Mellon Retirement Benefits Plan

TCFD Report 2023

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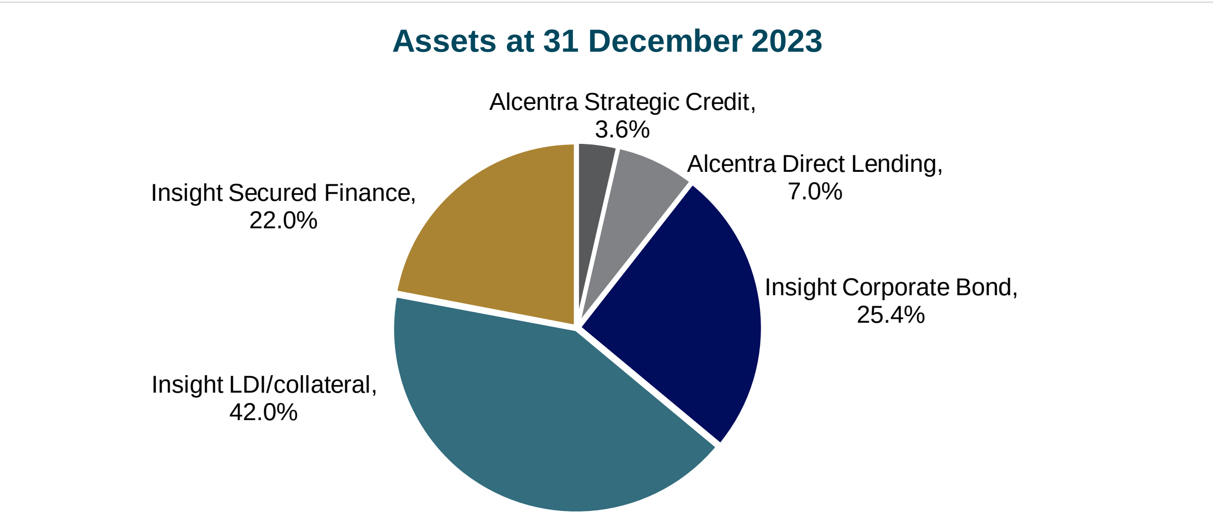
Mellon Retirement Benefits Plan

The Mellon Retirement Benefits Plan (the 'Plan') is a defined benefits occupational pension scheme. The Plan has closed to future accrual and, as a result, the Trustee has adopted a low-risk investment strategy, with the bulk of the Plan's assets being invested with Insight Investment in a cashflow driven solution that hedges the significant majority of the Plan's interest and inflation risk.

The Trustee fully supports the Paris Agreement and recognises the need to address the risks that members of the Plan face from climate change. The Trustee acknowledges that there is an urgent need to accelerate the transition towards global net zero greenhouse gas emissions and do its part in helping deliver the goals of the Paris Agreement. The Trustee of the Mellon Retirement Benefits Plan therefore commits to transitioning the investments to achieve net zero portfolio greenhouse gas emissions by 2050, or sooner.

The Plan had invested assets of £578.4m as at 31 December 2023 (excluding insured annuities). The asset allocation at that date was as follows:



This report sets out the Plan's disclosure of the financial impacts of climate related risks and opportunities in line with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 and Guidance issued by the DWP and the Pensions Regulator.

Mr. Barry Halpin
Director and Chairman of the Trustee

1. Governance

The Trustee of the Mellon Retirement Benefits Plan has ultimate responsibility for ensuring the effective governance of climate-related risks and opportunities. The Trustee has put in place a governance process to ensure that there is oversight of the climate related risks and opportunities that are relevant to the Plan. The Trustee remains responsible for Plan-wide decisions.

The governance process around climate related risk and opportunities reflects the unique challenge these risks pose and the severity of the impact they could have on the Plan.

The Trustee Directors meet approximately four times per year and maintain responsibility for ensuring effective governance of climate related risks and opportunities. The Trustee considers climate related issues when reviewing its investment objectives, strategy, risk management policies and implementation.

The Trustee has established a Climate Risk Sub-Committee comprising of two Trustee Directors and representatives from the Company, Investment Consultant and Insight Investment. Its aims are to develop and maintain the Plan's responsible investment and climate change policies including the Plan's climate related investment beliefs, objectives, metrics and targets. The Climate Risk Sub-Committee is also responsible for ensuring compliance with meeting regulatory reporting requirements, including the preparation of the Plan's TCFD report.

The Climate Risk Sub-Committee meet as frequently as required, with meetings being held to provide training and discussion around the TCFD framework and reporting requirements.

Minutes of the meetings of the Climate Risk Sub-Committee are circulated to all Trustee Directors and progress on meeting objectives and any decisions required are raised at each Trustee meeting.

The Trustee and the Climate Risk Sub-Committee have taken advice from Buck Consultants (Administration and Investments) Limited ('Buck') in setting their responsible investment and climate change policies and they are satisfied that they have taken adequate steps to identify climate related risks and opportunities through the following activities:

- Setting climate related objectives and measurement criteria for their investment consultant and reviewing these objectives every three years or more frequently if necessary. The performance of the investment consultant against the agreed objectives and measurement criteria is conducted annually.
- Reviewing the climate competency of their investment consultant against the ICSWG Investment Consultants Competency Guide along with their performance against other objectives on an annual basis.
- Reviewing the investment consultant's Stewardship Report as assessed by the Financial Reporting Council.

Training has been provided to the Trustee and the Climate Risk Sub-Committee by the investment consultant and by Insight Investment covering:

- The Trustee's legal obligations to consider and act on climate related issues.
- Training provided by Insight on their own TCFD reporting and challenges they have faced.
- The Pensions Regulator's review of climate related disclosures by pension schemes.
- Updated scenario analysis.
- Climate related metrics and targets, including Trustee selected metrics.

Further training is provided on an ad hoc basis depending on the nature of the discussions, such as climate related legislative and other developments.

The Trustee has not been able to obtain meaningful data from Alcentra. This is not expected to have a material impact on reporting as these assets form a relatively minor part of the Plan's overall portfolio and the value of assets held with Alcentra over the next two years is expected to drop sharply. However the Trustee has noted that Alcentra became a signatory to the UK Stewardship Code in September 2022 and is expected to publish its first TCFD report in 2024.

Insight Investment has provided the Trustee with appropriate climate related scenario analysis, risk metrics and targets in addition to more general reporting on stewardship activities and responsible investment activities. This information is updated and provided to the Climate Risk Sub-Committee and the Trustee on a quarterly basis.

Insight Investment reports to the Trustee on their adherence to specific climate related conditions set out in their Investment Management Agreement, where applicable.

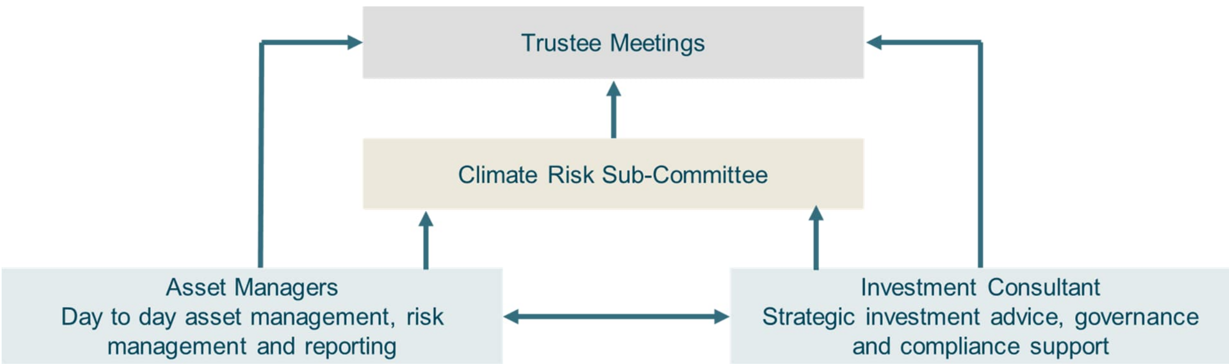
This information is provided quarterly to the Climate Risk Sub-Committee and is reviewed by the Trustee Directors at each meeting. The Insight reporting has evolved over time and includes, for example, the following climate risk information in respect of corporate bonds:

- ESG scoring
- Issuers materially exposed to coal power, thermal coal mining and unconventional oil and gas extraction
- Scope 1, 2 and 3 emissions and data coverage
- Climate risk model rating (physical and transitional)
- Net zero alignment, including Insight's net zero model, Transition pathway, Implied temperature rise and Science based targets.
- Investments in Green, social and sustainability bonds

The asset managers have primary day to day responsibility for the way in which climate related investment risks are managed. The Trustee allows Insight Investment significant discretion in the application of Environmental Sustainability Restrictions set out in their Investment Guidelines.

The Climate Risk Sub-Committee has reviewed Insight Investment's approach to climate related risks and opportunities and how these are integrated into their investment process. The Climate Risk Sub-Committee will also review quarterly reports received from their investment manager.

Mellon Retirement Benefits Plan – Governance



1.1 Investment Beliefs

The Trustee's climate related investment beliefs are as follows:

- Based on evidence provided by the Intergovernmental Panel on Climate Change (IPCC), changes in the climate are widespread, rapid, intensifying and unprecedented.
- To limit global warming, strong, rapid, and sustained reductions in CO2, methane, and other greenhouse gases are necessary. This would not only reduce the consequences of climate change but also improve air quality.
- Climate change will result in physical/transition risks and opportunities for the Plan taking into account the impact on scheme funding, investment and sponsor covenant.
- The best long-term interests of members and beneficiaries will be best served by ensuring that the balance between the amount of greenhouse gas produced and removed from the atmosphere from the Plan's investments are net zero by 2050 or sooner. This may result in avoiding investments that are inconsistent with this aim.
- Long term returns will be enhanced where the Plan's asset managers' stewardship and engagement activities are consistent with a net-zero commitment.

2. Investment and Funding Strategy

Climate related risks and opportunities will have an impact on the Plan and the Trustee has considered these in relation to their funding and investment strategy, including the sponsor covenant.

The Trustee has decided on the Plan's short, medium and long-term time horizons for the Plan, taking into account the liabilities of the Plan and the likely time horizon over which current members' benefits will be paid.

The Trustee has considered the following time bands as appropriate for the Plan:

Time Period		
Short-term	(2021-2026)	The short-term time band reflects the availability of forward data provided by companies in which the Trustee is likely to invest and the availability under the Paris Agreement Transition Assessment Tool
Medium-term	(2027-2034)	The period over which the assets are most likely to be impacted by transition risks to net zero.
Long-term	(2034 +)	The average duration of the deferred member liabilities was 23.5 years at 1 January 2023. The aim is to be 114% funded on a low-risk basis by 2033.

2.1 Climate Related Risks and Opportunities

The Trustee has a legal duty to consider matters which are financially material to investment decision-making. The Trustee has considered financial risks which might affect the Plan's investments, liabilities and sponsor covenant.

Positive stewardship and opportunities are expected to positively contribute towards risk adjusted returns over time.

The Trustee's assessment of risks has been split into 'physical risks' (e.g. extreme weather events and sustained changes in climate patterns) and 'transition risks' which reflect changes in climate related legislation, technology and consumer preferences that could have an impact on the Plan's assets and liabilities.

Physical Risks can be split between the following risks:

Acute Physical Risks	Acute physical risks refer to those that are event-driven, including increased severity of extreme weather events, such as cyclones, hurricanes, or floods.
Chronic Physical Risks	Chronic physical risks refer to longer-term shifts in climate patterns (e.g., sustained higher temperatures) that may cause sea level rise or chronic heat waves.

Transition Risks can be broken down into the following:

Policy and Legal Risk	Policy actions around climate change that may either constrain actions (e.g. carbon pricing) or promote lower emission sources of energy. Legal risks refer to climate related litigation such as the failure to adapt to climate change.
Technology Transition Risk	As new technology displaces old systems and disrupts parts of the economy, winners and losers will emerge. Examples include renewable energy, battery storage and the potential for carbon capture and storage.
Market Transition Risk	Supply and demand for products, services and commodities are likely to be impacted by climate related risks and opportunities which could affect markets generally and the value of assets in which the Plan invests.
Reputation Transition Risk	Perception of an organisation's contribution or distraction from the change to a lower-carbon economy can be a potential source of reputational risk.

The majority of this report considers the risks of climate change. The Trustee also believes that there are corresponding opportunities and has therefore adopted an active management approach to investing that enables the fund managers to take advantage of these opportunities. This includes various government initiatives around the world that support investment in clean technology and infrastructure that will impact on new jobs, increase economic activity and reduce fossil fuel imports.

> '**Net zero is the growth opportunity of the 21st century**
>
> The evidence presented to the Review has shown that the pace of recent change has created a rush of economic opportunity at a massive, global scale. With more than 90% of global GDP covered by a net zero target there is now huge global momentum to reach net zero and capture the economic opportunities. This is driven by businesses of all sizes who have recognised that net zero can help them grow.'
>
> *Rt Hon Chris Skidmore MP*
> *Independent Review of Net Zero*
> *September 2022*

2.2 Credit Risks and Opportunities

The majority of the Plan's assets as at 31 December 2023 were held in credit related investments through both Insight Investment and Alcentra. The credit holdings of the Plan includes a broad spectrum of investments including both public and private debt, secured finance and direct lending.

The assets held with Alcentra in the Direct Lending and Strategic Credit funds will be reduced substantially over the period to 2025.

Insight Investments Climate Change Report 2023 states that financial risks of climate change to ABS and secured finance have been limited historically but could grow over the next decade, with an increase in exposure of assets to extreme weather events and rising regulatory and market risks.

Asset and geographical diversification has traditionally been a source of risk mitigation for ABS, but as these risks become increasingly prevalent, direct and indirect credit risks could rise.

Most residential mortgage-backed securities (RMBS) for example have significant geographical and asset diversification. Despite higher exposure to physical risks in some markets (e.g., Australia) these typically have a more indirect impact on the financial profile of borrowers (e.g., employment and household income) than direct effects on mortgage delinquency or default rates.

The report suggests that commercial mortgage-backed securities (CMBS) have growing evidence of a ‘green premium’ for energy-efficient properties, whilst in the RMBS space climate risk has generally manifested as a ‘brown penalty’ for older and energy-inefficient homes. Many key CMBS markets have seen tightening emissions and energy efficiency standards in recent years.

Insight Investment believes that the diversification of collateralised loan obligations (CLOs) provides some level of risk mitigation, but the issuance of loans to sub-investment grade corporates means that these loans are highly sensitive to revenue fluctuations linked to extreme weather events, shifting demand for goods and service or structural erosion of creditworthiness through higher capex and opex requirements.

The Trustee expects that corporate bonds will be impacted by climate change to a lesser degree than equities due to lower volatility and greater security through creditors’ rights and claims on a firm’s assets.

Research conducted by MSCI in October 2022 indicates that corporate bonds’ market prices and credit spreads currently do not systematically reflect the risk of the transition to a low-carbon economy nor do they consistently reflect physical climate risk.

This may reflect a mispricing of climate related risks. The research shows that the expected climate change cost could potentially pose a significant risk to the asset value of firms, and losses might be large enough to adversely affect the value of bonds, even in a less aggressive 3°C target temperature scenario.

The Edhec-Risk Climate Impact Institute research found that companies with a high carbon footprint are more likely to default, hence the exposure to climate risks affects the creditworthiness of loans and bonds issued by corporates.

Other factors are also likely to influence default risk. For example, regulation could impact earnings, consumer preferences could impact earnings, and companies may face difficulties refinancing their debt or could be shut out of capital markets. Utilities may be particularly affected as they have significant exposure to bond markets, making up 15% of the MSCI GBP Investment Grade Corporate Bond Index.

The Trustee believes that these risks will become more significant over the medium to long term, and that transition risks are generally more likely to be reflected in climate policy risk and market risks. Technology and reputational risks are more likely to impact the portfolio through sector and stock selection.

Assessing climate risks in secured finance has unique challenges due to the complexity, structure and nature of the assets. As a result, there is a lack of standardisation and depth in climate change reporting. The Trustee has noted that the International Capital Markets Association has proposed sustainability indicators for asset-backed securities which include greenhouse gas emissions metrics and information on physical climate change risks.

The Trustees maintain exposure to credit risk assets in order achieve their medium-term funding plan over the period to 2033 and beyond. The climate risks outlined in this report could result in this funding plan not being met, resulting in either a delay in meeting the funding target or the need for additional funding from the Plan Sponsor, BNY Mellon. The progress on meeting the funding target is monitored is reviewed by the Trustees on a quarterly basis and refined as necessary.

The Trustee has agreed certain constraints within their corporate bond portfolio to manage these risks which, together with effective stewardship and active management, is likely to remain low risk (See Section 4).

Climate related opportunities within credit are identified through active management of the corporate bond portfolio, with Insight Investment having discretion on sector and stock allocation within the constraints imposed by the Trustee. This applies over the short, medium and long time horizons.

The overall financial exposure risk assessment of the Plan's corporate bond holdings is as follows:

	Physical Risks		**Transition Risks**			
Time Horizon	**Acute**	**Chronic**	**Policy/ Legal**	**Technology**	**Market**	**Reputation**
Short	Low	Low	Low	Low	Low	Low
Medium	Low	Low	Medium	Low	Medium	Low
Long	Medium	Medium	Medium	Medium	Medium	Medium

Low Medium High

2.3 LDI / Collateral

The Plan's hedging assets are invested in UK Government bonds, liquidity and ABS investments, and repos/swaps to manage interest and inflation risks relative to the Plan's liabilities.

Climate change can have a significant impact on government spending, which can in turn affect government bond values. Governments are exposed to both transition risk and physical risk related to climate change, and these risks are expected to be material and grow.

Transition risk relates to the costs associated with countries transitioning to a greener economy. For example, growing concern over climate change—and the resultant increased regulation—has many countries developing plans to reduce carbon emissions.

The Climate Change Act 2008 requires the UK government to achieve net-zero greenhouse gas ("GHG") emissions by 2050. Progress toward this commitment is to be driven via a series of five-year carbon budgets. The sixth budget, imposed by the Carbon Budget Order 2021 (June 23, 2021), covers the years 2033-2037. It sets the budget at 965 million tonnes of carbon dioxide equivalent. This goal has been highlighted as the world's most ambitious target, seeking GHG emission reductions of 78% by 2035 compared to 1990 levels.

New analysis conducted by the Climate Change Committee ('CCC') as part of an independent review of the Government's Net Zero commitments published in June 2023 found that the UK was not on track to meet the UK's Nationally Determined Contribution (NDC) under the UN process for a 68% reduction in emissions by 2030.

The CCC has also stated that UK Government policy announcements in September 2023 relating to the delayed phase out of fossil fuel cars, the delayed phase out of oil and LPG boilers and minimum EPC ratings for rented homes have increased longer term risks to meeting the 2050 Net Zero target.

However, the Germanwatch Climate Change Performance Index (CCPI) (recommended by the IIGCC Net Zero Investment Framework as a tool for alignment) has ranked the UK 11 out of 64 countries for the ability to reach below 1.5°C target.

Case Study: Advocacy – Green Gilts

Insight downgraded the UK government's green government bonds ('green gilts') from their highest dark green rating, indicating a best-in-class green bond, to a light green rating. Insight will seek to take action where it perceives UK government policy to be inconsistent with its stated net-zero commitments.

One example is the UK's approval of the West Cumbria coal mine project (focused on metallurgical coal production) in December 2022, which Insight considered to be inconsistent with the UK's overall net-zero target given the project's planned operating life to 2049 and lifecycle emissions impact. Coupled with additional concerns regarding the lack of detail in key areas of the UK Net Zero Strategy, this led Insight to downgrade their impact bond rating of the UK green gilt framework from the best-in-class 'dark green' to 'light green' status.

A further downgrade to 'red' status could be possible in the event of further policy decisions seen to be inconsistent with the net-zero commitment. Impact bonds that Insight rate 'red' are typically excluded from their investment strategies with specific sustainability criteria

Source: Insight Investment

The Trustee has supported the Plan's investment in Green Gilts (0.4% at 31 December 2023) which are supporting the UK's transition to a low carbon economy, despite the potential for these to trade at a premium relative to similar maturity non-green gilts. This reflects the Trustee's support for the management and mitigation of climate risks through the projects that are being financed over the short, medium and long time horizons.

The Trustee is aware that there are challenges to employing climate-related metrics with respect to derivatives instruments. Climate risk associated with related counterparties for cash instruments and swaps is considered to be low and has been delegated to Insight Investment to manage.

The Plan's LDI/ collateral assets provide the Plan with a good level of protection against interest and inflation rate changes that might arise from climate-related risks (for example, inflation caused by higher asset costs that could arise from climate-related transition risks).

As the events in the gilt market during 2022 showed, there can be significant market risks associated with LDI, particularly where there is a high level of volatility. Scenario analysis conducted by Insight Investment suggests they expect material volatility in gilt valuations each year particularly under scenarios where either the forward long-term rate is high, and/or the forward curve is steep. However Insight successfully managed the Plan's LDI portfolio over 2022 and the Trustee expects them to be able to continue to do so in the future.

Due to the liability hedging characteristics of the Plan's LDI/collateral assets, the Trustee believes that the overall physical and transition risk of their investments in LDI assets is low over all time periods, with the exception of risks associated with policy and market risks.

The overall financial exposure risk assessment of the Plan's LDI / collateral assets is as follows:

	Physical Risks		Transition Risks			
Time Horizon	**Acute**	**Chronic**	**Policy/ Legal**	**Technology**	**Market**	**Reputation**
Short						
Medium						
Long						

Low Medium High

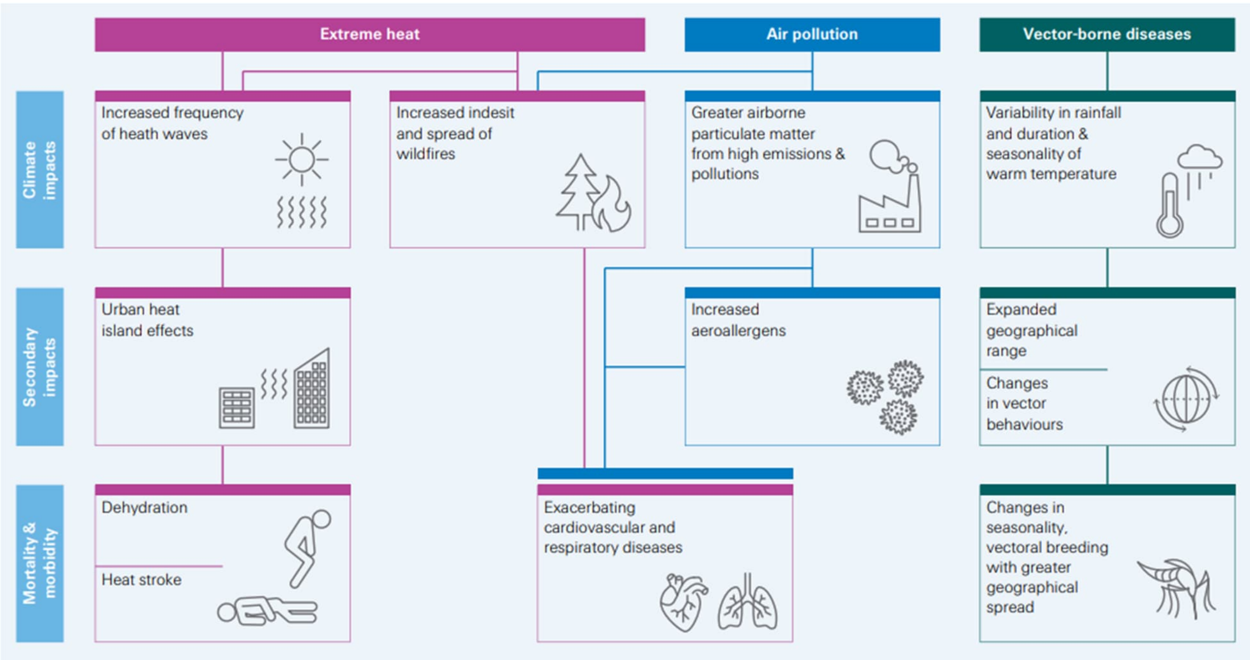
2.4 Insurance Policies

The Plan holds a small amount of assets (£4.2m at 31 December 2023) in annuity policies with various annuity providers. Due to the nature of the insurance contracts, there are no notable climate-related risks to the Plan.

2.5 Mortality

It is expected that the mortality impacts of climate changes will play out gradually with incremental impact on life expectancy.

According to a report published by Swiss Re Institute (The risk of a lifetime: mapping the impact of climate change on life and health risks, 2023), climate change affects human health through many channels, the biggest drivers of which are expected to be extreme heat, air pollution, and increased exposure to infectious disease spread by non-human vectors, as illustrated below:



Source: American Public Health Association, Swiss Re Institute

Consequently, increased morbidity of non-communicable diseases, especially cardiovascular diseases, respiratory illnesses and cancer, and increased spread and emergence of tropical infectious diseases, is expected. This will likely impact clinically vulnerable individuals with pre-existing comorbidities, or groups such as the elderly, and the disabled, the most. Increasingly frail, ageing populations could push mortality rates higher. The extent of an individual's direct exposure to risk factors and access to mitigation tools will also determine their overall risk.

Increased mortality is likely to result in a reduction in the Plan's liabilities that will materialise over the long term, although this has not been explicitly allowed for in funding the benefits.

2.6 Employer Covenant

The key business and financial issues around climate change are complex but specific climate related risks and opportunities can be considered around two key themes:

- The sponsor's available free cash flow to support the Plan, and
- The sponsor's longevity

The macro-economic impacts of climate change may result in reduced economic growth, either in the short term as a result of transitioning to a low carbon economy, or as a result of the longer term impact of physical risks.

The Plan is in surplus and has adopted a low-risk investment strategy. As such, the Plan has minimal reliance on the Employer covenant. The size of the Plan is also extremely small in relation to the sponsoring employer's market capitalization value of US$36.8bn at 31 December 2022.

The Trustee receives quarterly updates on the credit rating of the sponsoring employer and periodic covenant updates from the sponsoring employer.

Over 2023 the credit rating remined stable. The last covenant update from the sponsoring employer was received in 2022 and reflected continued operational resilience and balance sheet strength in a challenging environment. The next update from the sponsoring employer is scheduled for 2024.

The Trustee has not specifically modelled the impact of climate-related risks and opportunities on the sponsoring employer's covenant. However, BNY Mellon is committed to addressing climate related risks, which often manifest in the long-term, and seeks to identify opportunities arising from climate change throughout the business.

This is demonstrated by BNY Mellon's supporter status for the Task Force on Climate-related Financial Disclosures (TCFD) framework. Additionally, across the business, BNY Mellon maintain numerous affiliations with industry and thought leadership initiatives to support corporate considerations of climate change and climate risk.

BNY Mellon monitors how climate change affects its business and how its operations affects the sustainability of our planet. This is part of its broader responsibility to manage ESG performance and how it serves its clients.

BNY Mellon has published an '<u>ESG Report 2022</u>' which includes reporting against TCFD recommendations as at 31 December 2022.

The 2022 climate sensitivity analysis assessed the impacts to the following principal risks:

- Credit Risk,
- Operational Risk,
- Market Risk and
- Strategic Risk.

A range of climate-related sensitivities has been developed to explore vulnerabilities to physical and transition climate risks and to understand the climate-related impact on each risk type, including potential loss impacts. The sensitivities have been applied to sectors subject to elevated climate-related risks and identified products, processes and businesses.

Initial results of the climate sensitivity assessment demonstrate limited financial impacts at the enterprise level.

BNY Mellon set operational sustainability performance targets in 2019 with a target end date of 2025 and are on track to achieve or exceed those targets. This has been done so by investing heavily in physical infrastructure, adopting operational best practices and developing new employee-led initiatives. As the focus on reducing global GHG emissions increases, BNY Mellon will continue to explore the potential for developing more aggressive and longer-term targets.

BNY Mellon has set the following climate related targets:

1. Reduce Scope 1 and Scope 2 GHG emissions by 20% from a 2018 base year, including data centres, using methodology developed by the Science Based Targets initiative (SBTi). These have decreased by 32% relative to 2018 baseline.
2. Maintain carbon neutrality commitment. This has been achieved for 2022.

The Climate Risk Sub-Committee and the Trustee will continue to monitor the effects of climate change risks on the Employer Covenant as reporting improves over time.

3. Scenario Analysis

The Trustee is required to undertake scenario analysis to better understand the risks and opportunities posed by climate change to the Plan and to inform the Trustee's strategy and investment decisions. These scenarios are hypothetical forecasts and are not predictions of the future.

The lack of data on secured finance, direct lending and strategic credit has resulted in these assets being ignored for the purposes of conducting scenario analysis.

The Trustee has adopted a qualitative and quantitative approach to scenario analysis.

Over the short-term horizon, the Trustee has made use of the Paris Agreement Capital Transition Assessment (PACTA) tool to assess the Plan's publicly quoted corporate bond holdings with Insight Investment.

The tool allows the Trustee to get a granular view of the alignment of the quoted corporate bonds in the portfolio by sector and related technologies. This information can be used to help steer investment decisions in line with climate scenarios; to inform decisions around climate target-setting; and to gain insights into engagement on climate actions. The tool helps the Trustee identify their exposure to transition risks associated with a disruptive shift to a low-carbon economy.

Over the longer term, the Trustee has reviewed the Network for Greening the Financial System representative scenarios to understand broad climate related risks and opportunities. The Trustee has also reviewed the results of scenario analysis carried out by Insight Investment on their broader assets under management for UK gilts and buy and maintain bonds.

3.1 Short term scenario analysis

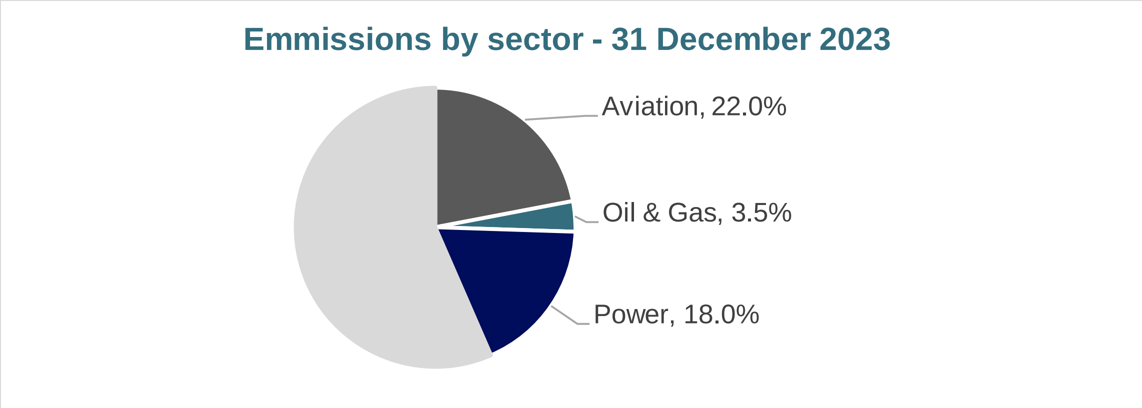
The Trustee has undertaken scenario analysis using the PACTA tool introduced by the 2^{o} Investing Initiative. The PACTA tool analyses exposure to climate transition risk. It was designed in part for TCFD and provides an analysis of the Plan's publicly quoted corporate bond portfolio relative to various scenarios.

Sector coverage includes automotive, aviation, coal mining, cement production, steel production, oil and gas, power generation and shipping. These sectors are responsible for 80-90% of carbon emissions associated with a standard financial portfolio and 75% of CO^2 emissions in the economy.

Given its emphasis on technologies and climate, the analysis is limited to those parts of the portfolio with direct exposure to the relevant technologies.

Corporate bond data for the analysis was provided by Insight as at 31 December 2023 and 73% of corporate bonds were included in the analysis. There has been reduction in the percentage of corporate bonds included in the analysis from 92% in the previous year. However all corporate bonds excluded from the analysis do not have assets in climate relevant sectors.

The share of assets invested in companies with assets in climate relevant sectors was 13% of the corporate bonds analysed. However, the emissions exposure from companies in the climate-related sectors was 44% of the corporate bonds analysed, as shown in the graph below.



The Trustee has selected the World Energy System (WEO) 2021 model, which provides a range of scenarios and in particular allows for an explicit scenario that targets net zero emission by 2050.

WEO 2021 analyses different pathways towards temperature targets as follows:

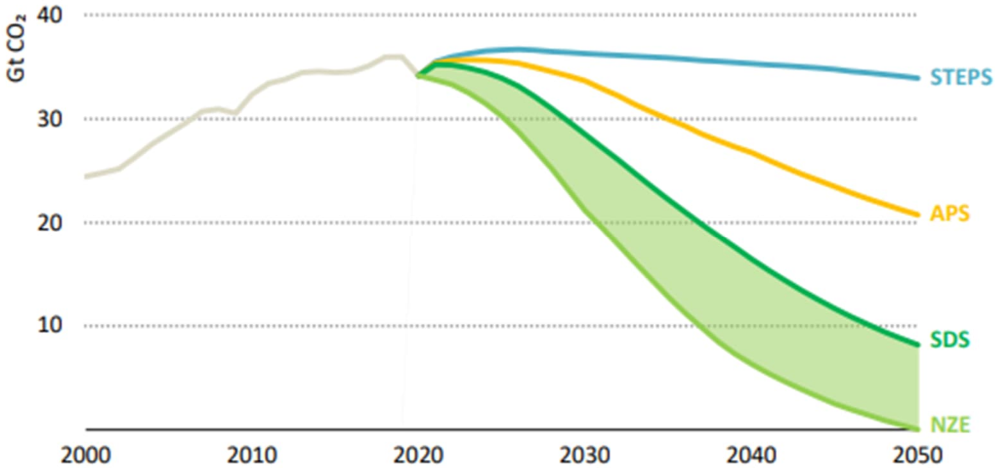
- **Stated Policies Scenario (STEPS):** This scenario incorporates policies declared as of 2019 with the goal of assessing what the world may look like in the future based on policies that have currently been announced. In the STEPS energy demand rises by 1% per year until 2040. More than half of this growth in demand is met by solar photovoltaics (PV) while natural gas enabled by trade in liquefied natural gas (LNG) accounts for a third. Oil demand plateaus in 2030. Despite this, the global economic and population growth means that there is no peak in global emissions ahead of 2040 and hence globally shared sustainability goals (like that set out in the Paris Agreement) are missed.

- **Announced Pledges Scenario (APS):** This scenario models the new commitments and pledges to meet net-zero emissions targets made by countries in the run-up to COP26. This is equivalent to a warming of 2.1°C at the end of the century. This scenario assumes that countries will implement their plans in time and in full. The projections evidence a decrease in global CO2 emissions driven by the capacity additions of low emission power generation sources in the period to 2030, which generates a decline in coal consumption in the power sector. Announced pledges save around 20% of the gap in emissions until 2030 from the Net Zero Scenario to the Stated Policies Scenario.

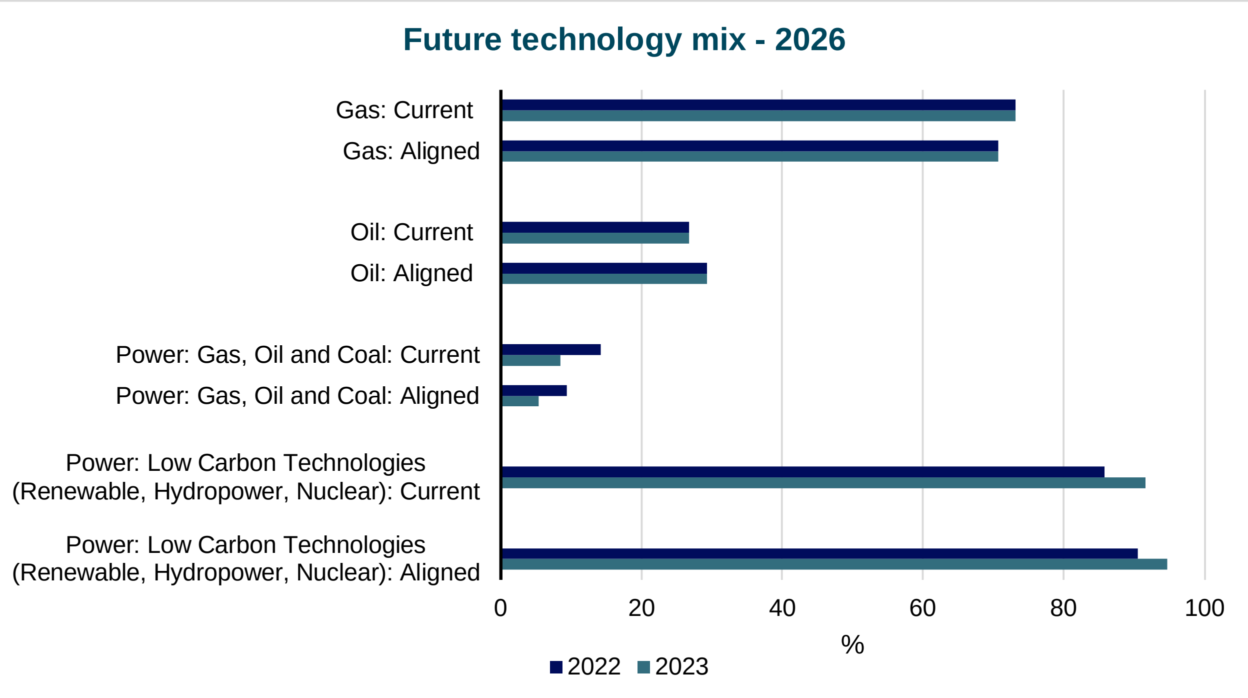
- **Sustainable Development Scenario (SDS):** This scenario aims to meet stricter sustainable development goals. This requires rapid and widespread changes across all parts of the energy system. It is aligned with the goals set out in the Paris Agreement, with a 50% chance of limiting global temperature rise to below 1.65°C by the end of the century, as well as objectives related to universal energy access and cleaner air. These efforts are shared amongst multiple fuels and technologies.

- **Net Zero Emissions by 2050 (NZE):** This scenario extends the SDS scenario to target net zero emissions. The scenario responds to the increasing number of countries and companies that have made commitments to reach net zero emissions earlier, combined with the aim of limiting the rise in global temperatures to 1.5°C by the end of the century (with a 50% probability). In particular, it explores the actions needed in the period to 2030 to be on track to achieve net zero emissions by 2050, including the need to end new fossil fuel exploitation from 2021 onwards and to avoid stranded assets across sectors.

The WEO 2021 scenarios are illustrated below:



The chart below reflects exposure of the corporate bond portfolio at the end of December 2026 to those sectors with sufficient granular technology decarbonisation road maps, namely the power and oil and gas sectors. From this, the future alignment (at 2026) can be inferred.

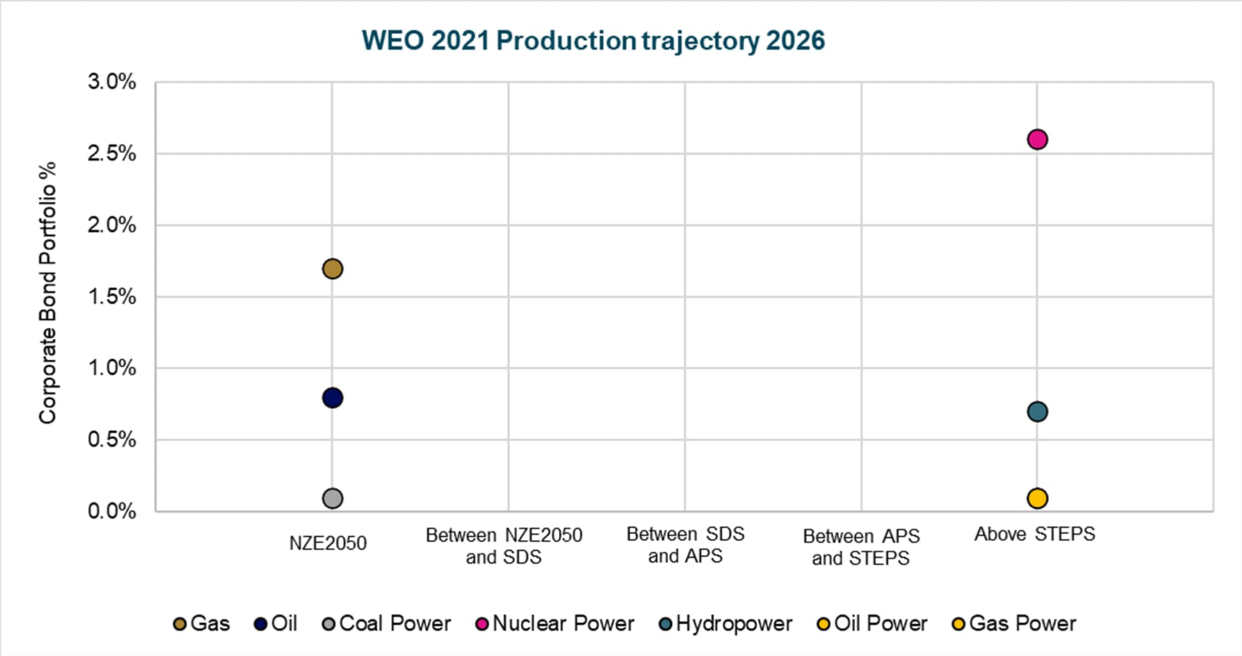


The 'Current' data shown above reflects the current corporate bond portfolio projected to 2026. The 'Aligned' data reflects 2026 policy mix if companies in the portfolio were aligned to NZE2050 scenario.

This analysis suggests that the corporate bond portfolio is expected to have higher exposure to gas than oil in 2026, and that the current exposure to oil is below that required to align with the NZE2050 scenario.

The current portfolio has reduced exposure to gas, oil and coal power and increased exposure to low carbon technologies at the end of 2023 compared to 2022.

It is important to consider both the size of the exposure as well as the alignment with the scenario analysis of the portfolio. Where a sector has a relatively low presence in the portfolio, the question of alignment of this sector is relatively less important than in sectors that are more heavily weighted.



* Oil Power and Gas Power both have the same expected future alignment (above STEPS) and Portfolio % (0.1%).

Compared to the 2022 the portfolio's planned yearly production of oil and gas in 2026 fell by 17.1%. The total planned yearly production of power in 2026 increased substantially between 2022 and 2023 from 1,029MW to 5,097MW, driven mostly by the increase in investments in low carbon technologies such as nuclear power, hydropower and renewables, which now make up 91.6% of the planned portfolio power generation in 2026 (85.8% 2022). These investments reflect climate related opportunities within the portfolio.

The aviation sector accounted for 4.5% of the corporate bonds analysed (22% of emissions) and the emissions intensity is not expected to decrease over the forecast period.

The Climate Risk Committee focus their engagement with Insight Investment on the companies that are most misaligned to make an impact in terms of a reduction of real-world emissions. It is also expected that Insight Investment will consider portfolio exposure to different technologies and geographies to minimise potential transition risks.

Please refer to Section 4 regarding the screening out of corporate bonds with certain negative aspects to their ESG characteristics, including climate change.

It should be noted that the analysis reflects a snapshot of the portfolio at a single point in time and does not reflect the changing nature of the portfolio between the date of the analysis and 2026.

The Plan's LDI/ collateral assets provide the Plan with a good level of protection against interest and inflation rate changes affecting both assets and liabilities that might arise from climate-related risks (for example, inflation caused by higher asset costs that could arise from climate-related transition risks).

Due to the liability hedging characteristics of the Plan's LDI/collateral assets, the Trustee believes that the impact on the liabilities of climate change is not material over the short term.

As stated in Section 2, the impact of increased mortality from climate change is not expected to be meaningful over the short term.

Case Study: **Engaging with a UK-based counterparty on their sustainable finance framework.**

Background

- Barclays (BACR) is a UK-based bank that operates globally as Barclays UK (retail banking, credit cards, wealth and corporate banking) and Barclays International (corporate banking, investment bank, credit cards, wealth management).
- This engagement was identified as part of Insight's counterparty engagement programme. Their weaker S and G scores are predominantly driven by controversies which is typical of large investment banks. With growing operations in the US, the political environment related to ESG is directly impacting the bank. The latest engagement sought to discuss the bank's sustainable finance framework and the feedback we provided, given some elements of their environmental programme lags behind their peers.

Engagement discussion and findings

- BACR's sustainable finance framework was developed in 2017 to track against green financing targets and was last updated in 2022 when the target went from $150bn to $1tr. However, they have yet to set accredited science-based targets (internally considering their use of IEA NZE to be suitable) and continue to engage with SBTi but are currently prioritising NZBA and for the majority of their portfolios to have financed emissions targets.
- Impact bonds were discussed in the context of stricter policy criteria which is likely to exclude the refinancing of old projects, thereby restricting the maximum look back period; consideration of EU taxonomy alignment (and others as they develop); details around use-of-proceeds within investor reporting; energy efficiency improvements and target populations for social considerations in line with local standards/ context; definitions such as what qualifies as 'sustainable protein'; and overarching governance.
- Their revenue-based threshold around artic drilling is currently quite high (50%); recognise the different dependencies on fracking between the UK and US and will remain flexible in their approach in each market; and noted that a significant proportion of their financing relates to cash flows rather than project financing.

Outcome and next steps

- Following on from Insight's recommendations, BACR has enhanced its oil sands policy and introduced a Client Transition Framework demonstrating how the bank is evaluating its corporate clients' transition progress towards low-carbon business models. They also acknowledged their risk policy guidelines are due for an update.
- Insight recommended that BACR continues to align its sector policies (to address exclusions relating to arctic, general oil and gas; and fracking) to IEA guidance; provide additional details on the assessment, support of and escalation (without terminating relationships) procedures relating to clients on climate-related issues under their Client Transition Framework in their next annual report; set science-based targets to improve transparency and comparability with competitors; increase scope of assurance on scope 1, 2, 3 emissions; transparency around its lobbying practices.

3.2 Medium- and long-term scenario analysis

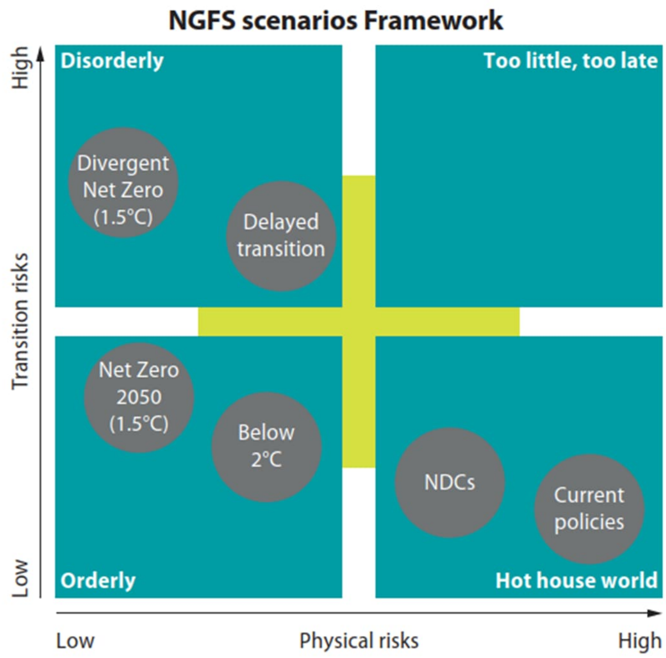
The majority of the Plan's assets are held with Insight Investment and the existing allocation to Alcentra is expected to diminish considerably over the short term. As a result, the Trustee has considered the scenario analysis carried out by Insight Investments to inform their view on climate change over the medium to long term.

Insight Investment has used the Network for Greening the Financial System (NGFS) scenarios which consider transition risks and chronic physical risks. Specifically, they have used the National Institute Global Economic and Social Research for inflation and interest rate forecasts.

The NGFS scenarios explore a set of six scenarios which are consistent with the NGFS framework (see below) published in the First NGFS Comprehensive Report covering the following dimensions:

- **Orderly scenarios** assume climate policies are introduced early and become gradually more stringent. Both physical and transition risks are relatively subdued.
- **Disorderly scenarios** explore higher transition risk due to policies being delayed or divergent across countries and sectors. For example, carbon prices would have to increase abruptly after a period of delay.
- **Hot house world** scenarios assume that some climate policies are implemented in some jurisdictions, but globally efforts are insufficient to halt significant global warming. The scenarios result in severe physical risk including irreversible impacts like sea-level rise.

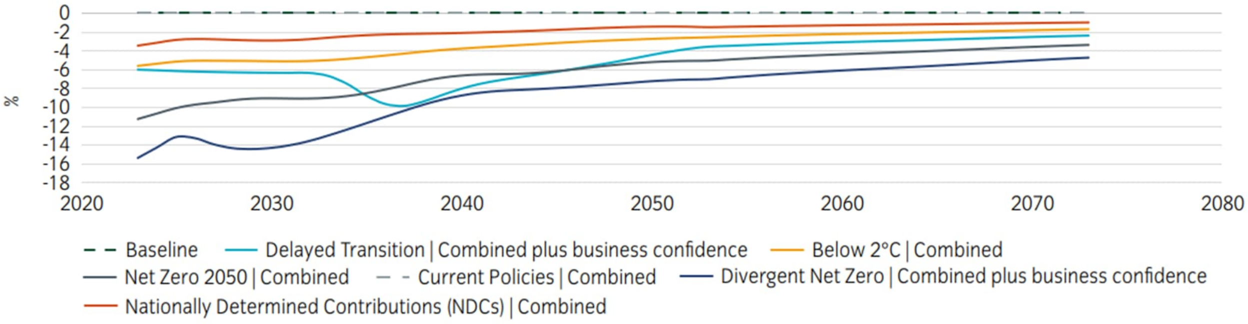
These six scenarios were chosen to show a range of lower and higher risk outcomes.



These scenarios reflect what the Trustee believes to be plausible pathways.

LDI Assets

Insight Investment's projected difference in the nominal value of an LDI benchmark under the six climate scenarios relative to the base scenario are set out below.



The results indicate that the Divergent Net Zero (which models a disorderly and costly transition to net zero) represents the most significant risk. The analysis also drew out the following points:

- The impact of the Divergent net Zero was 80 basis points ('bp') at the 20-year point and 50bp for Net Zero 2050.
- Long-term climate risks present a wider risks to the Plan under all scenarios but applying this to the LDI book highlights the limitation of climate scenario analysis at present.

Modelling of acute and chronic physical climate risks continues to develop – and will be incorporated more fully into future scenario analysis by Insight. They also recognise that gilts are not the only component of LDI strategies and are working to include other key assets such as ABS in future scenario analysis.

The continuing development of the LDI scenario analysis provided by Insight Investments will be monitored by the Climate Risk Sub-Committee.

The impact of changes in the present value of the liabilities arising from changes in interest rates (caused by factors including climate change) will be largely offset by changes in the value of the LDI portfolio. This is reflected in the Trustee's risk assessment of the Plan's LDI/Collateral assets on page 11.

As stated in Section 2, climate change is expected to increase mortality and hence reduce the cost of funding the Plan's liabilities.

Corporate Bonds

Insight Investments carried out climate VaR analysis on a sample 'Buy and Maintain' bond portfolio using the MSCI CVAR Portfolio Analysis tool.

The results showed that policy risk contributed the largest component of the portfolios climate VaR in disorderly scenarios due to higher transition costs. Technology opportunities had a low impact on overall climate VaR and physical risks was dominated by coastal flooding and extreme heat.

The climate VaR within the Insight sample buy-and-maintain corporate bond portfolio is shown below:

Climate VaR component	1.5°C Orderly (Net Zero)	1.5°C Disorderly (Net Zero)	2°C Orderly (Below 2°C)	2°C Disorderly (Delayed Transition)	3°C Hot House World
Scope 1	-1.41%	-6.21%	-0.21%	-4.81%	-0.22%
Scope 2	-0.10%	-3.38%	-0.02%	-1.50%	-0.01%
Scope 3	-0.09%	-3.55%	-0.01%	-0.64%	0.00%
Total policy risk	-1.53%	-12.96%	-0.23%	-6.83%	-0.22%
Technological opportunities	0.08%	0.19%	0.02%	0.12%	0.01%
Physical Risk	-1.14%	-1.14%	-1.14%	-1.14%	-1.14%
Climate VaR	-2.66%	-14.09%	-1.37%	-7.96%	-1.36%

Insight Investment reported that the actual risk related to delivery of their clients' required outcomes was somewhat limited and that the different climate scenarios did not provide the dispersion of VaR outcomes expected.

The magnitude of the changes in output compared to Insight's 2022 report (with VaR almost doubling in some cases) points to the emerging science of climate scenario analysis and the complexities of forecasting under high uncertainty.

Full details of Insight Investment scenario analysis can be found at https://www.insightinvestment.com/globalassets/documents/responsible-investment/responsible-investment-reports/uk-eu---climate-change-report-2023.pdf

Impact on the Plan

The Plan's LDI assets are designed to hedge interest rate and inflation risks and therefore the impact of the scenarios is expected to be offset by corresponding changes in the value of the liabilities. However, the possibility of increased volatility introduces the potential for additional operational risks to the LDI portfolio.

As discussed in Section 2, Insight Investment has successfully managed the operational risks associated with the 2022 gilts crisis and the Trustee therefore considers the additional market risk arising from increased volatility to be 'medium' over all time periods.

Insight Investment's climate VaR of their corporate bond portfolio provides only limited value in assessing risks and opportunities within the Plan. However, Insight Investment has stated that the analysis has provided them with multiple learnings which may translate into better risk management within the portfolio.

In addition, the Trustee has implemented a process with Insight Investment to screen out corporate bonds with certain negative aspects to their ESG characteristics, as set out in Section 4. As a result, the Trustee would expect a lower climate VaR than that indicated for the broader corporate bond portfolio shown in the above analysis.

In April 2023 the Pensions Regulator highlighted concerns over the integrity of some climate scenarios and in August 2023 suggested that more work needs to be done to address the shortcomings in the available models and approaches to scenario analysis.

Having considered the scenario analysis conducted by Insight, and recognising the liability hedging characteristics of the Plan's investments in credit and LDI, the Trustee has not changed the risk assessment in Section 2 because of this analysis.

3.3 Resilience of the Strategy

The Trustee believes that the Plan has made good progress in taking into account the effects of climate change through the active screening of corporate bonds within the portfolio, as described in Section 4 of this report.

The short-term projections to 2026 indicate that the future technology mix is broadly consistent with a net zero aligned portfolio, and the proportion of assets that are above the Stated Policies scenario is modest. This is consistent with the climate related metrics in Section 5 which indicates that total greenhouse gas emissions for the Plan's corporate bond portfolio (Scope 1 and 2) are 77.5% of the Global investment grade benchmark.

The resilience of the Plan's LDI portfolio is dependent on the ability and willingness of the UK Government to meeting its own Net Zero Strategy, which details the UK's decarbonisation pathway out to 2038, based on modelling the most cost-effective net zero system in 2050.

3.4 Review of Scenario Analysis

The Trustee will review the approach to scenario analysis on an annual basis to determine whether it remains relevant. In particular, the Trustee will consider whether to undertake more bespoke scenario analysis.

In this context the Trustee will review the analysis in the event of:

- A material increase in the availability of data.
- A significant/material change to the investment or funding strategy.
- The availability of improved scenarios or modelling capabilities, or events impacting key assumptions.
- A change in industry practice / trends in scenario analysis.

4. Risk Management

Risk management is important to effective governance around the potential implications of climate change. The Trustee has established and maintains a process to identify, assess and manage relevant climate related risks. This process integrates with the Trustee's overall risk management process.

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 (see previous Section).

4.1 Risk Identification and Assessment Process

The Trustee has used the scenario analysis to identify and assess the potential impact of climate related risks on the Plan. The Trustee also considers the various climate related metrics and targets to identify the risks and assess progress in reaching net zero portfolio greenhouse gas emissions by 2050.

Where quantitative analysis has not been undertaken the Trustee has taken advice from their consultants and asset managers, reflecting on their knowledge and experience of asset class characteristics and available information on the impact of climate change.

The Trustee has delegated to the appointed investment managers the identification of climate related risks and opportunities of the underlying companies in which they invest.

The Plan's Climate Risk Sub-Committee meets regularly, and it engages with the investment managers to review climate related metrics and assesses the managers' climate risk management based on:

- Insight Investment's alignment with the Paris Agreement.
- The investment managers reporting under the UK Stewardship Code.
- Insight Investment's own TCFD reporting.
- Awareness of climate related risk as it relates to the portfolio and steps being taken to proactively manage risk within the mandates provided.
- Engagement and escalation with the underlying companies in which the Plan invests.

Alcentra became a signatory to the UK Stewardship Code in September 2022 and is expected to publish its first TCFD report in 2024, after the date of publication of this report.

Insight Investment's performance against Plan specific risks identified in the Metrics and Targets section of this report will also be monitored.

The Investment Consultant and Investment Managers assists the Climate Risk Sub-Committee to identify climate related regulatory developments that may impact the Plan's investments.

The Trustee meets with Insight Investment on approximately a quarterly basis to review climate-related metrics and targets alongside broader risks to which the Plan's funding and investment strategy are exposed.

4.2 Risk Management Process

The Plan has a relatively low allocation to growth assets and is well protected against climate risk under the various scenarios considered.

The Trustee and Insight Investment have agreed appropriate risk metrics within their overall reporting framework which provides quarterly climate related metrics to the Trustee covering 67.4% of the Plan's total assets as at 31 December 2023.

The Trustee actively reviews the ESG policies (including climate change) with their investment managers and have implemented a process with Insight Investment to screen out corporate bonds with certain negative aspects to their ESG characteristics.

This includes not holding corporate bonds by companies that, in the opinion of the Insight Investment:

- are highly carbon intensive
- have material exposure to thermal coal
- are materially exposed to climate change risk
- have a material exposure to unconventional oil and gas extraction

Corporate bonds in breach of the above may be held where the investment manager believes the company has a clearly defined long term plan which would see it comply with the above restrictions.

Alcentra has established exclusion criteria for certain fossil fuel activities as follows:

- Issuers that derive 10% or more of revenues from thermal coal mining
- Issuers that derive 10% or more revenue from oil sands.

The Trustee expects their investment managers, where appropriate, to have taken account of financially material considerations, including environmental factors as part of their investment analysis and decision-making process. The Trustee expects this will typically involve the investment managers avoiding investments where unfavourable environmental factors could, for example through adverse reputational means, negatively impact the valuation or return profile of such investments.

The Trustee recognises that members may have increasingly proactive expectations regarding the consideration of climate change in the management of Plan assets. This is a rapidly evolving area and subject to active policy discussion by the Trustee, however the appointed investment managers are expected to draw attention, in their regular reports, to any potentially controversial investments and to explain why, perhaps because of active impact investing, the manager considers these appropriate or acceptable.

The Trustee recognises that investment managers' ability to influence the companies in which they invest will depend on the nature of the investment. The Trustee's policy is to delegate responsibility for the exercising of rights (including voting rights) attaching to investments to the investment managers and to encourage the managers to exercise those rights.

Insight's quarterly reporting to the Trustee highlights key areas of engagement. The following case study provides an example of Insight's engagement with Dow Inc, in which the Plan invests.

Case Study: **Addressing barriers to climate action in the hard to abate chemicals sector.**

Background

- Dow Inc. is a global commodity chemicals company operating through six global businesses, which are organised into three operations segments: Packaging & Specialty Plastics, Industrial Intermediates & Infrastructure, and Performance Materials & Coatings.
- Dow is an average performer on the climate action key issue and the company was prioritised for engagement because Insight's investment exposure is within the top 70% of their financed emissions as measured by Weighted Average Carbon Intensity (WACI). Unlike many peers, Dow's climate action targets are not verified by an independent third party such as the Science Based Targets (SBT) Initiative and is assessed as 'committed' within Insight's proprietary Net Zero assessment.

Engagement discussion and findings

- Insight is a member of the Climate Action 100+ (CA100+) collaborative engagement group. During this collaborative engagement, Insight introduced the Dow team to Transition Pathway Initiative (TPI), to discuss details on their evaluation of Dow's performance on the CA100+ benchmark. Dow has achieved alignment on only 3 of the 10 CA100+ benchmark indicators. During their call Insight reviewed three indicators: decarbonisation strategy, capital allocation alignment, and climate governance.
- The CA100+ benchmark's indicator 5: decarbonisation Strategy, assesses a company's climate transition plan. It focuses on the robustness of medium and long-term action plans as well as the alignment of those plans to medium and long-term targets. Dow is assessed poorly due to the lack of specificity within plans and limited references or connections to targets. One of the largest concerns is the lack of scope 3 targets and action plans because scope 3 category 1 (Purchased Good and Services), and category 11 (Use of Sold Products) application is relevant for the chemicals sector.
- While Dow provides some general information on their capital allocation plans to invest in 1) lower carbon assets, 2) renewable energy, 3) low carbon materials and solutions, and 4) transformative, next generation technologies, Insight encouraged them to provide quantifiable details and commitments to understand the how those investments impact enterprise value and cash flows.
- Dow has strong overall climate governance but lags behind industry leaders on executive compensation alignment, where short-term incentives (2021 Performance Award) do not include climate action items and the long-term incentive (2022-2024 Performance Share Program) does not sufficiently quantify climate action performance. Dow's performance on GHG emissions was concerning because emissions increased year-on-year on both absolute and intensity metrics. Most notably, there are no quantified GHG emissions reduction targets within the scheme and the scope 3 GHG emissions reduction action plan does not include category 11 (use of sold products) or category 12 (end-of-life treatment of sold products), which represent 20.6% (23.09 Mt) of the company's total scope 1, 2, and 3 emissions (111.61 Mt).

Outcome and next steps

- Insight intends to engage directly with Dow to follow up on shorter-term improvements that would help to clarify the company's climate transition plan, low carbon capital allocation, and climate governance.

4.3 Investment manager engagement policies

The Trustee's policy is to delegate responsibility for engaging and monitoring investee companies to the investment managers. The Trustee expects the investment managers to use their discretion to maximise risk-adjusted financial returns for members and others over the long term.

Where applicable, the Plan's investment managers are expected to have developed and publicly disclosed an engagement policy. This policy, amongst other things, provides the Trustee with information on how the investment managers engage in dialogue with the companies they invest in and how it exercises any voting rights. It also provides details on the investment approach taken by the investment manager when considering relevant factors of the investee companies, including environmental aspects such as climate change.

The Trustee recognises that each investment manager's ability to influence the companies in which they invest will depend on the nature of the investment. The Trustee acknowledges that the concept of stewardship may be less applicable to some of their assets, particularly for short-term money market instruments, gilt and liability-driven investments.

The Trustee reviews each investment manager prior to appointment and monitors them on an ongoing basis through the regular review of the investment manager's voting and engagement policies, and a review of each manager's voting and / or engagement behaviour.

The Trustee has not set out its own stewardship priorities but follows that of the investment managers. However, the Trustee has implemented a standard process with Insight Investment to screen out corporate bonds with certain negative aspects to their ESG characteristics, as set out above.

The Trustee will engage with an investment manager should they consider that manager's voting and/or engagement policy to be inadequate or if the voting and engagement undertaken is not aligned with the investment manager's own policies, or if the investment manager's policies diverge significantly from the views of the Trustee.

If the Trustee finds any investment manager's policies or behaviour unacceptable, it may agree an alternative mandate with the manager or decide to review or replace the manager.

For direct investments, the Trustee does not envisage being directly involved with peer-to-peer engagement in investee companies.

The Trustee publishes a separate Engagement Policy Implementation Statement which can be found here: https://www.mellonrbp.co.uk/.

4.4 Integration into overall Risk Management

The Trustee considers and manages climate-related risks within its wider investment strategy objective of providing security to all beneficiaries of the Plan while taking into account the legitimate desire of the sponsor to manage the financial volatility associated with a defined benefits pension scheme.

The Trustee and Climate Risk Sub-Committee have clearly defined areas of responsibility. These arrangements ensure that climate related risks and opportunities are considered by the Climate Risk Sub-Committee alongside the Trustee's other risk identification management.

The Plan's risk register includes the consideration of the impact and severity of risks arising from climate change (e.g. floods) and the use of disaster recovery plans to mitigate these risks. Broader climate related risks will be added to the risk register when it is next reviewed.

The Trustee has considered the funding position based on the effect of climate risk on the Plan's assets and liabilities and believes that no change is currently required to investment strategy based on the results of its scenario analysis.

Climate risk considerations are integrated into asset-level decision making through application of each investment manager's policy on climate change and through engagement, which are monitored and evaluated by the Trustee.

The Trustee will continue to work with its investment managers to evaluate and consider evolving climate risk within its investments and integrate this in its framework for investment strategy decisions.

5. Climate Related Metrics and Targets

The Trustee obtains quarterly reports on a number of climate related metrics from Insight Investment to help inform their understanding of the Plan's climate-related risks and opportunities.

Insight Investment provides the Trustee with the information necessary to help design and monitor the Plan's strategies, as well as to enable target setting, progress monitoring and fulfilment of regulatory requirements. Insight Investment provides the Trustee with portfolio-level data (based on the most accurate data available) including suitable reports aligned with recommendations from the Task Force on Climate-related Financial Disclosures (TCFD).

Scope 1, Scope 2 and Scope 3 GHG Emissions

Greenhouse gasses (GHG) include carbon dioxide, methane, nitrus oxide and others that contribute to global warming. Emissions are measured in carbon dioxide (CO_2 equivalent).

The GHG Protocol has defined three scopes for emissions:

Scope 1	Scope 2	Scope 3
Direct emissions	**Indirect emissions**	**All other indirect emissions**
Owned Assets	Energy purchased	3rd Party
• Facilities • Equipment • Vehicles • Onsite Landfills	• Purchased electricity • Purchased heating • Purchased cooling	• Transportation • Distribution • Waste • Energy and fuel • Leased assets • Travel

The Trustee has obtained the Plan's financed emissions as far as it is able, from the investment managers.

5.1 Climate Related Metrics

The climate related metrics monitored by the Trustee are as follows:

Absolute emissions metric – Total greenhouse gas (GHG) emissions

Emissions intensity metrics:

1. **Carbon Footprint** - Carbon Footprint is an intensity measure of emissions that takes the Total GHG Emissions figure and weights it to take account of the size of the investment made.

2. **Weighted Average Carbon Intensity** (WACI) - WACI measures the portfolio's exposure to carbon-intensive companies with attribution of emissions based on their weightings in the portfolio or part-portfolio for which data is available, rather than the ownership approach.

3. **Paris Alignment** - This measure seeks to consolidate the carbon reduction and net zero targets of issuers in whom the Plan is invested into a forward-looking measure of exposure to climate-related

risks. This will illustrate the temperature pathway the mandate aligns to, expressed as a projected increase in global average temperature. This should capture projected scope 3 emissions for sectors where these are significant.

Additional metrics - The Trustee will monitor data quality - share of portfolio held at year end for which climate-related metrics of an acceptable quality have been obtained. The tables in Section 5.2 provides a comparison with 2022 and will be expanded in future years.

5.2 Insight Credit Portfolio

The climate analysis of the Plan's Corporate Bond portfolio is as follows:

		Weighted average carbon intensity (tonnes/USDm sales)		Carbon footprint (tonnes/USDm EVIC)		Total GHG emissions (tonnes)	
	Date	**Plan**	**Benchmark Index**	**Plan**	**Benchmark Index**	**Plan**	**Benchmark Index**
Scope 1 and 2	**31/12/2022**	**91**	**216**	**24**	**54**	**5,190**	**11,682**
	31/12/2023	**78**	**208**	**39**	**59**	**8,633**	**11,140**
Coverage (reported/estimated) (%)	31/12/2022	92	87	60	95	60	95
		(62/30)	(79/8)	(56/4)	(82/13)	(56/4)	(82/13)
	31/12/2023	95	96	90	85	90	85
		(71/23)	(79/17)	(66/23)	(73/12)	(66/23)	(73/12)
Scope 1	**31/12/2022**	**32**	**192**	**19**	**46**	**4,107**	**9,838**
	31/12/2023	**28**	**177**	**18**	**49**	**4,120**	**9,255**
Coverage (%)	31/12/2022	87	95	60	86	60	86
	31/12/2023	91	95	52	72	52	72
Scope 2	**31/12/2022**	**44**	**30**	**5**	**9**	**1,083**	**1,845**
	31/12/2023	**45**	**28**	**5**	**9**	**1,045**	**1,676**
Coverage (%)	31/12/2022	87	95	58	86	58	86
	31/12/2023	91	96	56	82	56	82
Scope 3	**31/12/2022**	**328**	**792**	**150**	**301**	**32,260**	**64,863**
	31/12/2023	**313**	**730**	**228**	**367**	**50,853**	**68,899**
Coverage (%)	31/12/2022	89	93	54	72	54	86
	31/12/2023	89	96	87	87	87	87

Source: Insight Investment and MSCI. Coverage of scope 1 & 2 combined may be greater than coverage of the individual parts. Scope 3 coverage is 100% estimated. All estimates are external to Insight Investment.
Benchmark Index – Global Investment Grade Corporate Bond Index

Scope 1+2 coverage – GHG protocol reporting is mandatory in 40 countries, including the UK, where the regulatory requirement is to report combined Scope 1+2 emissions but not separate Scope 1 or Scope 2 emissions. This is reflective of the carbon reporting coverage for the portfolio where more issuers would have provided combined Scope 1+2 emissions as a result.

Coverage of scope 1 & 2 combined may be greater than coverage of the individual parts. Scope 3 coverage is 100% estimated. The renormalised figure is found by filling the data gaps. Where Insight does not have data, the average from the fund is used instead. It is preferred not to solely use this figure as there is the possibility of either understating emissions for high emitting issuers and/or overstating emissions for low emitting issuers.

Over the period since the Plan's initial TCFD report, Insight have done a lot of work to reduce the gap with the separate Scope 1, Scope 2 emissions especially where the carbon value was known but the EVIC denominator was not.

Paris Alignment				
	Fund		Global IG Corporates	
Implied temperature rise (ITR)	**2022 %**	**2023 %**	**2022 %**	**2023 %**
1-2ºC	63.8	68.0	49.3	63.8
2-3ºC	20.0	10.2	28.2	16.2
3-4ºC	0	5.4	7.9	6.6
4-5ºC	0	0	2.3	2.1
5-7ºC	0	0	2.2	1.9
7+ºC	0	0	3.6	3.4
Coverage	83.9	83.6	93.5	94.0
Weighted ºC	1.2	1.5	2.4	2.1
Renormalised ºC	**1.5**	**1.7**	**2.4**	**2.2**

ITR data is provided by MSCI and MSCI has had a recent change in methodology that is impacting some issuers ITR data where the credibility of targets have come under assessment and their decarbonisation trajectories have been adjusted accordingly and will likely see ITR categorisations change over the coming months.

This change in methodology was primarily prompted by the change in decarbonisation benchmark from 2ºC (NZ 2070) to 1.55ºC (NZ 2050) from NGFS, in line with guidance. There has also been a shift to peer-based as opposed to company-based ITR estimations. Additionally, the overall weighted average and renormalised fund/ benchmark ITR is calculated against a scaling factor and is not binary. Consequently, more issuers reporting/ being estimated to be in higher ITR categories is likely to increase the portfolio ITR more.

With MSCI's methodology change, Insight has noticed adjustments to ITR at an issuer level between 2022 and 2023 but most have been immaterial (0.1-0.3ºC) but there were 3 issuers that had more material adjustments – GM went from 2.1ºC to 3.4ºC; UKPONE went from 1.8ºC to 3.3ºC and F had no ITR data in 2022 but was 3.1ºC in 2023.

Science based targets	2022 %	2023 %	2022 %	2023 %
Committed	19.9	4.6	15.5	13.5
1.5ºC	12.5	20.3	18.3	24.3
Well-below 2ºC	4.3	6.9	4.5	5.2
2ºC	0	0	2.2	1.8
Coverage	36.7	31.8	40.5	44.7

Source: Insight Investment

Note: Due to a change in methodology in 2023 by MSCI it is not possible to directly compare the above numbers for 2022 and 2023. It is also not possible to restate 2022 since the underlying data was captured at that point in time based on the methodology applicable at that point.

ITR - MSCI Implied temperature rise (in the year 2100 or later), if the whole economy had the same over-/undershoot level of greenhouse gas emissions to the company analysed, based on its most recent Scope 1, 2 and 3 projected emissions

SBT - Science-based targets are greenhouse gas reduction goals set by business.

Insight believes that SBT coverage reduction is likely due to the number of issuers subscribing to SBTi for validation stalling and falling. E.g., Microsoft, Unilever, JBS have been reported to have withdrawn from SBTi. It is relatively easy for big banks and corporates to invest in setting and validating SBTs (amidst changing requirements - https://sciencebasedtargets.org/blog/explained-minor-revisions-resources) but is likely out of reach for smaller issuers (e.g., housing associations, infrastructure issuers).

Further, Insight have noted that, as many companies were due to revise their plans as they reached YE2023, that marked the end of a 2-year deadline, this has led to the downgrade of these 200+ companies by SBTi. E.g., Microsoft, P&G, Unilever, Walmart that has impacted the reclassification. Within the portfolio, HSBC was previously committed but does not currently maintain an SBT-verification. NatWest and Aviva were committed previously but are now classified under the 1.5ºC category.

5.3 Insight Gilt Portfolio

Absolute emissions	Market value of long only exposure		Absolute emissions*		PCAF**
(market value gilts / market value gilts in issuance* CO2e)	2022 £m	2023 £m	2022 tCO_2e	2023 tCO_2e	2023 tCO_2e
Funded gilts only	206	181	40,255	32,335	29,439
Gilts on repo and/or TRS	382	389	74,524	69,487	63,269
Combined gilt exposure	588	570	114,779	101,821	92,708

	Weighted average carbon intensity ($tCO_2e/GK\$m$ GDP) 2023		Carbon Footprint (tCO2e/£m) 2023	
	2022	**2023**	**2022**	**2023**
Gilts	124.8	112.2	195.3	178.6

Sources: Insight Investment. [2]m tCO2e is million tonnes of CO_2 equivalent gases.

- **Data quality**: 100% reported, unverified by a third party
- **Portfolio alignment metric (implied temperature rise °C):** The assumption is 1.5 – 2.0 degrees Celsius based on analysis by Germanwatch and the Climate Action Tracker

The following inputs and assumptions applied by Insight in preparing this information and is based on various sources of guidance:

- Annual UK greenhouse gas emissions data for 2022, published as a provisional figure by the UK government, of 417.1m tCO2e2. m tCO2e is million tonnes of CO2 equivalent gases.
- Total UK government debt at 29 December 2023, taken as the market value of gilts in issuance of £2,335,585m (including green gilts)
- UK PPP-adjusted GDP estimate3 for 2022, published by the IMF, of GK$3,716,621m. PPP adjusted GDP is used for consistency vs other sovereigns. GK$ = international dollar, the unit of PPP-adjusted GDP.
- Gilts posted out as collateral are included in gilt valuations; gilts received as collateral are excluded.
- Derivatives, cash and short gilt positions have also been excluded.

Provisional analysis for indicative purposes only.

* These emissions are defined as “Scope 1 and 2” emissions under DWP guidance.

** PCAF = Partnership for Carbon Accounting Financials which has issued guidance for calculating emissions.

Source: Insight, UK Government, DMO, IMF, Germanwatch CCPI, Climate Action Tracker. Provisional 2022 UK emissions; 2022 GDP IMF PPP FX rate

5.4 Alcentra Strategic Credit Fund and European Direct Lending Fund II

Alcentra has not been able to supply the data on time due to this being their first TCFD disclosures and the associated complexities of providing such reporting for the asset class.

Alcentra’s UK Stewardship Report confirms that 28% of borrowers in their Direct Lending portfolio have set a climate based target aligned with limiting global warming to 1.5ºC.

Alcentra became an official supporter of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (“TCFD”) in January 2020. Alcentra will be producing their first TCFD disclosures in 2024 in line with FCA requirements.

As part of TCFD reporting, Alcentra is aiming to combine portfolio carbon emissions data with forward-looking metrics – such as issuers' climate targets, temperature alignment, and scenario analysis to better understand the impact of climate change on portfolios.

The TCFD report (both the entity-level and the product-level) will provide detailed scenario analysis including Climate Value at Risk (CVAR) and Implied Temperature Risk (ITR) metrics.

Over the last 12-months, Alcentra have advised that they have stepped up the level of engagements in preparedness for TCFD reporting and have:

- Pushed for increased disclosure of climate metrics by borrowers;
- Pushed borrowers to set emissions reductions targets (including assessing whether borrowers have set credible transition plans); and
- Pushed for integration of climate into wider ESG policy and strategy.

The following data has been provided in respect of the Alcentra European Direct Lending (Levered) Fund II:

Climate metric	**Measurement**		**Coverage**	
	FY 2023		**2022**	**2023**
Financed Scope 1 GHG emissions	1,262	tCO^{2}eq	50%	67%
Financed Scope 2 emissions	207	tCO^{2}eq	54%	78%
Financed Scope 3 emissions	6,025	tCO^{2}eq	31%	66%
Fund carbon footprint (Scope 1 and 2)	5.4	tCO^{2}eq / € invested	No data	
Fund GHG Intensity (WACI – portfolio weighted	12.7	tCO^{2}eq / € invested	No data	

For the purposes of calculations, the proportion of emissions 'financed' by Alcentra funds represents the fair value of Alcentra investments as a % of company EV.

Alcentra reported that 23% of borrowers reported setting some form of emissions reductions target and that no borrowers reported being active in the fossil fuels sector.

Due to the small asset allocation and the short-term nature of the investment in the Alcentra Strategic Credit and the European Direct Lending Fund II, the Trustee has not considered the climate related risks and opportunities of this portfolio.

5.5 Climate Related Targets

The Trustee fully supports the Paris Agreement and recognises the need to address the risks that members of the Plan face from climate change. The Trustee acknowledges that there is an urgent need to accelerate the transition towards global net zero greenhouse gas emissions and do its part in helping deliver the goals of the Paris Agreement. The Trustee of the Mellon Retirement Benefits Plan therefore commits to transitioning the Plan's investments to achieve net zero portfolio greenhouse gas emissions by 2050, or sooner.

In order to meet this commitment, the Trustee has to place reliance on the following:

- Emissions reducing by investing in lower emissions investments, or investments that are transitioning to lower emissions.
- Influencing companies to reduce emissions.

A substantial proportion of the assets of the Plan will continue to be invested in UK government bonds and is therefore reliant to a large extent on the UK Government meeting its own interim targets and long-term commitments (see Section 2.3).

The Trustee has introduced screening of investments as detailed in Section 4.2 to reduce emissions and actively encourages their fund managers to engage with companies with the highest emissions beyond this screening process.

The Trustee also acknowledges that the lack of good scope 3 data could result in moving investments from high scope 1 and 2 to high scope 3 emissions.

Insight Investment have set the following targets for UK managed corporate bonds and equity mandates:

Target coverage: 75% of corporate bond assets

Portfolio Decarbonisation Reference target (WACI Scope 1 and 2 Only)

Year	Emissions reduction targets (from 2020 base)
2025	-30%
2030	-50%
2050	-100%

Implied temperature rise targets

Year	Implied Temperature Rise °C
2030	1.95
2050	1.50

Paris Aligned Investment Initiative (PAII) Net-Zero Alignment and engagement threshold

Year	Threshold Target
2023	50%
2050	70%

Insight Investments have set portfolio-level alignment and engagement targets to ensure that 50% of financed emissions for assets are either net zero, aligned to a net-zero pathway, aligning to a net-zero pathway or subject to engagement with a view to moving into alignment with net zero, by 2023. This target increases to cover 70% of financed emissions by 2025.

Alignment will be judged using one or more methodologies from the Climate Action 100+ benchmark and Institutional Investors Group on Climate Change (IIGCC) framework; Transition Pathway Initiative; and Science Based Targets initiative.

The Trustee recognises that the interim target measurement and targets themselves may change as further information becomes available and as methodology changes, and will continue to work with Insight Investment to select appropriate bases for monitoring progress in achieve net zero greenhouse gas emissions by 2050.

6. TCFD Framework

	Recommended Disclosures	Reference
Governance	Describe the Board's oversight of climate-related risks and opportunities.	Section 1 - Governance
	Describe management's role in assessing and managing climate-related risks and opportunities	Section 1 - Governance
Strategy	Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	Section 2 – Investment and Funding Strategy
	Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning	Section 3. – Scenario Analysis Section 3.3 - Impact on the Plan
	Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Section 3.1 – Short term scenario analysis Section 3.2 – Medium and long-term scenario analysis Section 3.4 - Resilience of the Strategy
Risk Management	Describe the organisation's processes for identifying and assessing climate-related risks.	Section 4.1 – Risk Identification and assessment process
	Describe the organisation's processes for managing climate-related risks.	Section 4.2 - Risk Management Process
	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	Section 4.4 – Integration into overall risk management
Metrics and Targets	Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Section 5
	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Section 5.1, 5.2, 5.3, 5.4
	Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Section 5.5