

Taskforce on Climate- Related Financial Disclosures (TCFD) Statement

BAA PENSION SCHEME

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Foreword

This document is the second draft of the TCFD statement for the BAA Pension Scheme (“BAA” or “the Scheme”).

Our understanding is that the new regulations proposed by the Department for Work and Pensions (“DWP”) will apply to the Scheme from 1 October 2022. It is our understanding therefore that this will apply for the Scheme’s next year-end date of 30 September 2023. This statement includes data as of 30 September 2022 to align with the Scheme’s latest financial year-end and details the work conducted by the Trustee, predominantly over the year ending 30 September 2022 in the assessment, monitoring and mitigation of climate-related risks and opportunities.

Executive Summary

This statement sets out the Trustee’s approach with regards to assessing, monitoring and mitigating climate-related risks and opportunities, in the context of the Trustee’s broader regulatory and fiduciary responsibilities for managing the Scheme on behalf of its members.

This statement has been prepared in accordance with the regulations set out under “The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021” and provides an update on how the Scheme is currently aligning with each of the four elements set out in the regulations. This is the Trustee’s second disclosure under the TCFD framework, and this statement is therefore expected to evolve over time.

The four elements covered in the statement are detailed below:

Governance: The Scheme’s governance process for managing climate-related risks and opportunities

The Trustee retains ultimate responsibility for the management of climate-related risks and opportunities, with day-to-day oversight delegated to the Investment Sub-Committee. The Trustee receives regular training relating to responsible investment, including climate-related risks and opportunities specifically to help its understanding of how climate change may impact the Scheme, and to provide appropriate scrutiny of the advice it receives. For example, the Trustee received training on the latest regulatory requirements set forth by the Department of Work and Pensions (“DWP”), on stewardship and engagement and climate-related investment opportunities, such as sustainable absolute return bonds and impact private credit. Further training has taken place since the period under review, namely on the climate change metrics, including updating the methodology for the climate scenario analysis from the previously used Prudential Regulation Authority (“PRA”) methodology to being based on that of the Network for Greening the Financial System (“NGFS”), and selecting a portfolio alignment metric to measure and monitor. The Trustee also requires the Scheme’s appointed fund managers to be cognisant of climate-related risks and opportunities. After the Scheme’s year-end, the Trustee put into place a manager engagement framework, where meetings with fund managers are carried out on a periodic basis and will be held with support from the Scheme’s investment adviser. These meetings will be held with a view of giving the Trustee confidence that their appointed fund managers are being held accountable on their responsibilities to be cognisant of climate-related risks and opportunities.

Strategy: The actual and potential impacts of climate-related risks and opportunities on the Scheme’s strategy and financial planning

The Trustee considers climate-related risks and opportunities across short-, medium- and long-term time periods relevant to the Scheme. This includes consideration of investment opportunities the Trustee can capitalise on. The Scheme carried out due diligence on investing in a low carbon absolute return bond mandate and was also considering investments in the impact private markets space. These investments were, however, paused due to market events which led to the Scheme needing to

reprioritise its liquidity. After the Scheme's year-end, the Trustee implemented a synthetic equity portfolio using a Paris Aligned benchmark which has climate VaR and carbon intensity reduction targets and is aligned with TCFD recommendations.

Climate scenario analysis has been conducted on the Scheme's assets and liabilities, alongside consideration of the potential impact of climate change on the covenant. Under the climate stress scenarios considered, the Scheme's funding level remains relatively resilient, declining slightly in the majority of scenarios considered.

Risk Management: The processes used to identify, assess, and manage climate-related risks

To monitor climate-related risk, the Trustee receives climate-related reporting quarterly from the Scheme's Investment Adviser. This allows the Trustee to better identify and manage the climate-related risks which are relevant to the Scheme on an on-going basis. The Trustee recognises the importance of engagement in relation to mitigating climate-related risks by ensuring their fund managers are adequately held to account on environmental factors and are therefore taking the sufficient steps to ensure the underlying holdings are adequately protected against the transition to the low-carbon economy.

Metrics and Targets: The metrics and targets used to assess and manage relevant climate-related risks and opportunities

The Trustee monitors and reports the Scheme's total absolute emissions and carbon footprint of its assets, and results of the "1.5°C Disorderly Transition" Network for Greening the Financial System ("NGFS") stress test. This is the scenario that relates to reaching global net zero emissions around 2050 but at higher costs due to divergent policies introduced across sectors leading to a quicker phase out of fossil fuel use. The Trustee also considers other climate scenarios, the details of which can be found in appendix A.

The Trustee has agreed to a Paris-aligned target for the Scheme to reduce total greenhouse gas emissions of the Scheme's assets to net zero by 2050, with a 50% reduction by 2030. This is monitored on a quarterly basis. The Trustee has also agreed to a target of its portfolio alignment metric, SBTi (Science-based Targets initiative), of achieving an SBTi score of 70% by 2030. This would imply that 70% of the underlying companies that the Scheme are invested in through its funds would have set decarbonisation targets using science-based methodology. Both targets are discussed in further detail in the Metrics and Targets section of this report.

Governance

The Trustee is ultimately responsible for identifying, assessing, and monitoring climate-related risks and opportunities which are relevant to the Scheme. However, the Board has established a sub-committee, the Investment Sub-Committee ("ISC"), to which it delegates the responsibility for ensuring climate-related risks and opportunities are integrated within investment strategy, risk management and decision-making. The roles and responsibilities of the ISC include:

- Considering climate-related risks and opportunities in the Scheme's funding strategy through measuring and monitoring a set of climate-related metrics. This includes the consideration of the impact of different climate scenarios on the Scheme's assets, liabilities, and covenant strength.
- Engaging with fund managers regarding their approach to identifying, assessing, and managing climate-related risks and opportunities. This involves regular meetings with fund managers to discuss ESG integration and outlook.

In carrying out its responsibilities, the ISC is supported by the Scheme's advisers. The ISC meets at least quarterly and reports to the Trustee on a quarterly basis regarding any actions taken or decisions made in relation to climate-related risks and opportunities.

The Trustee believes that engagement (including the exercise of voting rights) is one way of helping manage the Scheme's climate-related risks. Active engagement with underlying companies in which the Scheme is invested, specifically relating to climate-related risks and opportunities, is carried out primarily by fund managers on behalf of the Trustee.

The Trustee believes that Environmental, Social and Governance ("ESG") issues, including risks around climate change, are financially material and impact the value of investments over the Scheme's time horizon. As such, the Trustee and ISC undertake regular training around ESG factors to ensure their understanding and knowledge are up to date with regulatory requirements, evolving market developments and best practice, and to provide appropriate scrutiny of the advice it receives. Training conducted over the period included:

- Investing in illiquid sustainable asset classes in Q4 2021.
- Stewardship and engagement for asset owners in Q2 2022.
- Further training on latest guidance by the DWP to address any existing gaps for the Scheme in Q3 2022.

There has been further, more recent training conducted post 30 September 2022. This includes the following:

- Updating climate scenario analysis methodology in Q1 2023.
- Portfolio alignment metric in Q1 2023.
- Reviewing and update the climate-related target in Q1 2023.
- Further stewardship training in Q1 2023.
- Impacts of climate change on mortality in Q2 2023.

The Trustee and its Investment Adviser have agreed for training to be delivered as and when required, to ensure the Trustee maintains an adequate understanding of climate-related risks and opportunities, in line with DWP requirements.

The Trustee, with the support of its Investment Adviser, has detailed plans to ensure that governance and reporting requirements will continue to be met in advance of their regulatory deadlines.

The Scheme's Investment Adviser reports on climate-related risks and opportunities on an annual basis via a dedicated ESG report and within wider investment reporting. This includes reporting on the metrics and targets set out in the Metrics and Targets section of this document. The ISC reviews this reporting and discusses it with the Investment Adviser and Trustee, as appropriate.

The Trustee assesses the performance of its advisors on a regular basis across all areas of their advice, including that on climate related risks. For example, the performance of the Investment Adviser (Redington) is reviewed by the Trustee on an annual basis, and the criteria for this review includes objectives related to ESG (including climate change) and stewardship. Climate risk and opportunities has also been a key consideration as part of the Trustee's formal covenant review and regular covenant monitoring.

The Trustee also engages with a number of other independent advisors for climate-related analysis and advice on other aspects of the Scheme.

The Trustee receives analysis and advice on the climate-related risks of the Scheme's liabilities from its actuary, Mercer, and for the covenant from its covenant advisor, PwC. The Trustee has received information on Mercer and PwC's credentials regarding the provision of advice on climate change.

The Trustee believes that investors will deliver significant real economy progress towards a net zero and resilient future. With this in mind, the Scheme decided to join the Institutional Investors Group on Climate Change ("IIGCC") in September 2022. This is a leading global investor membership body and the largest one focusing specifically on climate change.

Strategy

The Trustee considers climate-related risks and opportunities and their potential implications for the Scheme's investment and funding strategy over the short, medium, and long term. To do this, it receives scenario analysis relating to the Scheme's assets, liabilities, and covenant. This helps to ensure that climate-related factors are incorporated throughout the Trustee's investment process, from strategic asset allocation to manager selection and portfolio monitoring, including consideration of potential risks to the liabilities and covenant of the Scheme.

The Trustee is conscious that, given the diversified nature of the Scheme's investment portfolio, the source of climate-related risks is likely to be varied. The main known risks to the Scheme are transition risk and physical risk, which are described below.

- **Transition Risk:** Transition risk refers to the potential price impact on the Scheme's assets as a result of policy actions taken to encourage economies to decarbonise, with risks being different depending on the shape of the pathway towards a low-carbon global economy. Policy actions are expected to affect asset values through channels such as carbon prices, and the greater adoption of renewable energy, for example. Portfolios that continue to have high exposures to carbon-intensive businesses may be exposed to higher levels of transition risk. The transition to a low-carbon economy is also expected to produce opportunities for investing in businesses that are poised to benefit from the transition, such as producers of renewable energy.
- **Physical Risk:** Physical risk refers to the potential price impact on the Scheme's assets as a result of changes in weather patterns and extreme weather scenarios, as well as from other physical effects of climate change such as rising sea levels. These include floods, hurricanes and droughts, or chronic effects, such as sustained increases in temperatures, air humidity and ocean acidity. These risks can affect the value of physical assets – in particular, property and infrastructure located in certain geographies such as coastal areas. An example of the knock-on effects of these risks is lower economic growth due to damage done to infrastructure as a result of increased natural disasters, for instance tsunamis and earthquakes. These risks could have both direct and indirect destabilising impacts on companies' operations, leading to both micro and macroeconomic stresses on company financials.

The Trustee has engaged with its three independent advisors to provide climate scenario analysis on their areas of speciality for the Scheme. The Trustee notes that due to methodological constraints all three of the advisors were not able to fully align with their climate scenario stresses. However, the Trustee does not expect this misalignment to have a significant impact on decision making and its advisors will endeavour to adopt the same stresses wherever possible in their analysis. Additionally, the Trustee recognizes that the entire industry is actively working towards developing uniform scenarios to address these challenges effectively.

Table 1: Table showing the Trustee's advisors that are responsible for providing Scenario analysis for their respective components

Scheme Component	Provider of Climate Scenario Analysis
DB assets	Redington (Investment Advisor)
DB liabilities	Mercer (actuary)
DB covenants	PWC (covenant advisor)

Time Horizons

Table 2: Table showing setting out the time horizons chosen by the Trustee

Term	Timeframe
Short-term	2 years (In line with the Scheme's next actuarial valuation cycle in 2024)
Medium-term	8 years (In line with the Scheme's 108% funding target (2031) on the low dependency basis)
Long-term	12-15 years (Post funding target, as the Scheme matures)

The Trustee considers the potential impact of these on the Scheme's funding strategy over the short-, medium-, and long-term. For example:

- Short-term risks and opportunities may include stock 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 (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.

Climate-related investment opportunities

The Trustee looks to take advantage of investment opportunities arising due to climate change and the wider transition to a lower-carbon economy. With that in mind, the Scheme has continued to fund its investment into the Blackrock renewables infrastructure fund, seeking to capitalise on investments into the construction of renewable energy infrastructure.

Following training from their Investment Adviser and manager selection exercise, the Scheme appointed a manager to implement a low carbon absolute return bonds strategy, which had a carbon reduction framework in place, set to align with the 1.5°C goal of the Paris agreement. However, before the new investment was funded, a change of priorities for the portfolio following the UK gilt market crisis in 2022 led to the halting of this investment. The Trustee is open to revisiting a similar investment in the future, should its situation warrant it.

Similarly, the Trustee received training on impact private credit and was in the process of arranging a manager selection day with the intention to appoint a manager to implement such a strategy, but the gilt market crisis also halted this.

Impact of climate-related risks on assets

The Trustee acknowledges that the Scheme's investments are exposed to climate-related risks to varying extents and has identified two specific risks which could impact the Scheme's investment and funding strategy, primarily through the asset side – physical and transition risks, as described earlier.

The Trustee, on an ongoing basis, assesses the impact of these risks on the Scheme's investment and funding strategies. For example, the Trustee recognises which funds are most carbon-intensive and engages with the relevant managers either outside of or as part of their quarterly ISC meetings. An engagement framework for active and meaningful interactions with the fund managers has been put in place – this framework involves meetings with at least two fund managers per year, with engagements with two of the Scheme's equity fund managers being planned for 2023.

The Trustee undertakes scenario analysis consistent with the Network for Greening the Financial System ("NGFS") climate stress scenarios. These scenarios were selected as they represent a range of possible future climate scenarios, which allow the Trustee to assess potential impacts on the funding strategy under different climate outcomes. The scenarios provided by the NGFS are set to be updated on an annual basis and contain more granular data than the trustee's previous climate metric of the PRA slow transition stress test. The stresses are designed to show what the impact on the value of the Scheme's invested assets would be in the following scenarios:

- *1.5 degrees Orderly transition* – Limits global warming to 1.5°C through stringent climate policies and innovation, reaching global net zero CO2 emissions around 2050. Some jurisdictions such as the US, EU and Japan reach net zero for all GHGs.
- *2 degrees Orderly Transitions* – Gradually increases the stringency of climate policies, giving a 67% chance of limiting global warming to below 2°C.
- *1.5 degrees Disorderly Transition* – Reaches net zero around 2050 but with higher costs due to divergent policies introduced across sectors leading to a quicker phase out of oil use.
- *2 degrees Disorderly Transition* – Assumes annual emissions do not decrease until 2030. Strong policies are needed to limit warming to below 2°C. CO2 removal is limited.
- *Hot House World (NDCs)* – Includes all pledged policies if not yet implemented.

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 example, the "disorderly" climate scenarios have significantly greater transition risk than that of the "orderly" scenarios, as they explore the consequences of delayed and divergent policies. Physical risk on the other hand remains comparable between the orderly and disorderly scenarios. In general, the macro-financial downsides for the higher temperature scenarios (2°C and hot house world) are greater.

Table 3: Table showing the Scenario analysis on the assets and funding level as supplied by Redington:

Scenario	Impact on Invested Assets Value (%) [Excluding Buy-in]	Impact on funding level (%) [Excluding Liability and Buy-in impact]
Baseline	2,536m	94%
Scenario A: 1.5°C Orderly Transition	-9.9	-7.8
Scenario B: 2°C Orderly Transition	-5.6	-4.4
Scenario C: 1.5°C Disorderly Transition	-28.9	-22.7
Scenario D: 2°C Disorderly Transition	-19.2	-15.1
Scenario E: Hot House World	-5.2	-4.1

The stress tests are based on asset allocations as of 30 September 2022 with funding level impact assessed on the low dependency basis (i.e. using a discount rate set as 'gilts + 0.5% p.a.'). The results, shown above, provide the Trustee with an overview of how resilient the investment strategy is with regards to various climate change outcomes.

A 1.5°C increase in temperatures is considered to be the best-case scenario and of these scenarios the disorderly transition is considered to be the most likely and therefore the “1.5°C Disorderly” most useful scenario to prepare for. As such, this is used as the basis for monitoring the Trustee’s climate risk– i.e. the low dependency funding stress under this climate scenario. With a current figure of c.23%, this would translate to a substantial loss in funding ratio, excluding the impacts on liabilities, which will be discussed later in the report. Therefore, this will be monitored regularly (at least quarterly) by the ISC and considered during investment strategy reviews to ensure the investment strategy is resilient against this scenario.

The other scenarios show a similar trend of declining asset values, albeit to a lesser extent than the 1.5°C Disorderly stress scenario. The 2°C Disorderly transition being of the greatest magnitude with a translated decline of c.15% in funding ratio through the decline in asset values.

Impact of climate-related risks on liabilities:

Pension liabilities are affected by climate change through factors such as interest rates, inflation, and mortality rates. Interest rates and inflation in particular are driven by climate change policy impacts on countries’ GDP growth, energy mix, etc. The Trustee therefore engaged its actuary, Mercer, to carry out analysis on the effects of the considered scenarios on the Scheme’s liabilities.

Financial impact

The results of Mercer’s analysis of the financial impacts as at 30 September 2022 on the ‘low dependency’ basis are summarised in the below table:

Table 4: Table showing the Scenario analysis on the Liabilities as supplied by Mercer:

	Change in Scheme Liability Value (%)	Change in Buy-in Liability Value (%)	Net Impact on funding level (%) [Excluding Invested Asset impact]
Baseline	3,232m	510m	94%
Scenario A: 1.5°C Orderly Transition	-6.0	-4.3	+5.2
Scenario B: 2°C Orderly Transition	-2.3	-1.4	+1.9
Scenario C: 1.5°C Disorderly Transition	-9.6	-5.9	+9.0
Scenario D: 2°C Disorderly Transition	-6.6	-3.5	+6.0
Scenario E: Hot House World	-2.2	-1.4	+1.9

Liabilities have been calculated based on a roll forward from the 30 September 2021 statutory funding valuation, allowing for benefit payments paid out, salaries paid, known inflation and changes in market conditions.

The figures are not as accurate as those that would arise from a full actuarial valuation as some approximations have been made and individual member data has not been used.

Combining the financial impacts on the assets and liabilities we have the overall impacts we would expect on the Scheme’s funding level:

Table 5: Table showing the combined effect of the liability and asset side stress on the Scheme's funding level.

Scenario	Overall Impact on funding level (%)
Scenario A: 1.5°C Orderly Transition	-3.0%
Scenario B: 2°C Orderly Transition	-2.5%
Scenario C: 1.5°C Disorderly Transition	-16.1%
Scenario D: 2°C Disorderly Transition	-10.1%
Scenario E: Hot House World	-2.3%

Mortality impact

On behalf of the Trustee, Mercer has carried out an analysis of potential mortality impacts from climate-related scenarios, including:

Transition risks – risks from policy changes, reputational impacts and shifts in market preferences, norms and technology. For example, these may impact on GDP, with consequent impact on wellbeing and longevity.

Physical risks – dangers or perils related to the physical or natural environment that pose a threat to people. This includes the direct impact on changes to heat/cold related deaths.

The balance between transition and physical risks will vary over different time horizons.

In modelling scenarios for mortality impacts, Mercer has made use of:

- Representative Concentration Pathways (RCPs) and Shared Socioeconomic Pathways (SSPs) as defined by the UN Intergovernmental Panel on Climate Change (IPCC), including estimated projected temperatures.
- Relationships between each SSP and a range of socioeconomic and other variables as published by the UK Climate Resilience Program, and modelling of how changes to those variables would affect UK mortality rates.
- UK-based climate projections from the Met Office, with correlations between past climate data and mortality rates being used to predict future influences.

The modelling indicates the following scenario outcomes, each compared to mortality assumptions constructed with no explicit allowance for climate-related risks:

- A temperature rise of 1.5-2°C from pre-industrial levels might mean 6.4% higher Scheme liabilities and 22 months higher life expectancy for older generations.*
- A temperature rise of around 3.5-4°C from pre-industrial levels might mean 2.2% lower Scheme liabilities and over 5 years' lower life expectancy for younger generations.*

Based on this analysis, mortality changes arising from the direct and indirect impact of climate change could be material to the funding strategy longer term. The Trustee has taken steps to reduce exposure to longevity risk in general by investing in the buy-in contracts in respect of c.25% of the pensioner liabilities. The Trustee will keep this under review alongside the other risks to which the Scheme is exposed.

** It is important to note that these "Results" are based on longevity projection models and third-party data which may produce output that differ materially from actual outcomes. The Results are set out for informational purposes only and should not be used for any other purpose. In particular, the Results should not be relied upon and they are not suitable for repurposing, copying, redistributing or modifying. The model provider disclaims all liability and makes no representations about the suitability for any purpose of the Results and such content is supplied on an as is basis, without any warranty of any kind.*

Impact of climate-related risks on the Covenant

The Trustee is aware that climate change represents a significant risk facing the aviation sector, the Scheme's sponsor Heathrow and, as a result, the employer covenant of the Scheme. Climate-related risks are fundamental to the assessment of covenant strength, affordability and the future prospects of the sponsor which informs the Scheme's overall strategy. Ensuring sufficient monitoring of employer-related risks is a key priority for the Trustee.

Heathrow's climate strategy targets net zero emissions by 2050, in line with the wider UK and global aviation sector and in March 2023 Heathrow secured accreditation from the Science Based Targets initiative (SBTi) that its carbon reduction targets are in line with a 1.5 degree pathway.

The Group uses climate scenarios to identify and assess risks and opportunities, and inform business strategy. Heathrow has examined three climate scenarios: 1.5°C, 2°C, and 4°C increase in global temperatures and considered the associated risks. Heathrow considers it is most exposed to transition risks, which are relevant under a 1.5°C scenario, noting pathways towards a 1.5°C rise in global temperatures require a material transition to be made to reduce emissions and maintain passenger growth. For physical risk, Heathrow considers a 4°C future to have the highest potential impact on financial outcomes arising from physical climate related effects.

The Scheme's covenant advisor has noted that Heathrow has set out a clear strategy, consistent with the wider UK aviation sector, to significantly reduce emissions by 2050, including committing to milestones by 2030. However, 95% of Heathrow's carbon emissions relate to flights and much of the remaining 5% is not within its direct control. Heathrow has recognised it is critical that it uses its influence and works with stakeholders to achieve Heathrow's net zero target.

As part of its covenant assessments, the Scheme's covenant advisor considers the materiality and timing of covenant risks relative to the Scheme's journey plan to inform the Scheme's strategy. The Trustee has received advice from the Scheme's covenant adviser in relation to the covenant impact of Heathrow's climate-related risks and opportunities (as outlined in Heathrow's TCFD disclosures), Heathrow's net zero strategy to mitigate the risks and its progress to date against targets and the Trustee has considered its funding strategy in light of this advice. The covenant advisor monitors risk using regulatory and policy announcements and company information and reports quarterly to the Trustee.

Risk Management

As mentioned, the Scheme is exposed to both physical and transition risks. The Trustee identifies and assesses the impact of these climate-related risks on its assets by conducting and reviewing the results of climate-related stress tests on a periodic basis.

The Trustee receives climate-related reporting from their Investment Adviser on a quarterly basis. This statement contains climate metrics as set out under the Department for Work and Pensions' adoption of the TCFD recommendations. The "1.5°C Disorderly Transition" scenario is used on the basis of a 1.5°C increase being viewed as the best case scenario and a disorderly transition being more likely than an orderly transition, and therefore it is considered the most useful scenario to prepare for.

Further details on this can be found in the appendix, however, it includes the following data:

- Carbon emissions – this is measured via the estimated total mandate carbon emissions. This represents the total share of scope 1, 2 and 3 carbon emissions that a fund is responsible for.
- Carbon footprint (aggregated to manager and mandate/portfolio level) – this involves measurement of the carbon dioxide emissions of a fund per million pounds of enterprise value inclusive of cash, using scope 1, 2 and 3 emissions.
- SBTi score - This measures what portion of underlying companies have voluntarily disclosed decarbonisation targets that are aligned with the relevant science-based pathway.
- NGFS Climate Scenarios – These are the stress tests of how the Scheme's funding level is expected to change based on the NGFS climate stresses as shown in the strategy section of this report.

This allows the Trustee to better identify and manage the climate-related risks which are relevant to the Scheme on an on-going basis. As mentioned, the Trustee believes that engagement with the Scheme's managers is one of the principal tools with which the Trustee can manage climate-related risks and opportunities. Most of this engagement is carried out on behalf of the Scheme by the Investment Adviser. As highlighted previously, the Trustee has produced an engagement framework of regularly meeting with and assessing its fund managers' stewardship activities. The purpose of this framework is to enable the Trustee to take greater ownership of its stewardship activities and have a more structured approach to ensuring that its fund managers are held to account in line with the Trustee's stewardship philosophy. The first of these manager engagement meetings is set to take place in June 2023.

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 monitoring and due diligence that the Trustee undertakes. In line with this, the Trustee seeks to engage with managers where possible to minimise climate-related risks. A couple of the Scheme's investment managers have put in more ambitious net zero targets in place following direct conversations with key decision makers.

The Trustee also ensures that ESG considerations are taken into account when appointing new fund managers and this was exercised in practice during a manager appointment exercise that the Trustee took part in in January 2023.

The Trustee also believes that being a member of an organisation like the IIGCC could bear fruits from a risk management perspective, as the Trustee is kept abreast with the latest ideas and trends in the market, which could in turn apply to the way the Scheme is managed.

Metrics and Targets

In line with the regulatory requirements, the Trustee has adopted four climate metrics to monitor and report on:

Table 6: Table showing an overview of the Scheme's selected metrics.

DWP suggested metric	Metric selected	Rationale
Absolute emissions	Total financed emissions	This is the absolute emissions metric recommended by the DWP.
Emissions intensity	Carbon Footprint	This is the emissions intensity metric recommended by the DWP. This metric is the total emissions divided by the total assets under management in the portfolio. It is useful as an indication of the intensity of carbon emissions per £m invested.
Additional metric	Scenario analysis outlining the impact on the Scheme's assets under the 1.5°C Disorderly transition stress test	This metric is the output of the asset-side scenario analysis and is key to assessing the level of downside risk exposure of the Scheme's assets and any hedging provided by assets that may benefit from climate-related opportunities.
Portfolio Alignment	Science-based target initiative (SBTi)	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 Trustee receives reporting on these metrics on a quarterly basis from their Investment Adviser and this will be reported on an annual basis in future TCFD statements. The Trustee will periodically review their selection of metrics to ensure they remain appropriate for the Scheme. The Trustee has also gone through the process of setting explicit targets for the Scheme which are aligned with the Trustee's climate-related beliefs and are complimentary to the Scheme's wider objectives.

In particular, the Trustee has agreed to align the Scheme's investment strategy with the goals of the Paris Agreement – to aim to reduce total greenhouse gas emissions of the Scheme's DB assets to net zero by 2050. Considering this is a long-term target, the Trustee has also set an appropriate interim target of a 50% reduction of carbon footprint of scope 1 and 2 emissions by 2030 (compared to the prevailing asset allocation as of 30 June 2021, rebased using updated carbon emission data from MSCI as of 31 December 2021). The Trustee has considered the feasibility of such a target by accounting for the anticipated changes in the Scheme's asset allocation over time.

The Trustee has also set a portfolio alignment target of having 70% of financed emissions or the top 20 emitters having a Paris-aligned Science-based target by 2030.

Going forward, the Trustee will use these metrics to identify the climate-related risks and opportunities which are relevant to the Scheme. These might include, for example, engaging with fund managers who have material carbon intensity levels (as noted previously) or with other industry participants, exploring low-carbon alternative investment options (some of which have already been introduced and more are being considered), and updating investment guidelines for managers where the Trustee has discretion to make such changes.

For the purpose of this analysis, emissions from gilts are currently excluded due to methodological challenges. However, the Trustee understands that this is a fast-moving area and therefore may revisit this in future as best practice develops. This may in turn change the metrics presented in this report materially.

Asset Allocation as of 30 September 2022:

Table 6: Table showing a breakdown of the Scheme's asset allocation by general asset classes.

Asset Class	Allocation (%)
LDI & Buy-in (not included in emissions analysis)	37.1
Liquid Markets	28.5
Liquid Credit	20.8
Illiquid Assets	13.5
Total	100.0

- *Liability driven investments ("LDI") are investments in financial instruments which mirror the movements of the liability profile of the Scheme when there are movements in interest rates or inflation. These may include UK Gilts or inflation swaps for example.*
- *Buy-in's are portions of the Scheme's liabilities which have been transferred to insurance companies.*
- *Liquid markets comprise of equities and hedge fund strategies which are publicly traded.*
- *Liquid credit is composed of fixed income bond funds which are publicly traded.*
- *Illiquid assets comprise of assets which are traded in private markets.*

Metrics as of 30 September 2022:

Table 7: Table showing the Scheme's metrics as of 30 September 2022.

	Scope 1&2 (absolute) financed emissions (tCo2e)	Scope 1&2 Carbon Footprint (tCo2e/ £m invested)	NGFS 1.5°C Disorderly Transition on Funding Level (%)	Science-Based Targets Initiative Rating (%)
Liquid Markets	29,933	279	-	20.3
Liquid Credit	108,021	326	-	7.5
Illiquid Assets	51,600	473	-	-
Total	189,604	99	-16.1	9.3

1. Total Financed Emissions

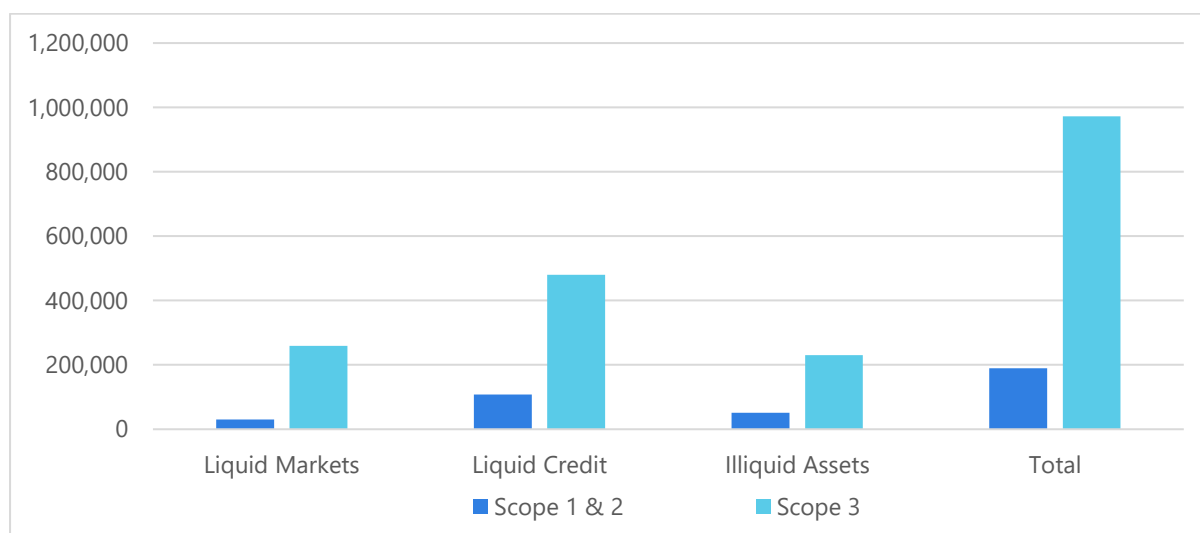
The Trustee has chosen total financed emissions as the main metric for absolute emissions – the metric shows the total greenhouse gas emissions that are financed by the Scheme’s investments.

There are three scopes of carbon emissions:

- Scope 1 emissions are direct emissions from an entity’s owned or operationally controlled sources;
- Scope 2 emissions are those from the use of electricity purchased by an entity;
- Scope 3 emissions are indirect emissions from the use of company’s products, or any other emissions across its supply chain.

Financed emissions are calculated as the proportional share of the Scope 1 and Scope 2 GHG emissions for each relevant investment, based on the size of the investment relative to the Enterprise Value Including Cash (‘EVIC’) of the respective company – the EVIC is a measure of a company’s total value.

Chart showing the Scope 1 & 2 (absolute) financed emissions for the Scheme as at 30 September 2022*



Source, Analysis by Redington as at 30 September 2022, using data from MSCI

**Please note: The Scheme also had an allocation in a fund that is classified under illiquid markets. This fund was contributed negligible emissions across the board as it is a fund that primarily invests in renewable energy infrastructure projects.*

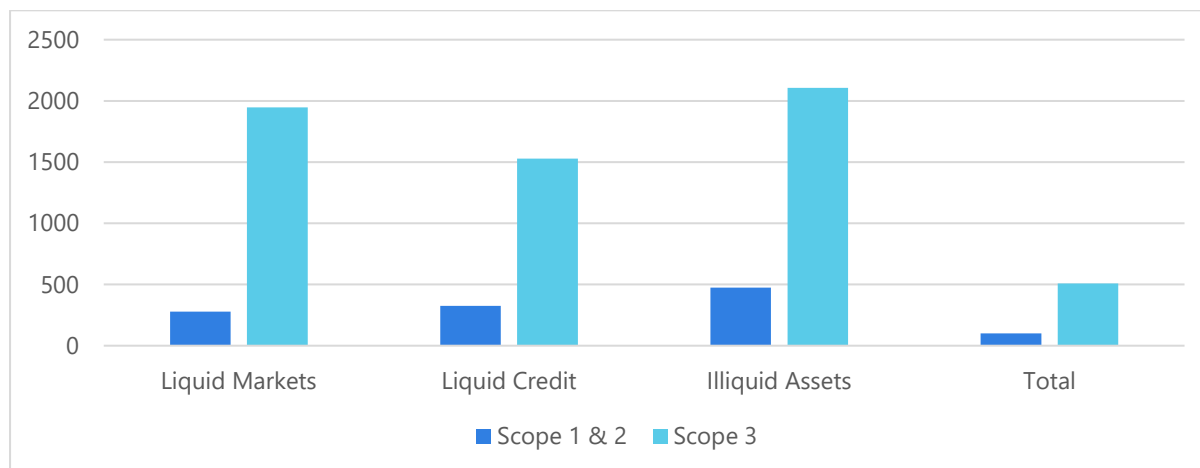
2. Emissions intensity

The Trustee monitors carbon footprint as it’s emissions intensity metric. Carbon footprint measures the carbon efficiency of a portfolio in terms of emissions per million pounds invested. It normalises the total financed emissions for the value of the portfolio. In other words, it shows the emissions per millions of pounds invested, the metric is therefore comparable between investments of different sizes.

At a portfolio level, the emissions intensity measures are calculated as the average of the emissions intensity of the underlying holdings, weighted by the value of each holding. A portfolio with a high emissions intensity will have a steeper route towards decarbonisation than a less intensive one. Hence, measuring the emissions intensity across the Scheme is useful in order to gauge how difficult (or easy) it will be to progressively decarbonise its portfolios.

Differences in portfolio emissions intensities are driven by differences in sector and company exposure. Portfolios with higher exposures to high-carbon sectors such as utilities, non-energy materials, energy and industrials tend to exhibit higher emissions intensities, especially within their scope 1 emissions. The Trustee has set an aspirational net zero target in relation to this metric, noting it is subject to the Trustee’s fiduciary and financial objectives.

Chart showing the total carbon footprint for the Scheme as at 30 September 2022*



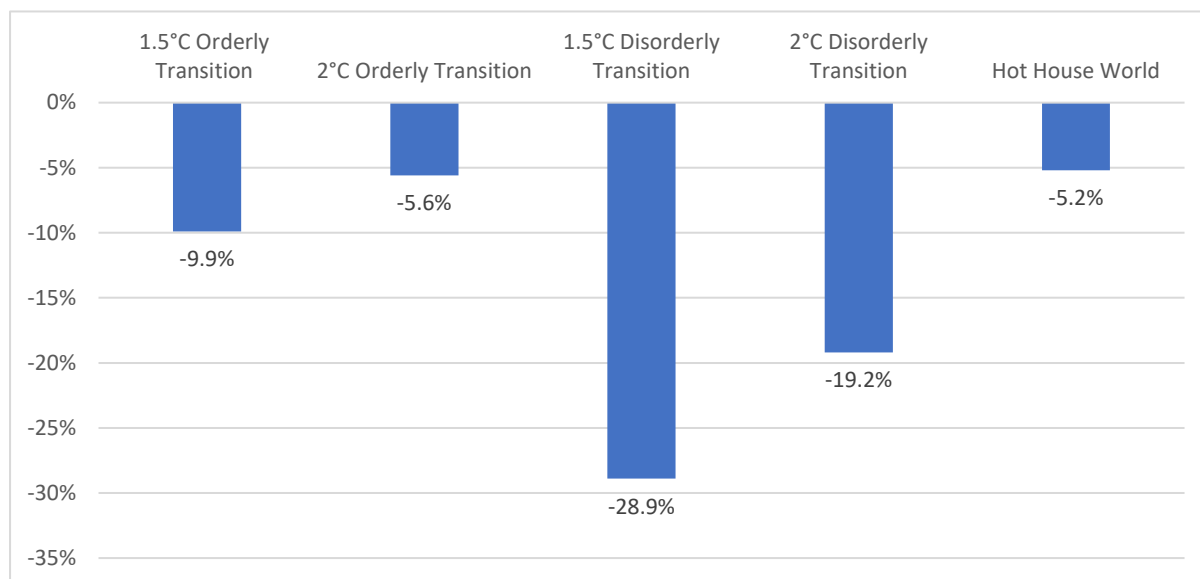
Source, Analysis by Redington as at 30 September 2022, using data from MSCI

**Please note: The Scheme also had an allocation in a fund that is classified under illiquid markets. This fund was contributed negligible emissions across the board as it is a fund that primarily invests in renewable energy infrastructure projects.*

3. Additional Climate Change

For the non-emissions based metric, the Trustee has opted to utilise the NGFS stress scenarios. This metric is calculated through applying the stresses on solely the asset-side. The Trustee selected this metric as it provides a good assessment of climate risk at a strategic level which the Trustee finds helpful to monitor. The trustee also notes that the scenario stresses are set to be updated on an annual basis and contain more granular data than the trustee’s previous climate metric of the PRA slow transition stress test.

Chart showing scenario analysis on the assets for the Scheme as at 30 September 2022



Source, Analysis by Redington as at 30 September 2022, using data from MSCI

4. Portfolio Alignment

The Trustee has agreed to adopt the Science Based Target's initiative (SBTi) as the Scheme's portfolio alignment metric, which assesses a company or issuer's self-developed decarbonisation target against sector benchmarks based on science-based methodology. Each company is 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". Each of the categorisations all denote the implied global temperature increases that coincide with the decarbonisation target. Whilst the Trustee is aware that the "SBTi Approved 2 C" categorisation will be gradually phased out in line with the initiative's raised ambition to 1.5C, the Trustee will continue to report under the "SBTi Approved 2 C" categorisation to capture companies currently on a 2C path until they increase their target ambition to 1.5C in the next few years. The SBTi rating of a fund shows what percentage of the companies the fund invests in have set a decarbonisation target using science-based methodology.

Target

In May 2021 the Trustee agreed to a Paris-aligned target for the Scheme to reduce total greenhouse gas emissions of the Scheme's assets to net zero by 2050 and set an intermediate objective of a 50% reduction in scope 1 and 2 emissions by 2030. The progress against this target is monitored by the Trustee on an annual basis.

The Trustee has also set a portfolio alignment target of having 70% of financed emissions or the top 20 emitters having a Paris-aligned Science-based target by 2030.

Table 8: Table showing the Scheme’s progress towards their targets against their baselines.

Metrics	As of 30 September 2021	As of 30 September 2022	Target level	Timeframe to reach target
Absolute Emissions (tCO2e)	530,303	403,625	C. 265,000	Sep 2030
Science-Based Target (%)	-	9.3%	70%	Sep 2030

The Trustee will continuously monitor its progress against these targets annually and explore any potential adjustments to its investment strategy to help facilitate their completion.

Appendix A: Scenario Analysis on the Scheme's Assets

Other than the 1.5°C Disorderly Transition, the Trustee also considered the following scenarios:

- "1.5°C Orderly Transition" (a scenario where global net zero for CO₂ emissions is reached by 2050 through stringent climate policies)
- "2°C Orderly Transition" (a scenario where there is a gradual increase in the stringency of climate policies)
- "2°C Disorderly Transition" (a scenario where annual emissions do not decrease until 2030)
- "Hot House world" (a scenario where all pledged policies, and no other policies, are implemented)

The Network for Greening the Financial System (NGFS) is a group of 91 central banks and supervisors and 14 observers committed to sharing best practices, contributing to the development of climate- and environment- related risk management in the financial sector and mobilising mainstream finance to support the transition toward a sustainable economy.

The NGFS Scenarios have been developed to provide a common starting point for analysing climate risks to the economy and financial system and highlight a few important themes including rapid decarbonisation of electricity, increasing electrification, more efficient uses of resources, and a spectrum of new technologies to tackle remaining hard-to-abate emissions.

Appendix B: Carbon Footprint Analysis

- Climate reporting as of 30th September 2022 can be found on the subsequent pages. This reporting includes the chosen first and second metric as described under "4. Metrics and Targets". The third metric (the result of the "NGFS 1.5°C Disorderly") is outlined in the Strategy section of this Statement.
- 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 and illiquid assets, the Trustee monitors 'asset class level' carbon estimates in the absence of reliable, reported line-by-line emissions data from MSCI. The Trustee notes using asset class modelling of emissions for assets where this data is not available enables a more holistic view of the Group's total portfolio emissions, albeit recognising that the modelled data is not perfect.
- The asset class modelling of emissions has been provided by the Investment Adviser and is based on asset class 'building blocks. These are either calculated directly using a given index's underlying holdings emissions (such as using MSCI ACWI as a proxy for a broad equity fund) or in some cases these indices are used and extrapolated to other asset classes based on given assumptions (such as using the emissions of infrastructure firms within an index to proxy an infrastructure fund).
- Emissions metrics will be 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, standardized 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 discount factor. The climate metrics reporting the Trustee receives from Redington reports "scope 1 & 2" and "scope 3" data separately before aggregating, to improve transparency.

Fund	Fund Value (£m)	MSCI Climate Metrics Coverage %	Absolute Carbon Emissions (tCO2e)						Carbon Footprint (tCO2e / EVIC £m)					
			30 September 2022 – Scope:			30 September 2021 – Scope:			30 September 2022 – Scope:			30 September 2021 – Scope:		
			1+2	3	Total	1+2	3	Total	1+2	3	Total	1+2	3	Total
Liquid Markets (Equities)														
GQG Emerging Markets Equity Fund	90.4	92.9%	22,801	116,966	48,534	49,325	214,822	96,586	252.3	1,294.3	537.1	283.0	1,158.0	538.0
Ownership Capital Global Equity Fund	354.1	100%	200	8,812	2,139	362	10,486	2,669	0.6	24.9	6.0	0.6	24.9	6.0
Liquid Markets (Multi-Asset)														
Bridgewater Optimal Portfolio Fund II	233.3	-	11,344	68,979	26,519	12,468	63,844	26,514	48.6	295.7	113.7	50.0	305.0	117.0
Man Progressive Diversified Risk Premia Fund	194.5	-	-4,412	64,488	9,775	8,491	52,690	20,083	-22.7	331.6	50.3	-22.7	331.6	50.3
Liquid and Semi-Liquid Credit														
Wellington LIBOR Plus Portfolio	182.6	-	26,806	143,885	58,461	29,079	167,812	65,998	146.8	787.9	320.1	146.8	787.9	320.1
BlueBay Leveraged Finance Total Return Fund	453.0	-	81,215	335,948	155,124	98,076	418,323	190,107	179.3	741.6	342.4	179.3	741.6	342.4
Illiquid Credit														
KKR Private Credit Opportunities Partners II Fund	131.1	-	38,604	175,599	77,235	31,013	140,506	61,925	294.5	1,339.8	589.3	294.5	1,339.8	616.8

M&G Multi-Dated Asset Fund	66.5	-	11,036	47,879	21,569	2,805	14,734	6,047	166.1	720.5	324.6	166.1	720.5	324.6
M&G Secured Property Income Fund	150.0	-	1,960	6,733	3,442	1,748	18,790	5,882	13.1	44.9	22.9	13.1	44.9	22.9
Illiquid Markets														
BlackRock Global Renewable Power III Fund	57.7	-	50	3,532	827	20	295	85	0.9	62.1	14.5	0.9	62.1	14.5
TOTAL PORTFOLIO	1,913.2		189,604	972,821	403,625	254,177	1,238,736	526,699	99.2	508.8	211.1	92.8	452.2	192.3

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.

"Previous" figures show climate metrics from 12 months prior to "Current" 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 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. These proxies are not updated frequently, which is why the "Current" and "Previous" "Carbon Footprint (tCO₂e / EVIC £m)" figures are the same for several funds.

Scope 3 emissions have been de-duplicated in the "Total" columns by a factor of 0.22.

ESG and MSCI Carbon Metrics meet the current minimum UK DWP's TCFD-aligned "Metrics and Targets" regulations. However, regulations are subject to change. Redington monitors developments closely.

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Carbon Emissions Direction of Travel (over rolling 12 months): A coloured arrow classification indication of whether a fund's carbon emissions improved, worsened, or remained stable over the past year.

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 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.

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.

Redington ESG Advantage: Redington's assessment of a manager's ESG integration relative to peers. Considers firm commitment, team expertise and ESG integration into the investment process. "Yes" means we believe a manager is best in class on ESG integration. "No" means we don't believe they are best in class.

MSCI Climate Metrics Coverage: The proportion by value of a fund for which carbon metrics are available from MSCI.

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. For example, the burning of fossil fuels to power the electricity grid. Scope 2 emissions refer to those from the electricity used to power the facilities and machinery of a company.

Total Carbon Footprint (tCO₂e / EVIC £m): Measurement of the CO₂e emissions of a fund per million pounds of EVIC using Scope 1, Scope 2, and Scope 3 emissions. Given a company's direct Scope 1 emissions will inevitably be another company's indirect Scope 3 emissions, aggregating the individual Scope emissions results in a higher number of emissions than exists. To mitigate double-counting, we apply a scaling factor in accordance with MSCI's methodology. This metric may be used to assess a fund's contribution to global warming versus other funds. Previous Total Carbon Emissions (tCO₂e / £m invested) are estimated by looking at the funds' respective holdings and emissions 12 months ago.

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.