# Taskforce on Climate-related Financial Disclosures Report

## ZF UK Pension Plan ("the Plan")

Year ending 31 March 2024

# Executive summary


This report sets out the Trustee's response and key actions across the four Task Force on Climate-related Financial Disclosures ("TCFD") pillars below.

## Governance

*Governance around climate-related risks and opportunities*

- **ESG Beliefs Policy** – The Trustee maintains an ESG Policy which sets out Trustee ESG beliefs & implementation framework. This was reviewed in Q1 and updated in Q2 2024.
- **Meetings** – The Trustee and the Investment Committee ("IC") meet quarterly and receive advisor support.
- **Training** – The Trustee has received training on relevant climate risks and opportunities from its Investment Advisor.

## Strategy

*Actual and potential impacts of climate risks and opportunities*

- **Time horizons** – The Trustee has defined key time horizons for the Plan and considered how the Plan may develop over these periods.
- **Risks & opportunities** – The Trustee has identified relevant climate-related risks over the selected time horizons, with opportunities evolving over time.
- **Scenario analysis** – The Trustee has implemented a new investment strategy over the year and has scheduled to complete updated climate scenario analysis in late 2024 (to feature in next year's report). This will include updated analysis on how climate-related risks and opportunities could impact the employer's covenant.

## Risk Management

*Identification, assessment and management of climate-related risks*

- **Risk register** – The Trustee reviewed the Plan's risk register and has included climate-related risks.
- **Manager assessments** – The Plan's Investment Advisor completed its annual review of the Plan's investment managers in Q1 2024 to identify areas of strength and areas for improvement.
- **Stewardship priorities** – The Trustee has set a stewardship priority based on climate change.

## Metrics & Targets

*Disclosure of key metrics and targets*

- **Metrics** – The Trustee has selected four metrics to report on and collated data against these from the Plan's investment managers.
- **One change to metrics** – The Trustee had previously agreed to report on the Binary Target Measurement as the Plan's portfolio alignment metric, however, this has been updated to Implied Temperature Rise, given better data availability for this metric.
- **Targets** – The Trustee has set a target of at least 65% of data to be verified, reported or estimated by the investment managers in the next 3 years.

# Trustee statement on climate risks and opportunities

## Chair statement on behalf of the Trustee

### An important issue

The Trustee recognises that climate change represents a long-term financial risk to the Plan but can also be a dynamic source of opportunities. Climate change is expected to affect our members, financial markets and society at unprecedented levels. We recognise that managing the associated risks and opportunities forms part of our fiduciary duty to members.

### Actions we have taken

This report sets out our response to the Task Force on Climate-related Financial Disclosures ("TCFD") regulation, intended to manage climate change risks in the Plan. The key actions we have taken over the 12 months ending 31 March 2024 include:

- Engaging with managers to target higher data quality over the next year (and beyond).
- Adjusting the target metrics from short-, medium-, long-term goals, to target a data quality threshold of at least 65% of data being estimated, reported or verified in the next 3 years.
- Monitoring a series of key metrics (including "Implied Temperature Rise" as the "Portfolio Alignment" metric).
- Reviewed the Trustee's ESG beliefs policy and considered how this is implemented across the Plan's assets.
- Set Climate Change as a Stewardship Priority which the Trustee has communicated to investment managers as a focus area regarding their engagements.
- Assessed how each of the Plan's investment managers have integrated ESG into their investment process; since the year-end we've communicated to managers on identified potential improvement points to hopefully reduce ESG risks in the Plan's investments going forward.

### In summary

The Trustee is committed to ensuring the best outcomes for the Plan's members by addressing the risks and opportunities of climate change. In the context of our wider responsibilities to the Plan's members, we will continue to take further steps to build the Plan's strategy for climate resilience.

**Mike Smaje, Chair of the Trustee of the ZF UK Pension Plan**

# Overview

# TCFD Overview

## Governance

*Governance around climate-related risks and opportunities*

### Internal

**Trustee** – We, the Trustee, hold ultimate responsibility for managing the Plan, to ensure Plan-level climate-related risks and opportunities are well governed.

The Trustee, working with the Plan's advisors, provides oversight and manages Environmental, Social and Governance ("ESG")-related risks as they pertain to the Plan's assets. In addition, the Trustee has set climate change as a stewardship priority, with the aim of engaging with managers to encourage positive changes, to help to manage financial risks and opportunities, while also ultimately likely benefitting members and wider society.

**Investment Committee ("IC")** - The Trustee has established an IC to both ensure that investment matters receive a sufficient degree of attention and to improve decision making. The implementation and monitoring of the investment strategy has been delegated to the IC.

**Plan Principal Employer** - The Plan's Principal Employer and parent company have their own sustainability strategy including regular reporting. The Trustee ensures those issues relevant to the Plan are considered where appropriate and ensures synergy (again where appropriate) between the Plan and Principal Employer's approach to climate related issues.

### External

**Investment Advisor** - The Plan's Investment Advisor provides climate-related advice to the Trustee throughout the year, covering the inclusion of climate considerations in governance arrangements, climate risks and opportunities, the analysis of climate metrics, and providing training on the ever-evolving climate science (as well as regulatory updates).

**Actuary** – The Plan's Actuary assesses climate-related risks and opportunities in relation to the Plan's liabilities and the implications for the Plan's funding and long-term objective.

**Other Advisors** - The Plan's Covenant Advisor provides advice to the Trustee in relation to climate risks and the principal employer. The Trustee's Legal Advisor provides advice to the Trustee on climate-related regulation.

**Investment Managers** - The Trustee has delegated responsibility to the Plan's investment managers for managing the Plan's assets in line with the agreed mandates. This includes identifying, assessing and managing climate-related risks and opportunities in relation to the Plan's investments, as well as engaging with portfolio companies in the best interests of the Plan's members and providing the agreed climate-related metrics.

# TCFD Overview

## Strategy

*Actual and potential impacts of climate risks and opportunities*

Over the year and continuing beyond year end, the Trustee implemented a revised investment strategy with most of the Plan's investment managers being replaced. As a result, the Trustee has not conducted further climate-related investment strategy modelling over the year, and the latest analysis remains as outlined in the Trustee's 31 March 2023 TCFD report.

Following the completion of the strategy changes (which were ongoing in March 2024), the Trustee has decided to conduct updated scenario analysis on the new investment strategy in September 2024. The results of this analysis will be included in the March 2025 TCFD report and will be used to inform future investment strategy decisions.

### *Scenario analysis carried out by previous investment advisor*

Over the previous year, the Plan's previous investment advisor carried out a scenario analysis which considered the following:

- A top-down analysis of the Plan's strategy at the time, using a proprietary model
- Three scenarios, considering how quickly and decisively the world responds (or fails to respond) to climate change
- The Plan's resiliency under the scenarios

The key outputs analysed were 'Likelihood of success' reflecting cases where the Plan achieves 100% funding level and 'Downside risk' which illustrates the possible funding level in the worst 5% of cases.

In the worst climate scenario, the strategy had a lower likelihood of success compared to the other scenarios due to the impact of this scenario being felt for longer. However, overall, there was no material difference in results across the three scenarios, suggesting the investment strategy is resilient to a range of climate change scenarios.

*Note: The scenario analysis carried out by the previous investment Advisor relates to the Plan's 2023 position due to the strategic changes that have been undertaken over the year. The Trustee will update the scenario analysis in Q3 2024.*

# TCFD Overview

## Risk Management

*Identification, assessment and management of climate-related risks*

The Trustee has a framework to ensure risks are managed holistically. This includes analysis of climate risks at the overall Plan level and ensuring the Plan's investment managers are considering ESG risks and opportunities in line with the Trustee's expectations.

### Plan level

The Trustee periodically reviews the risk register and has received advice on ESG risks regarding the:

- Investment strategy
- Asset and investment manager allocations
- Funding

The Trustee also received advice on the Plan's Sponsor Covenant in the previous Plan year. This advice will be refreshed in the next Plan year.

In addition to the risk register, the Trustee receives regular advice from their advisors on climate considerations.

### Underlying investment mandates

The Trustee regularly reviews the Plan's investment managers' ESG capabilities.

On an annual basis, the Plan's investment advisor provides an ESG assessment for the Plan's mandates. The assessment has a focus on climate-related risks, highlighting areas the mandates perform well, and areas for improvement/engagement.

The Trustee uses the results of these assessments to engage with the Plan's investment managers on areas to improve. Given this exercise will be completed annually, the Trustee will next review progress against these feedback points in 2025.

The Trustee also uses the climate metrics it has collected to engage further with the Plan's investment managers.

### Case study – European Loans

In this year's assessment, it was noted that the Plan's European Loan Fund manager uses a proprietary ESG scorecard to manage ESG risks in the Fund. The manager demonstrated that it's scorecard materially influences portfolio management, by declining to provide any more funds to lenders whose scores fell below expectations.

The Trustee identified two engagement points for the manager including asking them to assess the effectiveness of green bonds in the mandate, as well as set investee company specific performance targets.

# TCFD Overview

## Metrics & Targets

*Disclosure of key metrics and targets*

The Trustee has selected, gathered and assessed the four climate metrics outlined in the table below. Due to the nature of the Plan's investment strategy, which has a material allocation to illiquid assets, coverage of climate metrics is currently low. Therefore, the Trustee has set an interim data quality target of at least 65% of the data for the total portfolio to either be estimated, reported by the underlying company or verified by the manager in the next 3 years.

**Plan**

| Fund split | Scopes | Total GHG emissions | | Carbon footprint | |
|---|---|---|---|---|---|
| | | Metric $tCO_2e$ | Coverage | Metric $tCO_2e/\$m$ | Coverage |
| Growth Funds | Scope 1 & 2 | 31,678 | 21% | 33 | 21% |
| | Scope 3 | 142,914 | 19% | 147 | 19% |
| LDI Funds | Scope 1, 2 & 3 | 163,181 | 100% | 89 | 100% |

| Fund split | | Implied temperature rise | | Data quality, % of scope 1 &2 emissions that are: | | | |
|---|---|---|---|---|---|---|---|
| | | Metric °C | Coverage | Verified | Reported | Estimated | Unavailable |
| Growth Funds | Scope 1 &2 | 2.6 | 2% | 3% | 10% | 8% | 44% |
| LDI Funds | Scope 1, 2 & 3 | - | - | - | - | 35% | - |

| Data quality target | 31 December 2023 | 2027 target |
|---|---|---|
| Plan's short – medium term target | 56% estimated, reported or verified. | 65%+ estimated, reported or verified |

**Growth Mandates (c.65% of Plan assets). LDI Mandate (c.35% of Plan assets).*
**The total coverage numbers on this page are calculated relative to the Plan's total asset value.*
*Please see appendix for details and caveats*

The Trustee has decided to monitor Implied Temperature Rise instead of Binary Target Measurement going forward, given there is better data availability.

The Trustee's target metric (which previously included short-, medium- and long-term data availability targets for each fund), has been simplified to target a minimum threshold of at least 65% of data being estimated, reported or verified in the next 3 years.

# TCFD Recommendations – Governance

# Governance

## Describe the Trustee Board's oversight of climate-related risks and opportunities

**Climate-related beliefs**

The Trustee maintains an ESG Policy that sets out the Trustee's ESG beliefs and how these are implemented. Whilst these focus on general ESG principles, they do have an emphasis on climate change given the Trustee's belief that climate change is a financially material risk to the Plan. The Trustee's ESG beliefs are as follows:

1. Climate change and the expected transition to a low carbon economy is a financial risk to the Plan. The Trustee should consider climate risk factors in its investment decisions along with other risks.
2. The Trustee should set the policies for Responsible Investment and climate risks, and delegate management to investment managers who will act in line with the Plan's policies where practical. It is necessary to know investment managers' policies and performance to do this properly.
3. The Trustee believes that engaging with managers is more effective to initiate change than disinvesting and so will seek to communicate key ESG actions to the managers in the first instance. The Trustee prefers engagement to achieve this but would consider disinvestment, whilst also considering a range of other factors, if this is not effective.
4. ESG factors can be financially material, and it is important to consider them for risk management. Managing these risks forms part of the fiduciary duty of the Trustee and can lead to better risk adjusted outcomes.
5. The Trustee will seek to monitor key ESG metrics within the Plan's investment portfolio to understand the impact of its investments. The Trustee will consider its own and the Sponsor's ESG priority areas when setting targets for the managers.

Adopting these beliefs, with a particular focus on climate change, ensures that managing climate related risks is at the heart of investment-related decision making.

The overall responsibility for implementing these beliefs and other ESG-considerations (including climate-related) lies with the Trustee, however, it receives support from its Scheme Actuary, Investment Advisor, Legal Advisor and Covenant Advisor.

The Trustee delegates the day-to-day decision making of the Plan's investments to the investment managers. Therefore, the Trustee considers the managers' expertise, track record and stated policies and frameworks on ESG related issues, and it forms part of the initial and ongoing due diligence of the Plan's investment managers. On an annual basis, the Trustee assesses how the managers' ESG policies align with the Trustee's ESG beliefs.

# Governance

## Describe the Trustee Board’s oversight of climate-related risks and opportunities

**Climate-related beliefs (continued)**

The Trustee has set the following framework for implementing the ESG policy:

1. Continue to develop our understanding of ESG factors, and climate, through regular training.
2. Review our ESG Policy in line with regulation and industry progression regularly.
3. Consider ESG factors when selecting new managers.
4. Regularly review the managers’ approach to ESG factors and feedback proposed actions.
5. Monitoring integration of ESG factors via the implementation statement.

This framework emphasises that the Trustee will engage with managers to improve how they manage ESG factors (including climate-related risks). The Trustee believes this is the most appropriate action to take to reduce the impact of ESG risks on the Plan.

Overall responsibility for ESG considerations lies with the Trustee. The Trustee meets at least quarterly and receives updates and support from advisors on ESG and climate change topics. The IC meets with managers on a cycle, for an update on how the manager has considered climate change and ESG risks in their investment process. The Trustee ensures sufficient time is spent on ESG and climate change topics to best manage climate-related risks and opportunities. This is because the Trustee believes climate changes pose a systemic risk that could impact the investment returns of the Plan’s investment strategy. The Trustee will consider the quality of advice the advisors are able to provide from a climate perspective when reviewing their appointments. Where appropriate, the Trustee will challenge the advice provided, however, this was not relevant over the reporting year.

**Stewardship priority**

The Trustee has set climate change as a stewardship priority and has communicated this to the Plan’s investment managers. The Trustee’s aim is to encourage the Plan’s managers to support underlying companies and investee positions in taking steps to help mitigate climate change. Whilst this will help the global economy transition to net zero, it is believed this will also help to lower climate-related risks to the Plan.

**Climate-related training**

The Plan’s Investment Advisor regularly provides ESG training to the Trustee, either recapping previous topics or introducing new topics as the industry evolves. In November 2023, the Trustee discussed the four pillars of TCFD: Governance, Strategy, Risk Management, and Metrics and Targets and further training in February 2024 focussed on the results of the Plan’s TCFD metrics. The next session is in September 2024 which will focus on scenario analysis.

Where training needs arise, then this will be discussed with the relevant advisor and tabled for discussion at the next Trustee or IC meeting.

# Governance

## Describe the Trustee Board's role in assessing and managing climate-related risks and opportunities

The Trustee has appointed advisors and other parties to help support it in the management of climate-related risks and opportunities. The key stakeholders in managing climate-related risks are outlined in the table below:

| | |
|---|---|
| Trustee/IC | – The Trustee is responsible for incorporating Responsible Investment ESG considerations, such as climate change, into the Plan's overall management and executing the Plan's ESG Policy. This includes meeting all regulatory obligations and ensuring effective governance processes for managing ESG-related risks.<br>– The Trustee is tasked to include ESG factors in managing the Plan's assets, identifying and managing ESG related risks and opportunities in all areas including asset allocation decisions, manager appointments and monitoring the Plan's current investment managers. |
| Scheme Actuary | – The Plan's Actuarial advisors are responsible for identifying any ESG considerations which should be incorporated into the Plan's funding strategy (both short and long term) and in the Plan's integrated risk management plan.<br>– This will include the setting of individual financial and demographic assumptions and also the Trustee's assessment of the covenant of the Principal Employer. |
| Plan Principal Employer | – The Principal Employer is responsible for managing the climate-related risks to its business.<br>– The Trustee recognises that engaging with the Principal Employer on climate-related risks is important given the potential indirect impacts on the Plan. |
| Investment Advisor | – The investment advisor assists with ongoing monitoring of the investment managers, including their stance on climate related issues. It will also support with facilitating feedback to the investment managers to help improve their ESG processes over time.<br>– The investment advisor supports with integrating climate related risks and opportunities into the Plan's investment decisions.<br>– They provide advice and training to the Trustee regarding regulatory requirements.<br>– They also provide support to the Trustee with the collection of Climate-related metrics. |
| Investment Managers | – The Plan's investment managers are expected to integrate ESG considerations into their management of each of the Plan's mandates.<br>– On the appointment of any new manager, the Trustee considers each managers ESG capabilities, with assistance from their Investment Advisor, to determine if that manager's approach is aligned with the Trustee's policies and beliefs.<br>– Once appointed, the Trustee monitors all the managers' ESG policies regularly, The Trustee also liaises with the investment managers in relation to ESG matters, as required. |

# TCFD Recommendations – Strategy

# Strategy

## Describe the climate-related risks and opportunities the Trustee has identified over the short, medium and long term

**The strategy section reflects work carried out entirely by the previous investment advisor, however, this was been reviewed during the year and remains appropriate for this reporting period.**

When considering the impact on the Plan, climate risk can be defined as the potential impact on future financial returns that may arise from climate change. Climate risk is typically split into two parts – transition risk and physical risk. These risks may vary in likelihood and intensity over different time horizons and are dependent on how quickly and well the world transitions to a low-carbon economy. This is laid out in the diagram below:

Aggressive mitigation ⟷ Business as usual

**Transition to a low carbon economy – transition risks dominate.**

- Policy changes, e.g. carbon pricing, seek to create the changes needed in society.
- Technology development, e.g. renewable energy, and adoption enable the changes to be adopted.

**Physical risks and impacts dominate.**

- Chronic changes, e.g. sea level rise, agricultural systems impact economic and social systems.
- Acute changes, e.g. storms, wildfires create damage and give rise to costs of adaptation and reconstruction.

The Plan is a long-term investor. Given the nature of climate change and the time-horizons over which impacts of climate change may be felt, it can be expected that climate risk will impact the Plan in various ways. However, it is important first to define the different time-horizons which we may consider, in order to clarify whether the different risks and opportunities arising from climate change may impact the Plan in the short-, medium- or long-term.

In the context of the Plan, we consider short, medium and long-term horizons. We have defined what these time-horizons mean in more detail as set out below.

| Timeframe | Investment Horizon | Impact of Risks |
|---|---|---|
| Short-term *1 year* | This was the period from 31 March 2023 to the next actuarial valuation as at 31 March 2024. | • Transition risks are expected to feature more prominently over the shorter-time periods, due to likely escalation in climate change regulation. |
| Medium-term *7 years* | Half-way to the long-term target | • Physical risks are expected to feature increasingly over the longer-term. |
| Long-term *15 years* | Aligns to the likely time horizon over which the Plan is expected to reach 'significant maturity' under The Pensions Regulatory' new DB funding code. | • Both Transition and Physical risks will impact the Plan during its lifetime. |

# Strategy

## Describe the climate-related risks and opportunities the Trustee has identified over the short, medium and long term

Risks relating to climate change are identified through the various processes involved in managing the Plan, as described in the Risk Management section of this report.

Climate risks may be identified, assessed and monitored in a number of different ways. We consider climate risks at both an overall strategy level as well as with respect to each asset in which the Plan is invested. We then engage with their individual managers on these assets and improvements that can be made.

We assess climate related risks and opportunities when setting investment and funding strategy, taking into account covenant, to ensure a holistic and consistent approach. The tables below and overleaf set out a summary of the key ESG risks we have identified and monitored. We also consider how the impacts of these risks will manifest over the short-, medium- and long-term. Further detail on the risk management processes in place for the Plan are set out in the table below.

| Risk | Description | Examples | Possible controls/management techniques |
|---|---|---|---|
| 1. Transition - Assets - policy and legal | Risks (short- to medium-term) that may impact company earnings in the shorter term, e.g. policy risks arising from carbon pricing or taxes. | Increased pricing of GHG emissions; Enhanced emissions-reporting obligations; Mandates on and regulation of existing products and services; Exposure to litigation. | Underlying investee companies should provide an indication of the potential climate-related impact on their assets and liabilities, particularly long-lived assets.<br><br>Using a wide range of metrics and techniques to assess the risks posed by climate change to their portfolio.<br><br>Undertake scenario analysis and asset/liability stressing to assess the risk posed by climate change across the Plan.<br><br>Also see risk 4 below. |
| 2. Transition - Assets - Technology | Risks and opportunities (medium- to long-term) as companies develop, or don't adopt, superior technology to build industry-based solutions. | Substitution of existing products and services with lower emissions options; Unsuccessful investment in new technologies; Costs to transition to lower emissions technology. Continuation of BAU and wasted investment; delay in change. | |
| 3. Transition - Assets - Market | Risks (short- to medium-term) of shifts in supply and demand for certain commodities, products, and services as climate-related risks and opportunities are increasingly taken into account, resulting in poor asset performance. | Changing customer behaviour – Uncertainty in market signals – Increased cost of raw materials, changes in consumer behaviour and therefore purchasing decisions. | |

The strategy was considered by the Plan's previous investment advisor. The risks and opportunities identified last year remain appropriate for this year as the Plan is a long-term investor.

# Strategy

## Describe the climate-related risks and opportunities the Trustee has identified over the short, medium and long term

| Risk | Description | Examples | Possible controls/management techniques |
|---|---|---|---|
| 4. Transition – Reputation | Reputational risk (short- to medium-term) tied to changing perceptions of an organization's contribution to or detraction from the transition to a lower-carbon economy. | Shifts in consumer preferences; Stigmatization of sector; Increased stakeholder concern or negative stakeholder feedback. | See risks 1-3 above.<br><br>Require asset managers to provide carbon footprinting and scenario analysis of transition risks, consider exposure to physical risks and engage with issuers, where relevant/possible.<br><br>Consider pathway alignment and how the Plan could align with certain pathways.<br><br>Require fund managers to understand and integrate material climate-related risks into their analysis and investment process.<br><br>Regularly monitor and review manager activities (including voting & engagement with issues and reporting) regarding climate-related issues. |
| 5. Transition - Liabilities | Risk (long-term) that the transition to a low carbon economy and supporting technology resulting in longer life-spans and increasing the liabilities. | Legal action from stakeholder on breaches of fiduciary duty by directors. | Bake risk into funding assumptions/technical provisions as additional prudence. |
| 6. Transition – social | Risk (short-, medium- and long-term) that the transition to a low carbon economy is achieved in a way that negatively impacts social elements of society. | Inability to recruit, collective action, protest, reputational damage, impact of job losses in declining sectors. | Regularly monitor and review manager activities (including voting & engagement with issues and reporting) regarding climate/social-related issues and in particular issues that link to the just transition. |

The strategy was considered by the Plan's previous investment advisor.

# Strategy

## Describe the climate-related risks and opportunities the Trustee has identified over the short, medium and long term

| Risk | Description | Examples | Possible controls/management techniques |
|---|---|---|---|
| 7. Physical risks (acute) | Risks (medium- to long-term) of physical damages to real assets and resource availability due to acute physical impacts of climate change. | Short term risks from more frequent and extreme weather events and associated insurance losses. Disruption to BAU economic activity as a consequent of extreme weather event, e.g. agricultural supply chain. Increase prevalence of diseases from destruction of biodiversity and risk of zoonotic diseases. | See above (risks 1 – 4) |
| 8. Physical risks (chronic) | Risks (medium- to long-term) of physical damages to real assets and resource availability due to chronic physical impacts of climate change. | Rising mean temperatures. Rising sea levels. Changes in precipitation patterns and extreme variability in weather patterns leading to impact on agricultural, economic and social impacts. | See above (risks 1 – 4) |
| 9. (Missed) Opportunity risk | Risk (short-, medium- and long-term) that the Plan does not capitalise on opportunities within some asset classes, resulting in not keeping pace with the market. | Opportunities such as sustainable forestry assets that offer a viable nature-based solution to climate change mitigation. | See above (risks 1 – 4) - works for both risks and opportunities |

The strategy was considered by the Plan's previous investment advisor. Please see appendix for details. and caveats.

# Strategy

## Describe the climate-related risks and opportunities the Trustee has identified over the short, medium and long term

### Overall strategy risks

| Risk | Description | Examples | Possible controls/management techniques |
|---|---|---|---|
| 10. Transition - Covenant | Risk (medium- to long-term) of deterioration of sponsor covenant strength due to not keeping up with the market transition. This could be short term, e.g. car companies will fail if they don't change to EVs | Similar to the asset risks but focused on sponsor performance. | If the Plan is well funded – i.e. reducing remaining dependency on sponsor covenant;<br><br>Bake sponsor risk into funding assumptions/technical provisions as additional prudence<br><br>Covenant monitoring & scenario modelling of sponsor covenant. |
| 11. Physical - Covenant | Risk (medium- to long-term) of deterioration of sponsor covenant due to the physical risks of climate change directly impacting the sponsor's business. | Physical risks may have financial implications for organizations, such as direct damage to assets and indirect impacts from supply chain disruption. | |
| 12. Governance/ Compliance | Risk (short- to medium-term) that the scheme does not keep pace with the inevitable policy response leading to a breach of requirements. | Fail to put in place necessary governance requirements/publish a mandatory TCFD report | Ensure climate risk is embedded within scheme governance, include important deadlines within business plans, ensure kept up to date by advisors, have climate risk (and related actions) regularly feature on the agenda. |

The strategy was considered by the Plan's previous investment advisor. Please see appendix for details. and caveats.

# Strategy

## Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning

### Risks and opportunities summary

The systemic nature of climate change risk has the potential to reduce returns across all asset classes and will have a macro-economic impact that could affect the entire Plan. Equally, however, the need to transition to a low carbon economy and the innovation which that will require presents several potential investment opportunities.

Over recent years the Trustee has dedicated considerable time and resource to ensuring that climate risk and opportunities are appropriately embedded within our investment processes. This has largely been in the form of engaging with the Plan's investment managers and when setting investment strategy, considering the resilience of the strategy to climate change risks.

### Actions to manage and mitigate climate and ESG risks:

- Enhance the management of ESG issues and climate change, including new potential investment products;
- Continue to engage with investment managers regarding their processes for taking account of climate risk and steps being taken to improve availability of climate data;
- Comply with the processes and policies set out in the Trustee's ESG Beliefs policy;
- Monitor position of Government's approach to directing investment strategies via statutory guidance and legislation;
- Enhance the transparency of the Plan's approach to climate change risk.

### Activities to support these actions:

- The Trustee meets with each of the Plan's investment managers on a cycle, to understand how that manager integrates climate change and other ESG risks and opportunities into their investment process;
- When assessing strategy changes to be taken for the Plan, the Trustee has considered the climate risks and ESG characteristics of each mandate when selecting the types of investment to increase/reduce exposure to;
- Established a set of ESG beliefs.

# Strategy

## Describe the resilience of the Plan's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

**Agree climate scenarios**

The Plan underwent a strategy review over the past year, implementing significant changes to its strategic asset allocation. The Trustee is due to complete scenario analysis on this new strategy in September 2024, therefore the analysis on this page is based on the old investment strategy.

A top-down analysis was carried out using a proprietary model, with results displayed in the following sections. In order to test the resilience of the Plan's investment strategy to climate risk, the advisor carried out climate scenario analysis, considering the Plan's assets and market conditions as at 31 October 2022 and liabilities projected from cashflows produced as at 30 November 2021. This analysis was undertaken in order to assess the resilience of the Plan's strategy over the short-, medium- and long-term time horizons to a number of different climate scenarios. These climate scenarios estimate the impact to the Plan of temperature rises roughly equivalent to 1.5°C, 2°C and 4°C above pre-industrial times.

The scenario analysis considers the impact of an investment strategy under three scenarios, which differ by how quickly and decisively the world responds (or fails to respond) to climate change. In the table below these scenarios are summarised including how they correlate to the variance of the world's transition to a low carbon economy as outline under Strategy disclosure 1. These scenarios were chosen by the Trustee's previous investment advisor.

Aggressive mitigation ⟷ Business as usual

| Green Revolution | Delayed Transition | Head in the Sand |
|---|---|---|
| • Concerted policy action starting now e.g. carbon pricing, green subsidies<br>• Public and private spending on "green solutions"<br>• Improved disclosures encourage market prices to shift quickly<br>• Transition risks in the short-term, but less physical risk in the long- term<br>• Expectation of achieving c.1.5°C warming | • No significant action in the short-term, meaning the response must be stronger when it does happen<br>• Shorter and sharper period of transition<br>• Greater (but delayed) transition risks but similar physical risks in the long-term<br>• High expectation of achieving < 2°C warming | • No or little policy action for many years<br>• Growing fears over ultimate consequence leads to market uncertainty and price adjustment<br>• Ineffective and piecemeal action increases uncertainty<br>• Transition risks exceeded by physical risks<br>• Low/no expectation of achieving <2°C warming |

| | | | |
|---|---|---|---|
| Timing of disruption | Immediate | → | 10+ years |
| Intensity of disruption | High | → | Very high |

# Strategy

Net Zero 2050 · Divergent Net Zero · Current Policies

## Describe the resilience of the Plan's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

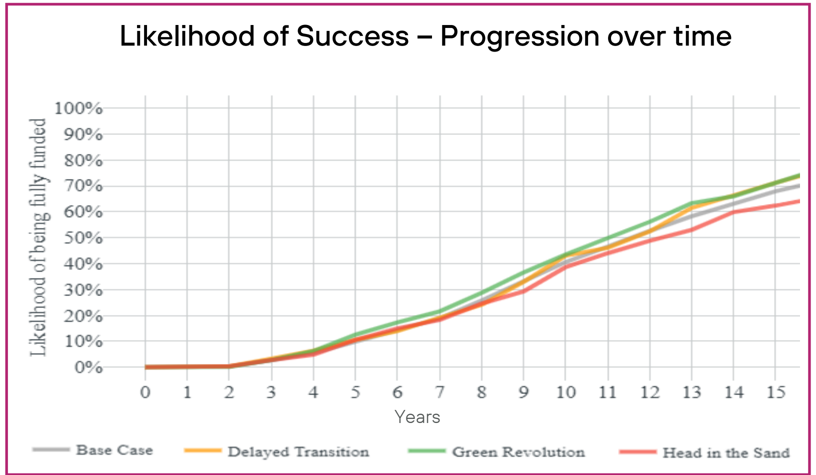
**Climate scenario analysis: total portfolio – impact on funding position relative to baseline scenario**

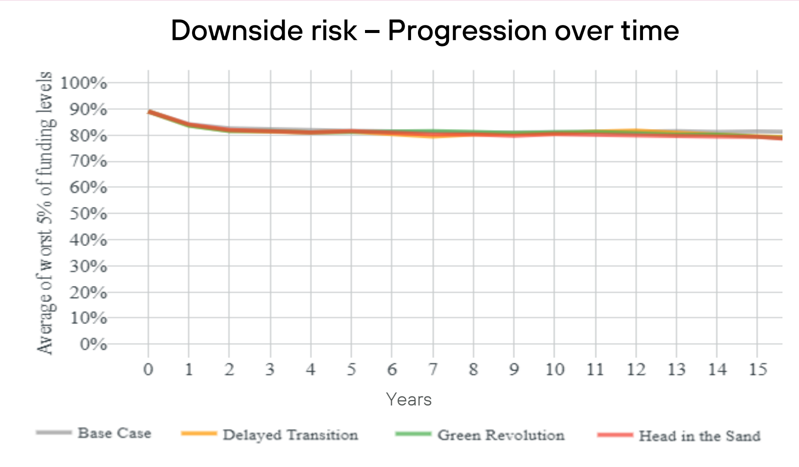
We considered two key outputs when trying to understand the resilience of the Plan to each of the climate Scenarios above:

- **Likelihood of success**: this relates to the probability that the Plan will be 100% funded (i.e. assets are at least equivalent to the liabilities) over time.
- **Downside risk**: this relates to the possible funding level over time in the worst 5% of cases.

The charts to the right show the likelihood of success and downside risk based on the strategic allocations effective in October 2022, and assuming no sponsor contributions are paid.

From the analysis, we could conclude that there was a lower likelihood of success for the Plan under the "Head in the sand" scenario. This is likely due to the impacts of this scenario typically being felt in the longer term. However, there was no material difference in results, which suggests that the previous investment strategy was resilient to a range of climate change scenarios.




Source: The model's projections are sensitive to the underlying methodology and assumptions. No guarantee can be offered that actual outcomes will fall within the range of simulated results. Due to the long projection period, the model's outcomes are particularly reliant upon the underlying assumptions. Therefore, more attention should be paid to the relative comparisons between different projections than to the absolute magnitude of the results. Please see appendix for further details on the modelling approach.

# Strategy

## Describe the resilience of the Plan's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

**Conclusions**

Overall, the Plan's previous investment strategy was generally resilient to the climate scenarios, with the impacts across the different time horizons being within +/- 5% of the base case results.

For short term time horizons, the climate scenarios were not expected to materially impact the distribution of outcomes.

In the medium term, the impact of a delayed transition began to feed through negatively on the probabilities of success as a result of policymakers taking more extreme action to limit rising global temperatures such as carbon pricing. This disruption was expected to impact growth-seeking assets more significantly.

Over the medium to long term, the 'green revolution' scenario positively impacted outcomes as companies and economies have successfully transitioned to a sustainable footing, improving the long-term prospects of the companies, with some harnessing the positive economic potential of green industries.

Under the 'head in the sand' scenario however, medium and long term outcomes were materially worse than under the base case as a result of the impacts of more severe physical climate risks feeding through.

An additional strategy was also assessed which targeted a higher investment return that the previous strategic allocation. This portfolio was more exposed to climate transition risks than the previous portfolio in the medium term. This was a result of the higher allocation to growth assets (such as equity) compared to the current strategic allocation.

Based on the output of the scenario analysis, it was agreed no further action was required in respect of the Plan's strategy, however it was noted that any future strategy changes to increase exposure to growth assets should take account of the climate risk in order to minimise potential transition risks.

We will also continue to measure its exposure to climate risk through the annual TCFD metric exercise.

The Trustee recognises this modelling is based on assumptions and more detail is provided in the appendix. The Trustee uses the analysis to guide its investment decisions, however, also recognises that modelling over such long-time horizons is subject to a large degree of uncertainty.

Source: Prior investment advisor. The model's projections are sensitive to the underlying methodology and assumptions. No guarantee can be offered that actual outcomes will fall within the range of simulated results. See Appendix for further details.

# Strategy

## Describe the resilience of the Plan's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

**Next steps**

The Trustee has chosen not to complete additional scenario analysis in the year to 31 March 2024. This is due to the significant changes made in the Plan's investment strategy over the year (ongoing in March 2024).

Now that the strategy changes have been implemented, the Trustee is scheduled to complete scenario analysis on the new strategy in September 2024. The results of this analysis will inform future decisions made on the investment strategy, and the results will be available in the Plan's 2025 report. As the Trustee has changed their investment advisor over the year, the modelling approach used may differ to what was done before.

# TCFD Recommendations – Risk Management

# Risk Management

## Describe the processes for identifying and assessing climate-related risks

As part of the Trustee's responsibility for the setting and implementation of the Plan's ESG Beliefs Policy, the Trustee must ensure that ESG related risks, including climate change, are identified, assessed and effectively managed. Therefore, it is crucial that the management of these risks is integrated into the overall risk management of the Plan. The Trustee delegates aspects of this responsibility to other parties (such as the Plan's investment managers), but retains overall oversight, as set out previously in the Governance section of this report. Below, where we have referred to ESG risks more broadly, this will include consideration of climate change risks.

At a simple level, the Trustee's risk management process comprises identification, assessment, monitoring and control of risk. The Trustee currently takes a top-down approach to risk management, which uses their strategic objectives as the starting point for their risk management process.

Climate risks are identified by Trustee and their advisors as appropriate. Information from a number of sources is used to help identify risks and the Trustee and their advisors are responsible for identifying risks as appropriate.

Once risks are identified, they are then evaluated and prioritised based on the overall threat posed to the Plan. This helps the Trustee build up a picture of the Plan's risks more widely and where climate-related risks sit in the overall risk management framework.

ESG and, in particular, climate-related risks can be identified by various parties including the Trustee, any other parties as outlined in the governance section, e.g. sub-committees, investment managers or the Plan's advisors as part of the ongoing management of the Plan. ESG risks are identified in the following processes:

| Process | Description |
|---|---|
| **Investment strategy reviews** | The Trustee considers ESG risks as part of the Plan's regular investment strategy reviews alongside each Actuarial Valuation and on an ad hoc basis as required. These reviews cover the extent to which ESG considerations are taken into account in the selection, retention and realisation of investments.<br><br>The Plan's Investment Advisors are expected to integrate ESG considerations into their strategy advice and to highlight any key risks that are included within any potential investment strategy.<br><br>The Trustee completes climate scenario analysis at least every three years. This analysis supports the Trustee's investment strategy decision making by informing how different investment strategies influence the extent of climate-related risks in the Plan's assets. |

# Risk Management

## Describe the processes for identifying and assessing climate-related risks

| Process | Description |
|---|---|
| **Valuations and covenant reviews** | ESG risks are considered as part of the triennial Actuarial Valuation process ensuring that this analysis considers the funding, covenant and investment risks in a joined-up way.<br><br>The Scheme Actuary will incorporate the consideration of ESG risks in the actuarial assumptions advice and any projections which are considered to evaluate the possible long-term funding outcomes for the Plan. When assessing the employer's covenant, ESG risks to the employer are also considered. |
| **Considering asset classes** | Potential ESG risks are assessed and discussed as part of the training provided to the Trustee.<br><br>The Trustee's Investment Advisor considers ESG risks as part of their research into different asset classes. This will influence their decision to issue a "buy" or "sell" rating to different asset classes. The investment advisor shares their research with the Trustee to help it form its views on suitable investments for the Plan. |
| **Selection of investment managers and investments** | The Plan's Investment Advisor provides information and their view on each manager's ESG policy and capabilities. Each manager is also asked to provide information regarding their own ESG risk management processes as part of the selection process. This information allows the Trustee to identify potential risks when comparing potential providers.<br><br>On an annual basis the Trustee receives a "Sustainable Impact Assessment" from its Investment Advisor. This report analyses and scores the Plan's investment managers' ESG policies and processes, as well as provide feedback points to the managers on where they can improve. The Trustee repeats this exercise on an annual basis to identify any changes in the managers' processes and to understand progress against previous engagement points.<br><br>The Plan's investment managers are responsible for the identification and assessment of ESG, including climate related risks and opportunities and will be expected to identify and disclose these risks to the Trustee. This could be during their presentations to the Trustee or by providing climate metric data in line with the TCFD requirements. |

# Risk Management

## Describe the processes for managing climate-related risks

### Prioritising risks and agreeing actions

The Trustee prioritises risks based on the size, scope and materiality of the risk event. This includes rating the likelihood and impact of the risk event to produce a score reflecting the threat that the risk event poses to the Plan, then making a decision on the appropriate action (mitigation, control or acceptance) based on this score and available courses of action. This is documented in the Plan's risk register and is reviewed annually. This process helps the Trustee build up a picture of the Plan's risks more widely and where ESG risks sit in the overall risk management framework.

Once the risks facing the Plan have been considered and prioritised, mitigation strategies will be established and monitored to ensure that they remain effective. We will delegate the management of certain risks to other parties, as set out in the Governance section. Risks that are deemed to be high in likelihood, impact, or both after allowing for mitigating controls are deemed to take priority for future action.

An action in the context of risk management will aim to either introduce an additional control to mitigate the likelihood of a risk occurring or reduce the impact of a risk should it occur. This discussion will also consider whether additional Trustee training is required.

### Expectations of investment managers

The Trustee's expectations of the investment managers with regard to the integration of ESG risks are set out in the Plan's Statement of Investment Principles (SIP) and ESG Beliefs policy. The Trustee monitors the ESG activities of all managers through regular reporting and meetings, as set out above.

In summary, the Trustee will expect all of its investment managers to:

- be aware of the investment risks and opportunities associated with climate change;
- incorporate climate considerations into the investment decision making practices and processes;
- monitor and review companies and assets in relation to their approach to climate change.

# Risk Management

## Describe the processes for managing climate-related risks

### Expectations of investment managers

In addition, the Trustee, with the assistance of its Investment Advisors, prepares an annual Implementation Statement which assesses the engagement and voting activities of investment managers and is used to monitor managers' activities in this area. From 2024, this will include specific monitoring on the Trustee's stewardship priority area (being Climate Change).

The Plan's approach to stewardship is also a key aspect of the management of climate-related risk. The Trustee expects their investment managers to consider and take appropriate steps to manage climate-related risks within their funds, including engagement with underlying investee companies on their management of climate risks.

The Trustee identifies whether the managers are acting in line with the Trustee's principles via the annual Sustainable Impact Assessment reports. The Trustee, with the support of its Investment Advisor, will engage with the Plan's managers to help improve the managers' processes where risk have been identified. If improvements are not seen over time, the Trustee will consider how the escalate its concerns which could include instructing managers to disinvest from certain investments or by disinvesting from specific investment mandates.

### Sustainable Impact Assessment – example evaluation criteria

The Trustee's Sustainable Impact Assessment assesses a broad range of ESG risks, however, has a significant focus on climate-related risks. The report aims to assess the managers over 5 assessment areas as outlined in the table below.

| Assessment category | Evaluation criteria |
|---|---|
| **Investment approach** | Is there a clear approach/framework for integrating ESG factors? |
| **Risk management** | Are ESG factors integrated holistically in the manager's risk management framework? |
| **Stewardship** | Is there evidence of ongoing engagement with companies on ESG issues to help initiate change? |
| **Reporting** | Can the manager provide meaningful and regular reporting on ESG issues, including voting and engagement activities? |
| **Collaboration** | Is there evidence of engagement with other stakeholders and market participants to encourage best practice on various ESG issues? |

# Risk Management

## Describe the processes for managing climate-related risks

### Sustainable Impact Assessment Case study – European Loans

In this year's Sustainable Impact Assessment, it was noted that the Plan's European Loan Fund manager, uses a proprietary ESG scorecard to manage ESG risks in the Fund. The manager demonstrated that it's scorecard materially influences portfolio management, by declining to provide any more funds to lenders whose scores fell below expectations.

The Trustee identified two engagement points for the manager including asking them to assess the effectiveness of green bonds in the mandate, as well as set investee company specific performance targets.

### Stewardship

**Assessing investment managers:** The Trustee assesses the stewardship activities and capabilities of the investment managers regularly, documenting this in the Implementation Statement, to ensure these align with our ESG beliefs and policy.

**Stewardship priorities:** In early 2024 the Trustee set climate change as its stewardship priority. The Trustee will review the managers against this priority to ensure they are engaging with their investments effectively on behalf of the Trustee.

# Risk Management

## Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the Trustee's overall risk management

**Management of ESG risks**

The management of ESG risks is integrated into the Plan's current risk management processes in the following ways:

| Management methods | Description |
|---|---|
| **Valuations and covenant reviews** | When assessing the employer's covenant we review the employer's plans to manage the ESG risks identified.<br><br>We consider the extent to which any adjustment is needed to the funding approach or strategy as a result of any ESG risks identified through the "identifying" stage described above.<br><br>This will be considered in the context of the investment and covenant risks faced by the Plan and may consider the appropriateness of actuarial assumptions and of overall security provided to the Plan. |
| **Setting strategy and choosing asset classes** | Determining whether exposure to any asset class should be reduced, increased or avoided in light of the ESG risks identified. |
| **Selection of investment managers** | The Trustee considers whether or not to invest with managers whose mandates are expected to introduce an unacceptable level of risk or who do not have adequate processes for the identification and management of ESG risks. |
| **Monitoring current investment managers / Individual mandates and investments** | The Trustee expects its investment managers to manage the ESG risks identified within their own mandates by:<br><br>• Integrating the analysis of these risks into the overall assessment of any potential investment.<br><br>• Engaging with investee companies where risks have been identified, to understand and encourage their management of ESG (in particular, climate-related) risks.<br><br>The Trustee will monitor all of its Investment Managers via the Sustainable Impact assessments previously outlined. If required, the Trustee will engage with the managers to make improvements. |

# Risk Management

## Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the Trustee's overall risk management

**Risk register**

Climate change is included within the Plan's risk register in the context of the risk of the investment strategy or investment managers underperforming. Relevant controls and mitigating actions are also documented. The risk register is reviewed regularly by the Trustee, with the last review completed in Q1 2024.

Climate risks are identified by the Trustee and their advisors as appropriate. These risks are then added to the Plan's risk register which forms part of the Plan's overarching Integrated Risk Management approach and framework. This includes rating the likelihood and impact of the risk event to produce a score reflecting the threat that the risk event poses to the Plan, then making a decision on the appropriate action (mitigation, control or acceptance) based on this score and available courses of action. Appropriate controls and mitigating actions are determined and put in place as part of the process to add these risks to the Risk Register.

In 2024, the Trustee's Investment Advisor proposed the following additions to the risk register to ensure climate considerations are embedded into the Plan's ongoing governance and risk management processes. These was reviewed as part of the Plan's wider risk register review.

| | Potential risk: | Potential control measures: |
|---|---|---|
| Investment strategy | – Asset mispricing due to the impacts of climate change and the transition to low carbon economy and/or physical impacts of climate change, e.g. lower real returns and/or market shocks due to pricing-in climate change | – Professional advice from investment advisor<br>– Chosen to monitor TCFD metrics which will capture underlying contributions to climate change and will monitor manager performance against these. |

# Risk Management

## Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the Trustee's overall risk management

Risk register

| | Potential risk: | Potential control measures: |
|---|---|---|
| Asset and investment manager allocations | – Investment managers do not adequately integrate financially material ESG factors (including climate risks) in their risk management framework<br>– Investment managers do not adopt effective stewardship or collaborate to encourage best practice in addressing systemic climate risks<br>– Investment managers do not adopt effective stewardship e.g. using voting rights (if applicable) and engagement to improve management of climate factors by investee entities, or do not collaborate to encourage best practice in addressing systemic climate risks<br>– Investment managers do not consider potential investment opportunities, which may be expected to benefit from climate change and provide upside opportunity for the portfolio, or individual asset classes | – The Trustee has communicated clearly to the Plan's manager, that it expects them to manage climate risks using their engagements with underlying companies.<br>– Investment advisor facilitates ongoing engagement with managers and reports to the Trustee. This may include but is not limited to, monitoring how they integrate ESG factors (including climate change), into their investment processes.<br>– Ongoing Trustee training on climate risks within investments<br>– The Trustee will consider ESG and climate factors in selection and appointment of new mandates<br>– The Trustee regularly reviews the managers' approach to ESG and climate risk management. |

# TCFD Recommendations – Metrics and Targets

# Metrics and Targets

## Disclose the metrics used by the Trustee to assess climate-related risks and opportunities in line with its strategy and risk management process

### Climate metrics selection

Greenhouse gas ("GHG") emissions are a key driver of climate change. These result from a number of economic activities, primarily as a result of burning fossil fuels. The gases contribute to the increased retention of the sun's energy, resulting in a "greenhouse effect" where the Earth is warmed. Slowing and reducing the release of GHGs into the atmosphere is therefore important. The Trustee selected and monitored four climate metrics, for the whole Plan during the year:

1. **Absolute emissions metric:** Total greenhouse gas emissions (scope 1, 2 & 3)
2. **Emissions intensity-based metric:** Carbon footprint (scope 1, 2 & 3)
3. **Portfolio alignment metric:** Implied temperature rise ('ITR')
4. **Additional climate change metric:** Data quality

**Monitoring**

The Trustee will assess these metrics, at least annually, to monitor climate-related risks and as a tool to engage with the Investment Managers.

More detail on how the metrics are defined can be found in the appendix.

The Trustee took the decision to begin monitoring Implied Temperature Rise instead of Binary Target Measurement, due to lack of data on the latter metric.

The process of selecting these metrics for monitoring focussed on two key aspects 1) **level of impact** and 2) **availability of data**.

### Level of impact

The metrics were chosen based on their potential to add value to the Trustee's decision making. The Trustee currently focusses on scope 1 and 2 emissions, but also reports on scope 3 emissions (indirect emissions in the value chain). Emissions metrics for LDI funds are calculated according to PCAF methodology, and therefore has been reported separately from the growth managers. Whilst it's important to consider emissions to date, it's also important to assess how these could evolve into the future. We have chosen ITR, expressed in degrees Celsius (°C), to estimate the global implied temperature rise if the whole economy was invested in line with our strategy. This metric is more well known in the industry, with the potential for better data quality going forward.

### Availability of data

Our Investment Advisor gathered this data from the Investment Managers on behalf of the Trustee. The quality of this information is important to allow robust decision-making and target-setting. We have therefore chosen to monitor data quality as our fourth metric.

The Investment Advisor, on behalf of the Trustee, engages with the Investment Managers to seek improvements in data quality.

# Metrics and Targets

## Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks

### Metrics review

The Trustee gathered climate metrics for the Plan as at 31 December 2023 (or the data at the best-available proximate date) and the results are set out below. This helps record progress against which future action can be measured, so that trends over time and problem areas within the portfolio can be understood. The metrics for LDI are reported separately due to the differences in metric definitions compared to the growth assets. Details of the Plan's metrics at the mandate level and notes to the data can be found in the appendices.

| **Growth Mandates (c.65% of Plan assets)** | GHG emissions | | Carbon footprint | | Data quality % of scope emissions intensity that are: | | | | Implied Temperature Rise | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Metric, $tCO_2e$ | Coverage | Metric, $tCO_2e$/ £1m of EVIC | Coverage | Verified | Reported | Estimated | Unavailable | Metric | Coverage |
| Scope 1 &2 | 31,678 | 21% | 33 | 21% | 3% | 10% | 8% | 44% | 2.6°C | 2% |
| Scope 3 | 142,914 | 19% | 147 | 19% | - | - | - | - | | |

| **LDI Mandate* (c.35% of Plan assets)** | Metric, $tCO_2e$ | Coverage | Metric, $tCO_2e$/ £1m of PPP adjusted GDP | Coverage | Verified | Reported | Estimated | Unavailable | Metric | Coverage |
|---|---|---|---|---|---|---|---|---|---|---|
| Scope 1, 2 & 3 | 163,181 | 35% | 89 | 35% | 0% | 0% | 35% | - | - | - |

Sources: Investment managers, Investment Advisor's calculations.
Notes: $tCO_2e$: Tonnes of carbon dioxide equivalent, where $CO_2e$ expresses the impact of each different greenhouse gas in terms of the amount of $CO_2$ that would create the same amount of warming.
EVIC: Enterprise value including cash. Coverage: Denotes the % of each fund where data is available. Figures rounded to nearest whole number or percentage. Current asset allocation as at 31 December 2023.
*LDI mandate emissions shown are including Land Use, Land Use Change and Forestry ("LULUCF"). The Partnership for Carbon Accounting Financials (PCAF) specifies a method of calculating metrics, to promote consistency. The total coverage numbers on this page are calculated relative to the Plan's total asset value. Please see appendix for further caveats.

# Metrics and Targets

## Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks

**Metrics review – key takeaways**

Due to changes in the investment strategy and differences in approach between the previous and current Investment Advisor, a "side by side" comparison versus last year's data is not informative, so this year the Trustee focussed on higher-level points and progress versus target. The Trustee will include more detailed updates on manager specific progress in future reports.

Key takeaways:

1. Around 56% of all data has been verified, reported or estimated (including Schroders LDI estimated data).
2. The Scope 3 emissions for the vast majority of mandates are significantly higher than scope 1 & 2, evidencing the importance of monitoring Scope 3 emissions.
3. Within the Partners Group mandate, data availability improved with Partners Group now reporting on emissions and data quality metrics.
4. There continue to be industry wide data issues in Asset-Backed Securities. The Trustee's Investment Advisor will continue to engage with their rated Asset-Backed Securities managers on behalf of the Trustee to try to improve data quality.

# Metrics and Targets

## Describe the targets used by the Trustee to manage climate-related risks and opportunities and performance against targets

**Target setting**

In March 2023, the Trustee agreed to an interim target to increase data quality scores (emissions verified, reported or estimated) over a period of 15 years (relating to Carbon Footprint Scope 1 & 2). Progress against these targets are reported below, reflecting that one manager managed to meet the short-term target set previously:

| | Actual data quality scores | | Target data quality scores |
|---|---|---|---|
| Mandate | 31 March 2023 | 31 December 2023 | Short term target (1-2 years) |
| Asset-Backed Securities | 1 – Poor | 1 – Poor | 2 – Adequate |
| Diversified Alternatives | 1 – Poor | 1 – Poor | 2 – Adequate |
| Global Credit | 3 – Good | 3 – Good | 4 – Excellent |
| Multi-Asset Credit | 1 – Poor | 1 – Poor | 2 – Adequate |
| European Loans | 2 – Adequate | 3 – Good | 3 – Good |
| Private Debt - X | 2 – Adequate | 2 – Adequate | 3 – Good |
| Private Debt - Y | 1 – Poor | 1 – Poor | 2 – Adequate |
| LDI Fund | 3 – Good | - | 3 – Good |
| LDI Fund (New mandate) | - | 2 – Adequate | - |

The data quality has remained low for some managers over the period to December 2023, resulting in most of them not meeting the Short-term targets set previously.

# Metrics and Targets

## Describe the targets used by the Trustee to manage climate-related risks and opportunities and performance against targets

**Target setting**

The Trustee has since decided to set a revised interim target to increase data quality (emissions verified, reported or estimated) at a portfolio level, by targeting a coverage of 65%+ over the next 3 years (i.e. by 31 March 2027).

Whilst the emissions data coverage is modest for the Plan, some Investment Managers are currently unable to break the data down by its quality. The Trustee views the current information on emissions as having room to improve, therefore the has decided that improving data quality and availability should be a key engagement point.

The Trustee will calculate annually the proportion of the portfolio for which emissions are verified, reported, estimated or unavailable. This will also assist with encouraging industry-wide efforts in improving emissions data quality over time.

Targets are important for measuring progress against the established baseline. To achieve the target on data quality that we have set, the Trustee intends to engage with the underlying Investment Managers via its Investment Advisor.

| | Baseline 31/12/2023 | Target |
|---|---|---|
| **Data quality** | 56% | 65%+ |

# Appendix

# Strategy

## Scenario analysis appendix

### Modelling limitations

The Plan's previous Investment Advisor (Hymans Robertson) undertook and provided all modelling used in this report. We have included a summary of their Reliances and Limitations from their reports below and would draw your attention to their previously issued papers for an exhaustive list:

*While the model allows for the possibility of scenarios that would be extreme by historical standards, including very significant downturns in equity markets, large systemic and structural dislocations are not captured by the model. Such events are unknowable in effect, magnitude and nature, meaning that the most extreme possibilities are not necessarily captured within the distributions of results.*

### Climate scenario analysis - overview

1. The analysis was based on a stochastic analysis, with each outcome considering 5,000 different outcomes for future market and economic conditions.
2. Assets are projected forward from 30 November 2021 using membership data at that date, under 5,000 different outcomes. For each outcome per scenario, the funding position was calculated annually throughout the projection period. The funding position used the same methodology as at the 2021 formal valuation.
3. The 5,000 outcomes were ranked from best to worst, then plotted graphically.
4. The ALM combines the Plan's cashflows, an investment strategy including any hedging, contributions into the Plan and stochastic economic scenarios from the advisor's economic model (ESS) to create stochastic projections of the funding positions.
5. Further details on the assumptions and model are available on request from Hymans.

**The following two investment strategies were modelled:**

| | Strategic target | Higher return alternative |
|---|---|---|
| Equities | - | 7.5% |
| Private Equity | - | - |
| **Total Growth** | **-** | **7.5%** |
| ABS | 15% | 10% |
| Loans | 8% | 5% |
| Multi-Credit | 12% | 10% |
| Illiquid Debt | 6.5% | 10% |
| Buy and Maintain Credit | - | 22.5% |
| **Total Income** | **41.5%** | **57.5%** |
| *CDS notional (exposure)* | *9%* | *5%* |
| **LDI and collateral** | **58.5%** | **35%** |

# Metrics

Climate metrics for the Plan's Growth Funds as at 31 December 2023 (or the data at the best-available proximate date) are set out below.

| Asset Class | Total GHG emissions (scope 1 & 2) | | Total GHG emissions (scope 3) | | Carbon footprint (scope 1 & 2) | | Carbon footprint (scope 3) | | Implied Temperature Rise | | Data quality % of scope 1 & 2 emissions intensity that are: | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Metric, $tCO_2e$ | Coverage | Metric, $tCO_2e$ | Coverage | Metric, $tCO_2e$/ £1m of EVIC | Coverage | Metric, $tCO_2e$/ £1m of EVIC | Coverage | Metric | Coverage | Verified | Reported | Estimated | Unavailable |
| Asset-Backed Securities | - | 0% | - | 0% | - | 0% | - | 0% | - | - | 0% | 0% | 0% | 100% |
| Diversified Alternatives | 67 | 27% | 15 | 10% | 56 | 27% | 5 | 10% | - | - | 0% | 27% | 0% | 73% |
| Global Credit | 3,393 | 69% | 13,473 | 68% | 59 | 73% | 237 | 72% | - | - | 61% | 0% | 12% | 27% |
| Multi-Asset Credit | 17,469 | 15% | 82,431 | 15% | 112 | 15% | 528 | 15% | 2.6 | 15% | 0% | 7% | 9% | 85% |
| European Loans | 10,124 | 79% | 44,745 | 62% | 86 | 79% | 405 | 62% | - | - | 0% | 75% | 4% | 21% |
| Private Debt-X | 624 | 100% | 2,251 | 100% | 11 | 100% | 40 | 100% | - | - | 0% | 0% | 100% | 0% |
| Private Debt-Y | - | 0% | - | 0% | - | 0% | - | 0% | - | - | 0% | 0% | 0% | 100% |
| **Growth Funds*** | **31,678** | **21%** | **142,924** | **19%** | **33** | **21%** | **147** | **19%** | **2.6°C** | **2%** | **3%** | **10%** | **8%** | **44%** |

Source: Investment managers, Investment Advisor's calculations.
Notes: $tCO_2e$: Tonnes of carbon dioxide equivalent, where $CO_2e$ expresses the impact of each different greenhouse gas in terms of the amount of $CO_2$ that would create the same amount of warming. EVIC: Enterprise value including cash. Coverage: Denotes the % of each fund where data is available. Figures rounded to nearest whole number or percentage. Current asset allocation as at 31 December 2023. *The total coverage numbers on this page are calculated relative to the Plan's total asset value, (including the LDI funds). Please see Appendix for further caveats.

# Metrics

Climate metrics for the Plan's LDI Fund as at 31 December 2023 are set out below.

| Mandates | Total GHG emissions (scope 1, 2 & 3) | | Carbon footprint (scope 1, 2 & 3) | | Implied Temperature Rise | | Data quality % of scope 1, 2 & 3 emissions intensity that are: | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Metric, $tCO_2e$ | Coverage | Metric, $tCO_2e$/ £1m of EVIC | Coverage | Metric | Coverage | Verified | Reported | Estimated | Unavailable |
| LDI Fund (new mandate) | 163,181 | 35% | 89 | 35% | - | - | 0% | 0% | 35% | 0% |

Source: Investment managers, Investment Advisor's calculations.
Notes: $tCO_2e$: Tonnes of carbon dioxide equivalent, where $CO_2e$ expresses the impact of each different greenhouse gas in terms of the amount of $CO_2$ that would create the same amount of warming. EVIC: Enterprise value including cash. Coverage: Denotes the % of each fund where data is available. Figures rounded to nearest whole number or percentage. Current asset allocation as at 31 December 2023, and excludes LGIM, BlackRock WABCO and TST cash fund holdings due to low allocations to these funds. Emissions are shown including Land Use, Land Use Change and Forestry ("LULUCF"). The Partnership for Carbon Accounting Financials (PCAF) specifies a method of calculating metrics, to promote consistency. *The total coverage numbers on this page are calculated relative to the Plan's total asset value, (including the growth funds). Please see Appendix for further caveats.

# Metrics

## Metrics data caveats (1/2)

| Asset Class | Caveats |
|---|---|
| **Asset Backed Securities** | • Data has not been provided in sufficient detail. |
| **Diversified Alternatives** | • Data as at 31 December 2022.<br>• Carbon footprint reported in tonnes of $CO_2e$ per £1m invested.<br>• Total emissions are provided at the Share class level, scaled to Plan specific, and for 100% coverage. The emissions metrics provided for this calculation are being clarified with the manager. |
| **Global Credit** | • Absolute emissions for the Credit Fund have been ratioed from Fund level, and scaled to show metrics for the Plan, and for 100% coverage.<br>• Carbon footprint reported in tonnes of $CO_2e$ per $1m invested, and converted to per £1m, using an exchange rate as at 29 December 2023. |
| **Multi-Asset Credit** | • Data as at 31 December 2023.<br>• Carbon footprint reported in tonnes of $CO_2e$ per £1m invested. |
| **European Loans** | • Data as at 30 September 2023.<br>• Carbon footprint metrics has been calculated by the sum of GHG Emissions for Public and Private investments, as a proportion of Public and Private investment value data available.<br>• The data quality metric for reported data has been calculated by the sum of total reported data available for Public and Private investments, as a proportion of Public and Private data available.<br>• The data quality metric for estimated data has been calculated by the sum of estimated data available for Public and Private investments, and as a proportion of the total value of Public and Private data available.<br>• These calculations are being clarified with the manager.<br>• Total emissions are scaled for 100% coverage. |

# Metrics

## Metrics data caveats (2/2)

| Manager | Caveats |
|---|---|
| **Private Debt-X** | • Data as at 31 December 2023.<br>• Absolute emissions for the fund has been ratioed from Fund level to show coverage for the Plan.<br>• Carbon footprint reported in tonnes of $CO_2e$ per £1m invested.<br>• Total emissions provided at the Fund level, scaled to Plan specific |
| **Private Debt-Y** | • Data has not been provided in sufficient detail, for us to provide meaningful analysis on the GHG and Carbon Footprint metrics. |
| **LDI** | • Data as at 31 December 2023.<br>• LDI government bond data uses 2022 emissions.<br>• The Carbon Footprint and GHG metrics relating to Scopes 1, 2 and 3, and have been reported separately from the other managers, as Schroders use the latest PCAF Sovereign Debt methodology.<br>• Carbon footprint reported in tonnes of $CO_2e$ measured per $1m of Purchasing Power Parity ("PPP") adjusted GDP. and converted into GBP terms, using an exchange rate as at 29 December 2023. |

# Glossary

| Metric | Description | |
|---|---|---|
| **Absolute Emissions Metric:**<br><br>**Total GHG emissions (scope 1 & 2)** | Total amount of greenhouse gas emissions (as mandated by the Kyoto Protocol) emitted by the underlying portfolio companies, attributed to the investor based on the total investment in each company | $\sum_{n}^{i}\left(\frac{\text{Current value of investment}_{i}}{\text{Investee company enterprise value}_{i}}\right) \text{X investee company's scope 1 and 2 emissions}_{i}$ |
| **Emissions Intensity Metric:**<br><br>**Carbon footprint (scope 1 & 2)** | An intensity measure of emissions that assesses the level of greenhouse gas emissions (as mandated by the Kyoto Protocol) arising from £1 million investment (based on Enterprise Value Including Cash) in a company | $\frac{\sum_{n}^{i}\left(\frac{\text{Current value of investment}_{i}}{\text{Investee company enterprise value}_{i}} \text{X investee company's scope 1 and 2 emissions}_{i}\right)}{\text{Current value of all investments (£ millions)}}$ |
| **Implied temperature alignment** | A forward-looking view of carbon exposure that can be translated into a projected increase in global average temperature (°C) above pre-industrial levels that would occur if all companies had the same carbon intensity. For example, a company that is Paris-aligned would have an Implied Temperature Rise of 'well below 2°C', which means that if the whole world economy only consisted of this one company then the rise in global temperatures will be kept below 2°C. Weighted averages are used for the total mandate or portfolio. The DWP recommend a focus on a 1.5°C scenario. We acknowledge that there some concerns around complexity/opaqueness of calculations across managers. | |
| **Data quality** | Verified | % of the emissions data that is verified (audited or independently verified) |
| | Reported | % of the emissions data that is sourced from actual company reported data |
| | Estimated | % of the emissions data that is estimated, either by the manager or a third party data provider |

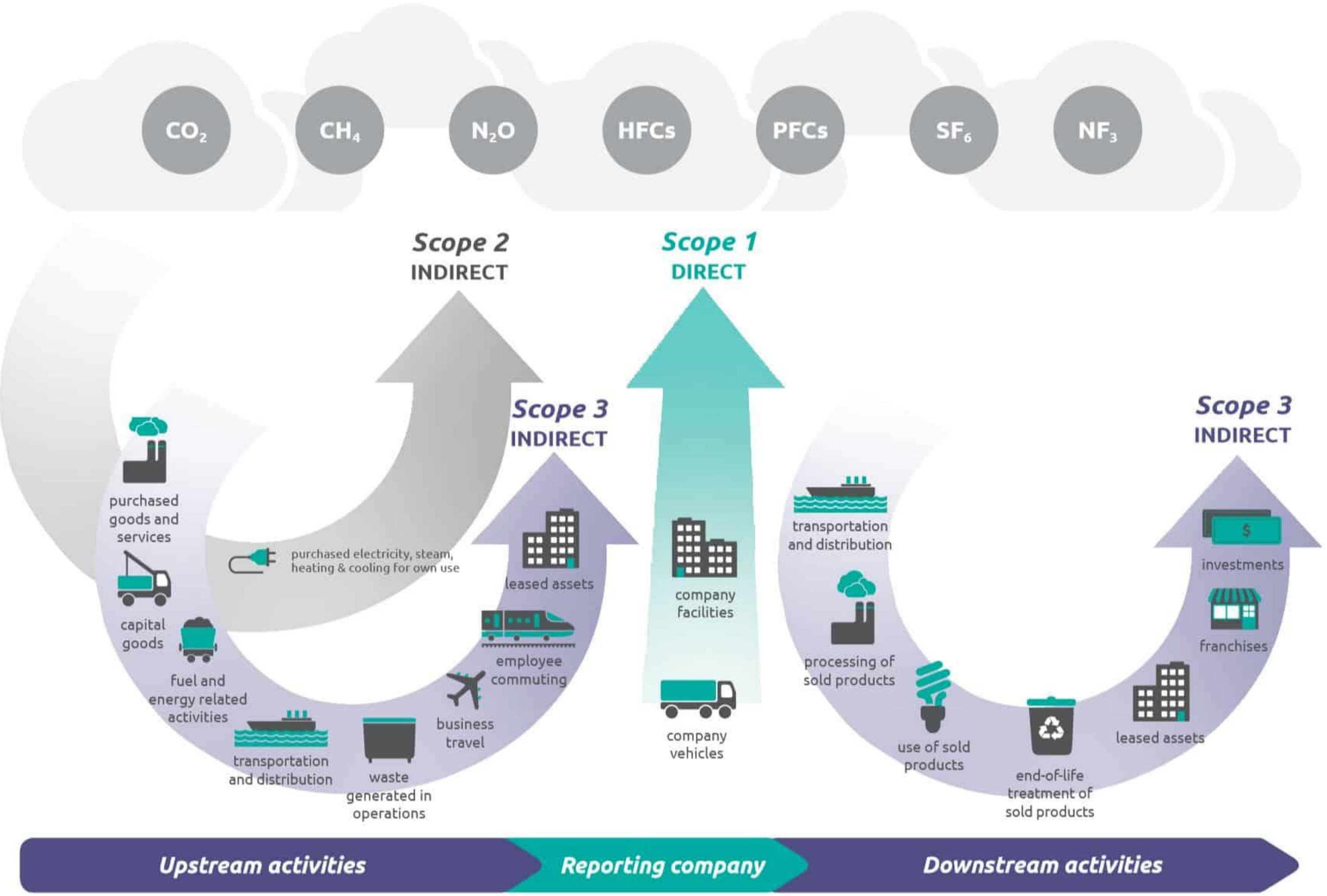



All metrics were provided by the Investment Managers, who are closest to the underlying assets, and consolidated by the Plan's Investment Advisor.
Source: DWP - Governance and reporting of climate change risk: guidance for trustees of occupational schemes

# Glossary

**GHG emissions** from a particular company can be split across three levels, as shown in the diagram.

- **Scope 1** are direct emissions from company owned or controlled sources – this includes heating/cooling of offices/factories and fleet vehicles.
- **Scope 2** are indirect emissions from purchased energy – emissions are created during the production of the energy which is eventually used by the company.
- **Scope 3** are all indirect emissions that occur in the value chain – this includes emissions from the production of purchased goods and services and the use of sold products. There are currently industry-wide issues with reporting scope 3 emissions.




Source: GHG Protocol

**Mike Smaje**
Trustee
Mike.Smaje@bestrustees.co.uk

**Chris Parrott**
Trustee
Chris.Parrott@bestrustees.co.uk