funds' metrics, including scopes 1, 2 and 3, as agreed by the Trustee:

- Total GHG Emissions is defined as tonnes of CO₂e.
- Carbon Footprint is defined as tonnes of CO₂e / £M invested.

The % coverage of emissions reported, estimated and not reported forms the Funds' data quality assessment.

To improve data quality for the Plan assets, the Trustee is setting a data quality target aligned with the DB Structure:

- In 5 years' time, achieve 80% coverage of carbon emission data across all funds split across scopes 1, 2 and 3.

The Trustee will do this by focusing on two key areas for the DC Structure over the next 12 months:

- The Trustee, with Redington's assistance, will engage with Aegon and BlackRock to request higher data availability and coverage across all mandates.
- Through engagement the Trustee will identify opportunities to improve coverage or investigate alternative sources of data.

The Trustee, with Redington's assistance, will engage with Aegon and BlackRock to understand the challenges of splitting out scope 1, 2 and 3 data and find an appropriate solution.

¹⁰ Where carbon data was supplied in USD terms, Redington have converted it to GBP terms as at 31 December 2021 FX rate of 0.739.

Looking to the future

Trustee’s climate-related target

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

The Trustee has set a target for improving the data quality metric. Without meaningful data from the investment managers, it is very hard for the Trustee to measure its climate-risk exposure. So, it is important to set a target to improve the quality of GHG emissions data from the managers.



Based on the observation of data quality summarised in the previous section, the Trustee has agreed to set the following data quality target for its Plan’s assets:

In 5 year’s time, achieve above 80% coverage of carbon emission data across all asset classes split across scopes 1, 2 and 3 for both the DB and DC Structures.

The Plan’s performance against the target will be measured and reported on every year. Over time, this will show the Plan’s progress against the target.

The Trustee will be taking the following steps to reach the target:

Step1: Increasing mandate coverage of data	Step 2: Making the reporting consistent
<p>Observation Coverage for equity mandates greater for those with equity exposure versus other assets (such as fixed income or property). Where data was obtained from MSCI, this was c.100%.</p> <p>Carbon data for fixed income assets was obtained through MSCI, however the coverage was much lower (c. 30%).</p> <p>Data was not available for some of the illiquid mandates.</p>	<p>Observation There were managers who were able to provide high coverage, but were not able to split out the data between scope 1, 2 and 3 emissions – this was seen on both the DB and DC Structures.</p>
<p>Solution The Trustee will engage with the managers directly, or through Aon (DB Structure) or Redington (DC Structure), to request higher data availability and coverage for fixed income mandates.</p> <p>Through engagement, it is expected that this will identify opportunities to improve coverage, or investigate alternative sources of data. However, the Trustee notes, that for some of the asset classes in which it invests, particularly in the illiquids which the DB Structure invests in, it may be some time before meaningful carbon data become available.</p>	<p>Solution The Trustee will engage with the managers directly, or through Aon or Redington, to understand challenges with splitting out this data and find an appropriate solution.</p>

Appendices

Appendix A - Climate Risk Assessment – transition risks

Transition risks relate to the need to transition to a low-carbon economy, including development of, and investment in, new technologies and services that support this transition as well as government policy to aid in the transition. Examples of climate-related risks and potential financial impacts include:

	Climate-related risks	Potential financial impacts
Policy and legal	<ul style="list-style-type: none"> ▪ Increased pricing of GHG emissions ▪ Enhanced emissions-reporting obligations ▪ Mandates on and regulation of existing products and services ▪ Exposure to litigation 	<ul style="list-style-type: none"> ▪ Increased operating costs (e.g. higher compliance costs, increase insurance premiums) ▪ Write-offs, asset impairment and early retirement of existing assets due to policy changes ▪ Increased costs and/or reduced demand for products and services resulting from fines and judgments
Technology	<ul style="list-style-type: none"> ▪ Substitution of existing products and services with lower emissions options ▪ Unsuccessful investment in new technologies ▪ Costs to transition to lower emissions technology 	<ul style="list-style-type: none"> ▪ Write-offs and early retirement of existing assets ▪ Reduced demand for products and services ▪ Research and development (R&D) expenditures in new and alternative technologies ▪ Capital investments in technology development ▪ Costs to adopt/deploy new practices and processes
Market	<ul style="list-style-type: none"> ▪ Changing customer behaviour ▪ Uncertainty in market signals ▪ Increase cost of raw materials 	<ul style="list-style-type: none"> ▪ Reduced demand for goods and services due to shift in consumer preferences ▪ Increased production costs due to changing input prices (e.g. energy, water) and output requirements (e.g. waste treatment) ▪ Abrupt and unexpected shifts in energy costs ▪ Change in revenue mix and sources, resulting in decreased revenues ▪ Re-pricing of assets (e.g. fossil fuel reserves, land valuations, securities valuations)
Reputation	<ul style="list-style-type: none"> ▪ Shifts in consumer preferences ▪ Stigmatisation of sector ▪ Increased stakeholder concern or negative stakeholder feedback 	<ul style="list-style-type: none"> ▪ Reduced revenue from decreased demand for goods / services ▪ Reduced revenue from decreased production capacity (e.g. delayed planning approvals, supply chain interruptions) ▪ Reduced revenue from negative impacts on workforce management and planning (e.g. employee attraction and retention) ▪ Reduction in capital availability

Appendix – B - Glossary

Governance	refers to the system by which an organisation is directed and controlled in the interests of shareholders and other stakeholders. ¹¹ 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. ¹²
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. ¹³
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. ¹⁴
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. ¹⁵
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. ¹⁶
Greenhouse gas emissions (“GHG”) scope levels ¹⁷	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. ¹⁸

¹¹ A. Cadbury, [Report of the Committee on the Financial Aspects of Corporate Governance](#), London, 1992.

¹² OECD, [G20/OECD Principles of Corporate Governance](#), OECD Publishing, Paris, 2015.

¹³ TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

¹⁴ TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

¹⁵ TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

¹⁶ TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

¹⁷ World Resources Institute and World Business Council for Sustainable Development, [The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard \(Revised Edition\)](#), March 2004.

¹⁸ PCC, [Climate Change 2014 Mitigation of Climate Change](#), Cambridge University Press, 2014.

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). ¹⁹
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. ²⁰
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. ²¹

¹⁹ TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

²⁰ TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

²¹ Energy Saving Trust, [What is net zero and how can we get there?](#) - Energy Saving Trust, October 2021