REDINGTON

TASKFORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) REPORT

31 March 2022 – 1 April 2023

PwC Pension Fund

Executive Summary

The Trustee of the PwC Pension Fund (the "Fund") has prepared the following statement in response to the Department for Work and Pensions Climate Change Governance and Reporting requirements and guidance (June 2021), which is built on the recommendations of the Taskforce on Climate-Related Financial Disclosures ("TCFD"). The regulation sets out four elements and a summary of the Fund's position against each element is given below:

Governance

Through the creation of a climate-related belief statement and TCFD framework document, the Trustee has created a governance structure which specifies roles regarding climate change risks and opportunities. Climate beliefs have been articulated within the climate-related belief statement. Further, the Trustee has received training on climate change risks and opportunities, carbon emission and targets, climate change scenario analysis, and stewardship to help in its understanding of how climate change may impact the Fund, and to provide appropriate scrutiny of the advice it receives.

Strategy

The Trustee has performed scenario analysis on the Fund to assess the potential impact of climate change under three different scenarios on the Fund's assets and liabilities. Under all stress scenarios, the Fund's funding level is projected to fall. Under a "Slow transition" scenario (where global temperature increases are kept below 2°C relative to pre-industrial levels), the Fund's funding level is projected to fall by 2.0%.

Risk Management

The Trustee recognises the Fund is exposed to climate change-related risks and it has created processes to identify, assess and manage these risks. These processes include conducting and reviewing the results of climate change scenario analysis, receiving climate change reporting from the Fund's investment advisor (including carbon emissions), and expecting the Fund's investment managers to have sufficient regard for climate change risk within their investment process.

The Trustee has considered and implemented changes to the investment strategy to limit exposure to climate-related risk and take advantage of climate-related opportunities. In order to do this, the Trustee considered the levers it could pull to manage climate-related risk, which included the following:

- **Making changes within mandates:** Enhancements to the Buy & Maintain mandates with LGIM and Insight were an example of the Trustee working to align the portfolio more closely with climate targets and the wider climate related beliefs of the Trustee. Changes included designing a strategy which aims to achieve a 50% emissions reduction by 2030 and applying exclusions to issuers from carbon intensive industries for all future purchases (such as coal).

- **Actively engaging with managers:** The Trustee regularly meets with its managers to ensure climate-related risks are integrated and managed within the investment process, as well as to assess and challenge them on their Environmental, Social, and Governance ("ESG") activities. In 2022, the Trustee met with each of its managers in annually scheduled manager meetings. Managers were challenged on key positions in the portfolio that face the most risk with respect to climate change. In addition, the Trustee's investment advisor conducts annual ESG reviews on each of its managers, challenging them where required on the level of climate integration in their mandates. The LGIM and Insight Buy & Maintain climate enhancements implemented in 2022 were a result of these discussions. Finally, the Trustee integrates the monitoring of climate risk metrics into its risk management framework and will expect any new mandates to appropriately integrate and consider climate risk as part of their investment process.

Metrics and Targets

To identify, assess and monitor climate-related risks, the Trustee measures the following metrics:

- Total greenhouse gas emissions of the Fund's assets ("absolute emissions metric");
- Carbon footprint – i.e. total carbon dioxide emissions for the portfolio per million pounds invested ("emissions intensity metric");
- Science Based Target initiative "SBTi" portfolio alignment metric ("alignment metric"); and
- Maintaining a climate risk budget based on the PRA Slow Transition stress test ("additional climate change metric")

The Trustee has set a target of maintaining a climate risk budget based on the Slow Transition scenario of less than 50% of the current Funding Ratio at Risk ("FRaR") budget, as it allows for monitoring of climate risk in the context of total risk and consideration of climate risk impact on future asset allocation decisions.

In addition, the Trustee has discussed an aspirational target to align the Fund's investment strategy with the goals of the Paris Agreement, i.e. to aim to reduce the greenhouse gas emission intensity of the Fund's assets to net zero by 2050. Given this is a long-term target, the Trustee has set an aspirational interim target of a 50% reduction of carbon footprint by 2030 (compared to a baseline as of 31 March 2022).

The Trustee will monitor these chosen metrics, and progress against the above targets, on an annual basis.

Introduction

This statement sets out the approach of the Trustee with regards to identifying, assessing, monitoring and mitigating climate-related risks in the context of the Trustee's broader regulatory and fiduciary responsibilities to Fund members. This is the first such report produced and is based on the year ended 31 March 2023 (in line with the Fund year-end).

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

This statement has been prepared in accordance with the regulations set out under the Department for Work and Pensions Climate Change Governance and Reporting requirements and guidance 2021, and provides a summary on how the Fund is currently aligning with each of the four elements set out in the regulations (and in line with the recommendations of the TCFD). Details on these elements are below:

- **Governance:** The Fund's governance around climate-related risks and opportunities.
- **Strategy:** The actual and potential impacts of climate-related risks and opportunities on the Fund's strategy and financial planning.
- **Risk Management:** The processes used to identify, assess and manage climate-related risks.
- **Metrics and Targets:** The metrics and targets used to assess and manage relevant climate-related risks and opportunities.

The following pages summarise the Trustee's current position with regards to the TCFD recommendations.

1. Governance

The Trustee Board has ultimate oversight for identifying, assessing and managing climate-related risks and opportunities which are relevant to the Fund.

There is a committee of the Trustee Board (the "Joint Investment Committee" / "JIC") that has been delegated the day-to-day responsibility for ensuring climate-related risks and opportunities are effectively integrated into the Trustee's investment strategy, risk management and overall decision-making. The JIC is comprised of Trustee-Directors of both the Fund and DH&S Retirement and Death Benefits Plan (collectively referred to as "the Schemes").

The Trustee has adopted a climate-related belief statement and TCFD framework document which document the Trustee's approach to identifying, assessing, and managing risks specifically related to climate change. The TCFD framework document provides additional detail regarding the roles and responsibilities of the Trustee Board, the Joint Investment Committee ("JIC"), and the Fund's external advisors in assessing, managing, and monitoring climate-related risks and opportunities. Both the climate-related belief statement and TCFD framework document have been taken into account when producing this report.

The specific roles and responsibilities of the Trustee Board, JIC and external advisors are summarised below:

- **Role of the Trustee Board**
    - Sets the overall investment and funding strategy and objectives, which includes the oversight of identification, assessment and management of climate-related risks and opportunities.
    - Approves climate-related metrics, targets and climate scenario analysis. Following recommendations from the JIC, the Trustee is responsible for approving the relevant metrics, targets and scenario analysis to allow climate-related risks and opportunities to be considered when setting the Fund's funding and investment strategy.
- **Role of the Joint Investment Committee ("JIC")**
    - Inform and make recommendations to the Trustee regarding climate-related risks and opportunities where this may result in a change to the overall investment strategy.
    - Appoint or terminate investment managers where appropriate in relation to climate-related risks and opportunities.
    - Responsibility to monitor how ESG and climate-related risks affect the Fund via annual training on relevant matters and developments (or more often as required)
    - Monitor and engage with the Fund's investment managers on how they measure and manage climate-related risks (including engagement activities which are carried out on the Trustee's behalf) and identify related opportunities as appropriate.
    - Review the output of the Fund's climate-related metrics and scenario analysis on a periodic basis.
- **Role of the External Advisors**
    - **Investment Advisor**
        - Advise on climate-related risks and opportunities including the provision of climate scenario analysis.
        - Review the Fund's investment managers to ensure ESG, including climate-related risks, are appropriately integrated into portfolio management.
        - Ensure it takes adequate steps to identify climate-related risks and opportunities, and that climate-related considerations are included in its annual objectives.
        - As part of the regular review of its investment advisor, the Trustee has set in place ESG and stewardship objectives to ensure the suitability of advice is consistently monitored and evaluated. This includes an annual assessment of how the investment advisor monitors ESG and stewardship (including climate change) within the Fund's investment strategy. The JIC receives a detailed report outlining the investment advisor's monitoring process and progress of the Fund's managers in integrating climate change and other ESG considerations.
    - **Legal Advisor**
        - Primary role with regard to climate change is to assist the Trustee in meeting its legal obligation.
    - **Actuary**
        - Provide funding advice and support on governance matters to the Trustee. In this role, the Trustee's actuary helps, to the extent relevant, the Trustee in considering the impact of climate-related risks and the impact this has on the Fund's funding.
    - **Covenant Advisor**
        - Provide the Trustee with a view as to the potential impact of climate-related risks and opportunities on the Sponsor and therefore on its ability to support the Fund.

When considering recommendations, the JIC and Trustee Board challenge its advisors where appropriate to ensure robust thinking supports the recommendations being put forward. In keeping with this governance structure, this Statement has been reviewed by the JIC and approved by the Trustee Board.

The Trustee has articulated its climate-related beliefs as follows:

Monitoring climate-related risks and opportunities

The Trustee's approach to managing climate-related risks and opportunities is rooted in its responsibility to act in the best financial interests of its members.

The Trustee believes that climate change presents material risks to the long-term stability and resilience of the global economy, and so to all available investment opportunities. Swift and robust action is required to reduce global emissions to net zero by 2050 to mitigate the worst outcomes of climate change. This responds to one of the key goals of the Paris Agreement: to limit global temperature increases by the end of this century to well below 2°C, and ideally 1.5°C, above pre-industrial temperatures.

In this context, the Trustee believes that climate change is likely to be a financial risk that will affect all the Fund investments to some degree. It is therefore in the best financial interests of its members for the Trustee to invest in a manner that is measurably aligned with achieving the goals of the Paris Agreement.

The Trustee believes that climate-related financial risks need to be considered alongside and balanced against other relevant investment risks and considerations when evaluating investments. The Trustee therefore acknowledges that it may not always be able to minimise or eliminate climate-related risk if doing so would be to the detriment of wider strategic objectives.

The Trustee monitors the carbon emissions of its investment portfolio, and within a reasonable timeframe will set a robust reduction target that is consistent with its wider funding journey plan. The Trustee is mindful of making investment decisions that reduce measurable portfolio emissions but have limited measurable benefit to the risk/return profile of the portfolio. The Trustee has a preference for forward-looking climate metrics as these allow for better informed risk-based decisions.

The Trustee integrates the monitoring of climate risk metrics into its wider risk management framework and considers these when making all investment decisions. The Trustee does not believe that it can rely solely on financial markets to price in climate-related risks quickly or accurately enough. The risks arising from climate change should therefore also be actively managed by asset managers where this is possible and appropriate.

The Trustee recognises that investment opportunities will be available that positively contribute to mitigating climate change and achieving the goals of the Paris Agreement. The Trustee will seek out these opportunities and invest when appropriate and consistent with its wider investment objectives.

The Trustee also believes it should be conscious of the real-world impact of its investment decisions. The Trustee can contribute to achieving the goals of the Paris Agreement, i.e. be impactful, through investing in climate solutions, effective engagement through its asset managers but also through its divestment decisions.

When making divestment decisions, the Trustee believes that the transfer of assets within secondary markets will not necessarily be impactful but may reduce exposure to climate-related risks.

Engagement

The Trustee believes that engagement (including the exercise of voting rights) is an effective means of helping to manage the Fund's climate-related risks. Engagement with underlying companies (as well as other relevant organisations) is carried out primarily by investment managers on behalf of the Trustee.

The Trustee may disinvest from businesses or asset managers who are inadequately managing their climate-related risks if attempts to engage with these parties to address this are not successful.

The Trustee will work collaboratively with asset managers and relevant industry stakeholders to set Fund-wide objectives for the engagement activities that are carried out on the Trustees' behalf.

The JIC regularly updates the Joint Trustee Board on key investment matters, including climate-related risks and opportunities. These updates are provided quarterly and are included as a standing item on both the Joint Trustee Board and JIC agendas. This approach ensures that climate-related issues and proposals are consistently considered alongside other important investment matters by the Trustee. For instance, in 2022 the JIC provided an update to the Trustee on climate enhancements to the Fund's Buy & Maintain mandates. The Trustee also receives annual reporting from its investment advisor which contains information on the relevant metrics and targets selected for monitoring as outlined in "4. Metrics and Targets".

Both the Trustee as a whole and the JIC have received training on climate change-related risks and opportunities, and TCFD recommendations. Training sessions are designed to ensure the Trustee and/or JIC had sufficient knowledge to make informed decisions on TCFD recommendations, and to provide appropriate scrutiny of the advice they receive. Training sessions included:

- Climate change as an investment risk and changing regulation
- Climate change-related metrics and targets
- Climate change scenario analysis and portfolio alignment metrics
- Stewardship and how this can be used to manage risks and meet sustainability objectives, including climate change

Following advice from the Fund's external advisors, members of the PwC Trustee Services Team also assist in the implementation of climate-related enhancement. They may undertake climate training on climate change risks and opportunities, carbon emission and targets, climate change scenario analysis, and stewardship to help in their understanding of how climate change may impact the Fund.

The Trustee is satisfied with the current allocation of time for addressing climate-related risks and opportunities. The Trustee will review this allocation periodically and allocate more time in future if needed.

2. Strategy

The Trustee considers climate-related risks and opportunities and their potential implications on the Fund's investment and funding strategy over the short-term, medium-term, and long-term. The consideration of these factors is incorporated throughout the investment process, from strategic asset allocation to manager selection and portfolio monitoring.

The Trustee acknowledges each of its investments is exposed to climate-related risks to varying extents, and has identified two specific risks which could impact the Fund's investment and funding strategy:

- Physical risks, i.e. those that arise from both gradual changes in climatic conditions and extreme weather events; and
- Transition risks, i.e. risk of re-pricing which would occur as part of the move to a low-carbon economy.

The Trustee has, and will continue to explore investment opportunities which are both appropriate for the Fund from an investment perspective and aligned with the goals of the Paris Agreement of avoiding dangerous climate change by limiting global warming to well below 2°C, ideally 1.5°C, above pre-industrial temperatures. These include, for example, enhancing existing credit strategies to include exclusions of high emitting sectors and exploring strategies which invest in companies which seek to benefit from the transition to a low-carbon economy. The Trustee believes that investing in such opportunities can be neutral or even positive from a traditional risk/return perspective and is therefore consistent with its fiduciary responsibility.

The Trustee, on an ongoing basis, assesses the impact of the identified climate-related risks and opportunities on the Fund's investment strategy and funding strategy. In order to assess the impact on the Fund's assets and liabilities, the Trustee undertakes scenario analysis consistent with the PRA's Life Insurance Stress Tests ("the PRA stress test scenarios"), as recommended by the Pensions Climate Risk Industry Group ("PCRIG"). The stresses are designed to show what the impact on the value of the Fund's funding level could be in the following scenarios:

- Scenario A (Fast Transition): Abrupt transition to the Paris-aligned goal occurring over a three year time period (temperature increase kept below 2°C relative to pre-industrial levels).
- Scenario B (Slow Transition): Orderly transition to the Paris-aligned goal occurring by 2050 (temperature increase kept well below 2°C relative to pre-industrial levels).
- Scenario C (No Transition): A no-transition scenario occurring in 2100 (temperature increase in excess of 4°C relative to pre-industrial levels).

The Trustee has conducted this analysis to the best of its ability and further detail on the limitations can be found in appendix A.

The results of these scenarios are summarised below.

Scenario Analysis

This shows impact on the Fund's funding position, via the projected change in value of the Fund's assets and liabilities.

Scenario	A - Fast Transition (3 years)	B - Slow Transition (by 2050)	C - No Transition (by 2100)
Funding Level Change	**-1.9%**	**-2.0%**	**-1.9%**

The results of the scenarios provide the Trustee with an overview of how resilient the current investment strategy is with regards to various different climate change outcomes. The results above are based on the Fund's current investment strategy and as such the Trustee notes that as the Fund continues to de-risk over time from return-seeking assets, the results are expected to improve.

The JIC and Trustee assess the results of these climate scenarios on the Fund's investment and funding strategy and incorporate them into the investment decision-making process. For example, the Fund has set a target to maintain the funding level stress based on the PRA Slow Transition scenario at less than 50% of the current FRaR budget, against which the Fund continues to be within tolerance.

Further information on scenario analysis can be found in Appendix A.

Appropriate time horizons

The Trustee notes the assessment of climate-related risks and opportunities may vary depending on the time horizon in question. The Trustee therefore assesses climate risks and opportunities over the following time horizons and considers the potential impact of these on its funding strategy:

- Short-term risks and opportunities may include price movements resulting from increased regulation directed at addressing climate change (i.e. mostly transition risk).

- Over the medium term it is expected that there will be changes in consumer spending habits following changes in technology, such as the uptake in electric vehicles or a reduction in overseas travel. Physical risks are likely to start to manifest more substantially and more frequently (i.e. some transition and some physical risk).

- Longer-term risks may include physical damage to real assets as a result of rising sea levels for coastal property or infrastructure assets; there may be opportunities for outperformance for organisations that put in place strategies to mitigate these potential risks well in advance of them materialising (i.e. mostly physical risk).

The table below sets out the time horizons chosen by the Trustee:

	Time horizon
Short term [1]	3 years (in line with the triennial actuarial valuation cycle)
Medium term	7 years (in line with the Fund's low dependency target date of 2030)
Long term	27 years (in line with discussions around the Fund's aspirational target of achieving Net Zero carbon intensity by 2050)

[1] Given the Fund's strong funding position, the Trustee views this time horizon as the most relevant to the Fund.

Impact of climate scenarios on Fund liabilities

The results of these climate scenarios reflect the impact to the Fund's funding position as a result of changes in both assets and liabilities. The Trustee notes that two of the three key liability related risks (interest rate and inflation) are suitably hedged via the Fund's Liability-Driven Investment ("LDI") strategy. Therefore the Fund is not overly exposed to changes in these metrics and they are expected to have a minimal impact.

The third (and largest) liability-related risk facing the Fund is longevity / mortality risk. The Trustee notes that there is currently little consensus in the industry as to how these longevity / mortality impacts should be incorporated into climate scenario analysis, and that the results can vary drastically. On this basis, the Trustee has discussed this matter with the Fund actuary, and the Fund actuary has run a scenario analysis to assess the impact of changes in mortality as a result of climate change. The analysis has been based on a warming scenario broadly equivalent to a PRA no transition scenario and the actuary concluded that under this scenario, the impact on liability values is expected to be minimal as the decrease in cold-related mortality is expected to cancel out projected heat-related mortality. It expects the impact on liabilities to remain small across the other less extreme scenarios. The results of this analysis are yet to be included in the Fund's scenarios on a quantitative basis as the Trustee notes that disclosure and industry best practice are expected to develop over time and will engage with its actuary as this thinking evolves.

Impact of climate scenarios on Fund's sponsoring employer

The Trustee has engaged with its covenant adviser to understand how the Fund's sponsoring employer (known as its "covenant") would be impacted by various climate scenarios.

The impact of the chosen climate scenario is focused on a Paris-aligned scenario and a No mitigation scenario akin to the PRA slow transition and no transition scenario. Given the size of outstanding deficit repair contributions relative to the sponsor's profits and cashflow, the impact of climate risks on the affordability of contributions or the likelihood of them being paid, is expected to be low over the relatively brief period of the remaining recovery plan. In addition, the covenant advisor does not consider there to be a material risk to the employer covenant, such that the risk of being downgraded from its current rating of Strong over the current valuation period as a result of climate risks is unlikely. This is supported by:

- The funding level of the Fund when compared to the resources of the sponsor and the timeline over which climate related risks and scenarios might emerge.
- PwC's operations are not as directly exposed to climate-related risks compared with other industries such as manufacturing or aviation.
- With regard to PwC's own net zero targets, it is taking actions in line with peers and keeping pace with its market.
- Growth opportunities for PwC due to climate change (e.g. advising organisations on how to better manage climate-related risks).

When considering the Fund's diversified investment strategy, high levels of liability hedging and strong covenant, the Trustee believes that the overall funding strategy would be resilient to a range of climate outcomes.

3. Risk Management

Identifying and assessing Climate Risk

As set out in section "2. Strategy", the Trustee recognises the Fund is exposed to climate change-related risks in the form of transition and physical risk.

The Trustee considers the impact of these climate change-related risks on all of the assets in which it invests through conducting and reviewing the results of climate-related stress tests on a periodic basis.

Climate change is also included in the Fund's risk register and reviewed as part of the wider risk management framework.

The Trustee also receives additional climate-related reporting from its investment advisor on an annual basis. This reporting contains relevant climate metrics as set out under DWP's adoption of the recommendations of the TCFD (and as further discussed under section "4. Metrics and Targets"). This allows the Trustee to better identify and manage the climate-related risks which are relevant to the Fund on an ongoing basis.

The Trustee considers the results of climate scenario analysis and assesses four climate metrics (described under "4. Metrics and Targets") as the primary risk identification process. In addition, the Trustee also expect their investment managers and advisors to highlight where climate risks are identified.

In considering the results of the Fund's metrics with their advisors, the Trustee identified the Fund's Buy & Maintain portfolios as an area for prioritisation due to the size of the allocations and their relatively high contribution to the carbon intensity of the portfolio. Subsequent steps taken by the Trustee to manage risk are outlined below.

Management of Climate Risk

The Trustee believes that engagement carried out by the Fund's investment managers with underlying companies is an effective means of helping to manage the Fund's climate-related risks. Engagement with the investment managers themselves is largely carried out on behalf of the Fund by its investment advisor. Throughout this engagement process, fund managers are asked to provide details of how climate-related risks and opportunities have been incorporated into the investment process within applicable guidelines and restrictions. Since year-end, the Trustee has been considering formalising climate change as a stewardship priority. In future, the Trustee may seek to understand and assess the stewardship activities of the Fund's fund managers, particularly relating to climate change, in greater detail.

Active engagement with underlying companies in which the Fund is invested, specifically relating to climate-related risks and opportunities, is delegated to the Fund's fund managers.

Actively engaging with managers

For all appointed fund managers, evaluation of ESG risk management, which includes climate-related risks, is an explicit part of both the selection process and continued due diligence or monitoring that the Trustee undertakes. The Trustee also relies on the manager research capabilities of its investment advisor to assess each manager's ability to effectively integrate climate-related risks and opportunities. In addition, the Trustee meets with its managers annually to assess and challenge them on their ESG activities. In 2022, the Trustee met with each of its managers in annually scheduled manager meetings. Managers were challenged on key positions in the portfolio that face the most risk with respect to climate change. The Fund also incorporated climate enhancements into its existing Buy & Maintain mandates with LGIM and Insight after conducting analysis with its investment advisor during its 2022 annual strategy review. This analysis, which focused on ESG factors, prompted engagement with investment managers to make adjustments to the portfolios to improve their climate profile.

In addition, the Trustee's investment advisor conducts annual ESG reviews on each of its managers, challenging them where required on the level of climate integration in their mandates.

Making changes within mandates

In 2022, the Fund incorporated climate enhancements into its existing Buy & Maintain mandates. This resulted in exclusions of sectors with high emissions (e.g. Coal). The Fund's Buy & Maintain portfolios are the mandates where the Trustee can have the largest impact both because they are segregated and because they contribute a relatively high proportion to the carbon intensity of the overall portfolio. In addition, The Fund has provided its LDI manager discretion to invest in green gilts within the existing mandate guidelines when the manager believes doing so will be beneficial to performance, liquidity, or risk management.

4. Metrics and Targets

Four metrics adopted to assess climate-related risks and opportunities faced by the Fund:

With regard to quantitative metrics, the Trustee – on an annual basis – monitors and reports:

- Total greenhouse gas emissions of the Fund's assets ("absolute emissions metric"). This is the absolute emissions metric recommended by the DWP;
- Carbon footprint – i.e. total carbon dioxide emissions for the portfolio per million pounds invested ("emissions intensity metric"). This is the emissions intensity metric recommended by the DWP;
- SBTi portfolio alignment metric ("alignment metric"). This metric examines whether a voluntarily disclosed company decarbonisation target is aligned with a relevant science-based pathway. There is evidence that companies that have set science-based targets are delivering emissions reductions in line with their ambitions, making this a key metric to monitor to drive positive change.
- The result of the "Slow Transition PRA stress tests" (the "additional climate change metric") – this has been chosen on the basis that it is a useful metric to understand the sensitivity of the portfolio to climate-related risks – details can be seen in Appendix A.

The Trustee receives these metrics on an annual basis from its investment advisor and will periodically review its selection of metrics to ensure they remain appropriate for the Fund. In addition, the Trustee has also gone through the process of setting an explicit target for the Fund which is aligned with the Trustee's climate-related beliefs.

For the purpose of this analysis, emissions from gilts and cash are currently excluded due to carbon accounting methodologies not being sufficiently developed in these areas, meaning the Trustee was not able to calculate the metrics using data available. The Trustee will keep abreast of best practice and engage with the relevant investment manager as guidance on reporting develops.

The below tables set out the results of each of the Trustee's chosen metrics broken down by broad asset class:

PwC Pension Fund:

Asset Class (% of Total Portfolio)	Absolute Carbon Emissions (tCO_2e) (Scopes 1+2)	Carbon Footprint (tCO_2e/EVIC £m) (Scopes 1+2)	Science Based Targets Initiative Rating	Slow Climate PRA Stress Impact on Funding Level
Liquid Markets (4%)	3,561	29.8	0.0%	-0.5%
Liquid Credit (57%)	54,330	74.3	20.8%	-1.7%

Total Portfolio	**57,890**	**68.1**	**17.9%**	**-2.0%**

[1] Science Based Targets Initiative are based on look through data where it is available and never proxied.
[2] Funding level stress is at the total Fund Level.
Please note the Carbon Footprint and SBTi "Total Portfolio" figures in this table are weighted averages of the portfolio and therefore the total may not equal the sum of the individual asset class values shown above. For the PRA climate stress, the Total Portfolio includes liabilities and LDI impact on the funding level, and therefore the total may not equal the sum of the individual asset class values shown above.

Trustee's target(s)

The Trustee has set targets which are aligned with the Trustee's climate-related beliefs and are complementary to the Fund's wider objectives.

For the non-emissions-based climate change metrics, the Trustee has opted to utilise the PRA slow transition stress test (setting a target of maintaining a climate risk budget based on the Slow Transition scenario of less than 50% of the current Funding Ratio at Risk ("FRaR") budget), against which the Fund continues to be within tolerance. This allows for monitoring of climate risk in the context of total risk and consideration of climate risk impact on future asset allocation decisions. The Trustee notes that this is a pragmatic first target which is readily available to report on; however, this metric may be reconsidered in the future as climate reporting methodologies evolve.

The Trustee has also discussed an aspirational target to align the Fund's investment strategy with the goals of the Paris Agreement, i.e. to aim to reduce the greenhouse gas emission intensity of the Fund's assets to net zero by 2050. Given this is a long-term target, the Trustee has set an aspirational interim target of a 50% reduction of carbon footprint by 2030 (compared to a baseline as of 31 March 2022).

The Trustee has begun considering the feasibility of both targets by considering the anticipated changes in the Fund's asset allocation over time. As a closed Scheme with a short to medium-term investment horizon, the Trustee has some scope to consider other potential investments which could help in the achievement of both targets and are also consistent with the Fund's other investment objectives. On an annual basis, the Trustee will measure performance against targets and review whether these targets should be updated or replaced.

Trustee assessment of metrics and targets as at 31 March 2023

The Trustee notes that metrics and targets stated above are embedded in the governance, strategy, and risk management processes via their inclusion in the ESG dashboard reporting provided to the Trustee by its investment advisor. On an annual basis, the Trustee measures performance against this target and furthermore determines whether this should be retained or replaced.

The absolute carbon emissions reported above demonstrate the total share of direct and indirect Scope 1 and 2 emissions for which the Fund's assets are responsible and is therefore an indication of the Fund's total financed emissions. Of the Fund's asset classes, liquid credit is responsible for the majority of the Fund's absolute emissions at 54,330 tCO_2e.

The Fund's carbon footprint reveals how carbon efficient the portfolio is per million pounds invested. This measure provides an insight into the carbon intensity of the Fund's assets, so is a useful measure to identify the Fund's stage in its decarbonisation journey. Relative to the baseline as of 31 March 2022, the Fund's carbon footprint (Scope 1+2) reduced by 26% as at 31 March 2023.

The 'Slow Transition' PRA stress test monitors the Fund's exposure to climate risk which is broadly aligned with the Paris Agreement. This provides an indication of the direction and magnitude of climate risk the Fund is exposed to, whereby the Fund's funding level is projected to fall by 2.0% as at 31 March 2023.

The SBTi portfolio alignment metric (available for the Fund's liquid markets and liquid credit mandates) indicates 20.8% of the Fund's liquid credit assets have science-based decarbonisation targets approved by the SBTi. Due to the small proportion allocated to liquid markets, the SBTi portfolio alignment metric for liquid markets is 0%.

Further details can be found in Appendix B. Absolute and % intensity metrics have been modelled at an asset class level by the investment advisor wherever data coverage for a particular fund is below 50%. This is the first time this analysis has been carried out, and the expectation is that the output will evolve over time as data availability is likely to improve. As and when new data becomes available, the Trustee will review the targets which have been set to ensure they remain appropriate in light of this new information.

The Trustee uses these results to identify tools which will help manage climate-related risks and opportunities which are relevant to the Fund, and to meet the targets set out above. These might include, for example, engaging with fund managers who have material carbon intensity levels or with other industry participants, exploring low-carbon alternative investment options, and updating investment guidelines for managers where the Trustee has discretion to make such changes (similar to some of the work already done, as described previously).

Note: All analysis is provided by the Funds investment advisor, and the data in the report is sourced from MSCI©. Please refer to the data disclaimer in Appendix B.

Appendix A:

Scenario Analysis

As part of its 2020 biennial stress tests, the Bank of England's Prudential Regulation Authority ("PRA") conducted an exploratory exercise to test the impact of future climate change scenarios on the assets and liabilities of (re)insurers, using predictions by the Intergovernmental Panel on Climate Change ("IPCC") and academic literature as the basis for their modelling assumptions.

Using the same methodology, the investment advisor has constructed similar tests that allow the Trustee to examine the impact on the funding position, via the effect on asset values and liabilities, of the Fund under three scenarios.

The magnitude of each of the physical and transition shocks varies across industries under each scenario, meaning some assets may fare better or worse under one scenario compared to another. For "Fast Transition": the asset downside comes almost entirely from transition risk. For "Slow Transition": the asset downside comes from a mix of transition risk and physical risk. For "No Transition": the asset risk is entirely physical risk.

In terms of the assumptions made under these scenarios, the PRA recognised that feedback loops between climatic shocks and structural economic change need to be incorporated when assessing the financial impacts on businesses of physical and transition risk under each emissions scenario. However, due to existing modelling and data constraints, this is a complexity that is purposely excluded from the modelling.

There is also an acceptance that the timing and sequence of financial impacts will be complex, as behavioural changes could result in physical risks preceding transition risks and vice versa. For the purpose of simplicity, where an asset is subject to both physical and transition risk, the shocks are applied consecutively, with the physical shock applied second.

Portfolio Alignment

The Trustee has agreed to adopt the Science Based Targets Initiative (SBTi) as its chosen fourth metric, which examines whether a voluntarily disclosed company decarbonisation target is aligned with a relevant science-based pathway.

As part of SBTi, a company or issuer will sign a commitment to self-develop a single or multiple pathways to reduce greenhouse gas ("GHG") emissions, with 24 months to develop this pathway, submit it for SBTi validation and publish the approved target. The Company/Issuer's chosen decarbonisation target can be aimed at one or all of: the short term, long term or Net Zero, with each company being scored with a binary yes or no assessment on the following target categorisations: "SBTi Approved 1.5 C", "SBTi Approved Well Below 2 C" or "SBTi Approved 2 C". These categories indicate the expected global temperature increase based on the company or issuer's target. Should a company/issuer's decarbonisation pathway not comply with either of the Paris-aligned targets, it will be assigned a 'Not Committed' rating.

Using line-by-line data, the investment advisor can calculate the proportion of assets invested within each fund the Fund is invested in, that correspond to each SBTi score classification, ignoring negative allocations. Where line-by-line data is not available, managers can also provide these proportions if they have access to the data. A scheme-level score is calculated as the value weighted average of the fund level scores (i.e. for an example Scheme XYZ, that is 50% invested in Fund X with an SBTi score of 20% and 50% invested in Fund Y, with an SBTi score of 40%, the Scheme-level aggregate SBTi score

(30%) is calculated through a weighted average of the fund's weight within the portfolio and SBTi score).

Appendix B:

Carbon footprint analysis

- Climate reporting as of 31 March 2023 can be found on the following pages. This reporting includes the chosen four metrics as described under "4. Metrics and Targets".
- Where possible and where there is reasonable data coverage, the Trustee monitors 'line-by-line' emissions reporting for funds. These tend to be more generic, long-only asset classes such as listed equity and corporate credit. However, for funds with less than 50% coverage, the Trustee monitors 'asset class level' carbon estimates in the absence of reliable, reported line-by-line emissions data from MSCI. The Trustee notes that using asset class modelling of emissions for assets where this data is not available enables a more holistic view of the Fund's total portfolio emissions, albeit recognising that the modelled data is not perfect.
- The analysis in Appendix C contains estimates of the Fund's scope 3 GHG emissions, i.e. the "financed emissions" associated with the Fund's investments. The Trustee acknowledges the impact its own actions may have and does consider them, but the Fund's scope 1 and scope 2 emissions (e.g. the use of fuel and electricity in office buildings) are nominal in comparison to scope 3 emissions (i.e. the emissions arising from investments). Definitions of scope 1, 2 and 3 emissions can be seen in the Glossary of Terms in Appendix C.
- The asset class modelling of emissions has been provided by the Trustee's investment advisor and is based on asset class 'building blocks'. These are either calculated directly using a given index's underlying holdings emissions (such as using Intercontinental Exchange Bank of America Merill Lynch ("ICE BofAML") US Corporate Index as a proxy for a broad credit fund) or in some cases these indices are used and extrapolated to other asset classes based on given assumptions.
- Emissions metrics have been calculated in line with the GHG Protocol Methodology, the global standard for companies and organisations to measure and manage their GHG emissions. The GHG Protocol provides accounting and reporting standards, sector guidance and calculation tools. It has created a comprehensive, global, standardised framework for measuring and managing emissions from private and public sector operations, value chains, products, cities and policies to enable greenhouse gas reductions across the board.
- The Trustee recognises that there can be some degree of double counting in including scope 3 emissions for all investments in the same portfolio (due to the potential supply chain relationships between companies within the portfolio). For this reason, scope 3 emissions figures have been adjusted for double counting by applying a de-duplication multiplier of 0.22 to all portfolio companies' scope 3 emissions. This is the discount factor used by the Group's ESG data provider and it is based on the relationship between the total scope 1 and scope 3 emissions of a company. In this way the discount factor is designed to reduce the portfolio's aggregated scope 1, 2 and 3 emissions down to a level more closely reflecting the real-world footprint. The climate metrics reporting the Trustee receives from its investment advisor reports "scope 1 & 2" and "scope 3" data separately before aggregating, in an effort to improve transparency.

Appendix C: SBTi and MSCI Climate Metrics Output

Fund	Fund Value (£m)	MSCI Climate Metrics Coverage %	Absolute Carbon Emissions (tCO2e)				Carbon Footprint (tCO2e / EVIC £m)			
			Current – Scope:		Previous – Scope:		Current – Scope:		Previous – Scope:	
			1+2	3	1+2	3	1+2	3	1+2	3
Liquid Markets (Equities)										
LGIM Volatility Controlled Equity with Put Portfolio	-.3	-	2,903	15,329	4,259	18,979	45.3	239.1	46.0	205.0
Liquid Markets (Multi-Asset)										
Bridgewater Optimal Portfolio Fund	55.5	-	658	16,194	4,656	28,404	11.8	291.7	50.0	305.0
Liquid and Semi-Liquid Credit										
Brigade Credit Offshore Fund II	51.2	-	8,099	33,148	18,692	85,002	158.1	647.0	179.0	814.0
CQS Credit Multi Asset Fund	91.0	-	13,713	55,697	26,167	108,469	150.7	612.1	179.0	742.0
Insight Buy & Maintain Global Credit Portfolio	218.5	93.4%	12,596	84,386	18,976	101,996	57.6	386.1	80.0	430.0
LGIM Global Buy & Maintain Credit Portfolio	271.2	90.3%	11,966	70,182	18,106	82,958	44.1	258.8	55.0	252.0
Payden & Rygel Absolute Return Bond Fund	99.0	89.2%	7,956	43,327	12,197	64,584	80.4	437.6	105.0	556.0
TOTAL PORTFOLIO	**786.1**		**57,890**	**318,263**	**103,053**	**490,392**	**68.1**	**374.2**	**92.1**	**438.3**

All “Current Total Portfolio” figures in this table are weighted averages with the exception of “Fund Value” and “Absolute Carbon Emissions (tCO2e)”.
“Absolute Carbon Emissions (tCO2e)” is calculated using the notional value of the fund. “Fund Value (£m)” shows the mark-to-market value of the fund. Emissions from gilts and cash are currently excluded due to carbon accounting methodologies not being sufficiently developed in these areas.
“Previous” figures show climate metrics from 12 months prior to 31 March 2023 figures. Fund-level “Previous” figures may not sum to the “Previous Total Portfolio” figures because the “Total Portfolio” values may contain funds that have now been divested from and are not reported in this table.
Carbon metrics are proxied where there is insufficient data for funds. In these instances, no figure is shown for MSCI Climate Metrics Coverage.
ESG and MSCI Carbon Metrics meet the current minimum UK DWP's TCFD-aligned “Metrics and Targets” regulations. However, regulations are subject to change. The investment advisor monitors developments closely.

Fund	Fund Value (£m)	Science Based Targets initiative Rating		Weighted Average Carbon Intensity (tonnes)		PRA Slow Climate Stress	
		Current	Previous	Current	Previous	Current	Previous
Liquid Markets (Equities)							
LGIM Volatility Controlled Equity with Put Portfolio	.3	-	-	116.7	121.4	-0.2%	-
Liquid Markets (Multi-Asset)							
Bridgewater Optimal Portfolio Fund	55.5	-	-	32.9	108.8	-0.3%	-
Liquid and Semi-Liquid Credit							
Brigade Credit Offshore Fund II	51.2	4.0%	-	370.1	375.1	-0.2%	-
CQS Credit Multi Asset Fund	91.0	5.1%	-	310.8	331.8	-0.3%	-
Insight Buy & Maintain Global Credit Portfolio	218.5	33.8%	-	184.5	287.2	-0.4%	-
LGIM Global Buy & Maintain Credit Portfolio	271.2	24.4%	-	216.4	457.1	-0.7%	-
Payden & Rygel Absolute Return Bond Fund	99.0	5.5%	-	223.6	286.5	-0.1%	-
TOTAL PORTFOLIO	**786.1**	**17.9%**	**-**	**207.3**	**331.4**	**-2.0%**	

All “Current Total Portfolio” figures in this table are weighted averages with the exception of “Fund Value” and “ITR” where it is presented.
“Previous” figures show climate metrics from 12 months prior to 31 March 2023 figures. Fund-level “Previous” figures may not sum to the “Previous Total Portfolio” figures because the “Total Portfolio” values may contain funds that have now been divested from and are not reported in this table.
Where presented, “Science Based Target initiative” or “TPI” scores are all based on lookthrough data where it is available and never proxied. “ITR” is only proxied where there is insufficient data.
Please note the total portfolio PRA climate stress includes liabilities and LDI impact on funding level, and therefore the total may not equal the sum of the lines above.
ESG and MSCI Carbon Metrics meet the current minimum UK DWP's TCFD-aligned “Metrics and Targets” regulations. However, regulations are subject to change. The investment advisor monitors developments closely.

Glossary of Terms (Carbon Metrics)

Enterprise Value Including Cash (EVIC): Defined as the sum of market capitalisation of shares and book values of total debts and minority interests at fiscal year-end. No deductions of cash or cash equivalents are made to avoid potential negative enterprise values. This is the recommended denominator metric for carbon attribution according to the GHG Protocol, the global standard for carbon accounting endorsed by the European Union and the DWP.

Estimated Total Mandate Carbon Emissions (tons): Represents the total share of Scope 1, Scope 2 and Scope 3 carbon emissions a fund is responsible for. Please note the metric is sensitive to the investment holding size in the fund.

PRA Slow Transition Climate Scenario Analysis: The investment advisor's extrapolation of a stress test constructed by the Prudential Regulation Authority ("PRA") to explore the % impact of future climate change on assets. A slow transition assumes a long-term, orderly transition that is broadly in line with the Paris Agreement out to 2050.

Scope 1 & 2 Carbon Footprint (tCO2e / EVIC £m): Measurement of the Scope 1 & 2 CO2e emissions of a fund per million pounds of EVIC. Scope 1 emissions refer to those which are directly connected to the production of a company's product or service e.g., burning of fossil fuels to power the electricity grid. Scope 2 emissions refer to those from electricity used to power company facilities. For a pension scheme, scope 1 emissions include the use of gas fuel and refrigerants in the office whilst scope 2 emissions include the use of electricity in the office buildings.

Scope 3 Carbon Footprint (tCO2e / EVIC £m): Measurement of the estimated Scope 3 CO2e emissions of a fund per million pounds of EVIC. Scope 3 emissions refer to all those that are not in direct control of a company's productive activities. Namely, all those emissions from a company's upstream supply chains and downstream product use by the consumer.

MSCI Climate Metrics Coverage: The proportion by value of a fund for which carbon metrics are available from MSCI. Climate metrics are proxied where coverage is low and in this case, the MSCI Climate Metrics Coverage will be assumed to be "-".

SBTi Score: The Science-Based Targets initiative ("SBTi") sets out a framework through which companies can set out their decarbonisation pathway and have them assessed against the goals set out in the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels or well-below 2°C. The SBTi Score is the proportion of assets invested that are classified as being Paris-aligned.

Tons of Carbon Dioxide Equivalents (tCO2e): Tons of greenhouse gases including methane, nitrous oxide, carbon dioxide, and fluorinated gases. Given the abundance and prominence of carbon as a greenhouse gas, all the other gasses are considered carbon equivalents.

Limitations of Carbon Metrics

- TCFD based regulations require portfolios to report on their climate metrics without asset class adjustments. Therefore, metrics in funds with a lower coverage (below 80%), or in multi-asset funds and liquid / semi-liquid credit need to be evaluated with more context. This is because a low coverage means a larger part of emissions are unknown, and because the carbon risk of equity holdings will tend to be higher than that of credit holdings.
- Specific line-by-line modelling of emissions is currently available only for publicly listed equity and credit assets. For unlisted asset classes, the investment advisor has reported asset class-level estimations of carbon emissions. This provides a broad and longer-term understanding of what the portfolio's emissions are and where the biggest amount of emissions come from. The investment advisor believes this is appropriate from a strategic asset allocation perspective, but will not capture specific actions managers are taking to reduce their CO2e footprint.
- Due to lags in company carbon reporting and database updates, carbon footprint numbers have a one to two year lag. The carbon numbers included in this report are updated at the start of every year.