Jacobs Douwe Egberts UK Pension Trustee Limited

Trustee of the Jacobs Douwe Egberts UK Pension Plan

2022 TCFD Report

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Forward by Chairman

In this inaugural report we outline how Jacob Douwe Egberts UK Pension Trustee Limited ("the **Trustee**"),[1] as trustee of the Jacobs Douwe Egberts UK Pension Plan (the "**Plan**"), meets the requirements of the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021, the Occupational Pension Schemes (Climate Change Governance and Reporting) (Miscellaneous Provisions) Regulations 2021 and the Occupational Pension Schemes (Climate Change Governance and Reporting) (Amendment, Modification and Transitional Provision) Regulations 2022 (together, the "**Regulations**").[2] We approach these requirements through the lens of our ESG beliefs, and our investment process and our implementation process. During the Plan reporting period ending 31 March 2023, we have invested time and resources to continue to improve oversight of climate-related risks and opportunities ("**CRRO**") and integrate these throughout the Plan's manager research and portfolio implementation.

We believe that our fiduciary objectives and responsible investing ambition are aligned, and we have agreed on the Plan's objective to minimize carbon exposure where possible. As of 31 March 2023, the Plan's funding ratio was estimated to be 124%, reflecting strong performance and a stable surplus. The Plan had de-risked twice in 2021 and a further de-risking step was carried out in June 2022. Due to the de-risking that has taken place the Plan's exposure to CRRO is low.

Russell Bailey

Chairman of the Trustee, Jacobs Douwe Egberts UK Pension Trustee Limited

Footer Notes

[1] The Trustee has prepared this report in its capacity as trustee of the Plan.

[2] The following sources have been considered during the preparation of this report: the TCFD's Principles of Effective Disclosure; the Department for Work and Pensions' guidance on Governance and Reporting of Climate Change Risk; Guidance for Trustees of Occupational Schemes; the Pensions Regulator's guidance on governance and reporting of climate-related risks and opportunities and the Pensions Climate Change Risk Industry Group's Aligning Your Pension Scheme with the Taskforce on Climate-related Financial Disclosures Recommendations dated 27 January 2021.

Executive Summary

Responsible Investing Approach

We recognise that integration of ESG factors (including CRRO) has the potential to reduce risk, protect the value of the Plan and potentially enhance returns, through considering additional risks and injecting new insights into the investment process. The Plan has adopted an ESG and Stewardship Policy as well as ESG Beliefs to demonstrate the commitment to ESG considerations and to appropriately document the Plan's consideration and incorporation of ESG in management and oversight.

Governance

The Trustee has established a governance and oversight framework in the Policy and Beliefs that addresses themes related to responsible investing (including CRRO).

The Trustee works effectively with advisers and investment managers who undertake or advise on Plan governance activities and has put processes in place to ensure each of those entities is taking adequate steps to identify, assess and manage CRRO.

Strategy

The Trustee has identified CRRO that may have an effect on the Plan in the short-term, medium-term and long-term. The key risks identified can broadly be categorised as:

- risks associated with transitioning to a low carbon economy;
- physical risks from extreme weather;
- regulatory risks as world governments seek to facilitate the transition to a low carbon economy; and
- disruption in the broader economy due to climate change.

The Trustee considers the appropriate time horizons for the Plan to be:

- Short-term: 5 years
- Medium-term: 10 years
- Long-term: 20 years

Based on the identified risks outlined above, we work with the Plan's investment managers to integrate these considerations into their portfolio management and oversight processes.

The Trustee has analysed four scenarios: an Orderly transition, an Abrupt transition, No action and a Green bubble. The Trustee considers that the potential impacts on the Plan's assets and liabilities of these scenarios will be low and can be mitigated by addressing the relevant risks and opportunities. The Plan is well-funded, significantly de-risked in the short-term, and has appropriate hedging and other safeguards in place to minimise the possibility of significant drawdowns. It is also supported by a strong sponsor covenant.

The Plan has considered the potential CRRO relevant to the covenant through consideration of the outputs of climate scenario modelling prepared by the Trustee with input from its advisors.

Overall, the Trustee considers that the Plan's investment strategy and funding strategy is resilient to the impacts of the scenarios analysed.

Risk Management

As noted above, the Trustee has a well-established governance and oversight framework that addresses items related to responsible investing (which includes CRRO).

The Trustee has chosen to take an approach to the oversight and management of CRRO that largely replicates the process of how it considers other risks and opportunities, and it is integrated into the overall risk management of the Plan through the existing governance framework.

Metrics and Targets

As part of its process of assessing CRRO, the Trustee has introduced the monitoring of several climate-related metrics: weighted-average carbon intensity (WACI) which measures a portfolio's exposure to carbon-intensive companies and indicates the potential climate change-related risks relative to other portfolios or a benchmark; normalised carbon emissions which provides a normalised measure (by £M invested) of the portfolio's contribution to Green House Gas (GHG) emissions; and exposure to carbon-related assets. The Plan's target is to maintain, and where possible, reduce the Plan's WACI.

The Trustee has also calculated a portfolio alignment metric, in accordance with the Regulations by analysing the portfolio through the Paris Agreement Capital Transition Assessment (PACTA) tool which evaluates a portion of the Plan's assets to determine how they align with various climate scenarios consistent with the Paris Agreement. Due to de-risking, the Plan held no public equity and corporate bond positions. Given the Plan's limited exposure to the assets that PACTA has identified as having material risks or opportunities related to climate change, we conclude that the portfolio is well aligned to achieve its investment objectives.

Looking Ahead

This is the first year that the Trustee was required to produce a report in accordance with the Regulations. The Trustee is satisfied with the progress it has made, but understands that identifying, assessing and managing CRRO (and wider ESG considerations) will be a continuous effort. Looking ahead, we will seek to meet our target to maintain the portfolio's WACI and look to expand our data coverage for WACI and normalised carbon emissions.

Data and Metrics

The Trustee has considered its obligations under the Regulations and associated statutory guidance, and taking into account the assets, liabilities and funding for the Plan, has decided it is appropriate to report on all activities at the "whole plan" level.

We have committed resources to complying with the requirements of the TCFD and in building out climate risk-related capabilities. There are other varying regimes, and increasing compliance requirements in number, scope and complexity but the language and methodologies of these

frameworks are not harmonised. In light of the continued challenges in sourcing and evaluating climate-related data of varied scope and quality the Trustee has sought to populate gaps in data as far as it is able to.

Where relevant in this report, the Trustee has described the data (1) it has been unable to obtain or (2) has treated as unobtainable, and the reasons for this.

Responsible Investing Approach

The Trustee's approach to CRRO and other ESG factors is articulated in the Plan's ESG and Stewardship Policy, which is guided by the Plan's ESG beliefs. The Plan is a long-term investor whose primary purpose is to provide pension benefits to its beneficiaries in line with its fiduciary duty. We recognise that integration of responsible investing factors into the management of assets can help to reduce risk, protect the value of the Plan, and can potentially enhance returns. In this context, the Trustee defines responsible investing as an approach to investing that explicitly acknowledges the relevance to the investor of ESG factors (including CRRO), and the long-term health and stability of the market as a whole.[3] CRRO are considered as part of the Trustee's responsible investing approach.

The Trustee believes that its fiduciary responsibility is aligned with embracing responsible investing and taking ESG factors (including CRRO) into account in its investment framework, in a manner that follows legislation and regulatory guidance. These serve as a guide to implementing responsible investing in the Plan. The Trustee will review the ESG and Stewardship Policy and ESG beliefs on a regular basis and will update them as required.

JDE ESG Beliefs

1. **We believe that ESG principles are aligned with our investment strategy, objectives and long-term investment process.**
2. **ESG factors impact the performance of companies and security pricing over time.**
3. **Adhering to sound ESG principles should improve risk-adjusted returns over the long-term.**

Footer Notes

[3] We use the UNPRI as a starting position in our objective to establish a responsible investing approach and develop our beliefs on the relevance of ESG factors to our investment framework.

Governance

Oversight of climate-related risks and opportunities

Key obligation #1: The Trustee understands that it must set out how it maintains oversight of CRRO which are relevant to the Plan.

The Trustee has chosen to take an approach to the oversight and management of CRRO that largely replicates the process for how it considers other risks and opportunities. As noted above, the Trustee believes that consideration of CRRO is part of "responsible investing".

The Trustee has a well-established governance and oversight framework that addresses items related to responsible investing, including regular a) scenario analysis and b) total Plan and asset class level responsible investing reporting.

This framework ensures that the Trustee is regularly informed about CRRO and is able to take steps to assess and manage them.

In addition, the Trustee will continue to:

- provide an opportunity for its directors to discuss responsible investing (including CRRO) at trustee meetings;
- review and update the Plan's Statement of Investment Principles (SIP) and ESG and Stewardship Policy having regard to CRRO and its obligations under the Regulations;
- integrate CRRO into its risk register;
- periodically provide its directors with responsible investment training, which includes consideration of CRRO.

Additionally, the Trustee's advisors evaluate responsible investing opportunities, such as impact investing, or other innovative ideas as they emerge and evolve.

As part of the governance process, existing procedures and policies are reviewed and updated accordingly.

Governance Framework

Key obligation #2: The Trustee understands that it must set out (1) the role of any person who undertakes scheme governance activities, or who advises or assists the Trustee with scheme governance activities (apart from its legal advisors) and (2) the processes put into place by which the Trustee satisfies itself that each of those entities is taking adequate steps to identify, assess and manage relevant CRRO.

The Investment and Funding Committee ("**IFC**") undertakes governance activities for the Plan. SECOR Investment Advisors (UK) LLP ("**SECOR**"), Barnett Waddingham LLP ("**BW**"), and Penfida advise and assist on governance activities for the Plan.

Investment and Funding Committee

The Trustee has established the IFC with responsibility for: (1) advising the Trustee on its investment policy (and other related matters); (2) implementing the Plan's investment policy; and (3) monitoring the

performance of the Plan's investments and its investment managers and advisors and their compliance with the SIP.

The IFC has overall responsibility for and oversight of the ESG and Stewardship Policy and works closely with its strategic investment advisor, SECOR, to monitor CRRO through the Plan's ESG dashboard report and ESG asset class reports. These reports include qualitative assessments and quantitative data to determine if managers are sufficiently integrating ESG considerations, including CRRO, into their management processes.

The IFC reports to the Trustee throughout the year and identifies any concerns regarding CRRO.

SECOR: Strategic Investment Advisor

SECOR provides investment-related advice and assistance to the Trustee. To ensure that SECOR takes adequate steps to identify, assess and manage any climate-related risks and opportunities the Trustee requires SECOR to act in accordance with the SIP and the ESG and Stewardship Policy. The Trustee has given clear directions in terms of how and when SECOR needs to inform the Trustee of its work; as noted above, SECOR will prepare periodic responsible investment reports for the Trustee and the IFC to review. Where SECOR has material concerns regarding CRRO, it is expected to report those concerns to the Trustee in a timely manner in the context of the overall risk management framework.

BW: Actuarial Advisor

BW provide actuarial advice and assistance to the Trustee. The Trustee regularly engages with BW to ensure that BW takes adequate steps to identify relevant risks and opportunities including any relevant CRRO. The Trustee has given clear directions in terms of how and when BW needs to inform the Trustee of its work and receives funding updates on a quarterly basis at board meetings. The Trustee believes that this is a proportionate approach considering the nature of BW's role.

Penfida: Covenant Advisor

Penfida advises the Plan in respect to the strength of the covenant of the Plan's sponsor. The Trustee regularly engages with Penfida to identify risks and opportunities related to the strength of the covenant of the Plan's sponsor.

Asset Managers

The day-to-day fund management of the assets of the Plan is performed by external professional fund managers (each of which is authorised and regulated by the Financial Conduct Authority or similar overseas entity).

As demonstrated by the flowchart in Annex 1.I, outlining SECOR's manager selection and oversight process, responsible investing is considered an integral part of the selection, review, and monitoring processes for the Plan's asset managers.

SECOR takes an active role in assessing asset managers for the Trustee, including providing a proprietary responsible investment scorecard. SECOR ensure that the weighting attributed to climate change issues within manager selection, review and monitoring is appropriate to the Trustee's ESG beliefs and the SIP.

When appointing asset managers, SECOR makes recommendations to the IFC, taking into account the guidelines set by the Trustee. The IFC considers these recommendations and makes the final decision on any appointments.

The Trustee maintains oversight of the incorporation of climate considerations in the selection, review and monitoring of asset managers by reviewing SECOR's reports which identify the asset managers and their responsible investment rating and provides information on each asset manager's performance. Where the Trustee or the IFC has concerns over an asset manager, it will engage with SECOR to find a suitable resolution.

Time and resources

The Trustee conducts regular discussion on responsible investing at board meetings at least bi-annually. These discussions include appropriate training on responsible investing and updates to governance and investment activities.

The Trustee notes that its professional advisors also dedicate resources to CRRO. The Trustee has given clear directions in terms of how and when advisors need to inform the Trustee of their work. Where any advisor has material concerns regarding climate-related risks, it is expected to report those concerns to the Trustee in a timely manner.

The Trustee encourages all its directors to develop their understanding of CRRO and will periodically review its training programme and, where appropriate, will ask its external advisors to provide additional training.

Strategy

Time Horizons

Key obligation #3: The Trustee understands that it must set out its short-term, medium-term and long-term time horizons.

When assessing the CRRO for the Plan, the Trustee believes that the appropriate short, medium, and long-term time horizons are:

Short-term: 5 years, which encompasses triennial valuation cycle.

Medium-term: 10 years, covering the period to 2030 and the importance of policy decisions that will need to be made to achieve the Paris Agreement.

Long-term: 20 years.

The Trustee will review these periods annually considering Plan and industry developments.

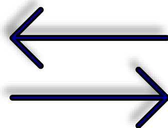
General Climate-related Risks and Opportunities

Key obligation #4: The Trustee understands that it must identify CRRO which it considers will have an effect over the short-term, medium-term and long-term on the Plan's investment strategy and funding strategy.

The world's climate is 1°C warmer today, on average, versus pre-industrial levels[4]. Without strong and globally co-ordinated action, some experts believe the world could warm above 4°C by the end of this century, which could lead to significant consequences for ecosystems and humanity. As the world and society seek to address climate change, two types of risks will impact pension plan portfolios and the businesses of the sponsors:

Physical risks

Relate to the impacts of climate change, such as rising temperatures, changing rainfall, flooding risk and extreme weather.



Transition risks

The risks from the realignment of our economic system towards low-carbon, climate-resilient or carbon-positive solutions.

On an ongoing basis, the Trustee identifies CRRO which it considers may have an effect over the short-term, medium-term and long-term on the Plan's investment and funding strategy. Key risks identified by the Trustee are set out below.

Some CRRO will impact investments in individual companies and others will have wider impacts that will impact sectors and asset classes more broadly. For example, investments in the energy sector are likely to be significantly impacted by the transition to a low carbon economy and we expect our managers that invest in this sector to diligently assess the risk and opportunities related to the transition. While investment managers differ in their approach to managing climate risks, and their impact will vary by asset class, we seek to have all managers integrate climate risk and opportunity assessments into their investment process. Key risks that we have identified include:

- Transition risks which may have a financial impact on portfolio investments and businesses as a result of transitioning to a low carbon global economy, including stranded assets, asset mispricing, and carbon sensitive sectors significantly underperforming or outperforming.
- Physical risks from extreme weather as part of climate change.

Footer Notes

[4] Source: The Intergovernmental Panel on Climate Change (IPCC): The United Nations body for assessing the science related to climate change.

- Regulatory risks as world governments seek to facilitate the transition to a low carbon economy, the risk of asset mispricing and the potential creation of green bubble asset valuations.
- Disruption in the broader economy due to climate change leading to financial risks:
  - If not fully hedged, the risk of inflation being higher than expected can lead to a negative impact.
  - If not fully hedged, the risk of falling government gilt yields can lead to a negative impact.
  - Increasing longevity can lead to a negative impact.
  - Annuity pricing risk.

Further details of these risks are included in the sections below, including those risks that are more likely to be associated with the short, medium, and long-term time horizons.

In addition to these risks, the Trustee recognises that climate change can present opportunities, and we support initiatives for the evolution and improvement by investment managers of their ESG integration approach. We believe financial opportunities will develop across many asset classes as the world transitions to a low carbon economy. We expect fund managers to integrate these considerations into their asset allocation and security selection process.

Short-term risks and opportunities:

Over the short-term, the Trustee acknowledges there will likely be greater market price sensitivity to increased regulation and investor behaviour. This could, in the short-term, result in some sectors or market segments experiencing an artificial increase in valuations. Consequently, the Plan could experience some volatility in funding as the Plan invests 7.5% of its portfolio in return seeking assets. The Trustee believes an actively managed investment strategy with downside risk protection will help the Plan avoid any severe negative impact that climate risks may have on markets.

Medium-term risks and opportunities:

Over the medium-term, transition risks, both in terms of technology and policy, are expected to be material. These transition risks will likely present challenges for some of the Plan's investments, but also present new investment opportunities. For example, companies that are heavily reliant on sustained carbon emissions will likely need to invest in more sustainable business practices that require significant investment. Conversely, as new technologies are developed this will create new investment opportunities whilst also facilitating the change to a low carbon economy.

These medium-term transition risks will be particularly important to consider as 2030 gets closer. If significant progress by the world and society to meet the objectives of the Paris Agreement has not been made by 2030, then there could be more drastic policy measures taken which could have an impact on companies and other assets that are not resilient to these measures. To manage this risk, the Trustee has requested that investment managers consider climate-related risks when making investments on the Plan's behalf.

Long-term risks and opportunities:

Over the long-term, physical risks are expected to dominate. The extent to which these physical risks are borne out will largely depend on global society's success in meeting the objectives of the Paris Agreement. This ultimately highlights the importance of addressing climate change over the long-term.

The physical risks of climate change will have a wide-ranging impact on the Plan's assets. More severe weather events could result in damage to physical assets such as real estate which, in turn, could have a contagion impact on other segments of the economy. However, if the objectives of the Paris Agreement are achieved and the world transitions to a low-carbon economy, many assets may become "stranded". The Plan will need to carefully navigate the transition and monitor any exposure to potential stranded assets. The Plan's funding position over the long-term is most exposed to a failure to assess accurately the effects of climate change, but the Plan's de-risked portfolio and hedging programme will help mitigate the risk of a material worsening in the funding level.

Funding strategy

Key obligation #5: The Trustee understands that it must assess the impact of the identified CRRO on the Plan's funding strategy.

In reviewing (on an ongoing basis) and setting the funding strategy and agreeing the long-term funding target, we consider the integrated and interdependent triangle of considerations: liabilities (funding), covenant risk, and assets (investment) in the light of the key climate-related risks listed below.

The investment implications will be further addressed in the investment strategy section. This includes consideration of appropriate interest rate hedging, inflation hedging and longevity hedging; investment and covenant risk; time dimensions and funded status development.

Strategy considerations - Liabilities (Funding)

The extent of climate risk exposure from a liability perspective is relevant when determining the degree of prudence to be adopted when setting liability assumptions.

Inflation risk: Increasing extreme weather events eventually might force governments to address GHG emissions at a global level with carbon tax policies, which could result in inflation figures coming in ahead of expectations. While higher than expected inflation increases the liability, the Plan's 100% LDI hedge ratio means the Plan's matching assets will also increase proportionately, and hence this will not have an adverse impact on the Plan's funding level.

Gilt yield risk: Considerable economic disruption could lead to a flight to safety, pushing gilt yields down, and this could happen at the same time as inflation is increasing (even though it is normally expected that bond yields would rise in an inflationary environment). While lower government bond yields increase the liability, the Plan's 100% LDI hedge ratio means the Plan's matching assets will also increase proportionately, and hence this will not have an adverse impact on the Plan's funding level.

Longevity risk: Increasing longevity could lead to a negative impact on funding as liabilities increase. Better air quality and improved health conditions may lead to higher longevity. This may happen in those scenarios where there is a transition to a low carbon economy and so may be expected to have the biggest impact in earlier transition scenarios than those that tend to lead to high inflation and gilt yield risk. However, the timing may be such that this does not get reflected in the actuarial valuation for another 10 years, whereas the transitional risks to the gilt yields and inflation may occur earlier.

Annuity pricing risk: The cost of buy-in and buy-out will be affected by the risks above. However, there are the additional risks that the strength of the insurers may weaken as a result of

climate risk or that the solvency standards are increased to reflect the increased risks. This could further increase the price of buy-in or buy-out.

Strategy Considerations – Covenant

All sponsors will be exposed to CRRO to some extent, although their nature and magnitude will vary considerably. Climate change is therefore a relevant consideration for covenant assessments, particularly over the longer term.

The Trustee considers that climate risks relevant to the covenant of the sponsor include:

- Transition risks, such as carbon pricing: the risk that increased cost of carbon generation through taxation and/or the cost of offsetting increases adversely impacts the businesses of the sponsor (energy for manufacturing and distribution) and the costs of raw materials (particularly animal proteins).
- Physical risks, such as extreme weather events causing factory shut down, and changing weather patterns causing disruption to the supply of (and impacting the cost of) raw materials.

The strength of the covenant of the sponsor was most recently assessed as strong. When coupled with the Plan's strong funding position, and the expected impact of the various climate scenarios on the Plan's funding, the Plan appears resilient.

Investment strategy

Key obligation #6: The Trustee understands that it must assess the impact of the identified CRRO on the Plan's investment strategy.

Climate change is a relevant consideration for pension plan investments, both setting strategy and select managers.

Framework

The Trustee assesses the impact of the CRRO which they have identified on the Plan's investment strategy on an ongoing basis. The Trustee continues to believe it makes sense to look at ESG risk and return considerations (including CRRO) utilising a common framework across all asset classes, with due consideration for asset class differences. The three primary ways in which ESG can be incorporated are: Exclusion, Integration, and Impact Investing as outlined in the table to the right. The Trustee has worked with its advisors, particularly SECOR, to adopt these approaches as appropriate when responding to CRRO that have materialised or are expected to materialise.

	Definition	Example
Exclusion Investing	Attempting to screen out investment in stocks, companies or industries based on a set of ethical values.	Carbon, coal, fossil fuel, cluster munitions.
Integration	Integrates environmental, social and governance non-financial data into fundamental investment analysis to the extent they are material to investment performance.	A clear and systematic process on how financially material ESG factors are identified and incorporated into the decision-making process.
Impact Investing	Looking for (or avoiding) investments that have a positive (or negative) investment return as well as a desired social, economical or environmental outcome.	Climate change, low-income housing, clean drinking water, clean technology projects, protecting biodiversity.

We believe each of these approaches can be utilised in the portfolio, to varying degrees, and that ESG should primarily be incorporated as part of the Plans' active management programmes, rather than as part of higher-level investment strategy.

Approach

Any ESG Exclusion required by law or regulation will be included in the SIP. ESG Integration is an approach that can be used by managers to improve risk or return relative to their benchmark. Impact Investing can be used to reduce risk relative to the benchmark, to improve returns, or for diversification while also having a desired environmental or social outcome. The Plan does not currently incorporate impact-oriented strategies.

While there is a growing body of research on the inclusion of ESG considerations at a strategic level, the findings are not conclusive. The primary goal in designing investment strategy is to maximise net total returns within specified constraints, using long-run, high-confidence return assumptions. A wide range of ESG factors could be considered as part of the process; however, there is insufficient historical data and evidence that ESG factors are reliable strategic return sources or diversifiers. Clearly, longer-term ESG risks (and particularly those climate-related risks relevant to the Plan that have been identified above) warrant serious evaluation. We believe that until more is known about these risks, ESG considerations are best addressed through active management.

Scenario Analysis

Scenarios

Key obligation #7: The Trustee understands that it must set out the most recent scenarios which it has analysed.

The Trustee requested SECOR to undertake scenario analysis to assess the Plan's exposure to climate-related risks. SECOR constructed four climate-risk scenarios that project the assets and liabilities forward based on SECOR's assumptions. The scenario analysis is assumption-based and has been conducted top-down rather than based on underlying holdings, for which there may be limited climate-risk information. The objectives of the Paris Agreement could be achieved or not achieved in numerous ways. SECOR has suggested these four scenarios to demonstrate the breadth of outcomes that could be observed in practice and the Trustee have agreed that this is a balanced approach to take. The Orderly transition scenario assumes a smoother journey to the objectives of the Paris Agreement, whilst the Abrupt transition scenario stresses this assumption. The No action scenario reflects a sustained failure to address climate change, whereas the Green bubble scenario reflects a similar failure resulting from the risk of financial markets and investors providing only lip-service to the Paris Agreement.

The Trustee believes that this scenario analysis provides an up to date understanding of:

(a) the potential impact on the Plan's assets and liabilities of the effects of the global average increase in temperature and of any steps which might be taken (by governments or otherwise) in light of the increase in temperature in these scenarios;

(b) the resilience of the Plan's investment strategy; and

(c) the resilience of the funding strategy in all of the scenarios considered.

The four scenarios that the Trustee has considered are summarised below:

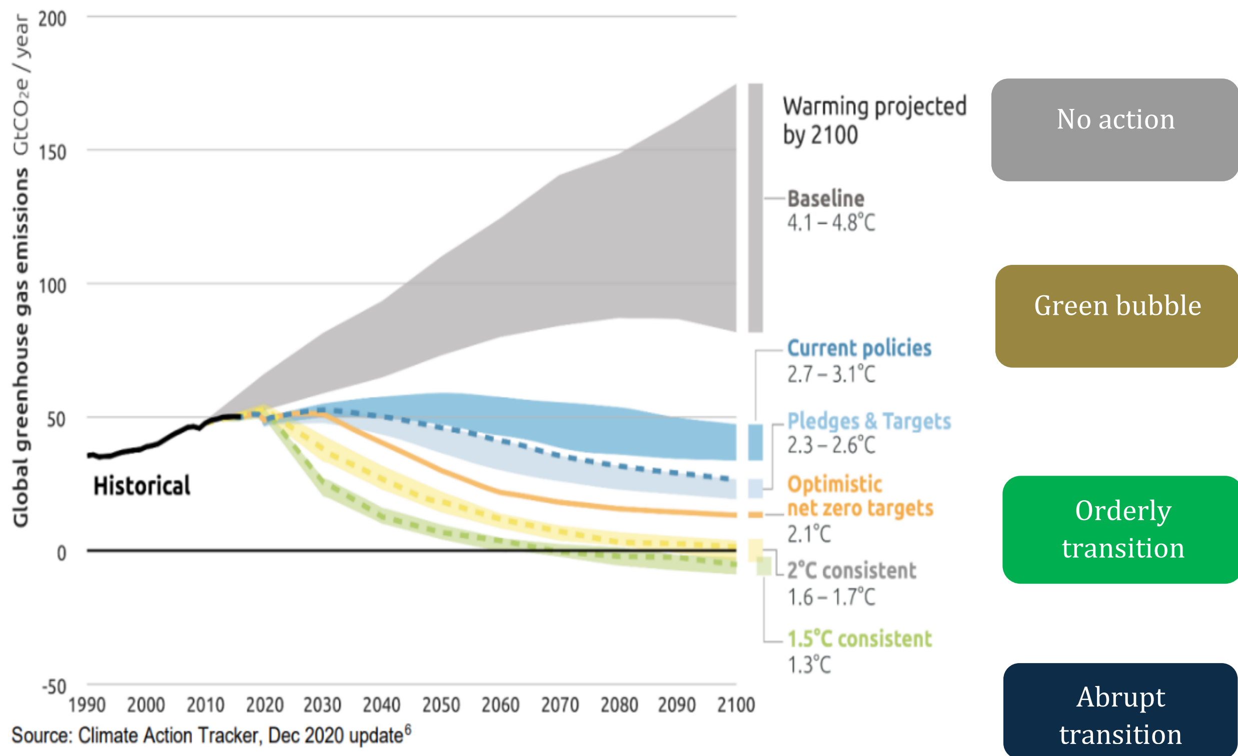
1. Orderly transition: 2° C or lower scenario where emission reduction starts now and continues in line with the Paris Agreement.
2. Abrupt transition: 2° C or lower scenario where little short-term action is taken, followed by sudden action in 2030 to address climate change.
3. No action: 4+°C scenario where society fails to address climate change.
4. Green bubble: A scenario where substantial financial investments behind addressing climate change are found to be ineffective, resulting in a bubble and crash, followed by a loss of confidence in any ability to truly address climate change using the financial system.

Assumptions

The scenarios above are deterministic scenarios that have been constructed based on SECOR's judgement of the climate risks embedded in each asset class. Each scenario represents a set of deterministic return paths ending in 2050. The Orderly transition scenario represents SECOR's base-case capital market assumptions which reinforced the belief that for the Plan's investment strategy to perform in line with expectations, there must be an orderly transition to a low carbon economy. The Abrupt transition, No Action and Green bubble scenarios are also composed of deterministic return paths but with market shocks for each asset class relative to the Orderly transition scenario. At key points in the pathways, returns are informed by historical asset class returns in other stress scenarios. The pathway returns are informed by the latest capital market assumptions to ensure the analysis remains up to date.

Limitations

The Trustee has decided the scenario analysis provided is appropriate for assessing the impact of the four scenarios constructed by SECOR on the Plan's investment strategy. The scenarios are top-down scenarios and hence rely on SECOR's judgement and proprietary analytics to assess how each asset class might behave under each scenario. In practice, there is insufficient data on the dependencies between asset class returns and climate risks. In light of this, the analysis should not be solely relied upon each scenario when constructing portfolios.

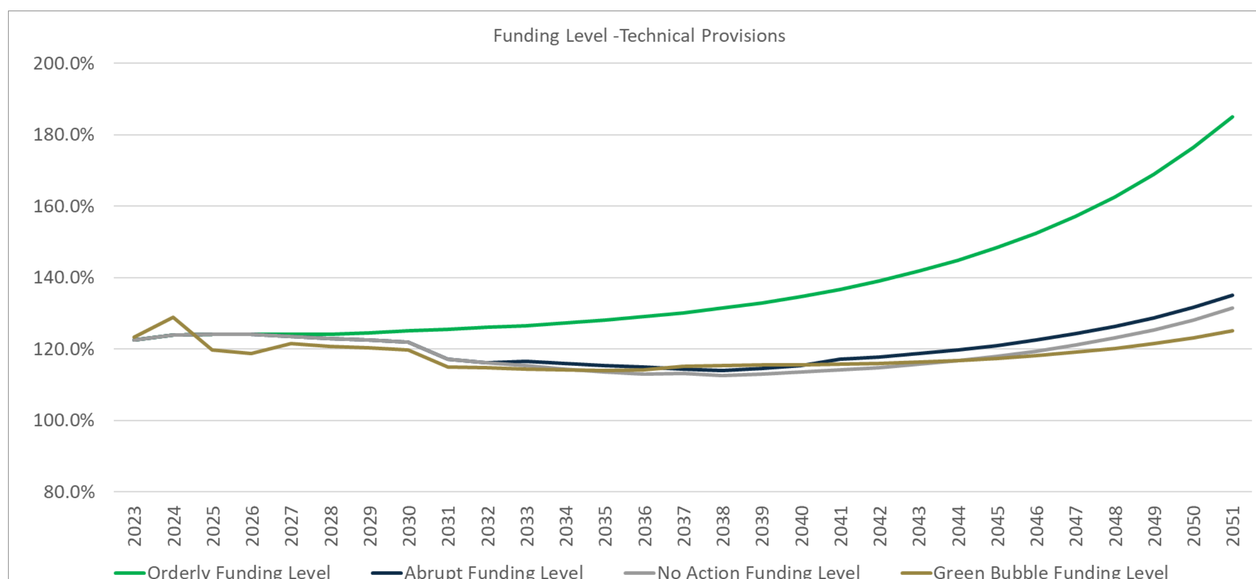


Source: Climate Action Tracker, Dec 2020 update[6]

Analysis Results:

Key obligation #8: The Trustee understands that it must set out (1) the potential impacts on the Plan's assets and liabilities which it has identified in the scenarios analysed above and (2) if it has not been able to obtain data to identify potential impacts for all of the assets of the Plan, why this is the case.

SECOR has projected forward the assets and liabilities of the Plan under each of the four scenarios. The below chart demonstrates the progression of the funding level through to 2051.



The above chart illustrates the funding level of the Plan over time in all four scenarios (from 2022 to 2051- spanning 30 years). The Plan's pathways differ quite a lot in the short-medium term (5-10 years), but the Plan maintains a strong funding position over the longer term in all scenarios. The Plan funding level never falls below 110% in any of the scenarios analysed, including the Green bubble scenario. The high initial funding level of the Plan (>120%), the de-risked nature of the portfolio (92.5% Matching Assets, 7.5% Return Seeking Assets) and the 100% LDI hedge ratio means the Plan is well placed to withstand significant capital market shocks without a material deterioration in funding.

Scenario Analysis Summary[5]		Orderly transition	Abrupt transition	No action	Green bubble
Short-term (5 years)	Assets	£1,300m	£1,300m	£1,300m	£1,300m
	Liabilities	£1,000m	£1,000m	£1,000m	£1,000m
	Funding level	124%	124%	124%	122%
Medium-term (10 years)	Assets	£1,200m	£1,200m	£1,200m	£1,200m
	Liabilities	£900m	£1,000m	£1000m	£1,000m
	Funding level	126%	116%	116%	115%
Long-term (20 years)	Assets	£900m	£700m	£900m	£800m
	Liabilities	£600m	£600m	£700m	£700m
	Funding level	139%	118%	115%	116%

Footer Notes

[5] Funding level % does not align with Assets and Liabilities due to rounding.

Short-term:

Over the short-term, the Plan is well-positioned to manage climate change risks. The primary risk in the short-term is a Green bubble scenario which could result in more volatile funding levels. The Trustee has de-risked investments which mitigates against any drawdowns or market volatility.

Medium-term:

Over the medium-term, the Plan's funding level remains above 100% on a technical provisions basis in all scenarios. The key identifiable risk is focussed around 2030 and the potential for any drastic policy action (or lack thereof). Much of the market impact in these scenarios is mitigated by the considerably de-risked portfolio, the equity downside protection embedded in the Hedged Equity asset class, and the 100% LDI hedge ratio (inflation and interest rate shocks are hedged, and hence do not impact Plan funding).

Long-term:

Over the long-term, the impact of climate change risks on the Plan is more pronounced as lower returns compound over time resulting in worse funding levels. The scenario analysis shows that societal failure to achieve the Paris Agreement presents a risk to the Plan as this may result in lower-than-expected returns from the Plan's risk assets; however, it is worth putting this in context. The Plan maintains strong levels of funding in all of these scenarios, driven by the Plan's strong initial funding position, de-risked portfolio and the equity downside protection embedded in the Hedged Equity asset class. Over the long-term SECOR will advise the Trustee to incorporate the impact of lower expected returns from risk assets by updating the Plan's investment strategy, which will also be dependent on the long-run funding objective (insurance transaction, self-sufficiency etc.) as part of the usual investment strategy review process.

Resilience of the Plan's Investment Strategy and Funding Strategy:

Key obligation #9: The Trustee understands that it must set out the resilience of the Plan's investment strategy and funding strategy in the scenarios analysed above.

The Trustee believes that the Plan's funding strategy will be resilient in the face of all four scenarios described above. The reason for this is that the Plan is already well-funded, and the funding strategy will be reviewed and amended in light of any changes to the covenant and investment strategy.

The Trustee believes, following advice from SECOR, that the investment strategy will be robust and resilient in the face of the climate-related risks identified in each of the four scenarios above because it can address those risks in a number of ways. As shown by the scenario analysis summary table above, over the short, medium, and long-term the Plan remains over 115% funded. This is largely due to the high funding level at the beginning of the analysis, the 100% LDI hedge ratio (inflation and interest rates are hedged, and hence do not impact Plan funding), and the de-risked portfolio. The Plan is overall well-positioned to manage climate risks.

Risk Management

Identifying, assessing and managing climate-related risks

Key obligation #10: The Trustee understands that it must describe the processes it has established for identifying, assessing and managing climate-related risks which are relevant to the Plan.

The Trustee's processes for identifying, assessing, and managing climate-related risks are set out in the Governance section of this report. Key points include:

- The Trustee works with SECOR to identify relevant risks and opportunities;
- CRRO are assessed in the regular investment and risk performance reports the Trustee receives from its advisors;
- The Trustee recognises climate change as a responsible investing risk factor, and as part of the Plan's overall risk management oversight and investment programme, the Trustee works with the IFC, SECOR, BW and others to align relevant climate-related risks within the investment portfolio. These risk management activities are reported to the IFC and the Trustee;
- Climate-related risk management is co-ordinated and managed in close partnership between the IFC and SECOR. SECOR assists in the management of climate-related risks of the Plan's investment portfolio on behalf of the Trustee throughout the investment lifecycle;
- As part of the investment process, SECOR monitors and engages with external investment managers regularly on activities related to climate risk, stewardship and ESG as reported in the annual implementation statement. The external investment managers are expected to implement their respective ESG policies in assessing and managing climate related risks based on their mandates.

The Trustee prioritises and manages risks which pose the most significant potential for loss and are most likely to occur by working with its advisors to undertake scenario analysis and to consider the outputs of that analysis. The scenarios that have the most extreme consequences for the Plan in terms of financial loss or instability get the most attention. The investment strategy will be reviewed to ensure that risks that could materialise are sufficiently addressed.

Integration

Key obligation #11: The Trustee understands that it must describe how the processes described above are integrated into its overall risk management of the Plan.

As stated in the Governance section of this report, the Trustee has chosen to take an approach to the oversight and management of CRRO that largely replicates the process used for other risks and opportunities.

The ESG and Stewardship policy is integrated into the Trustee's overall risk management of the Plan through the existing governance framework (the risk register, SIP and ESG Policy) and is aligned with the Risk Policy Statement and the established operational procedures. This approach has been approved by

the Trustee and is overseen by the IFC and executed by SECOR with appropriate delegation to third party managers and service providers.

Risk tools

The Trustee relies on SECOR's broad range of custom-built proprietary risk analytics to monitor and manage risks within the investment strategy, including climate risk. The risk tools include, but are not limited to:

Top-down macro-economic and market factor analysis

The key output of this analysis is a summary of the macro-economic and market factors that drive portfolio returns. SECOR monitors and assesses how the relationships between these factors and the Plan's portfolio changes over time.

Value at Risk analytics

SECOR provides value at risk analysis that provides a breakdown of the key risks that affect the Plan's funding status. The value at risk analysis focusses on a 1-in-200-year downside outcome.

Active risk reporting

The investment strategy of the Plan is implemented via active managers who are given discretion to add alpha versus their respective benchmarks. The discretion afforded to managers is governed by an active risk measure. SECOR sets a Plan-level active risk budget and monitors the active risk of underlying managers versus the aggregate risk budget.

Stochastic asset-liability modelling

The Trustee relies on stochastic asset liability modelling conducted by SECOR to assess the range of outcomes the Plan could experience. SECOR projects forward the assets and liabilities accounting for the investment strategy. Key outputs of this analysis are the potential downside scenarios and the likelihood and size of contributions by the sponsor.

Climate risk scenario analysis

The Trustee has engaged SECOR to provide climate risk scenario analysis to better understand the Plan's exposure to the transition and physical risks of climate change. The output of this analysis is provided in this report and is further assessed against the output of the stochastic asset-liability modelling.

Focus on transition and physical risks

Asset managers identify and assess the risk to the portfolio of transition risks (including stranded assets, asset mispricing, the potential for carbon sensitive sectors to significantly underperform or outperform), as well as physical risks from extreme weather as part of climate change. Transition and physical risks related to climate change are then managed through the integration of ESG considerations in the security

selection and manager investment process. SECOR liaises with all the asset managers to ensure that their approach to climate-related risks is appropriate for their asset class and investment mandate.

The Trustee believes that an actively managed investment strategy will help the Plan avoid investments that will be negatively affected by physical and transition risks and invest in those that will benefit from the transition. The strong funding level and low overall allocation to risk assets means that the Plan's exposure to these risks is low and is expected to remain low.

Metrics and Targets

Metrics[6] [7] [8] [9]

Key obligation #12: The Trustee understands that it must describe the metrics it has calculated.

Metrics can help to inform the Trustee's understanding and monitoring of the Plan's CRRO. Quantitative measures of CRRO, in the form of both emissions and non-emissions-based metrics, help the Trustee to identify, manage and track the Plan's exposure to the financial risks and opportunities climate change will bring. Considering the above, in this section we outline our approach to the incorporation of various metrics in our approach to responsible investing for the Plan.

The Trustee has adopted total carbon emissions as its absolute emissions metric, WACI as its emissions intensity metric and exposure to fossil fuel intensive assets as its additional climate metric. The Trustee believes that these metrics are appropriate for the Plan and will continue to calculate them in future reports.

In accordance with the Regulations, the Trustee will also report a portfolio alignment metric.

The Trustee will review these metrics annually in light of Plan and industry developments.

Portfolio CO2e emissions can be measured using different metrics. For the reasons discussed in the first part of this report, we are approaching the process carefully and expect ultimately to adopt an approach and methodology tailored to the Plan's investment programme. We report results related to WACI and total carbon emissions based on a market value invested weighting methodology. The results are calculated based on physical investments, excluding overlays and cash accounts and are measured using the following indicators:

Footer Notes

[6] Proxy determined by underlying manager's benchmark and managers weight in the portfolio as of 31 December 2022.

[7] If appropriate benchmark data is not provided, the benchmark exposure will be matched to the manager. The percentage of managers where this is the case is indicated in the tables in this section.

[8] Data shown only accounts for Scope 1 and 2 Emissions. See Appendix I for methodology and disclosure.

[9] For following data presented, Scope 3 emissions data not available. Statistics for corporate emissions only, sovereign securities not included in the analysis. Assumes SECOR LDI has zero corporate emissions.

Scope 1 and 2 data (whole Plan level)

Each metric calculated uses Scope 1 and Scope 2 emissions. We plan to provide results that include Scope 3 emissions in future reports as data becomes available. The statistics below account only for corporate emissions and do not include emissions connected to sovereign securities. This analysis excludes physical gilts as managers primarily report on carbon data related to corporate bond positions.

Absolute Emissions metric (whole Plan level)

- Total Carbon Emissions – Measures the carbon emissions of the portfolio in tons of carbon dioxide equivalent (in tCO2e)[10]. TCO2e includes emissions from carbon and other GHG emissions. The metric has limited use for comparison with other portfolios because it is not normalised by portfolio size.
- Normalised Carbon Emissions — A normalised measure (by $M invested[11]) of the portfolio's contribution to GHG emissions. Expresses the carbon efficiency of the portfolio.
- Total Carbon Emissions calculated as (Normalized Carbon Emissions x $M invested in strategy). Based on the available data assets produce approximately 11,544 tCO2e.[12]

	Total Carbon Emissions (Tons CO2e) Scope 1+2			
Mar-2023	% of Plan	% of Managers Supplying Data	% of Managers using Benchmark as Proxy	Asset Class Total Emissions (tCO2e)
Hedged Equity	7.6%	0.0%	100.0%	9,860
LDI	92.4%	100.0%	0.0%	1,683
Total	100.0%	92.4%	7.6%	11,544

Emissions Intensity metric (whole Plan level)

- WACI — Measures a portfolio's exposure to carbon-intensive companies and indicates the potential climate change-related risks relative to other portfolios or a benchmark. It is useful for comparing portfolios across asset classes.
- The Trustee has calculated and reported WACI in addition to the carbon emissions for the following reasons:
    - It can be more easily compared across asset classes and portfolios of different sizes.
    - It also allows for portfolio decomposition and attribution analysis.

Footer Notes

[10] Source: Eurostat - tCO2e is a carbon dioxide equivalent or CO2 equivalent, abbreviated as CO2-e is a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.

[11] Invested amount shown in USD converted from GBP to be consistent with industry reporting standards presented in USD.

[12] Data calculated based on 12/31/2022 carbon data with 3/31/2023 market values. MSCI ACWI benchmark proxy used and adjusted to represent net equity exposure.

Weighted Average Carbon Intensity (Tons CO2e / $m Sales)				
	% of Plan	% of Managers Supplying Data	% of Managers using Benchmark as Proxy	Asset Class Weighted Average
Hedged Equity	7.6%	0.0%	100.0%	170.9
LDI	92.4%	100.0%	0.0%	5.3
Total	100.0%	92.4%	7.6%	17.9

Note: The WACI of 17.9 for Scope 1+2 emissions is based on the available data.

Portfolio alignment metric

In compliance with new reporting requirement for portfolio metric alignment, SECOR has conducted the analysis using the PACTA tool which measures financial portfolios' alignment with various climate scenarios consistent with the Paris Agreement. The PACTA tool assesses portfolio alignment by comparing the performance of investments in the portfolio against one or more benchmarks for public equity and corporate bonds. The PACTA analysis focuses on asset classes with the most direct and traceable impact on the real economy and for which public data is available.

The Plan directly held no equities or corporate bonds. The PACTA tool output does not have one overall metric to report on; it includes a number of climate related factors that PACTA tool compares.[13] Based on the assets that PACTA has identified as having material risks or opportunities related to climate change SECOR's analysis provides further confirmation that climate risks and opportunities are limited for the Plan. The Trustee has concluded that the portfolio is well aligned to achieve its investment objectives and the impact of climate change identified by the tools are not expected to be material to the Plan.

Additional climate change metric (whole plan level)

Exposure to fossil fuel intensive assets. The amount of carbon-related assets in the portfolio, expressed in percentage of the current portfolio value. This metric was chosen as the Trustee views fossil fuel intensive assets as having a relatively high exposure to near-term climate-related risk and will be considering limiting or reducing these risks in the near-term.

Exposure to Carbon-Related Assets				
Mar-2023	% of Plan	% of Managers Supplying Data	% of Managers using Benchmark as Proxy	Asset Class Carbon Exposure
Hedged Equity	7.6%	0.0%	100.0%	7.5%
LDI	92.4%	100.0%	0.0%	1.3%
Total	100.0%	92.4%	7.6%	1.8%

Footer Notes

[13] Portfolio alignment analysis include climate relevant sectors: power, oil & gas, coal mining, automotive, shipping, aviation, cement, steel, and heavy-duty vehicles.

Using the metrics to identify and assess the climate-related risks and opportunities which are relevant to the Plan

Key obligation #13: The Trustee understands that it must use the metrics it has calculated to identify and assess the CRRO which are relevant to the Plan.

The metrics above provides us with an additional tool for assessing managers on a standalone basis against their benchmark and against comparable managers. The collection and analysis of this data give a better perspective on how managers could improve their decarbonisation efforts and what asset classes are slower to adopt these practices.

As such, decarbonisation and carbon emissions reporting has become a standard part of our due diligence process and ongoing monitoring as we look to reach our own reduction targets discussed later in this report. These metrics indicate that the Plan can have a material carbon footprint and is exposed to carbon intensive companies and fossil fuel intensive assets.

Metrics - Data Availability

Key obligation #14: The Trustee understands that if it has not been able to obtain data to calculate the metrics for all of the assets of the Plan, it must describe why this is the case.

This section of the report describes the data (1) The Trustee has been unable to obtain or (2) The Trustee has treated as unobtainable, and the reasons for this.

Data availability related to emissions varies widely across the Plan's portfolio. Due to the nature of regulatory reporting for public companies, Public Equity and Public Fixed Income managers are able to aggregate emissions data for their underlying holdings. While some managers collect this data themselves, the majority of managers rely on third party data providers that charge an annual fee for access. As such, only those managers that are willing to pay for full access to these data providers are currently able to satisfy the required scope of emissions while others can only supply a few data points. For those managers that do not subscribe to any third-party data provider, we rely on publicly available resources such as the MSCI ESG Fund Rating tool to fill in the data gaps.

As we are reliant on businesses calculating and reporting their own metrics to asset managers, and the asset managers collating that data and creating asset class calculations, there is some inherent uncertainty about the quality of the data used. As industry practice develops, we expect that this uncertainty will be reduced.

Metrics – Scope of Analysis

Total climate-related metrics are reported at both the asset class level and portfolio level using an asset weighted methodology. We expect the portfolio level metric to become more useful in future years as data becomes available. In addition to TCFD reporting, our asset class reports focus on the common metrics that are provided by a consistent data provider. These reports include both quantitative climate metrics and additional qualitative ESG metrics based on the underlying portfolio holdings.

Metrics – Approach, Rational and Assumptions

Methodologies for the metrics calculated above are set out in Annex 1.II. Our approach to reporting climate-related metrics is tailored to fit the recommendations of the TCFD guidelines while also

accounting for the wide spectrum of data availability across managers and asset classes as discussed above. Ultimately, we seek to provide meaningful statistics that are representative of the asset class exposure and the overall portfolio. We also seek to use consistent providers to ensure that there is no variation in methodology. The majority of public managers supply climate metrics as calculated by MSCI ESG based on their underlying holdings.

The tables above show the percentage of managers that were able to provide that statistic on an asset-weight basis (% of Managers Supplying Data). For managers that have not provided a statistic, but where we can rely on an equivalent benchmark, one of the key assumptions in our analysis is to use benchmark data as a proxy. This assumes that the manager's carbon exposure is similar to the benchmark, which may not be the case. The percentage of managers using a benchmark proxy in lieu of manager data is also indicated in the table (% of Managers using Benchmark as Proxy). This assumption (that managers without data have benchmark-like carbon exposure) does not impact the results significantly as only a small portion of the Plan's assets fall under that category.

The Trustee has calculated and reported metrics on the proportion of the portfolio for which it has reported or estimated data. In calculating the above metrics, one of our assumptions has been to exclude entries from those managers who have not provided any data and where there is no equivalent benchmark.

The Trustee has sought to populate gaps in data as far as it is able to do so, but some data gaps are unavoidable because it is not possible to estimate data with sufficient accuracy. This will impact our ability to create meaningful targets for the Plan's portfolio until coverage improves.

Next Steps

We will work to improve our data coverage for the metrics outlined with the ultimate goal of being able to calculate and disclose year-over-year portfolio carbon emissions with good accuracy and data coverage across the four metrics. We have seen notable progress in the past two years with a dramatic increase in data availability from public market managers, primarily driven by investor demand and regulation. We expect this trend to continue, and plan to focus our efforts on encouraging better disclosure from those managers that are currently not able to provide sufficient information.

Targets

Key obligation #15: The Trustee must measure, as far as it is able, the performance of the Plan against the target.

Target-setting should be used by trustee boards to track their efforts to manage climate change risk exposure and take advantage of climate change opportunities.

This is the first-year reporting for the Trustee. Based on available year-end 2022 data, at a total portfolio level, the Plan aims to maintain and reduce where possible the WACI (Scope 1 and 2) over a three-year period concluding in March 2025.

Key obligation #16: The Trustee must, taking into account the performance of the Plan against the target, determine whether the target should be retained or replaced.

This is the first-year reporting for the Trustee. We will assess the target following the completion of 2024 analysis.

Key obligation #17: The Trustee understands that it must describe the target it has set.

The current framework gives us the flexibility to incorporate into our targets additional climate-related metrics, such as absolute emissions and fossil fuel exposure. The progress towards achieving the targets has been reviewed and will be reassessed every three years.

Methodology to measure performance

Due to the nature of the asset weighted calculation for the total portfolio, these targets can be influenced by the availability of data, and careful consideration should be taken when evaluating future results as new data is introduced. Anticipating that data coverage will continue to improve, we will still be able to compare progress year-over-year by only updating data from the prior year's template.

Performance so far

Key obligation #18: The Trustee understands that it must describe the Plan's performance against the target.

This is the inaugural TCFD report. The Trustee will review the Plan's performance against the target at next year's report.

Steps the Trustee is taking to achieve its targets

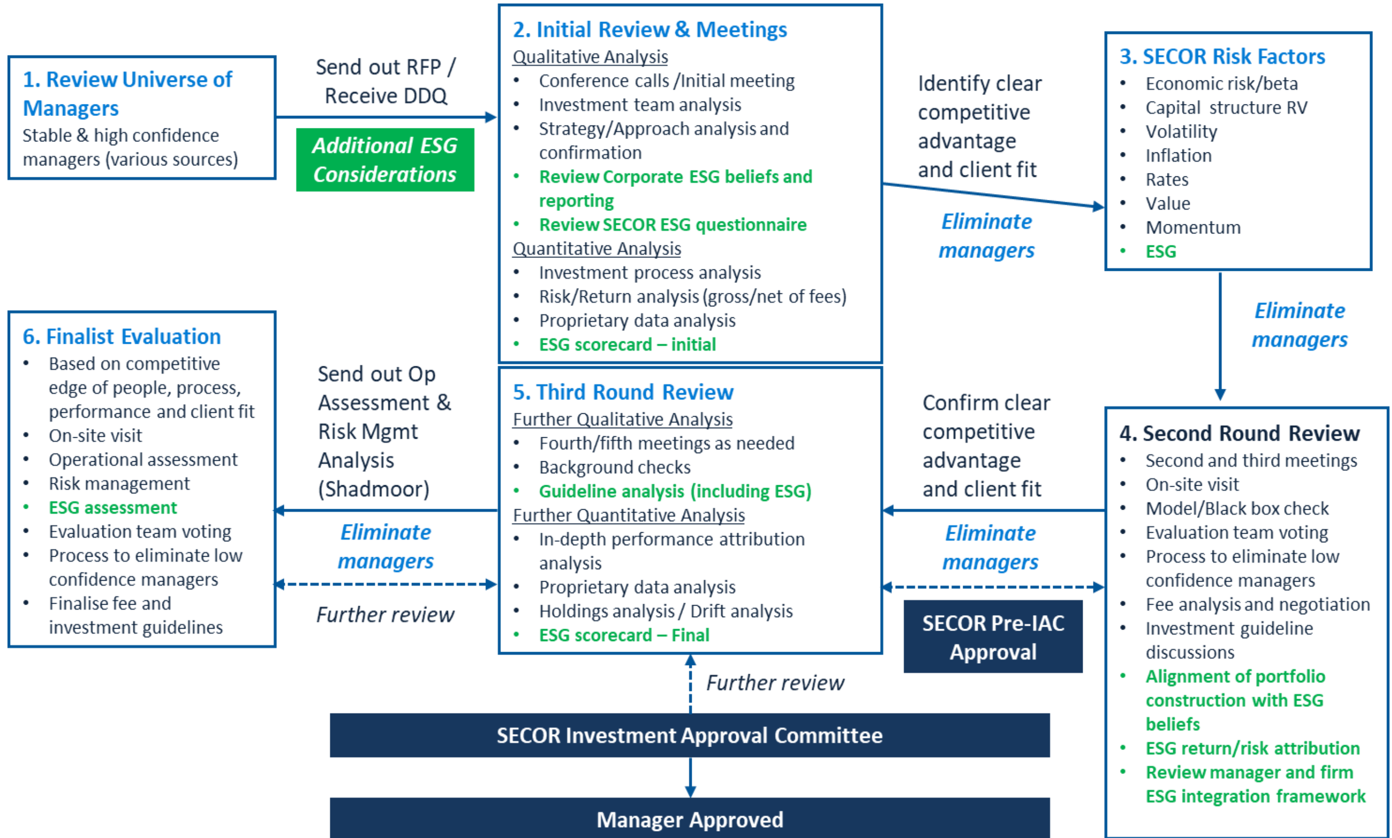
The Trustee engages with the Plan's service providers regarding carbon reporting improvements and the steps that could be taken to reduce emissions while maintaining the desired portfolio exposure.

Looking Ahead

We will continue to encourage all managers to produce data that aligns with current and future TCFD recommendations. We expect accuracy for these metrics to improve in the coming years as climate reporting becomes industry standard across public companies and public asset managers.

Appendices

Annex 1.I: SECOR's Multi-Stage Manager Selection Process



Annex1.II: Emissions Methodologies and Disclosures

Weighted Average Carbon Intensity (tCO2/$M Sales)

$$\sum_{i=1}^{n}(Weight_i \times CARBON_EMISSIONS_SCOPE_12_i \,/\, SALES_i) \,/\, \sum_{i=1}^{n}(Weight_i)$$

- i = index security with both carbon emissions (scope 1 and 2) and sales available
- $Weight_i$ = closing index weight for security i
- $CARBON_EMISSIONS_SCOPE_12_i$ = scope 1 and 2 carbon emissions of security i's issuer (in t CO2)
- $SALES_i$= Company sales for security i's issuer(in USD million)

Scope 1 and Scope 2 GHG emissions are allocated based on portfolio weights (the current value of the investment relative to the current portfolio value), rather than the equity ownership approach (as described under methodology for Total Carbon Emissions).

Total Carbon Emissions (tCO2e)

$$\sum_{i=1}^{n}(Weight_i \times Reported\ Emissions\ Factor_i)$$

- i = index security with both carbon emissions (scope 1 and 2) and EVIC available
- $Weight_i$ = closing index weight for security i
- $Reported\ EmissionsFactor_i$ = reported emissions factor for security i

Scope 1 and Scope 2 GHG emissions are allocated to investors based on an equity ownership approach. Under this approach, if an investor owns 5 percent of a company's total market capitalization, then the investor owns 5 percent of the company as well as 5 percent of the company's GHG (or carbon) emissions

Normalised Carbon Emissions

Formula

$$\frac{\sum_{n}^{i}\left(\frac{\text{current value of investment}_i}{\text{issuer's market capitalization}_i} * \text{issuer's Scope 1 and Scope 2 GHG emissions}_i\right)}{\text{current portfolio value (\$M)}}$$

Normalized Carbon Emissions is similar to Total Carbon Emissions, except that rather than providing the total carbon emissions for the portfolio it normalizes the carbon emissions for every $1,000,000 of market value. As a normalized metric, it can be used to accurately compare portfolios of any size.

Exposure to Fossil Fuel Intensive Assets

Description	The amount or percentage of carbon-related assets[34] in the portfolio, expressed in $M or percentage of the current portfolio value.
Formula for Amount	$\sum$ *$M current value of investments in carbon-related assets*
Formula for Percentage	$\frac{\sum \text{current value of investments in carbon-related assets}}{\text{current portfolio value}} * 100$
Methodology	This metric focuses on a portfolio's exposure to sectors and industries considered the most GHG emissions intensive. Gross values should be used.

This metric focuses on a portfolio's exposure to sectors and industries considered the most GHG emissions intensive.

Portfolio Alignment Metric Methodology

PACTA tool methodology[14]

The Paris Agreement Capital Transition Assessment (PACTA) is a tool which measures financial portfolios' alignment with various climate scenarios consistent with the Paris Agreement.

PACTA compares what needs to happen in climate-relevant sectors in order to minimize global temperature rises, with financial institutions' exposure to companies in the most relevant sectors. It employs a forward-looking approach, based on the 5-year production plans of companies to which a portfolio is exposed.

The methodology measures alignment per sector or per technology with consideration of what needs to happen to meet the goals of the Paris Agreement for that sector. Some sectors need to move more quickly than others; some sectors need to reform (such as power generation); and others need to phase out (for instance, fossil fuels).

The climate-relevant sectors currently covered by PACTA are power, coal mining, oil & gas upstream sectors, auto manufacturing, cement, steel, and aviation. Collectively, these sectors account for about 75% of global greenhouse gas emissions.

PACTA relies on physical, asset-based company data as the core analytical concept, which provides regional, sector-specific, and forward-looking production pathways that can be compared with various scenarios.

This core alignment functionality is complemented by a stress-testing module for investors that measures various climate scenarios' influence on asset prices.

Footer Notes

[14] PACTA tool methodology description as presented by 2° Investing Initiative (2DII). PACTA tool is developed by 2DII.