British Coal Staff Superannuation Scheme TCFD Report

For scheme year ending March 2025

BCSSS
British Coal
Staff Superannuation Scheme

Contents

Introduction

The Financial Stability Board created the Task Force on Climate-related Financial Disclosures ("TCFD") in 2015. The TCFD allows the regulator, companies and investors to understand better their financial exposure to climate risk. As required by UK Government legislation, the British Coal Staff Superannuation Scheme ("the Scheme") published its first report in 2022 and is now publishing its fourth report. This will be available to members and other interested parties and provides detail of how the Scheme is addressing the risks and opportunities associated with climate change and the climate transition. Whilst the Scheme undergoes an operating model and investment strategy review, this TCFD report has been reduced in content until decisions are made on the future approach.

About the Scheme

The Scheme is one of the largest occupational pension schemes in the UK, providing benefits for just over 39,000 pensioners and deferred members as at the end of March 2025. The Scheme was established by an Act of Parliament on 1 January 1947 following the nationalisation of the coal industry. The coal industry was privatised in December 1994 and because of this, contributing members of the Scheme became deferred members. The Coal Industry Act 1994 established the parameters under which the Scheme operates, with the Government in place as the Guarantor. Coal Staff Superannuation Trustees Limited ("the Trustee") has ultimate responsibility for decision-making on investment matters. Coal Pension Trustees Investment Limited ("CPTI") is responsible for providing investment advice and investment management services to the Trustee. As of 31st March 2025, total Scheme assets were valued at £8.1bn.

The Scheme's approach to Climate and TCFD Summary

The Trustee's fiduciary duty is to act in the best interests of members, with the primary objective of paying all future member benefits (i.e. the Scheme's liabilities) from the Scheme's assets. The Scheme recognises climate change as a source of risk and opportunity with ongoing impact on asset pricing, making climate-related issues legitimate concerns for pension fund trustees.

The Trustee's fourth TCFD report restates the Scheme's current governance and risk framework for tackling climate change risks and opportunities. It also addresses areas needing improvement, highlighting ongoing challenges with data coverage, methodologies, and other areas where progress is still required. Much work is being done to improve and understand the data, models and assumptions; however, significant hurdles remain and therefore many of the estimates in this report are subject to considerable uncertainty. This applies particularly to climate scenario analysis which the Trustee has re-run in 2025, in line with the regulatory deadline.

The Trustee has set an ambitious target for carbon emissions data coverage across the portfolio and continues to push to achieve this.

Climate Metrics

As required by regulation the Trustee has committed to report on the following metrics, which are reported across all the Scheme's assets as far as is possible:

- **Total carbon emissions** – measures the absolute tonnes of carbon dioxide emissions for which an investor is responsible. Total emissions are what must be reduced to limit the carbon dioxide in the atmosphere and the degree of planetary warming. In line with regulations, the Scheme has reported on Scope 1 (direct emissions), scope 2 (purchased emissions) and Scope 3 (supply chain emissions).

- **Carbon intensity** – an efficiency metric based on absolute emissions relative to the enterprise value including cash (EVIC). EVIC is a measure of firm size so allows comparison of carbon efficiency across different firms.

- **Data coverage** – the proportion of the Scheme where reported (not proxied) Scope 1 and 2 carbon emissions data is available.

- **Paris Alignment** - per TCFD regulation, the Scheme has reported on the extent to which its assets are Paris Aligned in this TCFD report.

In line with the statutory guidance, the Trustee has also agreed a target for this report. The Trustee has chosen a target based on the third metric as follows, noting that the Trustee reviewed and extended the timeline of the target in 2025:

- Increase the proportion of the Scheme covered by reported (not proxied) Scope 1 and 2 carbon emissions data to 90% by the end of 2027.

Since measurement of the Scheme's emissions began at the end of September 2021, the proportion of assets where data is available has increased from 54% to 93% at the end of March 2025. However much of the data is still from proxies rather than directly reported by companies and assets. Actual reported data has increased by 24%, from 39% to 63%. These numbers will continue to vary in the near term as data and methodologies continue to evolve across the whole industry and as the Scheme's asset allocation changes. The Trustee will seek to take steps to ensure data quality continues to improve and will seek continued assurance it is following best practice in data collection and aggregation.

The Scheme has observed a decline in both absolute emissions and emissions intensity from March 2021 to March 2025, with a roughly 32% reduction in estimated emissions intensity. This reduction results from strategic asset class changes, investments in climate opportunities, risk reduction efforts but also a gradual decline in index level emissions. There is no specific emissions reduction target, and the Trustee acknowledges the likelihood of emissions fluctuating if considering future allocations to high-emission assets. For example, the Scheme's more recent investments in emerging market credit have significantly higher emissions intensity than many of the Scheme's other existing asset classes. This is due to the fact that such bonds, both corporate and sovereign, often come from sectors or countries with higher carbon emissions. However, the Scheme is comfortable investing here as the investment is focused on companies with transition plans in place or in development.

The Scheme commits to reporting Scope 3 emissions for public market holdings and for real estate where the data is available. The Scheme also continues to monitor Paris Alignment to gauge the portfolio's alignment with the 1.5-degree Celsius goal of the Paris Agreement. Despite limited Paris Aligned assets currently (for this Scheme and the market as a whole), the Scheme expects improvement over time, aligned with broader market improvements.

Scope 3 emissions significantly increase the total emissions picture, potentially overlapping with Scopes 1 and 2. The Scheme's Scope 3 intensity, based on MSCI estimations for public markets and manager data for real estate, is slightly higher than the FTSE All World Index for public equity and slightly higher than the Bloomberg Global Aggregates Corporate Index for investment grade credit. There is not a comparable real estate index.

Changes to Metrics since last Annual Report

Over the past year, the Scheme has maintained a steady approach to managing climate risks, adapting to a changing market environment with greater climate transition uncertainty and varying policy across regions. Governments have faced competing pressures, balancing energy security, inflation, and economic challenges alongside climate goals. At the same time, asset managers have encountered growing legal pushback from anti-ESG initiatives. These tensions have slowed the energy transition in developed markets, while emerging markets, particularly China and India, have accelerated their renewable energy efforts.

Against this backdrop, the Scheme has continued to evolve its approach to climate risk and opportunities, particularly given the likelihood that the transition will be extended whilst at the same time the Scheme's investment horizon will gradually decline – over 65% of liabilities will be met over the next 10 years.

While significant progress has been made in data quality since setting the target, the Trustee acknowledges that further work is required to navigate evolving regulatory, market, and data challenges in this space.

Section 1 – Governance

During the reporting period to which this TCFD report relates there have been no significant changes to the governance framework set out, maintaining the same formalised governance framework for managing climate risks and opportunities. The Trustee has agreed a new Investment Belief in December 2024: Decisions involving Responsible Investment-related risks and opportunities are made with a financial focus and clear economic rationale. The Committee of Management (COM) oversees climate strategy, approves climate policies, monitors metrics, and reports on climate targets, while the Investment Sub-Committee (ISC) manages implementation.

CPTI advises on investment management and climate risks. Climate risk and performance are assessed regularly, and the Trustee prioritises training to ensure ongoing expertise in this area. Further details on governance are provided later in the report in the detailed governance section.

Section 2 – Strategy, risks, opportunities, time frames

This section highlights how the Trustee, on an ongoing basis, identifies climate-related risks and opportunities which it considers will have an effect over the short, medium, and long term on the Scheme's investment strategy and funding. It also demonstrates how the Trustee considers where climate change, and actions to address climate change, might contribute positively to anticipated returns or to reduced risk. In addition, this section sets out changes over the past Scheme year.

Appropriate Time Periods over which the Scheme assesses Strategy:

Short term: Everything up to 3 years in the future. This would cover the Scheme's next actuarial valuation (undertaken every 3 years) and is in line with the Scheme's economic scenario modelling, which is used to assess risk and asset allocation.

Over the short term the most material impact to the Scheme's assets associated with climate is likely to be Transition Risk and Opportunity. The Scheme has made certain investments in climate opportunities to take advantage of market moves likely to occur over a short-medium time horizon. The Scheme has also sought to ensure exposure to very at-risk companies/assets is reduced if not sufficiently managed or rewarded.

Even over the short term the Scheme has already experienced the impact of some physical risks to the Real Asset portfolio, for example (i) flood risk and retrofitting requirements in the property portfolio; and (ii) greater stranding risk and investment requirement in the UK infrastructure holdings alongside weather damage and higher insurance costs.

Medium term: Defined as the period between 3 and 10 years. The end of this period is aligned with long term expected return forecasting which is done over 10 years. Over 65% of the Scheme's future payments (in real terms) are expected to be made over the next 10 years. During this period Transition Risk and Opportunity, Physical Risk and potentially Stranded Asset risk in some of the least efficient technologies, properties and companies are all relevant.

Long term: Defined as anything beyond 10 years up until 35 years (2059) when less than 1% of the Scheme's future payments (in real terms) are expected to remain. All risks and opportunities are relevant over this period, however the Scheme's risk-taking capacity is likely to be greater in the medium term than the long term.

Climate Related Risks and Opportunities - Investments

Responsibility

The Trustee is responsible for setting the climate strategy and managing and monitoring climate risk as with all other areas of risk and strategy. Like other areas of investment, the Trustee delegates the implementation of the strategy and the management and monitoring of risk to CPTI who use external investment managers, data providers and advisors to assist.

High Level Strategy

During the most recent Scheme year the key developments around climate risk and opportunities focused on reviewing climate strategy in relation to an extended time horizon of transition in certain markets versus duration of Scheme liabilities.

Risks and Opportunities

The Trustee continues to work to build an understanding of the possible impacts of climate across all areas of the portfolio. Each of the following areas of risk and opportunity are expected to be relevant to the Scheme:

- Physical Risk
- Transition Risk including Stranded Asset Risk
- Climate Opportunities and Solutions.

Climate Opportunities and Solutions

Whilst not an official metric or target which has been included in this report, the Trustee has continued to monitor the level of investment exposure in climate opportunities (as defined by MSCI for public markets and direct manager input in private markets).

Overall, like many pension schemes, as the Scheme matures, its ability to invest in more climate opportunities may reduce. Large exposure to legacy private assets and the Scheme's requirement to reduce illiquidity also limits the ability to add to climate opportunities.

Understanding Scheme Exposure to Physical Risk

The Scheme is required to conduct climate scenario analysis at least every three years. With the last scenario analysis undertaken in 2022, updated climate scenario analysis has been included within this TCFD report.

The analysis is a useful tool for understanding whether the Scheme is likely to face losses due to climate transition/damage and where climate-related opportunities could lead to future gains.

CPTI has utilised MSCI modelling on the Scheme's public assets. The analysis has been provided in Section 4.

BCSSS Approach to Transition and Stranded Asset Risk

Transition risk refers to how assets will perform under a transition to a low carbon economy. This can be an orderly and gradual scenario, or a more disorganised scenario where regulation comes in suddenly, over a shorter period, and with greater market impact. Transition risk also incorporates shifting consumer preferences towards environmentally friendly products and services.

Stranded asset risk refers to the risk that an asset currently assumed to have value may lose much or all of its worth in the future. An asset's worth is based on its assumed future cashflows and therefore if these are lower, or last for less time, the asset is worth less. An asset can be stranded for regulatory reasons (i.e. not allowed to profit from the asset), or economic reasons (no longer profitable). Given a high proportion of the Scheme's liabilities will be met over the next decade stranded asset risk is lower for this Scheme than many others. As such, the first focus in this area is on assets with near term risks to pricing or profitability, or assets that expected to become difficult to sell over the medium term. This is likely to evolve as the transition progresses.

CPTI, on behalf of the Scheme seeks to understand this risk through careful engagement with managers, particularly on assets or companies that are clear laggards within their sectors. The Scheme has not adopted any exclusions in this area nor a Net Zero target.

How the Scheme Implements its Climate Strategy

The Scheme looks to consider climate risk, where relevant under the Scheme's time horizon. The below sets out how this is incorporated in each stage of portfolio management.

1) Strategy changes

In terms of high-level changes to funding strategy, asset allocation and planning, the Trustee and the broader market are still in the initial stages of considering how climate change will impact expected returns across asset classes, regions, sectors and in aggregate. In general, significant changes to high level strategy are not expected.

2) Manager assessment

For all new appointments, CPTI assesses external fund managers' understanding of and positioning around climate change, looking for

assurance that risk is appropriately considered and priced, and opportunities are not being missed. This is documented as part of each investment decision and in ongoing monitoring.

Where CPTI has concerns around a manager's investment approach or stewardship in this area it will place the manager on a formal watchlist, which is presented to the Trustee on a quarterly basis and is subject to increased scrutiny until a decision on how to proceed is made.

For legacy private equity and debt exposures where CPTI cannot easily make changes, the priority is to understand the Scheme's exposure to risk and engage with the managers.

3) Reporting requirements

CPTI is looking to ensure all managers report on their exposure to climate risk and opportunities as well as their engagement and voting in this area.

Stewardship

The Trustee views stewardship as a key tool for enhancing value through reducing risk and focusing on opportunities. Climate change has been formally identified as a key focus of the Scheme's stewardship efforts.

The Scheme's role as a steward applies across all assets and geographies in which the Scheme invests. As the Scheme delegates the management of individual assets to its investment managers, the Scheme's key levers of control and influence in stewardship are (a) the appointment of aligned managers and stewardship providers; and (b) ongoing engagement, oversight and challenge of those managers and providers.

Escalation and Exclusions

A key part of engagement is escalation. CPTI must determine if the investment managers and third-party providers' engagement is effective and, if it is not, CPTI must determine whether investing in a particular manager, sector, company or asset still makes sense. For areas with elevated levels of risk of financial loss the Trustee may consider exclusions. Thus far the Trustee has a formal engage and/or exclude policy only for investments that violate the UN Global Compact principles. The Scheme has additionally changed voting and engagement responsibilities between fund managers and stewardship services provider, EOS within public equities according to views on the provider's stewardship capabilities.

Monitoring and Engagement on Exclusions, Laggards and Controversies

In line with the Scheme's Stewardship Policy the Scheme will focus stewardship on material factors relating to environmental, social or governance issues.

CPTI has access to data from two ESG data providers, MSCI and Sustainalytics, which facilitates the process of monitoring these factors. Within private markets, eFront has been onboarded which will help assess risk data. eFront collates company-level carbon data from private market managers and provides proxied carbon data for use in carbon reporting, although this remains a work in progress and CPTI hopes to have more useable data from the platform as 2025 progresses.

Over the year, CPTI worked with the emerging market debt manager to develop a monitoring framework for the portfolio's sovereign bonds (corporate bond monitoring follows the same approach as public equities and investment-grade credit). The framework screens issuer countries on factors such as UN Human Rights convention signatories, participation in controversial weapons treaties, and MSCI's E, S, and G pillar scores. The manager then provides CPTI with commentary on the most flagged countries, explaining why they remain in the portfolio.

The Trustee monitors the Scheme's exposure to ESG laggards, controversies and UNGC Watchlist companies on a regular basis. Where the data providers highlight a relevant holding, CPTI will contact the manager responsible for the position and engage with them on their rationale for holding and understanding of the risk and the data provider's view. This rationale will be documented, and CPTI will continue to engage on a regular basis whilst the position is held. This engagement will also feed into CPTI's overall view of the manager's approach.

Voting

The Scheme seeks, wherever practicable, to vote on every resolution at all meetings of companies in its portfolios. Voting is regarded as an important part of the Scheme's stewardship activities and as a means of achieving positive change.

CPTI also monitors the Scheme's voting on key themes, including climate-related management and shareholder resolutions which CPTI expect to be considered by managers and third-party engagement providers during voting. As voting is outsourced, CPTI has appointed an external advisor to enable better understanding of the voting conducted by the Scheme's managers and third-party engagement provider and to provide a basis for CPTI engagement. The analysis so far has been encouraging and indicates that the third- party provider, EOS, displays independence of thought in this area. The analysis has also been helpful in highlighting some questions and areas where CPTI can provide challenge on voting policies with some of the other managers, which has led to meaningful engagement.

Climate Related Risks and Opportunities – Funding

Funding Strategy

The Trustee's primary funding responsibility is to pay all future member benefits (i.e. the Scheme's liabilities) from the Scheme's assets. In addition to member benefits, the future payments also include payment of an Adjusted Reserve to the Guarantor by 2033 if the assets are sufficient. In the period up to 2033 the Adjusted Reserve effectively acts as a funding buffer.

In order to meet the future payments, the Scheme's assets need to generate a return in excess of that available on "risk-free" assets such as UK Government Bonds. As such, the Scheme invests in a proportion of return seeking assets.

Ultimately, if the Scheme's funding strategy is unsuccessful (i.e. there are insufficient assets available to meet member's benefit payments), funding will be provided by the UK Government who is the Scheme's Guarantor.

Climate Related Risks and Opportunities

Given the Scheme invests in return seeking assets, the biggest climate related risk and opportunities to the funding strategy are those that impact such investments. These risks and opportunities have been covered in detail above.

Climate change could also impact the level of benefit payments that the Scheme makes to members, either as result of changes in mortality levels or due to changes to future levels of inflation. Here, the maturity of the Scheme is likely to be a key factor, as the average age of members (weighted by pension amount) is around 78 and over 65% of the Scheme's future payments (in real terms) are expected to be made over the next 10 years. So, for climate change to have a meaningful impact on the future benefit payments from the Scheme it is likely that these impacts will need to happen in the next 10 years.

It is unlikely that climate change is going to have a material impact on the life expectancy of the Scheme's members (and therefore the associated pension payments to members), particularly given the vast majority of members live in the UK where the physical risks of climate change are less extreme, relative to some other parts of the world. And whilst, for example, climate change could increase the number of heat-related deaths in the summer, this may well be offset by a reduction in cold-related deaths in the winter.

A more meaningful area of impact on future benefit payments could be the impact climate change has on inflation, as around 75% of members benefits increase each year in line with inflation.

Covenant Risk

Whilst the Scheme does not have a sponsoring employer, should the Scheme's funding strategy fail, funding will be provided by the UK Government under the terms of the Government guarantee. As such, climate change is not expected to affect the ability of the Scheme's sponsor to support the Scheme.

Overall Progress on Strategy

The Trustee continues to work to integrate climate risk and opportunity throughout the funding strategy. Whilst some areas, for example physical risk and climate scenarios, remain in early stages, regular reporting and discussion on transition risk and opportunities has been rolled out across the majority of Scheme assets for a number of years. Qualitative understanding and interrogation of climate risks and opportunities is a key part of manager selection and monitoring, and climate change is a core focus of the Scheme's stewardship efforts.

Section 3 – Risk management and monitoring

The Trustee's goal is to identify, monitor and manage climate risks and opportunity across the whole portfolio, public and private. Whilst this remains a work in progress for the Scheme and wider industry, the Trustee now has a substantial level of information included in regular reporting around risks and opportunities in this area.

Risk Appetite

While climate risk has not altered the Trustee's overall risk appetite, it has led to some changes to the Scheme's portfolio, approach and providers as part of broader investment considerations.

Incorporating Climate Risk into Overall Investment Strategy

The Trustee expects to continue considering climate change and climate transition, alongside other areas of market risk and opportunity, across the portfolio - the Scheme's investment horizon and asset allocation is also very relevant for this assessment.

How the Trustee Assesses the Risks and Opportunities

Climate risk assessment is relatively new and continues to evolve. CPTI expects the tools and data available to continue to expand and improve. CPTI, on behalf of the Trustee, relies on both quantitative and qualitative approaches to assess climate risk.

Qualitative assessment involves understanding how different scenarios can play out at the asset class, sector and regional level and having detailed discussions with managers and other research providers on evolving expectations in this area. CPTI receives qualitative assessments of company risks from the Scheme's ESG data provider MSCI and stewardship provider EOS. Discussion of both company and broad market/asset class risks and opportunities are also part of regular ongoing conversations with the Scheme's managers, advisors and broader network including ESG and stewardship collaborative groups. Given limited data coverage and quality, particularly in certain areas of the portfolio, taking a qualitative approach as well as quantitative is critical.

In preparing regular reporting for the Investment sub-Committee (ISC), CPT and CPTI collate reports using data directly extracted from tools available in-house in conjunction with data sourced from third party managers. The reports are designed, reviewed and overseen by the Head of Responsible Investment and signed off by the CIO before being presented to the Trustee.

The following quantitative data is reported to ISC quarterly:

- ESG laggards

- Controversy exposure
- Carbon emissions and intensity across the portfolio (Scope 1, 2 and 3)
- Degree of Paris Alignment
- Level of investment in climate opportunities

At present full coverage of the portfolio is not available but CPTI continues to work to build this up through new data providers and engagement with managers. In the absence of reported data, the most sensible available proxies will be used. As discussed above there is currently limited data and understanding around physical risk, as such, CPTI and the broader market continue to seek better information and models here.

Another key tool for understanding climate risk and opportunity is scenario analysis – both quantitative and qualitative. The Scheme has undertaken new analysis this year, considering how climate change will affect various investments and overall economies, a key consideration in decision making.

Monitoring of Risk Metrics

The ISC is presented with climate risks and TCFD metrics on a regular basis. The Trustee Board formally reviews climate risks (including metrics and targets) at least once a year ahead of the publication of the Scheme's TCFD report.

The TCFD recommends that trustees should increase the frequency of monitoring if risk levels approach pre-determined risk appetites. The Trustee has not yet determined tolerances in this area given data and methodologies are still being constructed but will continue to develop its approach here as discussed in greater detail below.

To the extent possible, climate risk metrics are monitored for every asset class in the portfolio, however some areas remain a work in progress. More broadly the Trustee acknowledges that all areas of its assets and the broader economy are exposed to some level of climate risk and opportunity and that these risks are systemic and cannot be fully divested or diversified away.

Physical Risk: Generally speaking, limited data or acceptable scenario modelling is available here for many asset classes. Some physical risk analysis for the real estate portfolio has been performed - through the *MunichRe* platform, spanning multiple risks including river flooding, sea level rise and heat stress. More work is to be done in the coming years.

Transition Risk:

- Carbon emissions: absolute and change over time; scopes 1, 2 and 3.
- Carbon emissions intensity: absolute and change over time.
- Climate Stress Testing – conducted in 2021 and will update in 2025.
- Paris Alignment.

Stranded Asset Risk: The above transition risk metrics also relate to stranded asset risk. As the price of carbon increases, the risk of stranded assets increases with the most carbon intense assets at greatest risk.

ESG Scores: Scores absolute and versus the benchmark, along with exposures to laggard companies, relevant for public equities and corporate bonds (scores /data sourced from MSCI).

Controversies: Exposure to UNGC violators, watchlist and broader controversies, relevant for public equities and corporate bonds (data sourced from MSCI).

There has been no change in the Scheme's prioritisation of relevant risks for the TCFD report, and no tolerances have been proposed. CPTI continues to incorporate and evaluate climate risks into the investment process and reports back to ISC on all major developments. Understanding and assessing climate risk and opportunity remains an area of development for both the Scheme and the broader market. The Trustee will continue to evolve its approach accordingly.

Data Providers, Advisors, and Tools

In addition to data provided directly from managers, CPTI uses MSCI for ESG and climate risk assessment in public markets, supplementing this with additional data from EOS, Sustainalytics and Bloomberg.

In private markets, Blackrock eFront collects and collates reported ESG data for private companies, on an annual basis. The work being done by eFront remains a work in progress due to a combination of factors: legal challenges relating to data ownership; manual data cleansing to ensure that there are no mistakes or outliers within the data set; and the fact that many private companies simply do not yet report, or even collect, ESG and climate data. This final hurdle is expected to be overcome in the coming years when TCFD-aligned disclosures become mandatory for many private companies, meaning that many more private market companies will be collecting and reporting on this data.

Lastly, CPTI engaged with a number of consultants and key external fund managers in this area, for training purposes. CPTI, on behalf of the Trustee, has significantly increased the Scheme's available data in this area since 2021 and continues to work to further build this out.

Section 4 – Scenario Analysis

Introduction

As required every three years, the Trustee has undertaken new climate scenario analysis in 2025 as part of this report. Scenario analysis is a helpful tool for assessing the Scheme's resilience to different future outcomes.

The analysis highlights how different climate pathways could impact the value, risk and resilience of the Scheme over time. Whilst the output can provide some useful indications of whether the Scheme is likely to face losses due to climate transition/damage and where climate-related opportunities might emerge, there are significant limitations to both data and modelling as well as mismatches with the Scheme's investment horizon.

Approach

Understanding the performance of the Scheme's assets under various scenarios is a key part of the risk management and asset allocation approach. This applies to climate in the same way inflation or recessionary scenarios are considered. The approach here is both quantitative where possible, and qualitative to ensure a deeper understanding of the Scheme's assets and circumstances.

Scenario Analysis Methodology and Caveats

In preparation for this second round of scenario analysis, the team at CPTI met with a number of service providers during 2024 to explore their models but ultimately decided to use MSCI to conduct the analysis utilising public assets as an indicator for the full Scheme results.

Given the limitations to the data and modelling discussed below, CPTI has advised the Trustee to focus on relative impacts versus specific numerical data and whether impacts are positive or negative.

Understanding the analysis helps the Trustee to ensure that appropriate consideration is being given to the risks and opportunities presented by climate change and transition as highlighted within the analysis.

Limitations to the analysis

Data limitations

CPTI note that the climate analysis has been limited to identifiable public assets. Analysis is not applicable across private assets and also excludes securitised credit and any derivatives exposures such as commodities and hedge funds. That said, given the analysis is derived from estimations based on broad sector and geography classification we expect similar private market exposures to bear a reasonable resemblance to high level public market conclusions, and thus the analysis can be used to understand the likely direction of impacts of different scenarios across the whole Scheme assets.

For physical risk analysis to be truly accurate and complete, exact locations of all assets, workforces and full supply chains would need to be known. Unfortunately, this complete data set is not yet available and thus the results are based on proxies and estimations of both the assets held and the likely path of climate transition and climate change.

Modelling limitations

There are a number of limitations to the modelling. The scenarios remain very long-term, and this doesn't align with the Scheme's time-horizon – it is impossible to separate out the impact to assess over the relevant timeframe for the Scheme's assets. The scenario modelling also assumes assets are held constant over this very long period and also that there are no changes within the profile of each asset. Scientists do not know accurately what the result of global warming will be, in particular there are various tipping points expected to exponentially increase problematic changes, and it is unclear when these will be reached. Also changing weather patterns and damages are occurring significantly faster than predicted and in different locations.

Furthermore, many factors remain outside the scope of the analysis, such as mass immigration and conflict caused by climate change.

Climate Scenarios

Per regulation, CPTI has analysed the impact of 3 climate scenarios, as set out below, of which ***2°C Disorderly is the selected central scenario based on current policy expectations.***

CPTI notes that the analysis has not been conducted under a 1.5°C scenario, this is because the team believe it is very unlikely that global temperature rises will now be limited to 1.5°C All scenarios are modelled over 25 years to 2050.

Scenario	Description	Risks and impact
2ºC Orderly	Global warming reaches 2ºC above pre-industrial levels, and the transition to a low-carbon economy is **well-managed and predictable.**	The key risk here is transition risk – i.e. the cost to companies of regulation and spending to reach net zero – e.g. carbon tax, retrofitting. Stranded asset risk will also be high in this scenario.
2ºC Disorderly	Global warming reaches 2ºC above pre-industrial levels, and the transition to a low-carbon economy is characterized by **significant disruptions and surprises.**	As above the risk here is transition risk, the cost is higher here given the lack of planning. Given the delay in action, physical damage is also higher in this scenario.
3ºC	Global warming reaches 3ºC above pre-industrial levels, and there are significant physical damages to assets and cost to GDP.	This scenario includes the highest impact of asset damage. Other sources of models also include a 4 degree scenario. Any of these scenarios are expected to significantly underestimate the actual cost to assets.

Methodology – the climate analysis is produced by MSCI using their proprietary models, incorporating the scenarios developed by The Network for Greening the Financial System (NGFS), other frameworks and data sources. The NGFS is a global network of central banks and financial supervisors and aims to accelerate the scaling up of green finance and develop recommendations for central banks' roles in addressing climate change.

BCSSS Liquid Portfolio – High Level Scenario Analysis Results

The table below shows the cumulative impact of the 3 climate scenarios on BCSSS's public assets through to 2050. The impact is split into 3 areas – both the negative and positive impact of changing regulation/consumer preferences plus physical damages.

	Climate Transition Regulation Impact on Scheme Total Value (%)			Physical Impact on Scheme Total Value (%)			Opportunities Impact on Scheme Total Value (%)			Aggregated Impact on Scheme Total Value (%)		
	2°C	2°C	3°C	2°C	2°C	3°C	2°C	2°C	3°C	2°C	2°C	3°C
Predicted Value change on BCSSS Public Assets	Disorderly	Orderly	Hot House World	Disorderly	Orderly	Hot House World	Disorderly	Orderly	Hot House World	Disorderly	Orderly	Hot House World
	-3.7	-1.8	-1.6	-3	-3	-3.9	0.7	0.6	0.4	-6	-4.2	-5.1

Under the central scenario (NGFS 2°C Disorderly) the portfolio is **projected to lose 6.0% of its value by 2050** due to the combined effects of disruptive policy action, physical climate risks and only modest gains from climate-related opportunities. This is subject to significant uncertainty.

The above analysis has been conducted on the Public Equity portfolio in its entirety, Investment Grade Credit and Emerging Markets Debt portfolio (Corporate Bonds only), as of 30th June 2025. While private assets have not been modelled the overall results of private equity and private credit are expected to have a high level of overlap with their public counterparts given the estimations, modelling and data gaps encountered in the modelling.

BCSSS Liabilities

There are 2 key areas where BCSSS's liabilities could be affected by climate change and/or climate transition. These are as follows

- If UK inflation rates change in future as a result of climate change/climate transition.
- If BCSSS members live longer or die sooner as a result of climate change/climate transition.

The impact on the liabilities is limited by the maturity of the Scheme - the average age of members is 78 and we expect that around 65% of the Scheme's future payments (in real terms) will be made within 10 years. So, for climate change/transition to have a meaningful impact on the liabilities, these impacts will need to happen soon.

The scenario analysis modelling on previous pages does not consider the impact on the BCSSS liabilities. The MSCI scenarios do not consider inflation changes and generally there is no market consensus around how climate will impact inflation. However, if climate change/transition shifted inflation the results are expected to be as follows:

UK Inflation changes by	Sum of all expected future payments changes by
+/- 0.25% pa today	+/- 2.2%
+/- 0.25% pa in 10 years	+/- 0.8%

The impact climate change/transition will have on member life expectancy is extremely hard to predict. However, given the maturity of the Scheme it is not expected to be a key mortality impact. The BCSSS liability projections use broadly best estimate life expectancy assumptions that are reviewed on a triennial basis.

The BCSSS has a UK Government Guarantee which means that if there are insufficient assets to meet member pension payments, then funding will be provided by UK government. This provides a resilience to the Trustee's funding strategy and means that employer covenant is less of a factor for BCSSS.

Conclusions and next steps

Under the central NGFS 2^{o}C Disorderly scenario, the BCSSS portfolio is modelled to lose 6% in value by 2050, driven by both transition and physical risks over the next 25 years. **Whilst this is very much an approximation it does underscores the need for integrated, forward-looking strategies to safeguard value and harness opportunities.**

Key takeaways

Whilst data and modelling remain flawed there are some high-level conclusions that can be reached from the analysis and from deeper dives in real assets.

Policy-driven transition costs and physical hazards (coastal flooding, river low-flow and extreme heat) are expected to have significant impacts. The extent of this is determined by industrial sector and asset location and depending on timing may be more or less relevant.

Select mandates (e.g. Listed Infrastructure) and select assets exhibit elevated risk profiles requiring greater monitoring/engagement.

Recommended actions

- Continue engagement with high-risk managers and assets to ensure risks are being considered and mitigated effectively.
- Continue to rerun scenario analysis every three years with consideration of this every year.
- Continue to consider climate risks and opportunities that are relevant within the Scheme's time-horizon.

Section 5 - Metrics and Targets

Overview

In compliance with TCFD regulations, the Trustee agreed three climate metrics and a target in 2021. Two of these metrics, total carbon emissions and carbon intensity, are required by statutory guidance. The third metric, data quality, was also agreed in 2021 alongside an ambitious target of 90% reported emissions by the end of 2024. The Trustee acknowledged that this target was not met and has reviewed this and agreed a new target date of 2027. A fourth metric on Paris Alignment was added in 2023 to meet regulatory requirements.

CPTI, on behalf of the Trustee, is engaging with the Scheme's investment managers to improve data availability across the Scheme's assets. Enhanced data on emissions and trends will enable the Trustee to measure the impact of portfolio changes and engagement success. Subsequent pages detail Scheme data under the mentioned metrics.

Carbon Emissions Data Quality/Coverage by Asset Class

Data Quality: The accuracy, completeness, and reliability of information pertaining to carbon emissions, used to effectively assess the Scheme's financed carbon emissions.

Figure 1 The following table shows the data quality currently available by asset class and at the total Scheme level as of 31st March 2025:

Asset Class	% coverage (including proxy and reported data)	% coverage (reported data only)	% of total Scheme NAV (excluding cash)
Public equity	99%	88%	21%
Private equity	93%	5%	11%
Private debt	9%	0%	6%
Liability driven assets (LDI)	99%	99%	14%
Investment grade credit	98%	90%	20%
IG Securitised credit	100%	0%	6%
EMD Corporate	100%	95%	1%
EMD Sovereign	100%	100%	1%
HY Securitised Credit	100%	0%	3%
Special situations debt	100%	3%	6%
Infrastructure	82%	82%	2%
Property	99%	88%	9%
Total (reflecting asset allocation)	**93%**	**63%**	**100%***

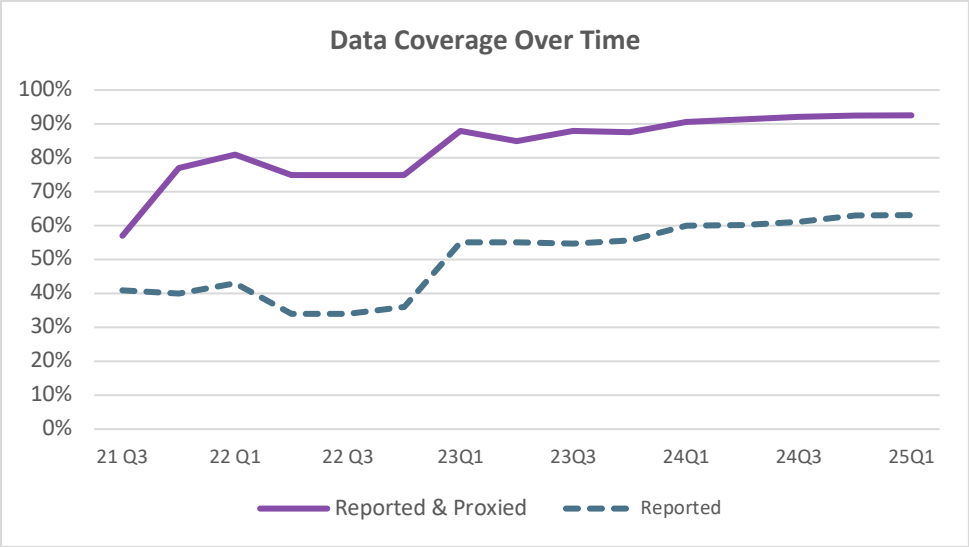
Source: MSCI and managers; * Absolute emissions data is not yet available for government bonds as there is not yet an agreed methodology of apportioning this data to investors. Therefore, coverage for government bonds relates to carbon intensity metrics only.

*The Methodologies section includes information about assets where there is currently no accepted methodology of reporting carbon emissions and have therefore been excluded from the total calculation.

From 30th September 2021, when measurement of the Scheme's emissions began, to 31st March 2025, data coverage has increased by 39% including both proxy and reported data, and by 24% for coverage including reported data only.

Figure 2 below shows the trend in data quality through time.

Figure 2



Total Scheme Scope 1 and 2 Carbon Emissions and Intensity

Carbon Emissions: refers to the absolute greenhouse gas emissions associated with the portfolio, expressed in tons of CO2. Total emissions are what must be reduced in order to limit the carbon dioxide in the atmosphere and the degree of planetary warming.

Carbon Intensity: is the portfolio's exposure to carbon-intensive companies, expressed in tons of CO2 per the enterprise value of the company/asset including cash (EVIC). It allows a comparison between companies and assets of varied sizes.

Scope 1 & 2: Scope 1 and 2 emissions are those directly produced by the companies/assets through burning fossil fuels or indirectly through purchased energy.

Scope 1 and 2 total carbon emissions are reported at each asset class level where possible and aggregated at the Scheme level. The Scheme is focused on collecting reported data for Scope 1 and 2 emissions but will use proxied data to fill in any gaps.

The metrics and methodology in each asset class have been chosen in-line with industry consensus, more information can be found in the methodologies section.

Figure 3

The following table shows the Scope 1 and 2 carbon emissions and intensity by asset class and at the total Scheme level as of 31st March 2025:

Asset Class	Scheme emissions (thousands of tonnes of CO2)	Benchmark emissions (thousands of tonnes of CO2)	Scheme Intensity (EVIC)	Benchmark Intensity (EVIC)
Public equity	80	93|121[1]	52	60|77[1]
Private equity	67	49[2]	82	60[2]
Private debt	1	5	28	122
Liability Driven Assets[4]	N/A	N/A	114	TBC
Investment grade credit	55	141	37	92
Securitised Credit	14	TBC	28	TBC
EMD Corporate	28	23	278	226
EMD Sovereign[4]	N/A	N/A	960	TBC
HY Securitised Credit	6	TBC	31	TBC
Special situations debt	42	42	97	96
Infrastructure	7	TBC	41	TBC
Property	3	TBC	4	TBC
Total*	**304**	**356**[3]	**51**	**60**

Public market and Property carbon data shown to end September 2024, all other data as of December 2023.

[1] Secondary benchmark shown for public equity emissions and intensity represents the public equity AIP benchmark.

[2] FTSE All World benchmark (the primary benchmark) used as a proxy for Private equity benchmark.

[3] The benchmark total is the Scope 1 and scope 2 emissions of the FTSE All World Index for the asset value CPTI have data for.

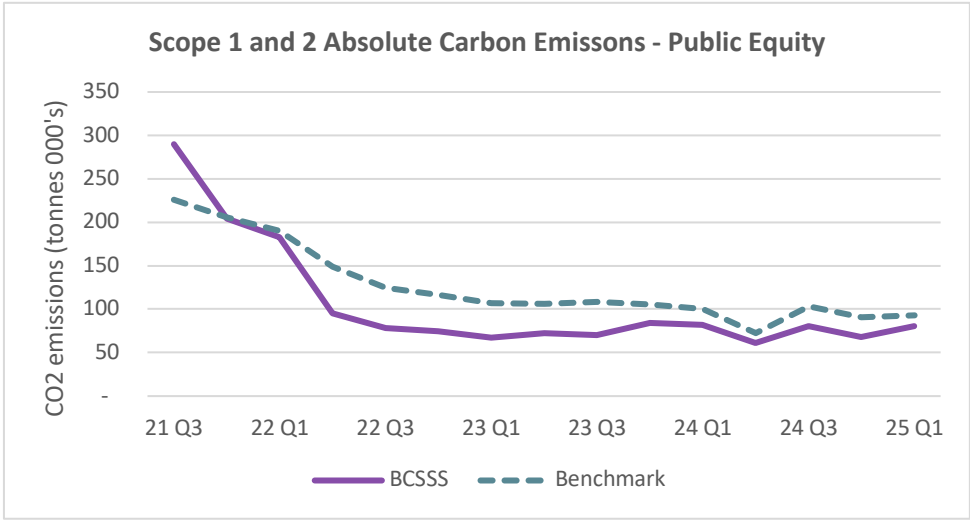
[4] The Scheme does not report absolute emissions as there is currently no agreed methodology of apportioning country-level emissions to investors. The Methodologies section includes information about assets where there is currently no accepted methodology of reporting carbon emissions and have therefore been excluded from the total calculation.

As indicated in the table above, the Scheme's absolute emissions and emissions intensity are both lower than the benchmark. The Scheme has no set targets and as such, fluctuations in carbon emissions and intensity are expected when changes are made at the asset class level. There have been marginal changes on emissions since last year, however since reporting began in Q4 2021, there has been an overall downward trend.

Figures 4 and 5 show the total carbon emissions and carbon emissions intensity for the Scheme's public equity portfolio at the end of each quarter from Q3 2021 when the metrics were agreed, and tracking began. Carbon intensity is shown by the chosen metric of emissions (EVIC) and also relative to sales as an additional measure relevant to these assets. In each case, changes through time are shown as well as the comparison with the relevant asset class benchmark.

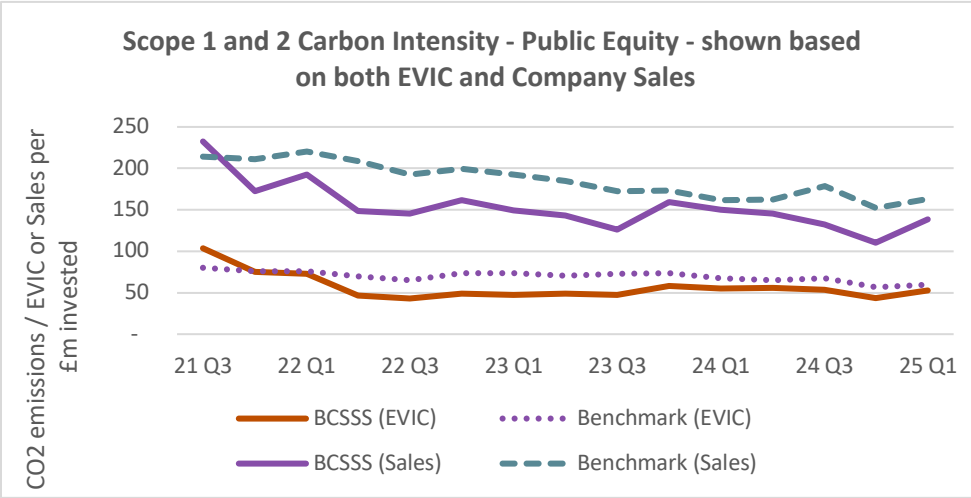
The emissions and intensity of the public equity portfolio (which accounts for 21% of the total asset value of applicable assets) is roughly unchanged versus the previous year (as per figure 4).

Figure 4



Source: MSCI

Figure 5



Source: MSCI

Following an initial fall in emissions and intensity when monitoring began these measures have both remained broadly stable. The initial reductions predominantly relate to the transition of the passive mandate in Q4 2021 and the termination of a semi-active equity mandate in Q2 2022.

Over the reporting year, the intensity number has reduced slightly, and remains marginally below index emissions, both compared with the FTSE All World and the regionally weighted Trustee benchmark (40% Americas, 30% Asia-Pacific and 30% EMEA). The Scheme's emissions intensity is expected to vary up and down through time with asset class shifts and regional and sector views.

Figure 6

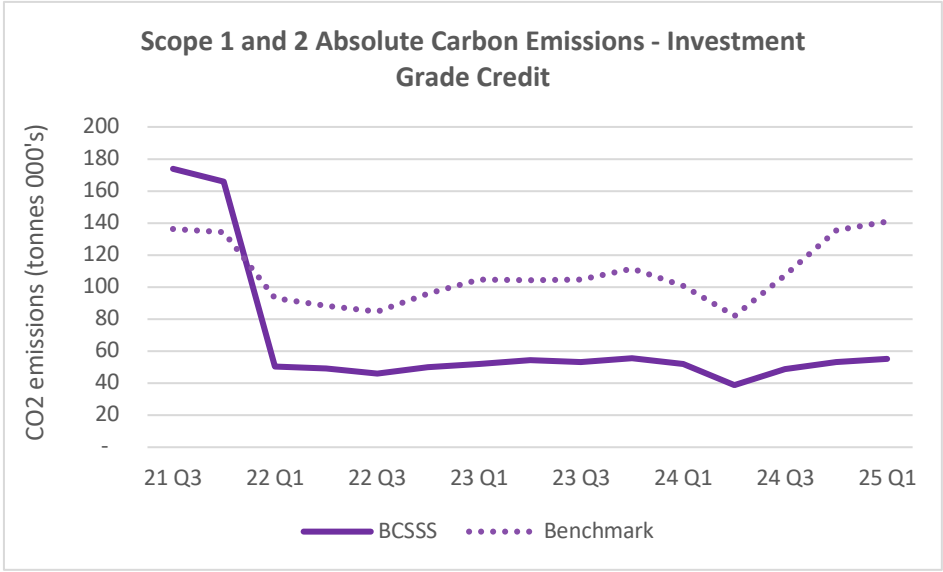
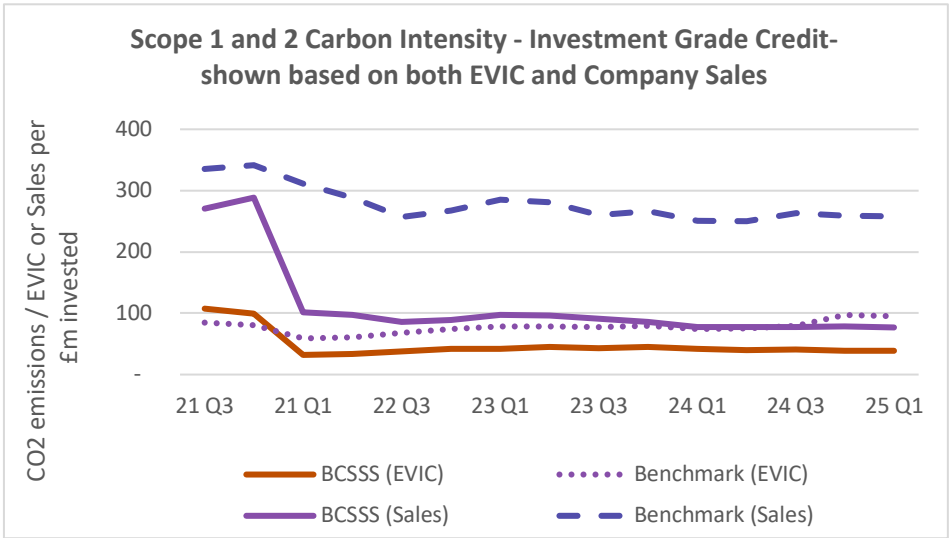


Figure 7



Source: MSCI, Benchmark: BBG Global Aggregate Corporate Hedged Index

Both absolute emissions and emissions intensity within investment grade credit have fallen following the transition in February 2022 to mandates considering risk in this area. Over the last reporting year these metrics have remained largely the same.

Scope 3 Carbon Emissions

Scope 3: refers to indirect greenhouse gas emissions both upstream and downstream of an organisation's main operations.

Upstream: refers to indirect greenhouse gas emissions that occur prior to the company's operations, including those from the production and manufacture of purchased goods and services.

Downstream: refers to indirect greenhouse gas emissions that occur after the company's operations, including those from the distribution, use, and end-of-life stages of sold goods and services.

Scope 3 emissions, constituting 90% of the equity benchmark's total emissions, encompass indirect impacts throughout a product's life cycle. Focusing solely on Scope 1 and 2 emissions may neglect supply chain issues and promote the use of opaque and lengthy supply chains by both companies and countries. Understanding Scope 3 emissions, including the full life cycle of a product, is crucial for risk management, robust corporate governance, and future planning.

Challenges: Addressing Scope 3 emissions poses challenges related to limited data access and varying methodologies across suppliers, leading to potential inaccuracies. Aggregating data faces difficulties, with upstream emissions for one company becoming downstream for another, causing double or triple counting in total portfolio emissions.

Double or triple counting is a deliberate feature of Scope 3, used to create shared responsibility – the double counting also leads to fast downward curves when emissions are cut. Data reporting in Scope 3 is currently extremely limited. Even where data is reported, methodologies vary hugely. As such, unlike with Scope 1 and 2, best practice is to use estimated, not reported, data to allow like for like comparisons.

Therefore, the approach we continue to use in TCFD reporting on Scope 3 is to use estimates provided by MSCI for public assets. For their modelling, MSCI use the publicly available Greenhouse Gas Protocol (GHGP) framework for Scope 3 emissions accounting.

The Scheme's approach to measuring Scope 3 emissions currently covers public markets (public equity and investment grade credit) and real estate. MSCI's coverage of Scope 3 data covers the Scheme's public markets and real estate Scope 3 emissions have been provided by the manager. CPTI fully expect to extend the reach of Scope 3 reporting across other asset classes in due course, but currently the lack of data and coverage in other asset classes currently remains too low for inclusion into the Scheme's report.

The following two tables show the Scope 1, 2 and 3 carbon emissions and intensity by asset class and at the total Scheme level as of 31st March 2025:

Figure 8

Asset class (NAV)	Carbon emissions (thousands of tonnes of CO2)				
	Scheme Scope 1 & 2	Scheme Scope 3	Scheme Scope 1, 2 & 3	Benchmark Scope 1, 2 & 3	
Public equity (£1.6bn)	80	756	836	750	894[1]
Investment grade credit (£1.6bn)	55	712	767	827	
Property (£671m)*	1	4	5	TBC	

Figure 9

Asset class (NAV)	Carbon intensity (EVIC/NAV)				
	Scheme Scope 1 & 2	Scheme Scope 3	Scheme Scope 1, 2 & 3	Benchmark Scope 1, 2 & 3	
Public equity (£1.5bn)	52	493	545	482	598[1]
Investment grade credit (£1.6bn)	37	549	586	569	
Property (£671m) *	2	7	9	TBC	

[1] Secondary benchmark shown for public equity emissions and intensity represents the Trustee's public equity benchmark.

[2] Scope 3 property emissions and emissions intensity relate only to the Nuveen Portfolio.

Compared with the FTSE All World Index, when including scope 3 emissions and intensity, the public equity portfolio's emissions are marginally higher than the level of the index. This is reflective of the portfolio's sector exposure relative to the index – despite a lower exposure to energy stocks, the portfolio's overweight exposure to utilities and healthcare sectors both result in a higher scope 3 emissions number. Scope 3 emissions are notably high for utilities companies because the emissions from the combustion of solid fuels (e.g., coal, gas) by end-users, typically far exceeds the company's direct (Scope 1) and indirect (Scope 2) emissions.

When compared with the Trustee's public equity benchmark, scope 3 emissions and intensity numbers are lower for the Scheme. This is due to stock selection in areas like industrials, metals, mining and energy.

The investment grade credit portfolio's emissions are below the Bloomberg Global Aggregate Corporate Index.

Paris Alignment: Definition and Scheme Relevance

The Trustee notes that, as with Net Zero, the Scheme is not required to set a Paris Alignment commitment although the Scheme is required to report on the extent to which its assets are Paris Aligned or not.

The Scheme's Approach

The Trustee has chosen to calculate the extent to which its assets are Paris Aligned by using a binary target measurement. The approach taken by CPTI looks at the company/asset level within each portfolio from data provided by either MSCI or directly from the managers. For some asset classes, this is relatively straight-forward while for others it is either more complicated or in some cases not possible. More information can be found in the methodologies section. For an asset to be considered "Paris Aligned" it must be on **a credible pathway** towards Net Zero at an appropriate pace, rather than already achieving Net Zero today.

Figure 8 below shows the current look-through level of Paris Alignment across the total portfolio as at the end of March 2025.

Figure 10

Asset class	% of asset class that is Paris Aligned	
	March 2024	March 2025
Property	0%	45%
Investment grade credit	40%	43%
Public equity	40%	48%
Infrastructure	24%	37%
Emerging market debt	10%	8%
Private equity; Private debt; Special situations debt	*No Data*	
Liquid securitised assets; Government bonds; Hedge funds; Commodities; and Other *	*N/A*	
Total portfolio alignment	**16%**	**23%**
Alignment of assets where data has been provided	**37%**	**43%**
FTSE All World alignment (science-based targets)	**41%**	**44%**

Source: Investment Managers/SBTi; * asset classes for which Paris Alignment is not an applicable metric.

Looking at the asset classes where data is available, the portfolio is 43% Paris Aligned, in line with the FTSE All World. The level of alignment across the portfolio (and the benchmark) has risen slightly over the year, reflecting the inclusion of the Property portfolio.

Within Public equity there are also now more companies with SBTi approved targets and the portfolio has higher exposure to companies with existing targets.

Section 6 – Conclusion

This fourth statutory TCFD Report demonstrates the Trustee's rigorous approach to this area. The Scheme is not Paris Aligned, and its investment horizon is shortening and as such it must take a carefully managed approach to climate risk and opportunity in line with regulatory and market developments.

The Trustee acknowledges the high level of uncertainty around the data and modelling included in this report, which presents challenges to decision-making. Whilst this report has identified many areas of work in progress for the Trustee, and the industry, the Trustee is committed to continuing to develop its approach in this area, and to both challenge and partner with asset managers.

The Trustee continues to make progress towards its target of significantly improving data quality on carbon emissions across the whole portfolio. The 90% target is ambitious and was not met by the end of 2024. In light of this, the Trustee extended the target to 2027, confident that data quality remains one of the best tools for understanding climate risk.

The Trustee notes that carbon emissions remained similar over the year. The Scheme has set no targets here and notes that its emissions are expected to vary through time and could rise as well as fall.

Overall, it has been a complex year for the climate transition, marked by conflicting themes and shifting policy dynamics. Governments faced competing priorities meanwhile asset managers contended with increasing legal and political scrutiny.

Despite these challenges, investment in the energy transition continued at pace, with emerging markets, particularly China and India, making significant strides. However, in developed markets, momentum slowed, with investors remaining largely cautious amid regulatory uncertainty and shifting sentiment.

Against this backdrop, the Scheme remained focused on strengthening its climate risk governance, improving data quality coverage in particular.

Governance in detail

As set out in the first TCFD report, The Trustee has an established governance framework for considering all investment opportunities and risks. The Trustee's approach to governance of climate, outlined below, was formalised in 2021 in the context of this and as an extension of existing governance arrangements. This section is largely unchanged since the Scheme's second TCFD report.

Committee of Management ("COM")

COM consists of all eight members of the Trustee board. COM retains responsibility for all key areas of policy which includes the overarching Responsible Investment ("RI") Policy. Climate has been an important theme within the RI policy and the most recent review of the policy in 2021 resulted in a dedicated section on climate (link). The key roles retained by COM are as follows:

- Managing the risk of climate on Funding Strategy.
- Approve and regularly review the RI policy, which includes a specific climate policy.
- Provide clear guidance to the Investment Sub-Committee within the Terms of Reference for overseeing implementation of COMs policy regarding climate.
- Establish climate metrics to monitor and report publicly as part of TCFD requirements. In 2021, COM agreed the following key metrics to report on:
  - Absolute carbon emissions across the portfolio.
  - Carbon emissions intensity across the portfolio.
  - Percentage of the portfolio on which acceptable (reported not proxied) carbon emissions data is available.
  - In 2023, as required by the TCFD regulation, COM also agreed to report on Scope 3 emissions and the degree of Paris Alignment across the Scheme's assets.
- Establish a climate target and report progress towards this target as part of TCFD requirements. In 2021, COM agreed the following target:
  - Increase the proportion of the Scheme on which acceptable (reported not proxied) carbon emissions data (Scope 1 and 2) is available to 90% by the end of 2024.
- COM extended the target date to 2027 in 2025.
- Review progress against the climate data target, and whether the target remains relevant or needs replacing.
- Publish an annual TCFD Report within 7 months of the end of each Scheme year on a publicly available website, accessible free of charge.
- Ensure knowledge and understanding of climate issues across the Trustee and its advisors are sufficient to address the issues presented.

Investment Sub-Committee ("ISC")

ISC consists of four of the eight-member Trustee board and currently has two investment advisers who are non-voting members of the sub-committee. During the reporting period there were three investment advisers. COM delegates to ISC the ongoing oversight of investment risks and opportunities, including those relating to climate. ISC is responsible for:

- Implementation of investment strategy.
- Monitoring the agreed climate metrics to be reported publicly as part of the TCFD reporting, as well as any additional metrics that ISC believe are appropriate.

- Reviewing progress against the established climate target as set out above and acting as necessary to ensure the Scheme remains on track.
- Reviewing whether the agreed climate metrics should be changed through time and making any proposals to COM.
- Reviewing the climate scenario analysis and agreeing any investment changes required as a result.
- Setting and reviewing any additional metrics relating to climate and broader ESG risks as part of ongoing investment activity; and
- Overseeing CPTI's implementation of climate risk management and opportunity capture.

Climate and broader ESG metrics are reported in each quarterly ISC meeting pack. COM formally reviews the climate data and metrics following the end of each Scheme year.

Coal Pension Trustees Investment Limited ("CPTI")

CPTI is responsible for providing investment advice and investment management services to the Trustee. As set out in its Investment Management Agreement, CPTI is responsible for the implementation of the Scheme's RI policy, including in relation to climate and advising the Trustee on ongoing management issues. This includes:

- Ensuring climate risks and opportunities are assessed and addressed across all areas of the portfolio.
- Ensuring that the Scheme's providers are aligned in their management and reporting of climate risk and opportunity and stewardship of the Scheme's assets.
- Ensuring investment thinking evolves to stay on top of a fast-changing opportunity set.
- Advising the Trustee on governance, risk and opportunities, metrics and targets.
- Ensuring the TCFD mandated scenario analysis is conducted; and
- Providing all required reporting and market information.

Risk management

The ISC receives quarterly information on carbon emissions data, the level of investment in quantitatively assessed current climate opportunities, the performance of the climate theme and investments in potentially risky areas such as ESG laggards and controversies. This is discussed as part of the regular meeting agenda. The Scheme (and the market more broadly) is yet to build out an approach to systematically analyse physical risk data. Beyond these regular quantitative updates, CPTI assesses climate risks and opportunities as part of all regular review meetings with managers and any new manager due diligence. It is also a focus of all stewardship discussions. CPTI or the Trustee may also identify areas of risk and opportunities through external meetings, training and their own networks and studies. All of this is then fed back into the ongoing qualitative and quantitative evaluation of risks and opportunities.

Whilst there is no one risk indicator or target around climate change, the Trustee believes through the combination of the below, as well as ongoing developments, a good picture of potential risk and opportunity is being built:

- Monitoring carbon emissions and intensity data on an absolute basis and versus the benchmark.
- Monitoring investment in climate opportunities.
- Monitoring exposure to laggards and controversies and engaging on these.

The Risk and Assurance Sub Committee ("RASC"), which consists of four of the eight-member Trustee board, is responsible for overseeing overall compliance with policies and risk tolerances. As above, there are no formal risk limits or tolerances set for climate change. Aside from any issues raised by the sub-committees, COM will formally review climate risk annually before publishing the Scheme's TCFD report.

Knowledge, understanding and training

The Trustee is required by regulation to have the necessary expertise in relation to climate-related risks and opportunities and to ensure adequate knowledge from those appointed to advise it. The Trustee and its advisors look to regularly enhance their knowledge in this area as detailed below. Through COM and sub-committee meetings, the Trustee will challenge CPTI to ensure it takes adequate steps to identify, assess and manage any climate-related risks and opportunities on behalf of the Scheme. The Trustee has discussed climate change related issues at a number of ISC and COM meetings across the year.

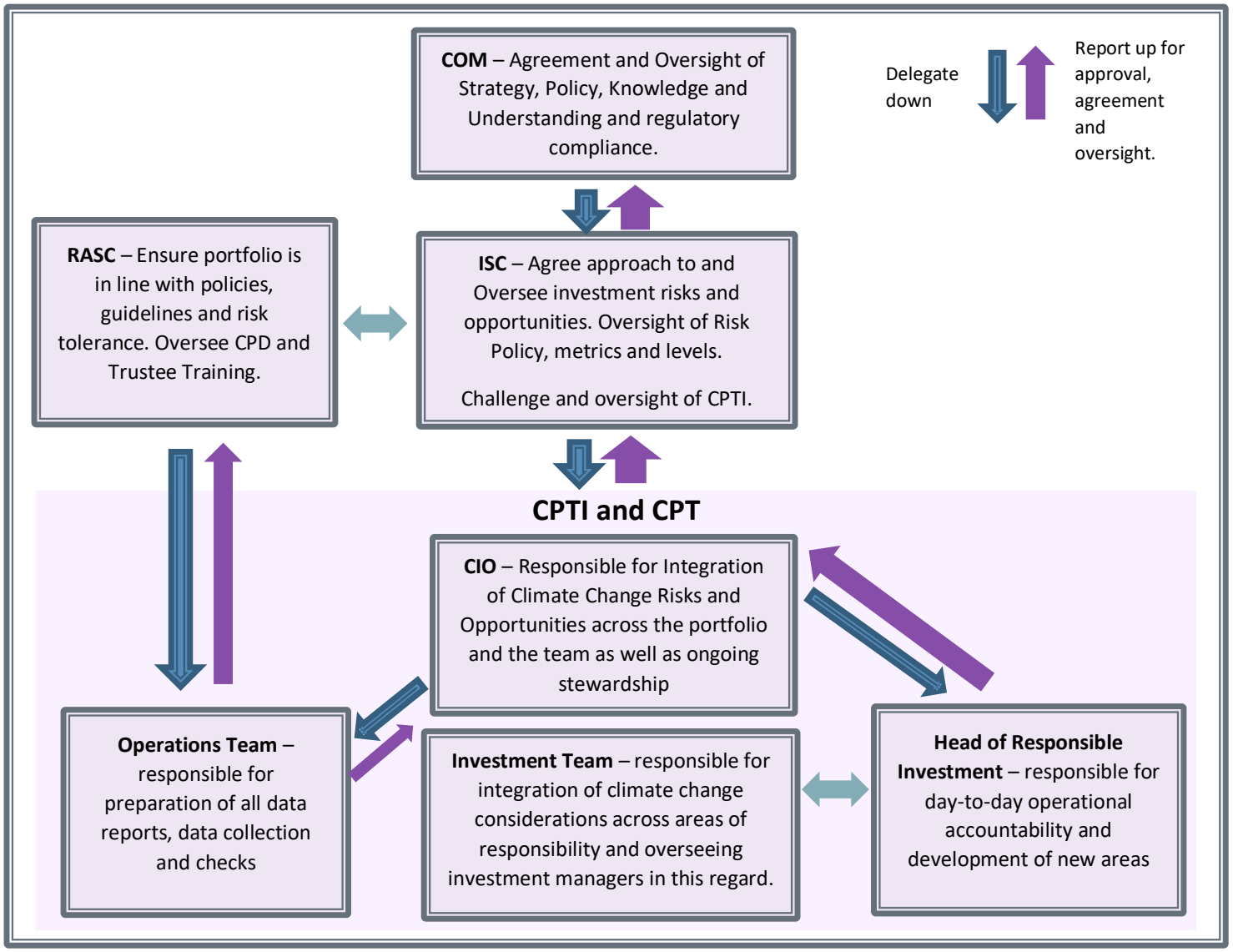
Trustee training is undertaken at Trustee meetings, sub-committee meetings and through other external training as appropriate and is monitored through a training register by Coal Pension Trustees. Coal Pension Trustees Services Limited is the in-house executive function for the two closed Coal Industry pension schemes, the Mineworkers Pension Scheme (MPS) and the British Coal Staff Superannuation Scheme (BCSSS). CPT is the parent company of CPTI. The training register enables CPT to keep a watching brief of those subjects the Trustee Directors are voluntarily pursuing, with a view to providing supplementary training on matters of particular interest and to identify any gaps in the Trustee Directors knowledge and arrange for this to be addressed.

Due to the fact that there has been no update from the Regulator regarding mandatory climate disclosures, there has been no need of Trustee training in this area during the year.

The Trustee also has two independent investment advisors who attend all ISC meetings and provide expert investment opinions and challenge on behalf of the Trustee.

All CPTI Senior Managers and certified staff are required to fulfil training and competency requirements and are internally certified under the FCA's Senior Managers and Certification Regime (SM&CR). CPTI employees are given access to ongoing training, including training on climate-related risks and opportunities each year.

Climate Oversight Governance Structure



Methodologies

The following section goes into detail on the methodologies used to calculate the metrics relating the Scheme's TCFD report, as well as identifying the data resources used by CPTI. Any changes to methodologies or resources over the reporting year have been covered earlier in the report.

Data quality

CPTI assesses reported data coverage using information from independent data providers in public markets (public equity and public credit). Reported data is available on the majority of Real Assets which is received directly from the managers and based predominantly on actual energy use. In private equity and private debt, limited reported information is available, some of which is provided by managers based on underlying company information and the remaining portion of data is approximated via proxies based on company sector and geography. The data collected is aggregated at the asset class level and then shown at the portfolio level in the main body of the report.

As of 31st March 2025, 63% of the Scheme's data comes from reported company or asset data. As such, the actual carbon emissions of the Scheme could differ significantly from what is reported in this report using best estimates and proxies as well as noting the level of unreported data. That said, the most robust methodologies are being used for estimates and the Trustee has clear sight of the areas of the portfolio that are more or less carbon intensive. As some areas of the portfolio are not currently covered, the total emissions number in this report is expected to be an underestimate. Increasing data coverage and accuracy is a key focus for the Trustee. Where proxy data is used, this is based on the actual sector and regions of the assets where available and thus is expected to be an indicative (if not accurate) estimate of actual data.

In line with DWP guidance, some asset classes have been excluded from the metrics and targets data due to there being no way to calculate or indeed assign emissions to them. These asset classes include commodities futures, hedge funds and cash. Specifically for the Scheme, the majority of excluded assets are cash, derivative based assets such as Brevan Howard (the hedge fund manager) and commodities, which represent 3.0% of total Scheme valuation as at end March 2025. The total reported data coverage shown in the main report excludes these assets.

In the case of commodities, where investments are made through liquid futures instead of direct physical commodity purchases, determining emissions is challenging due to the absence of a specific emissions-generating entity linked to the futures. Additionally, the complex nature of measuring emissions from commodities like cotton, influenced by factors such as type, usage, and harvesting methods, coupled with a lack of sufficient data, supports the decision to exclude this asset class from total portfolio-level emissions reporting.

Similarly, hedge funds pose a challenge as there is no clear emissions-generating entity associated with instruments like rate and currency futures. Brevan Howard notes the absence of an industry standard for calculating emissions in the instruments they trade, reinforcing the practical impossibility of assigning emissions to this asset class.

Carbon Emissions and Intensity

While there is little ambiguity when it comes to calculating carbon emissions, there are a number of different methods for calculating carbon intensity. The Trustee has chosen to calculate intensity based on absolute emissions relative to the enterprise value of the company/asset including cash (EVIC). This metric has been chosen as it is in-line with industry consensus, although there is a greater degree of variability in metrics used here versus absolute emissions and the metric used may change in future. Additional metrics are monitored where appropriate to particular assets, for example looking at intensity/sales in public equities and intensity per square meter in real estate or per unit of energy produced in certain infrastructure assets. Scope 3 emissions are shown

in the main body of the report where possible – currently this is just proxy data for public assets and some reported data provided by the manager for property.

Methodologies used for calculating carbon emissions and intensity figures differ across asset classes. These are outlined below:

Public equity and corporate credit: For public equity and corporate credit, Scope 1 and 2 carbon data is sourced from MSCI or the manager and is based primarily on company reported emissions with proxy data used to supplement any gaps. Carbon emissions are apportioned to the investor, based on investors share of the EVIC of a company. Scope 3 emissions are estimated for all public market investments.

Property: Scope 1 and 2 property emissions are received from the managers on an annual basis and are based on landlord energy use only. To calculate carbon intensity, the team have used *tons of CO_2 per the Gross asset value*. The chosen metric aligns well with EVIC (used for Public Equity and Investment grade credit) due to the fact that both metrics consider the total value of the assets and, as such, are somewhat comparable.

Infrastructure: Infrastructure emissions are received from the managers on an annual basis, based on reported energy use at the asset level.

Private equity and private credit: For private equity fund of funds we have used proxied data provided by eFront, based on MSCI public market equivalent emissions. This data is applied by sector allocation of the underlying assets where available. Outside of fund of funds, private equity fund data is a combination of reported data and estimated data through ClarityAI provided by eFront. The majority of reported data is collected by CPTI, based on reported asset level data, some of which has also been assured by the manager. Over time CPTI expect the proportion of the reported data to increase as eFront continue to roll out their data programme, and this process is likely to be accelerated by CPTI's own engagements and data collection with these managers.

For private credit, data is a combination of data received from investment managers and a proxy based on a 50/50 public equity/loan index.

Government bonds and Liability Driven Assets: Government bond emissions intensity is calculated as the emissions of a country shown per **GDP** (source: World Bank and manager). The Scheme does not report absolute emissions as there is currently no agreed methodology of apportioning country-level emissions to investors. Emissions per **GDP** is a better metric than emissions per capita for comparing government bond emissions intensity because it accounts for economic productivity differences, enables fairer comparisons across developed and emerging markets, aligns with sovereign risk factors, and provides a more stable measure over time.

Securitised: Data for securitised assets has been calculated and provided by the manager using proxy estimates based on a similar securitised fund. Proxies are created at the deal level, quantifying expected carbon from each underlying asset backing the particular securitisation.

Paris alignment

The approach taken to assessing Paris Alignment for each asset class is outlined below:

Public equities and corporate credit

CPTI has assessed Paris Alignment in public markets based on a single metric: whether or not a company has a carbon emissions reduction target approved by the Science Based Targets initiative (SBTi). Targets are considered science-based if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement. CPTI note that using this metric alone may not be a true representation of the Scheme alignment – on one side, a company may be aligned but not yet have had its target approved by SBTi, on the other, some companies may have had SBTi targets approved but could rely on partial offsets (which are newly being considered by SBTi).

As with public markets, CPTI has assessed Paris Alignment in the emerging market debt portfolio, though only for the portion of that portfolio that is invested in corporate bonds (there is no agreed methodology as of yet to deem whether or not a government bond is Paris Aligned.) The same SBTi metric is used here.

Infrastructure:

The infrastructure holdings exhibit varying degrees of alignment. One manager has identified their holdings as 100% Paris Aligned, reflecting investments tailored to support a low-carbon economy. Conversely, another manager has not yet conducted a formal assessment against Science Based Targets for climate impact, resulting in their holdings being categorised as "Not Aligned" for the current reporting period. The Scheme is in the process of exiting some of this latter portfolio and some was sold over the reporting year.

Real estate:

Previously Carbon Risk Real Estate Monitor (CRREM) analysis (based on benchmark assumptions of carbon intensity) has shown that all the real estate assets would be stranded by 2050 and are therefore currently not Paris Aligned. However, this is purely based on a snapshot of the assets in their current state, with no improvements made between now and 2050, so was not a good indicator of what will actually occur. As units become vacant and undergo refurbishment, a large part of the refurbishment focuses on reducing the carbon intensity of the property. The Scheme's property manager has a Net Zero target of 2040, ahead of the Paris Alignment target, and as such, the Scheme anticipates that all properties will comply with the Paris Agreement once fully incorporated into asset level business plans.

During the last year, the Scheme's real estate manager has put together a model to estimate Paris Alignment. Note the alignment scores do not take into account upcoming capital expenditure which would reduce energy consumption.

Other asset classes:

The Scheme's Private Debt, Private Equity and Special Situations Debt allocations include a large number of commitments made several years ago. These assets are in gradual run-off, and CPTI expect much of these investments to be paid out to the Scheme over the next several years. Given this CPTI are mainly focusing the Paris Alignment assessment on the remainder of the Scheme's assets. Over the reporting year, CPTI engaged with one the larger managers within the Private Equity portfolio to discuss possible metrics that could be used to determine Paris alignment in the future. CPTI hope to incorporate some of the data in next year's TCFD report.

For some asset classes in which the Scheme is invested such as government bonds, securitised credit, commodities and hedge funds, there is no current market accepted methodology for assessing Paris Alignment and thus these portfolios have been classified as N/A and will be excluded from the overall calculation – noting what percentage of the total portfolio falls under this category.

CPTI engaged with one of the strategic partners over the year regarding the possible labelling of "green gilts" as Paris aligned investments, arguing that the UK is a signatory to the Paris Agreement and the green bond is used to fund climate-related investments that contribute towards the UK's transition plan. It was, however, decided that this does not constitute a strong enough argument to designate a government bond as Paris aligned as the manager in question does not yet consider the UK to be aligned, only aligning. CPTI will consider looking at Paris Alignment on a scale in the future, but for this report the team have continued to look at the metric on a binary Aligned/Not Aligned basis.

Signed by the Chair of Coal Staff Superannuation Scheme Trustees Limited