



2023/24 TCFD Report
**Task Force on
Climate-Related
Financial Disclosures**

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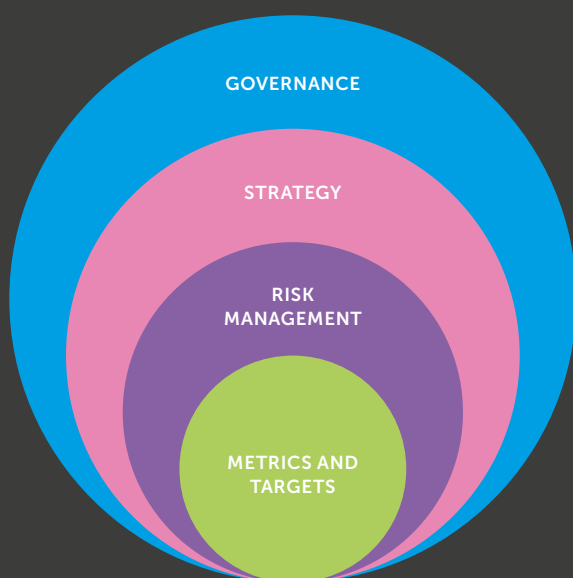
Introduction

This is the first year the Gloucestershire Pension Fund has published a report based on the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) framework. The report covers the period from 1 April 2023 to 31 March 2024. It provides an update on specific actions taken by the Fund to support the transition to a low carbon economy and manage climate risks within its investments.

The Task Force on Climate-Related Financial Disclosures (TCFD) was established by the Financial Stability Board (FSB), a body set-up by the G20 to monitor and make recommendations about the global financial system. In 2017 the TCFD issued initial recommendations for the standardisation of reporting methodologies to assist all stakeholders in understanding climate risks and opportunities.



CORE ELEMENTS OF RECOMMENDED CLIMATE-RELATED FINANCIAL DISCLOSURES



(Recommendations of the Task Force on Climate-related Financial Disclosures, 2017)

- GOVERNANCE**
The organisation’s governance around climate-related risks and opportunities
- STRATEGY**
The actual and potential impacts of climate-related risks and opportunities on the organisation’s businesses, strategy, and financial planning
- RISK MANAGEMENT**
The processes used by the organisation 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 framework includes four core elements which are shown in the graphic above.

In 2020 the UK Government gave a clear commitment to implementing this framework and published a “TCFD Road Map” in making these disclosure requirements statutory across all financial sectors. Whilst this implementation plan is on-going following the phased

introduction of legislation to UK Listed companies and large Occupational Pension Schemes in 2021, there is currently no statutory requirement for Local Government Pension Schemes (“LGPS”) to report under this framework.

The Fund is fully supportive of this initiative, in recognition of the need for transparent disclosures to all our stakeholders, especially our employers and individual members. This provides a framework which will demonstrate how the Fund considers these risks and opportunities when formulating investment strategies and asset allocations. The Fund believes that this will also enhance decision making and strategic policy implementation going forwards, so have therefore now decided to produce a report based on the principles of the TCFD guidance in advance of legislation being introduced. The intention is to produce a TCFD report on an annual basis going forward. It is noted that if it becomes mandatory for the LGPS to report under the TCFD framework, this report may need to evolve based on the final regulations.

Whilst the Fund and our partners are using available data and information to identify, monitor and analyse carbon emissions within its investment holdings, it should be noted that the availability and quality of data particularly for 'scope 3' emissions (which capture emissions within a company's broader supply chain) within the industry is not always at the level or standard that we would desire. Whilst these regulations become more embedded throughout the industry, it is hoped that this situation will improve and enhance this process further.

The Fund uses diversification as an effective tool to manage investment risks and opportunities as can be seen in the strategic asset allocation which is detailed below:

	Strategic Asset Allocation Target 2023-24	Actual Asset Allocation as at 31st March 2024
	%	%
EQUITIES		
UK Active Equities	10.0	11.8
Global High Alpha	13.5	14.4
Emerging Markets	6.5	6.0
Global Sustainable Equities	13.0	12.9
Passive Paris Aligned	10.0	11.1
Total Equities	53.0	56.2
FIXED INCOME		
Multi Asset Credit	7.0	7.2
Sterling Corporate Bonds	10	10.2
Total Fixed Income	17.0	17.4
ALTERNATIVE MARKETS		
UK & Global Property	10.0	7.8
Diversified Returns	0.0	5.1
Infrastructure	7.0	5.6
Private Equity	3.0	2.5
Private Debt	5.0	4.1
Venture Capital	0.0	0.1
Social & Affordable Housing	5.0	0.2
Risk Management Framework	0.0	-0.1
Total Alternative Markets	30.0	25.3
CASH	0.0	1.1
TOTAL	100.0	100.0

As indicated to date the availability and accuracy of data across all of the investment portfolio is not currently available, but the Fund recognise the importance of seeking this data where possible to inform future decision making and the continued assessment of climate related risks and opportunities. To date the Fund has been able to focus on its equity and bond portfolios in obtaining carbon emission data but will expand this out to the remaining portfolios when the data is readily available and of the appropriate quality.



Executive Summary

In advance of formal regulation, the Fund is pleased to now be able to report under the TCFD framework and be able to reflect on the way in which climate related risks and opportunities are considered and monitored when managing the investment portfolio. The Fund takes a long term strategic view in setting its strategic asset allocation, but recognises the short, medium and long term risks and opportunities that climate change has and reporting under this framework provides an overview on the progress made during the year in management and mitigation.

During 2023-24 the Fund made considerable progress in developing a strategy in managing its investments in a sustainable and responsible manner. Following a series of workshops, which crystallised investment beliefs and aspirations, the Fund have approved a responsible investment policy. This set out a number of key targets:

- 'Net Zero' emissions by 2045, across the whole investment portfolio
- Total Fund carbon reduction target of 50% by 2030 (Carbon footprint scope 1+2)
- Allocation of 30% of the Fund to sustainable/low carbon assets by 2025
- A listed equities decarbonisation target of 60% reduction by 2030 (scope 1+2 against the 2020 baseline)
- A corporate bonds decarbonisation target of 50% reduction by 2030 (scope 1+2 against the 2021 baseline)



In partnership with Mercer, investment consultancy, the Fund have undertaken continued assessment of carbon emissions within its equity and bond portfolios using the Analytics for Climate Transition (ACT) framework. This annual analysis will enable the Fund to monitor performance in decarbonisation and in meeting specific targets set out within the responsible investment policy. The analysis for 2023-24 has shown that the carbon footprint of holdings has again fallen and that the Fund is on track to achieve the interim transitional reduction targets set for 2030 for both listed equities and bonds, and ahead of its transitional pathway in achieving net zero by 2045. This has also shown that the listed equity portfolio is more carbon efficient by 35% than the wider market (MSCI ACWI benchmark), as at 31 December 2023.

The Fund continues to work in partnership with the Brunel Pension Partnership, in delivering proactive stewardship and full consideration of environmental, social and governance (ESG) throughout the management of investments. Climate risks and opportunities are integral part of this process, and the Fund will continue to work with Brunel in influencing global transition going forward.

The Fund have during the year become members of the following organisations as asset owners, to assist both committee members and officers in the ongoing assessment of climate related risks and opportunities, and for the Fund to be proactive in collaboration with likeminded investors going forward:

- **Institutional Investors Group on Climate Change (IIGCC)** - who focus on bringing the investment community together to make significant progress towards a net zero and climate resilient future by 2030, in line with the goals of the Paris Agreement.
- **Climate 100+** - Climate Action 100+ is an investor-led initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change in order to mitigate financial risk and to maximize the long-term value of assets.

- **Transitional Pathway Initiative (TPI)** - an independent, authoritative source of research and data into the progress being made by corporate and sovereign entities in making the transition to a low-carbon economy.
- **Pensions for Purpose** – Who's vision is to empower institutional investors and businesses to value people and planet alongside profit.

As part of its strategic asset allocation to infrastructure, the Fund, in partnership with 5 other Brunel based LGPS Funds, invested in the Wessex Gardens Renewable Infrastructure Fund. This exciting opportunity is managed by Schroders Greencoat, under their project Toucan Energy and consists of 17 solar farms largely located within the South-West of England, which will not only provide reliable risk adjusted returns but also contribute to a substantial contribution to the Fund's net zero strategy. More information on this exciting project can be found on the Schroders website:

This is addition to the numerous sustainable infrastructure projects managed through the Brunel Pooled Infrastructure Fund.

The Fund have in association with Mercer, undertaken a scenario analysis to assess the potential impact of climate on the Fund's existing strategic asset allocation, over the short, medium and long term. This has confirmed that climate does represent a significant and material risk to the Fund and this information will inform the Fund's strategic planning going forward. Likewise, the opportunities that climate related investments hold will also be fully considered when developing future portfolios and asset allocations.

01



Governance

01



Governance

TCFD RECOMMENDED DISCLOSURE

A - DESCRIBE THE ORGANISATION'S GOVERNANCE AROUND CLIMATE-RELATED RISKS AND OPPORTUNITIES.

The Fund's governance arrangements are set out in its Governance Policy & Compliance Statement. This can be found on the Fund's website via the following link:

PENSION COMMITTEE

All functions relating to the management of the Pension Fund have been delegated by Gloucestershire County Council, acting as the administering authority for the Fund, to the Pension Committee. As such, the Committee is responsible for the Fund's long-term strategy and the management of climate related risks and opportunities.

The compliance statement outlines the terms of reference for the Committee, its structure, roles, and responsibilities, including membership requirements of 7 appointed County Councillors in addition to co-opted employer and employee representatives who undertake a non-voting role. The Committee meet four times a year.

The Committee is responsible for setting its Investment Strategy Statement which includes the Fund's approach to responsible investment, and its strategic asset allocation. This strategy is formulated having taken external advice and guidance from the Fund's actuary and from its Independent Investment Advisor.

The assessment of all associated risks, including climate related and wider Environmental, Social and Governance (ESG) considerations is embedded and considered fully in the formulation of this strategy and is kept under constant review, and included within the Fund's risk register.

The assessment of climate related risks and opportunities is also fully embedded in the formulation of the training strategy for Committee members, where specific training workshops are delivered where appropriate using external consultancy services or Officers to enhance the knowledge and skills of the Committee and inform decision making. Future training plans for 2024-25 include biodiversity and nature capital training workshops.

Climate related assessments are also embedded in the annual budget setting process undertaken by the Committee, ensuring resources are appropriate for the on-going identification, monitoring, and reporting of investment holdings.

Throughout 2022/23 the Pension Committee with the assistance of Mercer (an investment consultancy), undertook a full review of its responsible investment beliefs. Following formal training, the Pension Committee agreed a draft Responsible Investment Policy in December 2023 for consultation with all its membership and stakeholders. The intention is for the RI Policy to be a 'live' document that is reviewed on an annual basis.



PENSIONS BOARD

The Pensions Board has an oversight role in ensuring the effective and efficient governance and administration of the Fund, including securing compliance with the LGPS Regulations and any other legislation relating to the governance and administration of the LGPS.

ROLE OF EXTERNAL ADVISORS

The Fund recognise that the support and expertise of external partners is required to support the Fund in providing metrics and scenario analysis, which will enable the tracking of carbon footprints and monitor the Fund's performance in meeting its decarbonisation targets, and net zero aspirations.

The Fund commissioned Mercer, an investment consultancy to undertake an assessment of the carbon emissions of the Fund through their Analytics for Climate Transition (ACT) framework; this analysis covering 31 December 2019 to 31 December 2023 was used to set and monitor performance against carbon reduction targets. In addition, they have provided scenario analysis against the Fund's strategic asset allocation, to assess the potential impact of climate change and assist in the on-going assessment of these risks and opportunities. More information on these areas is provided later within this report. The assessment of climate related risks and opportunities is considered fully when advise and services are provided to the Fund by both the actuary Hymans Robertson and the independent investment advisor, John Arthur of Apex.

BRUNEL PENSION PARTNERSHIP

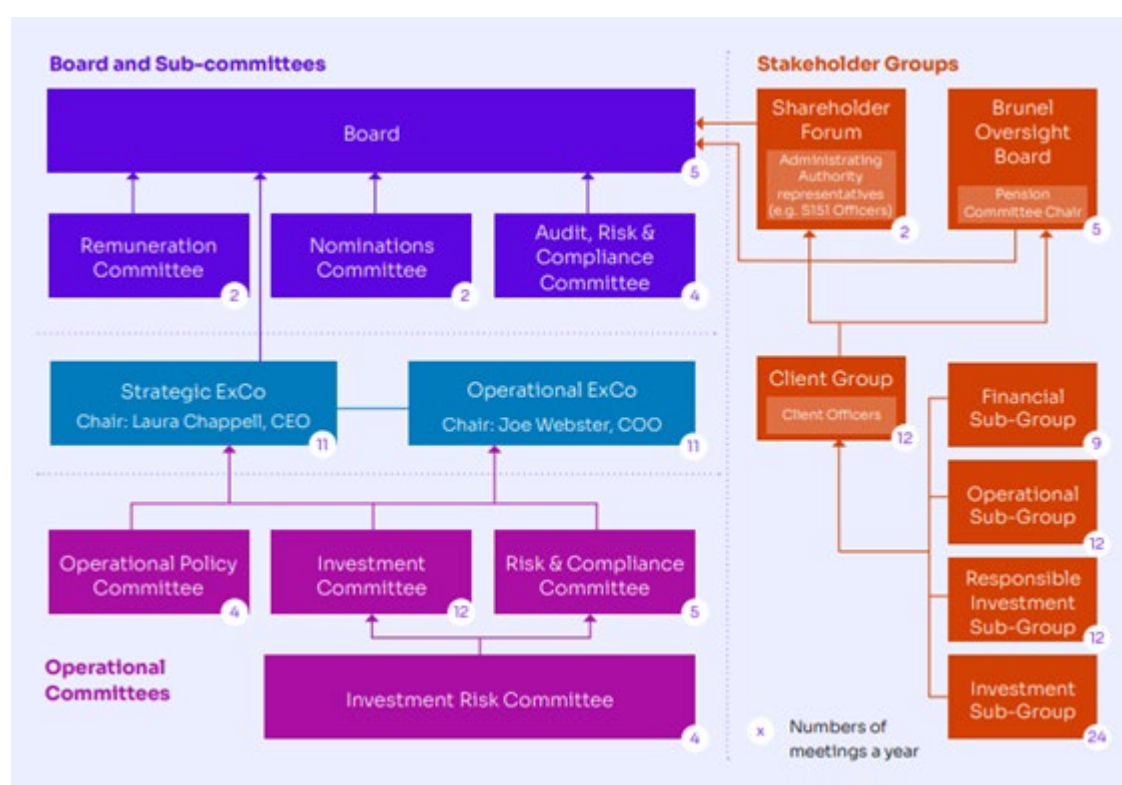
The Brunel Pension Partnership is a Financial Conduct Authority (FCA) regulated investment pooling company, which was formed in 2017, following pooling requirements set out by the UK Government. Formed through the partnership of 10 LGPS funds, located mostly within the South-West of England, with each separate Pension Fund acting as both a shareholder (equal 1/10th) and client within this agreement. The Fund has 97% of its investments managed through the Brunel Pool, including 100% of the listed assets of the Fund.

The Fund interacts with Brunel and partner Pension Funds through the regular attendance at the following Brunel bodies:

- Brunel Oversight Board
- Client Group
- Shareholder Forum
- Investment Sub-Group
- Responsible Investment Sub-Group
- Finance Sub-Group



BRUNEL POOL GOVERNANCE STRUCTURE



Brunel has, since its inception, taken a lead in developing responsible investment strategies and processes, with a stated aim to “systematically change the investment industry to ensure that it is fit for purpose for a world where the temperature rise needs to be kept to 1.5°C compared to pre-industrial levels.”

Brunel aims to deliver stronger investment returns over the long term, protecting clients’ interests through contributing to a more sustainable and resilient financial system which supports sustainable economic growth and a thriving society.

Whilst the Fund retain responsibility for asset allocation and investment strategy, and exposure to climate risk, the partnership with Brunel is essential in managing these risks, and achieving more sustainable investments which have the best chance of achieving appropriate risk adjusted returns for the long term.

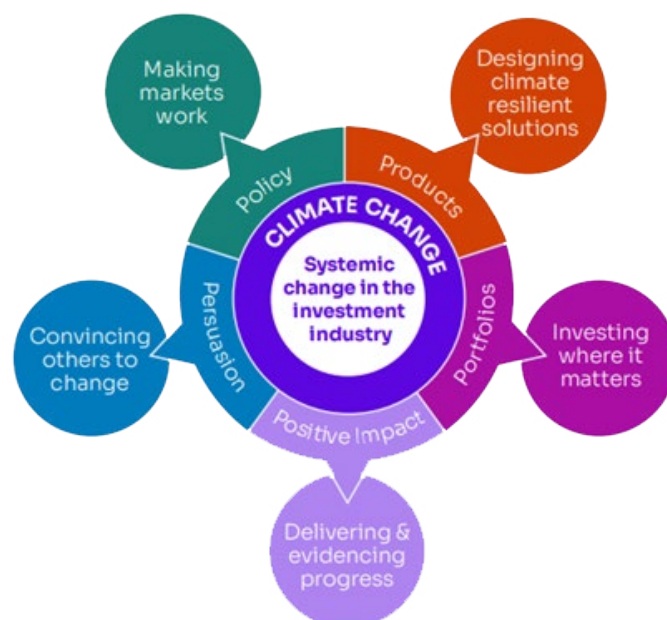
Brunel's Climate Change policy identifies five priority areas:

- Policy Advocacy
- Product Governance
- Portfolio Management
- Persuasion
- Positive Impact

These and the associated actions identified within the policy intend to ensure that all Brunel investment portfolios are aligned with the goals of the Paris Agreement on Climate Change. Brunel has a dedicated Responsible Investment Team and take a proactive role in stewardship, influencing change and providing regular reporting. Brunel regularly publishes its own plans and performance in this area:

- Annual TCFD Reporting through its Climate Change Progress Report.
- Annual Responsible Investment & Stewardship Outcomes Report – Outlining performance against goals – against wider ESG considerations, including climate.
- Annual Carbon Metrics Reporting shows the exposure of all its active holdings.
- Undertake regular Climate Stocktake Reports to review ongoing progress in meeting these strategic goals and achieving a net zero carbon target by 2050.

Brunel has committed to target 'Net Zero' carbon emissions by 2050 and the goal of limiting the global temperature rise to 1.5°C. It has an explicit target to reduce carbon emissions intensity (on a scope 1 and 2 basis) for all listed equity and corporate bond portfolios by 50% by 2030, using a trajectory of at least a 7% per annum reduction, from a baseline of 31/12/2019 (or an appropriate subsequent date).



These targets were considered by the Fund when drafting its RI policy and setting its own targets that are set out later in this report. The full set of Brunel climate targets can be found in its Climate Change Policy, (alongside other key documents) on the Brunel website:

The Fund is fully supportive of the Brunel investment strategy and supporting policies in managing its investment portfolios and takes a proactive approach as both Shareholder and Client in consulting; influencing; challenging; and agreeing Brunel strategies and investment policies and welcome this collaborative process.

TCFD RECOMMENDED DISCLOSURE

B - DESCRIBE MANAGEMENT'S ROLE IN ASSESSING AND MANAGING CLIMATE-RELATED RISKS AND OPPORTUNITIES.

The day-to-day responsibility for the integration of climate related risks and opportunities are managed by the Fund, through a scheme of delegated authorities, to the Deputy Chief Executive & Executive Director of Corporate Resources as section 151 Officer, the Director of Finance, and the Head of Pensions (together referred to below as "management").

Climate risks are fully considered by management in the formulation and on ongoing monitoring and review of its strategic investment strategy along with its Funding Strategy Statement. Management seeks appropriate advice and analytical services as required from its Independent Investment Advisor, its Fund actuary and Mercer as set out in the previous section. Officers also obtain a greater understanding of these risks and opportunities through the attendance of investment conferences, webinars, or workshops where appropriate.

With the majority of the Fund's investments being managed directly by Brunel, then management have a clear role in monitoring their performance and delivery in the management of climate and associated responsible investments policies. This monitoring is undertaken by Officers through the regular attendance at the respective Brunel meetings and sub-Groups, through the receipt of regular monitoring reports including an annual carbon metrics report. These meetings are invaluable to the Pension Fund in ensuring that the intended governance arrangements within the Pool are operating as intended and are aligned to the Fund's strategic goals and objectives.

Environmental, Social and Governance considerations are all embedded within the selection of Fund Managers and Pooled investment vehicles, both within the Brunel Pool and within any direct award initiated by the Fund.

Officers are also responsible for the ongoing monitoring of progress against the Fund's target to achieve 'Net Zero' carbon emissions within its investment portfolio by 2045, in accordance with the objectives of the Fund's Responsible Investment Policy. A system of developing an engagement framework for the Fund's highest carbon emitters within the listed equity and bond holdings is currently being established, so that management can ensure that the Pension Committee is fully informed of the progress for these Companies on a regular basis and can consider the requirement for any further action where necessary.

Management also has availability of additional industry data and shared information and expertise, through the Fund's membership of the following external bodies:

- The Institutional Investor Group on Climate Change (IIGCC)
- Climate Action 100+
- Local Authority Pension Fund Forum (LAPFF)
- The Transitional Pathway (TPI)
- Pensions for Purpose



02

Strategy

02



Strategy

TCFD RECOMMENDED DISCLOSURE

A - DESCRIBE MANAGEMENT'S ROLE IN ASSESSING AND MANAGING CLIMATE-RELATED RISKS AND OPPORTUNITIES.

Given the open nature and longevity of the scheme, the pension liabilities held by the Fund will remain decades into the future. As a result, the Fund takes a long-term view in setting investment strategies, policies and decision making. The Fund seeks to hold diverse investment vehicles and holdings which operate throughout the world geographically, and across most industry sectors. The Fund believe that climate change poses a systemic risk that will affect all asset classes and geographies, and that managing and mitigating climate risk is a key part of the overall fiduciary duty to members of the Fund.

The most significant risk presented to the Fund is the impact to financial assets if the objectives of the 2015 Paris Agreement (to limit global warming to 'well below 2 degrees Celsius ' relative to pre-industrial levels and pursue efforts to limit to 1.5 degrees Celsius if possible), fails to be met. This objective implies targeting 'Net Zero' carbon emissions as an investor by 2050 or earlier; in recognition of this significant risk, the Fund has set a target of achieving 'Net Zero' emissions by 2045, across the whole investment portfolio.

An approach taken in the assessment and management of these risks is through the use of climate change scenario modelling to assist understanding, and that these risks are considered when formulating strategies going forward. In early 2024 the Fund commissioned Mercer to undertake scenario modelling against its investment portfolio and asset allocation. The modelling undertaken has been structured to provide analysis of key risks over the short (1-5 years), medium (5-20 years) and long term (20-40+years). Further information on this can be found later in this report.

Officers and the Pensions Committee have identified two primary types of climate-related risks and opportunities that are relevant over the timeframes identified above. These are set out in the graphic below:



Source: Mercer, MSCI. ©2024 MSCI ESG Research LLC. Reproduced by permission.



Over the short to medium term transition risks to asset portfolios could arise because of increased legislation or regulatory changes in addition to technological changes and increased costs of companies have all been identified. Changes in market behaviour where customers perceptions and preferences in light of climate change is also a significant risk within many consumer-based industries.

Physical risks to the Fund become more prevalent over the long term, through the risk of stranded assets, together with supply change logistical difficulties of companies because of more frequent and volatile extreme weather conditions across the globe.

Opportunities for the Fund include the investment of more sustainable investments within its portfolio, including transitional technologies and renewable infrastructure.

The continued partnership with Brunel in providing positive stewardship and engagement with companies, and fund managers, influencing systemic change is an important aspect in mitigating these risks for the Fund going forward and ensuring that the Fund meets its net zero aspirations.

TCFD RECOMMENDED DISCLOSURE

B - DESCRIBE THE IMPACT CLIMATE RELATED RISKS AND OPPORTUNITIES HAVE HAD ON THE ORGANISATION BUSINESSES, STRATEGY, AND FINANCIAL PLANNING.

The Fund continue to take a long-term view in managing its investment portfolio, as it feels that this is essential in meeting its long term liabilities and pension obligations. The Fund accepts that risks associated with climate change are significant and ensures that these are considered fully throughout its business activities. The Fund uses diversification to manage investment risks but given the systemic nature of climate risks, diversification may have limited effectiveness under more extreme climate change scenarios.

The consideration of climate related risks is embedded in the setting of the Fund's Investment Strategy Statement and are integral when the Funding Strategy Statement and Triennial Valuations are compiled, agreed, and reviewed. This has been further strengthened by the publication of the Fund's RI Policy over 2024.

The Fund seeks to invest in opportunities that have a positive impact environmentally, or socially, but also achieve positive financial returns in line with its fiduciary duty. The Fund seeks to invest in a responsible and sustainable manner and following a realignment as part of the review of its strategic asset allocation in 2021-22 the Fund now has investments within the Brunel Paris Aligned Benchmark Passive Global Equities and the Brunel Global Sustainable Equities portfolios.



The Fund has also recently invested in the Schroders Greencoat Wessex Garden Renewable Infrastructure Fund, through partnership with fellow Brunel LGPS Client Funds Avon, Cornwall, Devon, Oxfordshire, and Wiltshire. Wessex Gardens is a place-based and locally focused renewable energy infrastructure fund that was established in 2023 to invest in projects in the Southwest of England that have significant climate solution benefits. Currently this totals 17 solar farms, with plans to extend this further with possible investments in battery storage and geothermal technologies. The Fund has made a £60m commitment to this Fund of the total £330m Fund value from all six LGPS partners. £242 million of this has been drawdown to date with all assets fully operational and generating low carbon electricity. Further information on this exciting project can be found via a press release entitled: Schroders Greencoat to acquire c.£700m Toucan Energy portfolio - the largest operational solar portfolio traded in the UK:

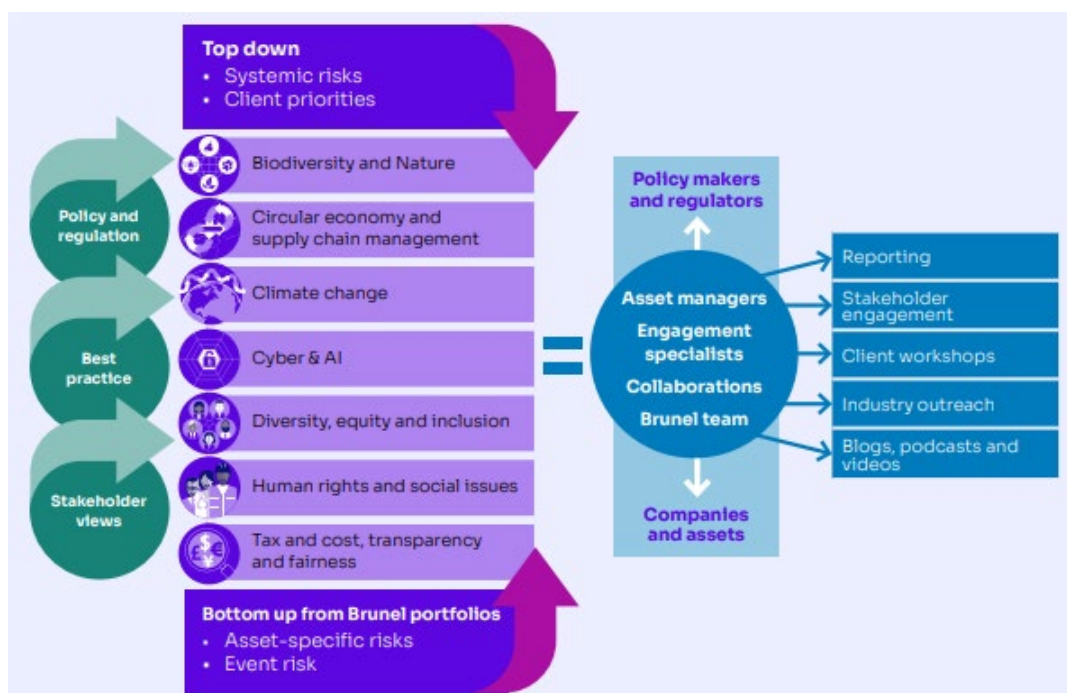
Consideration of climate and environmental impact together with wider ESG factors was also an important consideration under the selection of Fund Managers for the introduction of a Social & Affordable Housing Portfolio, which was undertaken during 2023-24. The Fund will continue to seek opportunities going forward and is next scheduled to review investment strategy as part of the 2025 actuarial valuation process.

With the majority of investments being managed through the Brunel Pool, the Fund takes a proactive approach in working within the partnership in the development of Brunel's Responsible Investment Strategy, Climate Policy, and Stewardship Policy through various oversight boards and groups. Brunel integrates Responsible Investment considerations into various stages of the investment process, with ESG factors incorporated into manager selection, ongoing monitoring, and performance evaluation.

Brunel strives to align all its investment decisions and operations with its Responsible Investment objectives across three pillars. An overview of how this works in practice is set out in the graphics below:

Responsible Investment Overview of ESG in action at Brunel

	 To Integrate	 To Collaborate	 To be Transparent
Own Operations	<ul style="list-style-type: none"> Board commitment In all we do Staff objectives 	<ul style="list-style-type: none"> Contributing to local and global community initiatives Diversity and inclusion ambassadors 	<ul style="list-style-type: none"> Best practice own reporting including climate change, diversity and tax
Portfolio Implementation	<ul style="list-style-type: none"> All asset classes globally Fully integrate into managers selection Low carbon and sustainability portfolio options 	<ul style="list-style-type: none"> Innovating investment solutions Cross pool collaboration ESG risk metrics and tools 	<ul style="list-style-type: none"> Impact reporting Positive case studies Carbon and sustainability metrics
Responsible Stewardship	<ul style="list-style-type: none"> Single voice Active engagement 	<ul style="list-style-type: none"> Annual engagement plan See Partnerships and Affiliations 	<ul style="list-style-type: none"> Proxy voting Policy and records Pre-declaration on selective votes



Source: Brunel Pension Partnership



Gloucestershire County Council, who administer the Fund, are working towards their own Net Zero goal by 2045 and this has been reflected in changes to operational policies, through hybrid working arrangements, allowing some meetings to be held remotely, where an office presence or travelling is normally required, encouraging public transport use, or the use of the Council’s electric pool vehicles.

The Fund continues to review and improve its operational delivery seeking to develop increased use of electronic communications with its members, and reduce the amount of printed or posted materials, going forward.

TCFD RECOMMENDED DISCLOSURE

C - DESCRIBE THE RESILIENCE OF THE ORGANISATION’S STRATEGY, TAKING INTO CONSIDERATION DIFFERENT CLIMATE-RELATED SCENARIOS, INCLUDING A 2°C OR LOWER SCENARIO.

The Fund is committed to keeping abreast of the latest scientific developments in respect of climate change to ensure that the strategic asset allocation remains appropriate in meeting its decarbonisation targets alongside generating the returns that are required to achieve the Fund’s financial objectives.

In recognition of the importance and need for the assessment of its portfolio’s resilience to different climate scenarios and impact on future climate trajectories, the Fund commissioned Mercer to undertake scenario analysis against its strategic asset allocation, with analysis completed as at 31 March 2024. This models the impact of four climate scenarios that highlight different aspects of climate-related risk, as set out in the graphic below:





1.5°C Rapid Transition

Average temperature increase of 1.5°C by 2100 in line with the Paris Agreement. This scenario assumes sudden large-scale downward re-pricing across multiple securities in 2025/6. This could be driven by a change in policy or realisation that policy change is inevitable, consideration of stranded assets or expected cost. To a degree the shock is sentiment driven and is therefore followed by a partial recovery across markets. Physical damages are most limited under this scenario.



<2°C Orderly Transition

Average temperature increase of less than 2.0°C by 2100. This scenario assumes political and social organisations act in a co-ordinated way to implement the recommendations of the Paris Agreement to limit global warming to below 2°C. Transition impacts do occur but are relatively muted across the broad market.



2.6°C Limited Transition

Average temperature of around 2.6°C by 2100. This scenario assumes that policymakers implement limited NDCs and fall short of meeting the Paris Agreement goals. The attempted transition translates in a slight downward re-pricing of securities in the late 2020s and slightly mitigates physical damage (relative to a failed transition). These damages are priced in to a degree in the late 2020s and the late 2030s.



3.7°C Failed Transition

average temperature increase of around 3.7°C by 2100. This scenario assumes the world fails to co-ordinate a transition to a low carbon economy and global warming reaches 3.7°C above pre-industrial levels by 2100. Physical climate impacts cause large reductions in economic productivity and increasingly negative impacts from extreme weather events. These are reflected in re-pricing events in the late 2020s and late 2030s.

These climate scenarios are constructed to explore a range of plausible futures over the next 40 years (i.e. taking us beyond the point where 'Net Zero' needs to be achieved if the goals of the Paris Agreement are to be achieved), rather than simply exploring tail risks. The scenarios variably demonstrate the impact of the two primary types of climate risk; transition risk (which dominates over shorter time periods) and physical damages risk (which dominates over longer time periods). In designing scenario analysis, a fundamental decision is whether to assume that any climate impacts are priced in today. The analysis below is expressed relative to a 'climate-informed' baseline¹; the implication is that all return impacts are presented in terms of how they are different to what we are assuming is priced in today.

¹ The baseline represents what Mercer are assuming the market is currently pricing in. The baseline includes a 10% weight to a Failed Transition, 40% weight to an Orderly Transition, 10% to a Rapid Transition and 40% to a range of low impact scenarios.



The following diagrams demonstrate the potential impact on returns under different climate scenarios which are used by the Fund.

The two graphs below show the annualised returns in absolute terms and the impact from climate effects. The Climate Impact chart shows the impact relative to the baseline under each scenario (e.g. Rapid Transition: Climate Impact at year 4 = absolute year 4 return on Rapid Transition – Absolute Level Baseline at year 4 (-1.0% = 7.1% - 8.1%):

5 Years – Over this time period, transition risk dominates. The Rapid Transition is the most impactful scenario. Under this scenario there is a shock to returns of about -3.9% p.a. in 2025 followed by a partial recovery the following year. Overall, annualised returns are reduced by 0.8% p.a. over the 5 year period under a Rapid Transition.

20 Years – As longer term physical damages begin to be priced in, the Failed Transition becomes the most impactful scenario. The Failed Transition causes a reduction in annualised returns of around 1.9% p.a.

40 Years – Over the long term, physical damages are the dominant driver, and the Failed Transition is by far the worst scenario. The Failed Transition causes a reduction in annualised returns of around 1.4% p.a.

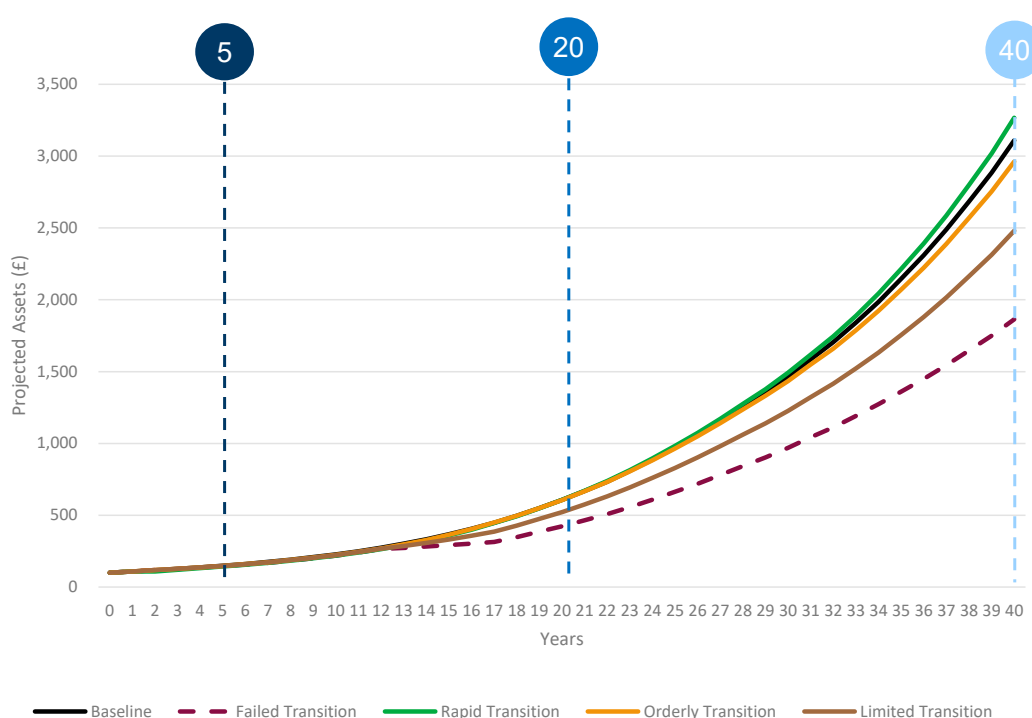


Source: Mercer, MSCI. ©2024 MSCI ESG Research LLC. Reproduced by permission.

The chart below shows an asset projection assuming a starting value of £100 and an investment strategy in line with the Fund’s current SAA.

Over the long term, a successful transition to a low carbon economy leads to enhanced outcomes when compared to scenarios associated with higher temperature outcomes, due to lower physical damages. The long term is most relevant given the Fund is an open DB Scheme with a very long time horizon, making a successful transition hugely important.

Asset Projection



Source: Mercer, MSCI. ©2024 MSCI ESG Research LLC. Reproduced by permission.

Scenario analysis is also considered by the Fund Actuary in assessing the potential impact on the Fund’s liabilities of different climate scenarios.

In addition to the scenario analysis the Fund also receive annual carbon metric reports from the Brunel Pool on listed equity and bond portfolios, and Mercer also undertake an annual assessment of carbon emissions and climate transition capacity (through the “ACT” framework) to assess the fund’s pathway in meeting its net zero targets.

Whilst the Fund acknowledges challenges with the quality of climate metrics and the landscape for scenario analysis is evolving rapidly, the Fund remains confident that the approach taken provides decision-useful information and helps ensure that climate-related risks and opportunities are kept under review.

It is anticipated that the scenario analysis would be re-run if there is a material change to the Fund’s strategic asset allocation and may be used as part of the decision-making framework for any proposed strategic changes.



03



Risk Management

03



Risk Management

TCFD RECOMMENDED DISCLOSURE

A - DESCRIBE THE ORGANISATION'S PROCESSES FOR IDENTIFYING AND ASSESSING CLIMATE-RELATED RISKS.

A key part of the role of Officers and the Pensions Committee is to understand and manage the risks that could have a financially material impact on the Fund's investments and funding position. The climate related risks set out in the previous section are considered in detail, alongside other financially material risks that may impact outcomes for members.

Climate change is included in the Fund's risk register, which considers impact and likelihood in assigning a score. The risk register is reviewed on a quarterly basis and reported to Pension Committee annually. Officers consider regulatory, scientific, and political developments on climate change, particularly those from recognised international bodies such as the Institutional Investors Group on Climate Change (IIGCC), International Energy Agency, and the UN Environmental Programme.

The Fund meets regularly with Brunel and discusses climate issues including any identified from the narrative reporting or climate metrics provided by Brunel. In turn Brunel meet with their appointed fund managers who also have a responsibility to consider climate related risks and opportunities. Mercer also undertake an annual assessment of carbon emissions and climate transition capacity (through the "ACT" framework) to assess the Fund's progress in meeting its net zero targets.

The Fund also take a proactive approach in working with Brunel through regular attendance at the respective client group, Investment Sub-Group, and the Responsible Investment Sub-Group meetings.

Existing fund managers are monitored on a regular basis by the Fund and the Brunel Pool to review the integration of climate risks into the managers' portfolio management approaches, and to understand their engagement activities.

Brunel and their engagement partner EOS Hermes have a proactive approach to stewardship and responsible investment and provide regular outcome reporting throughout the year



TCFD RECOMMENDED DISCLOSURE

B - DESCRIBE THE ORGANISATION'S PROCESSES FOR MANAGING CLIMATE-RELATED RISKS.

The Fund is responsible for asset allocation decisions and sets its strategic asset allocation targets to be consistent with the required return calculated by the actuary and the Fund's desired level of risk. The key method by which the Fund's risk is managed is through diversification of investment into a variety of asset classes. Each investment manager, whether appointed by Brunel or directly by the Fund is expected to produce metrics on climate risk and to manage these risks as part of their investment process and portfolio construction.

Brunel integrate climate risk into all stages of their engagement with investment managers as well as the design, selection, and monitoring of underlying funds.

A critical component of our climate risk management strategy is engagement and voting. Each investment manager appointed by the Fund is mandated to vote on all annual and special meeting resolutions and their voting record is reported to the Fund and its Officers. Any areas of particular concern are discussed directly with the underlying managers.

As part of the Fund's Responsible Investment Policy, the Fund aims to provide regular engagement information to the Committee on the top ten emitters identified within the listed equity and bond portfolios under the annual ACT analysis process provided by Mercer.

The Fund also seeks to use scientific information and analysis of company holdings where possible in informing the on-going monitoring of the transition.

TCFD RECOMMENDED DISCLOSURE

C - DESCRIBE HOW PROCESSES FOR IDENTIFYING, ASSESSING, AND MANAGING CLIMATE-RELATED RISKS ARE INTEGRATED INTO THE ORGANISATION'S OVERALL RISK MANAGEMENT.

Climate change considerations are embedded within the Fund's investment strategy and is considered alongside our wider duty of care, our commitment to responsible investing and sound risk management.

The Fund receives reports on key climate metrics (carbon intensity and fossil fuel exposure) and top contributors to emissions for each fund, alongside performance figures and other information in its quarterly reporting from the underlying Investment managers and will be working with Brunel and partners to continue to develop detailed climate change reports.

The Fund's Training Strategy outlines the requirement for the on-going training programme for members of the Pension Committee to enhance their knowledge and skills. Climate together with wider responsible investment issues are embedded within this programme accordingly. This ensures that ongoing decision-making is fully informed and considered. In addition to this Officers of the Fund undertake regular training via the attendance at conferences or specific workshops within the pool partnership.

04



Metrics & Targets

04



Metrics & Targets

TCFD RECOMMENDED DISCLOSURE

A - DISCLOSE THE METRICS USED BY THE ORGANISATION TO ASSESS CLIMATE-RELATED RISKS AND OPPORTUNITIES IN LINE WITH ITS STRATEGY AND RISK MANAGEMENT PROCESS.

The Fund utilises carbon intensity metric analysis of its listed equity and bond portfolio holdings. Currently this equates to approx. 63% of the Fund's Strategic Asset Allocation. This analysis informs the Fund on the effectiveness of the Brunel portfolio management and engagement through the monitoring of decarbonisation metrics. In addition to this the Fund through the Mercer ACT analysis monitors its current pathway on meeting the targets set out within its Responsible Investment Policy.

The Fund meets regularly with Brunel and discusses climate issues including any identified from the narrative reporting or climate metrics provided by Brunel. Brunel in turn meet with their appointed fund managers who also have a responsibility to consider climate related risks and opportunities.

TCFD RECOMMENDED DISCLOSURE

B - DISCLOSE SCOPE 1, 2 AND IF APPROPRIATE, SCOPE 3 GREENHOUSE GAS EMISSIONS, AND THE RELATED RISKS.

The assessment of a carbon footprint within listed equity and bond portfolios is an important tool in enabling the Fund to measure the level of carbon intensity within both portfolios and specific holding company investments. The measurement of carbon emissions provides a granular insight and helps the Fund with the on-going management and monitoring of climate related risks.

Carbon intensity analysis undertaken by Brunel is categorised by:

Scope 1 – Greenhouse Gas Protocol's scope 1 emissions, plus any other emissions derived from a wider range of greenhouse gases relevant to a company's operations. Scope 1 emissions are those directly emitting sources that are owned or controlled by a company, for example, produced by the internal combustion engines of a trucking company's lorry fleet

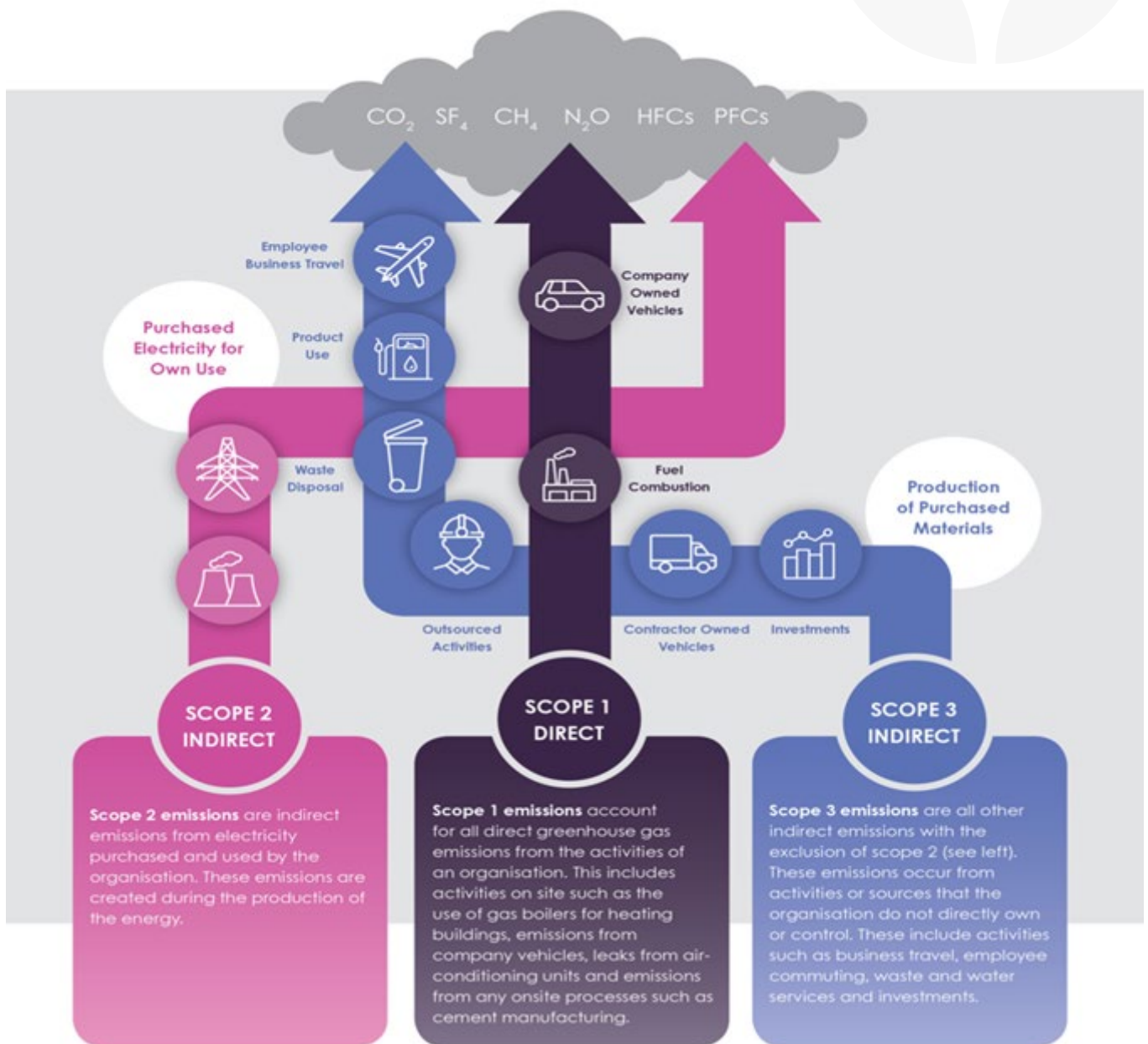
Scope 2 - from the consumption of purchased electricity, steam, or other sources of energy generated upstream from a company's direct operations

Tier 1 of Scope 3 - the company's first-tier upstream supply chain - the emissions of their direct suppliers.

The measurement of carbon intensity includes the calculation of a weighted average carbon intensity (WACI) score which is used to assess companies and enables clear monitoring on their transitional pathway going forward. This WACI score also assists the Fund in assessing specific portfolios and comparing these against a strategic benchmark. The availability and quality of available data throughout the industry is not always at the levels that the Fund would like, but

it is hoped that this will improve through the ongoing adoption of carbon reporting across the financial industry going forward. The WACI is calculated by taking the carbon intensity (total carbon emissions divided by total revenue) of each investee and multiplies it by its weight in the portfolio.

Further information on the definition of emissions is provided by the diagram below:



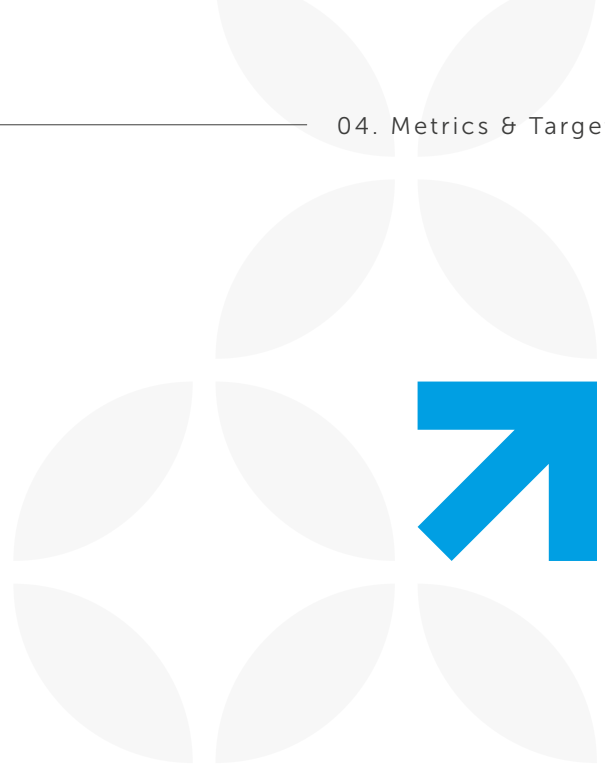
Source: Brunel Pension Partnership

CARBON METRICS

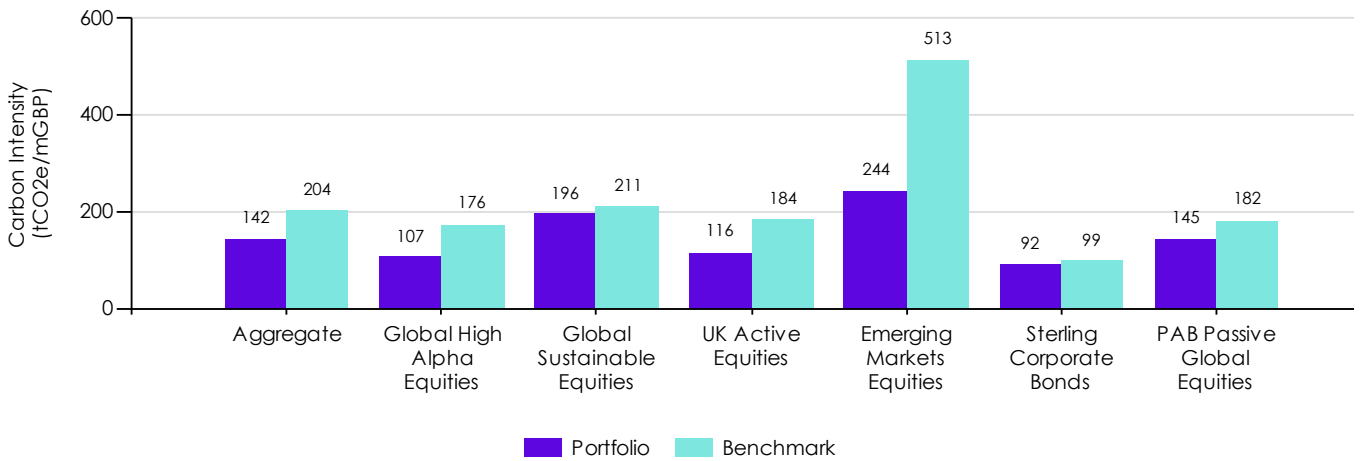
As at December 2023, the Weighted Average Carbon Intensity (WACI) of the Gloucestershire Aggregate Portfolio is below its Strategic Benchmark, with a relative efficiency of +30%.

Of the underlying Brunel Portfolios within the Aggregate, the highest intensity is the Brunel Emerging Markets Equities Portfolio (244 tCO₂e/mGBP), while the lowest one is the Brunel Sterling Corporate Bonds Portfolio (92 tCO₂e/mGBP).

All underlying Brunel Portfolios within the Aggregate have lower levels of carbon intensity compared to their respective benchmarks.



Weighted Average Carbon Intensity (WACI)

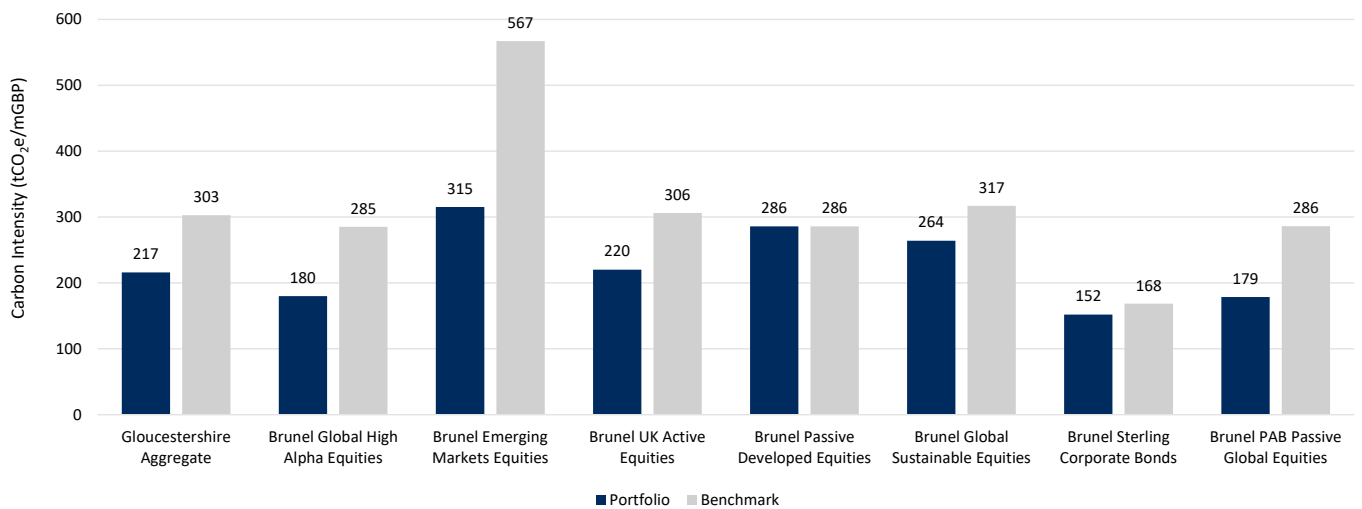


The December 2022 WACI is shown below for comparative purposes. As you will see the carbon intensity has reduced against all portfolios between financial years. The Passive Developed Equities Portfolio is no longer held by the Fund.

Whilst doubts remain about the quality of data and company disclosures, the Fund is making good progress in decarbonising its investment portfolio.

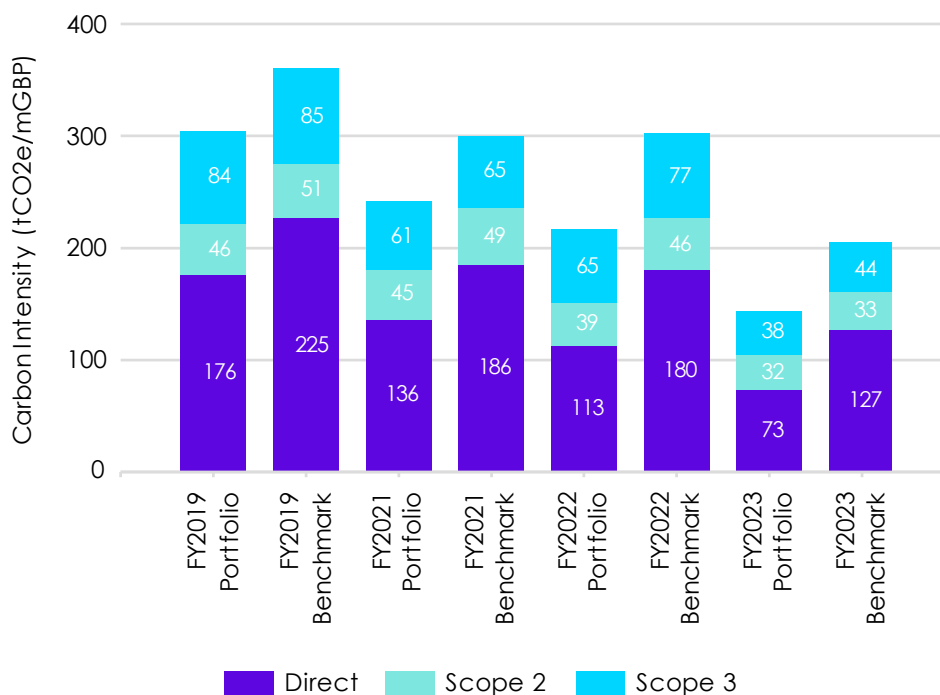


Weighted Average Carbon Intensity (WACI)



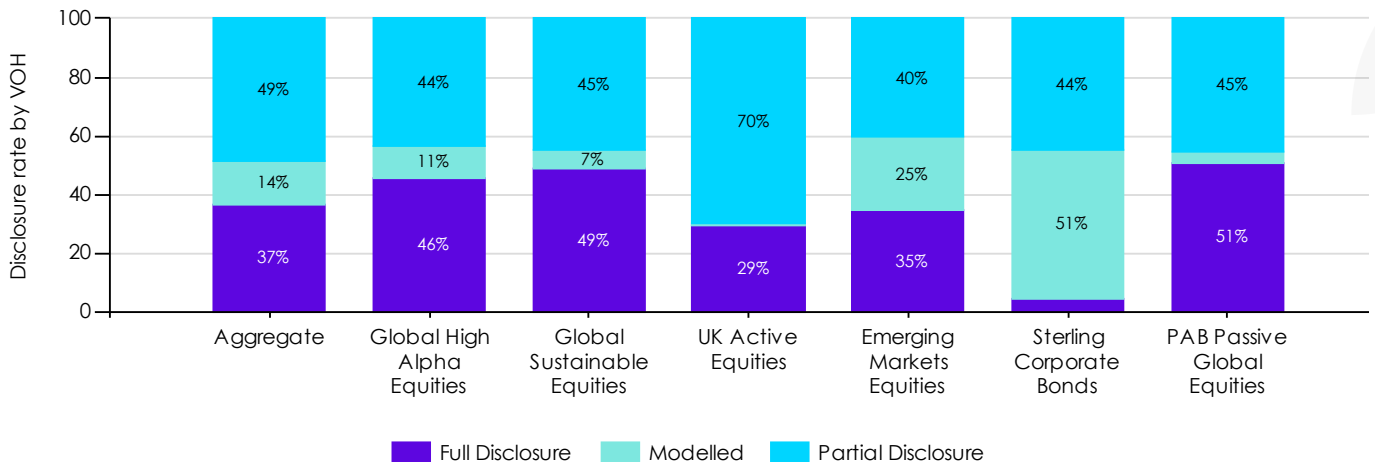
The Fund's aggregate WACI by scope is shown in more detail as follows:

Weighted Average Carbon Intensity (WACI)



The company disclosures rates are based on Scope 1 emissions, where the rate of companies in the Gloucestershire Aggregate Portfolio for which fully disclosed carbon data was available is 34% (GHG weighted) and 37% (value weighted), indicating scope for improved reporting among investees.

Scope 1 disclosure rates



As part of the Fund’s assessment of climate related risks the review of fossil fuel reserves provides a valuable insight into the potential for stranded assets going forward, because of the global transition. The fossil fuel reserves exposure metric looks at exposure to fossil fuels that have not been realised by an organisation.

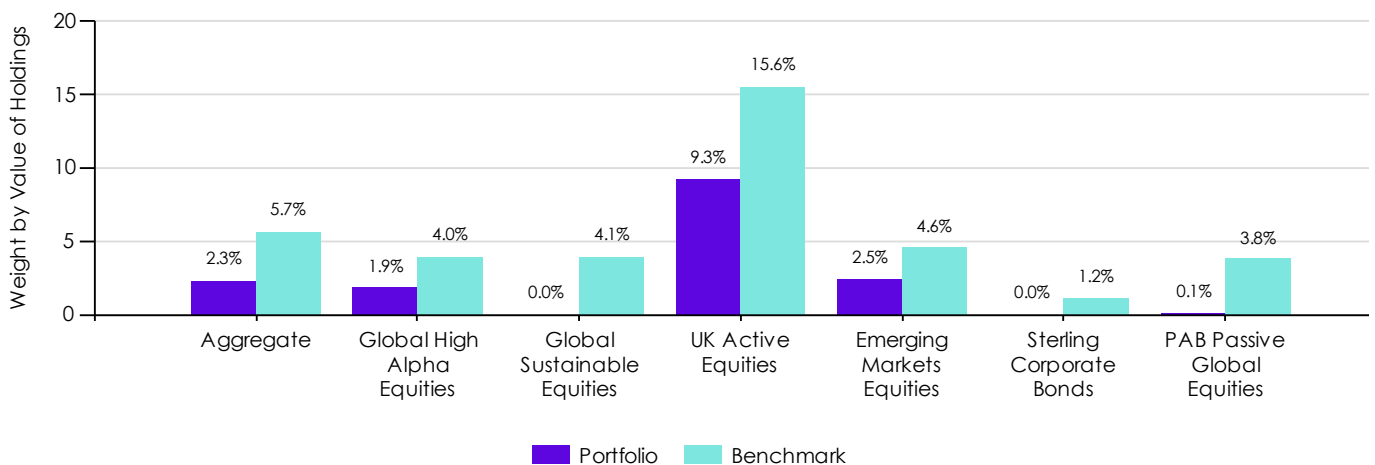
Fossil fuel reserves exposure gives a measure of companies that have disclosed their ‘proven’ reserves, as well as capturing companies that have ‘probable’ fossil fuel reserves. Companies that have both proven and probable reserves are assessed.

Proven reserves exposure - have a > 90% chance of being present.

Probable reserves exposure - have a >50% chance of being present.

Each portfolio is illustrated below against its respective benchmark.

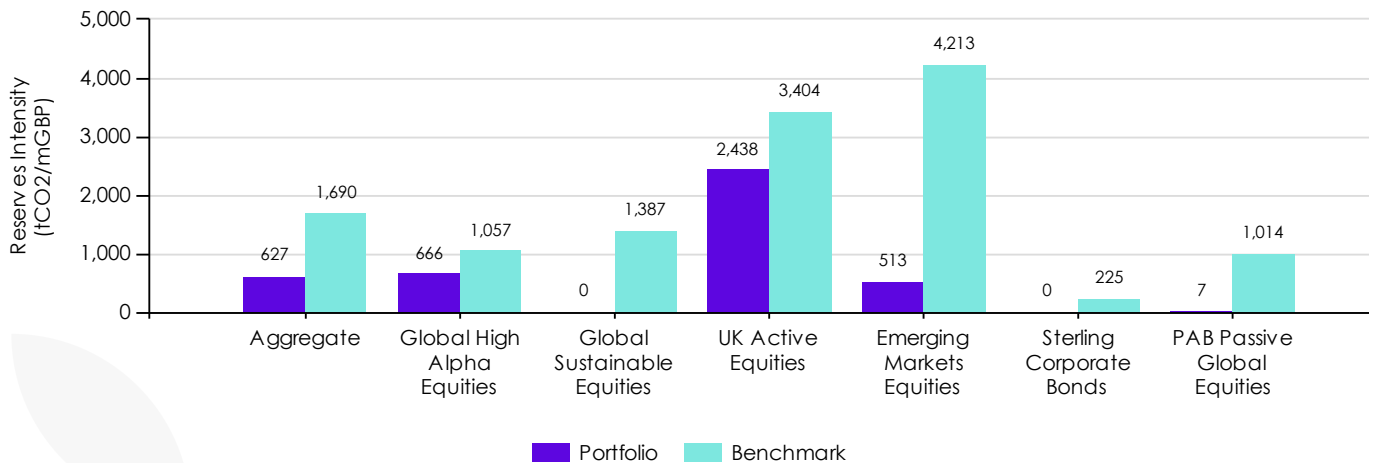
Fossil fuel reserves exposure





Taking the reserves exposures previously discussed, we can look at an assessment of potential future emissions that may incur from these reserves being realised. This metric is not included in the WACI figure (which focuses on current intensity) - and so it is an important assessment of company’s potential contribution to emissions via its stockpile of fossil fuels. We have been able to assess the potential emissions associated with the proven and probable reserves for companies within our portfolios, as well as an overall portfolio assessment. The reserves intensity highlights the risk of stranded assets across different portfolios, expressed on a basis of per GBP 1 million invested. We illustrate the potential emissions from reserves for each of our portfolios and their respective benchmarks below, as well as the Gloucestershire Portfolio.

Fossil fuel reserves intensity



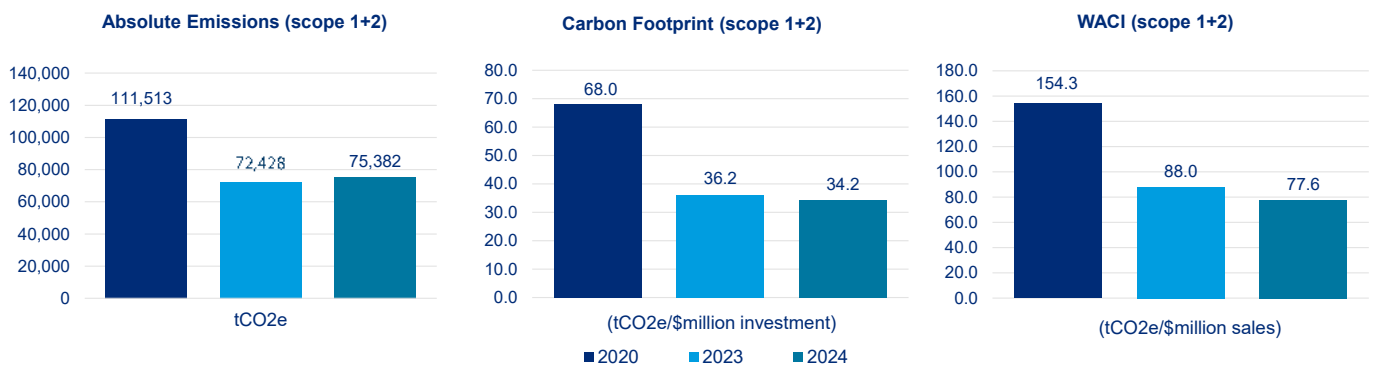
The full 2023 Carbon Metrics report can be found here:

ANALYTICS FOR CLIMATE TRANSITION (ACT)

As previously indicated the Fund, as part of its full review and development of a Responsible Investment Policy commissioned Mercer to undertake a baseline carbon footprint assessment of the Fund’s listed equities and corporate bond portfolios, as at 31 December 2019 (referred to as a 2020 baseline). Please note that for target setting purposes for the corporate bond portfolio the Fund adopted a revised baseline of 31 December 2020 (referred to as a 2021 baseline) as a result of terminating the original bond fund and allocating to the Brunel Corporate Bond fund. This established two baselines against which levels of carbon intensity can be tracked and through the annual assessment of holdings going forward will provide an insight in how the Fund is performing in meeting its decarbonisation and net zero targets.

Carbon footprint is an effective measure in the monitoring of decarbonisation and is calculated by dividing absolute emissions associated with a portfolio or holding per \$million invested in that portfolio or holding.

Listed Equities

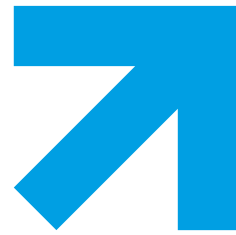


Source: Mercer

As shown above scope 1 & 2 absolute emissions within Listed Equities have reduced by 32.4% from the baseline, with the carbon footprint and WACI both having decreased by 49.7%.

It should be noted that during the 4-year period, the Listed Equities portfolio underwent strategy changes, including the divestment from the Scientific Beta Multi Factor Developed, World Developed, World

Developed (hedged) and MSCI World Carbon Target funds, and the investment in the Brunel – Global Sustainable and Brunel – PAB Passive Global mandates. The Brunel – EM, Brunel – High Alpha and Brunel – UK funds were present throughout the entire analysis period. This move to more sustainable investment portfolios has clearly assisted in the decarbonisation achieved during this period.

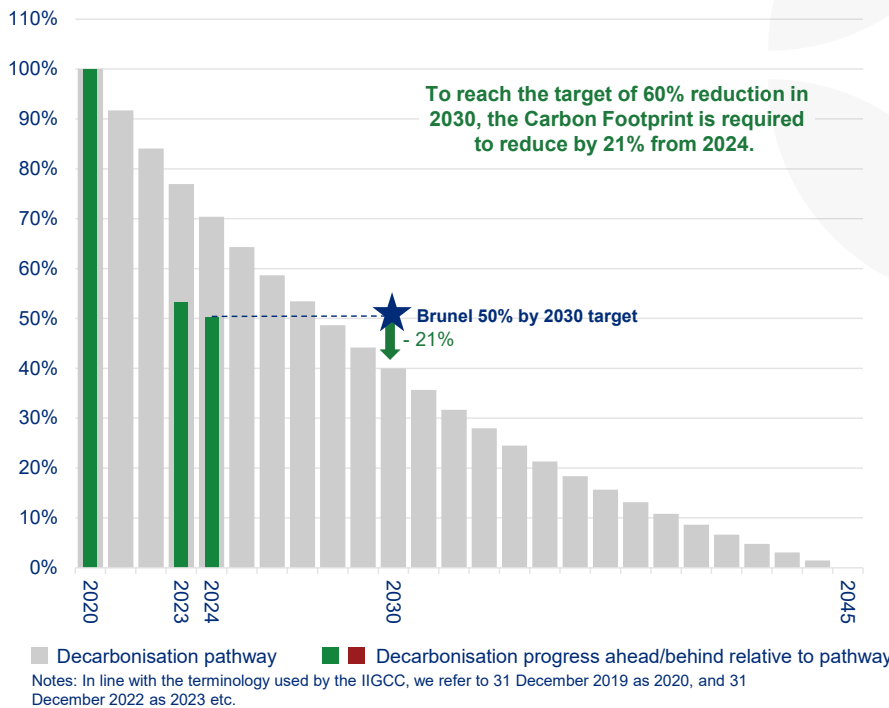


As of December 2023, Brunel – EM is the least carbon efficient mandate with a Carbon Footprint equal to 68.9 tCO₂e/\$million investments.

Decarbonisation progress

Progress relative to target – Listed Equity

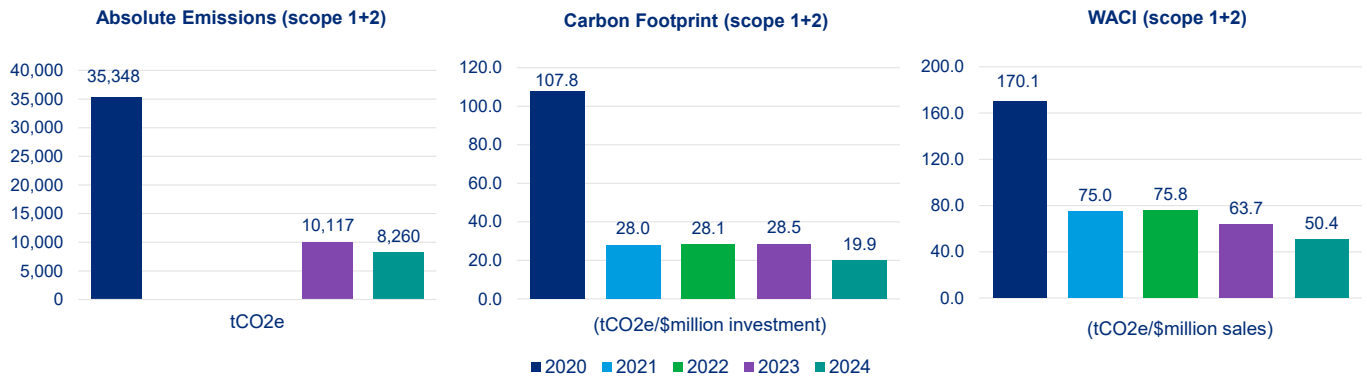
Carbon Footprint (tCO₂e / \$million invested) for Listed Equity, relative to 2020 Baseline - Scope 1 and 2



Source: Mercer

With a 49.7% reduction of Carbon Footprint over the last four years, this portfolio is ahead of the decarbonisation pathway, and on track to achieve the interim reduction target of 60% by 2030. The Listed equity portfolio is relatively more carbon efficient when compared to the wider market (c.35% below the MSCI ACWI benchmark as at 31st December 2023).

Corporate Bonds (exc. MAC)



Source: Mercer

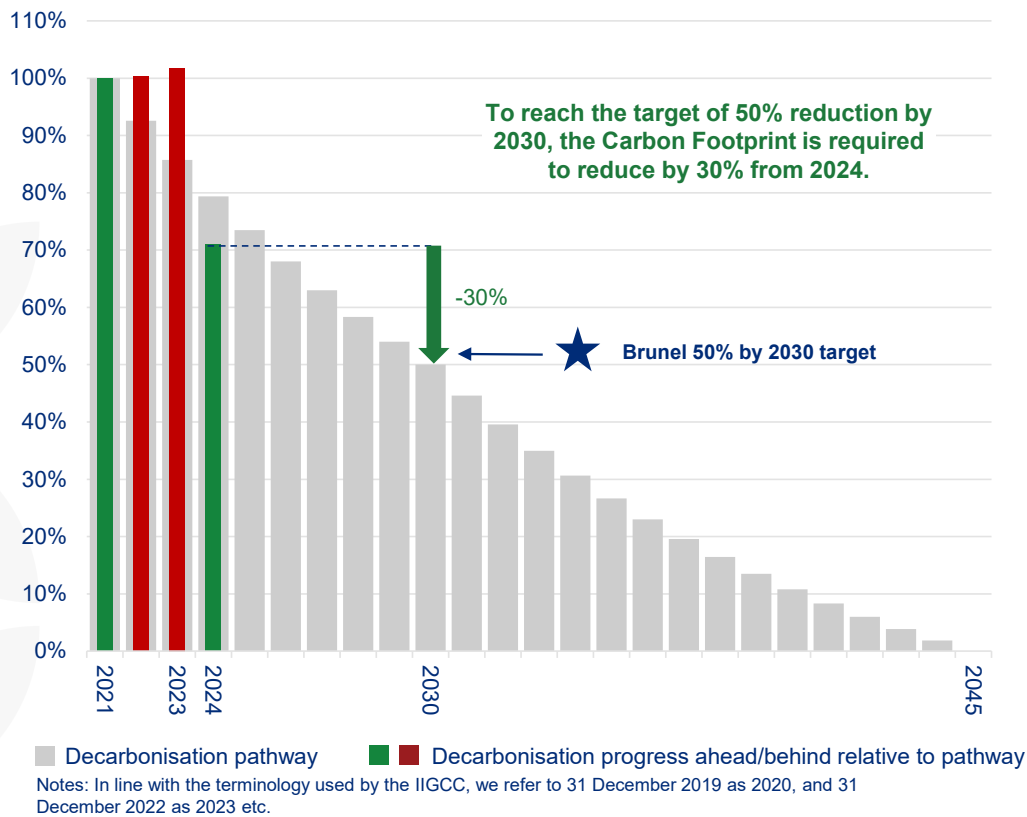
The Fund's Corporate Bonds portfolio decreased by c.81.6% on a Carbon Footprint basis, from December 2019 to December 2023. The Weighted Average Carbon Intensity (WACI) decreased by c.70.4% in the same period, and the Absolute Emissions decreased by c.76.6%. Much of the fall in carbon footprint can be

attributed to the change of corporate bond fund over the period in question. Therefore, the decarbonisation target (see next section for details) is based on expected decarbonisation between 2021 and 2030 for the fund currently held.

Decarbonisation progress

Progress relative to target Corporate Bonds (exc. MAC)

Carbon Footprint (tCO₂e / \$million invested) for Corporate Bonds, relative to 2021 Baseline - Scope 1 and 2



Over the last 3 years, the Carbon Footprint for the sterling corporate bonds portfolio has decreased by 29.1%. Hence, the portfolio is currently ahead of the decarbonisation pathway to achieve the interim reduction target of 50% by 2030.

Whilst accepting the limitations within the quality of the data available for this analysis, it is clear that the Fund is making good progress in decarbonisation and in meeting its Responsible Investment targets. The Fund will continue to monitor its progress as an integral part of its fiduciary duty.



TCFD RECOMMENDED DISCLOSURE

C – DESCRIBE THE TARGETS USED BY THE ORGANISATION TO MANAGE CLIMATE RISKS AND OPPORTUNITIES AND PERFORMANCE AGAINST TARGETS.

Following consultation with members and employers within the Fund, the Pension Committee approved a Responsible Investment Policy in June 2024, which sets out the following carbon transition targets, against the ACT baseline assessment:

- 'Net Zero' emissions by 2045, across the whole investment portfolio
- Total Fund carbon reduction target of 50% by 2030 (Carbon footprint scope 1+2)
- Allocation of 30% of the Fund to sustainable/low carbon assets by 2025
- A listed equities decarbonisation target of 60% reduction by 2030 (scope 1+2 against the 2020 baseline)
- A corporate bonds decarbonisation target of 50% reduction by 2030 (scope 1+2 against the 2021 baseline)

The annual ACT analysis of the Fund's listed equities and corporate bond portfolios is undertaken as at the end of December. It is carried out by Mercer and outlines the carbon footprint of investment holdings. It is used to track the Fund's performance in reducing carbon intensity and its pathway to meeting its net zero target by 2045 as set out within its Responsible Investment Policy, as well as the specific interim targets by 2030.

A key priority in future will be to expand specific net zero target setting and monitoring of metrics to other asset classes, not currently covered through the baseline analysis (private markets including infrastructure and property).

The Fund is committed to extending the portfolio's covered within the ACT analysis, where possible, but recognise that given the current limitations in the provision of accurate, reliable carbon data across the private markets, the Fund may need to use estimates within this analysis in the short-term pending improvements across the industry.

In addition, the Fund also uses the annual carbon metrics report for listed equity and bond investment holdings undertaken within the Brunel Pool, which provides granular data against holdings and portfolios, calculates weighted average carbon intensity, along with comparatives against strategic benchmarks.

Regular responsible reporting on ESG activities and stewardship outcomes including voting and engagement are also received from Brunel, which also assist the Fund in monitoring its performance against these targets.

A framework for enhancing stewardship and engagement on the Fund's top ten carbon emitters is currently being developed. In recognition that the top ten emitters of carbon within the equity and corporate bond portfolios identified under the ACT analysis for the Fund, equate to a significant high percentage of the carbon footprint of the total portfolio. It is therefore essential the Fund, in partnership with Brunel and partners, engages with these organisations to challenge and influence change, monitoring their pathway in reducing carbon reductions throughout their business activities. These companies will have the biggest impact on these portfolios.

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MSCI

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CONTACT US

For more information, please call us on [01452 328907](tel:01452328907)

Or email

Gloucestershire Pension Fund, Shire Hall, Westgate Street, Gloucestershire GL1 2TG

