



Task Force on Climate-Related Financial Disclosures (TCFD) Report

Avon Pension Fund

2021/22

Bath & North East
Somerset Council

For you, for now, for the future
lgps
2014



Executive Summary

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.

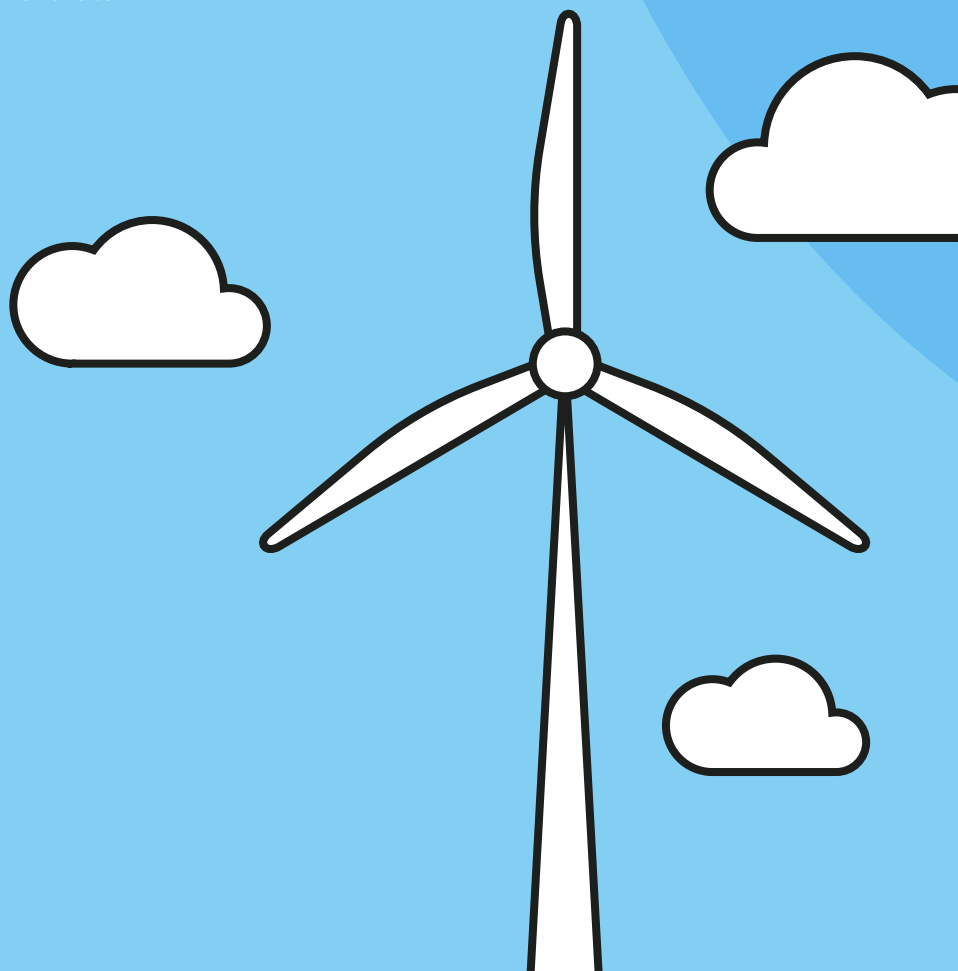
Following a review into how the financial sector can take account of climate-related issues and the need for better information to support informed investment, in December 2015 the TCFD was created.

In 2017, after a consultation process the TCFD issued initial recommendations for reporting to help stakeholders in financial markets understand their climate risks and opportunities. This covers the areas of Governance, Strategy, Risk and Metrics & Targets and Avon Pension Fund has now adopted this guidance and set out its own disclosures below.

Although not yet compulsory for Local Government pension funds, the Fund is a strong supporter of these disclosures. This critical framework not only helps us to deliver on our own climate change objectives but is also a way of signalling to investee companies, managers, partners and pension fund members how important climate risk transparency is if the Fund is to achieve real world emission reductions.

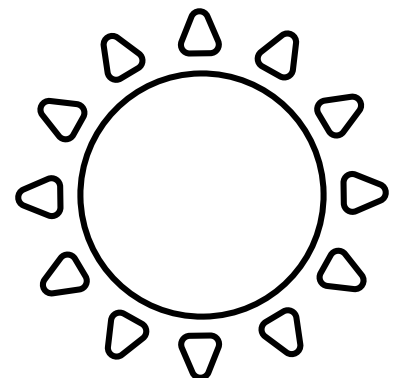
This is the second time the Fund has reported against these standards and reporting has been completed to the fullest extent we are able. While data is not always available in the quantity or quality desired, this is becoming more readily available over time, along with best practice frameworks and methodologies.

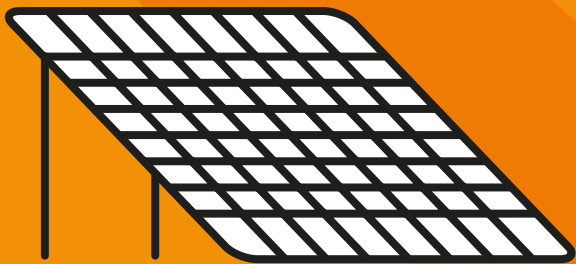
It is hoped that the level of detail and number of areas covered can increase with each future reporting period as the industry makes positive steps forward and as more disclosures become mandatory.



Contents

Executive Summary	2
Section 1 – Governance	4
Section 2 – Strategy	7
Section 3 – Risk Management	13
Section 4 – Metrics & Targets – Listed Equity Portfolio	17
Important notices from data providers	24





Section 1

Governance

Governance

1.1 Governance and Climate-related Risks and Opportunities

Our beliefs and approach to climate change are clearly set out within our Investment Strategy Statement (ISS) and Responsible Investment (RI) Policy.

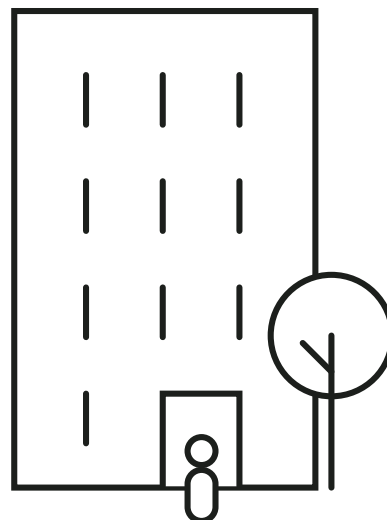
Overall responsibility for the Fund's investment strategy and RI policy, which recognises climate change as a long-term financial risk, rests with the Avon Pension Fund Committee (the Committee), who regularly meet to discuss such matters.

Climate change considerations are initially discussed by Officers and consultants with the Avon Pension Fund Investment Panel (the Panel), a sub-committee which includes a number of external investment experts. This then feeds through into the Committee where discussions are reviewed, and formal decisions are made.

Our approach to RI continuously evolves and our Policy is revised and updated, due to both changing landscapes and broader industry developments, as part of our 3-year investment strategy review cycle. At the last strategic review, the Committee agreed a series of climate change objectives that are kept under review as we move toward our 2050 Net Zero goal. Implementation of policy and objectives is monitored by the Committee. The next strategic review will begin in late 2022. Ongoing review of sustainable and Paris-aligned strategies, policy advocacy work, carbon emissions metrics, examples of material and/or successful engagement outcomes and key initiatives that the Fund has committed to, either in its own right or through one of its strategic partnerships, form the basis of climate change reporting.

The Committee is also responsible for ratifying the annual RI Report, while Officers and external experts convey further climate change information and developments to Committee to maintain knowledge levels, with further training being provided in specific areas as required. For instance, this year the Fund has adopted the Hyman's LGPS Learning Academy, which includes dedicated modules on climate change and disclosures.

Aggregate voting and engagement statistics for the Fund's listed equity portfolios is also monitored in terms of votes cast and number of engagements in the period according to each sub-theme included in the Fund's engagement plan. This has been co-developed with the Fund's pooling provider, Brunel Pensions Partnership (Brunel) and their appointed voting and engagement provider, EOS at Federated Hermes (EOS). The engagement service provided by EOS is complementary to the engagement activity undertaken by underlying investment managers within Brunel's pooled portfolios. The engagement plan itself is developed collaboratively between the Fund, Brunel and EOS.



1.2 Brunel Pension Partnership

Brunel is now directly responsible for management of 60% of the Fund's assets across its Equity, Multi Asset Credit, Diversified Returns and UK Property portfolios, and a range of private markets portfolios. A further 20% of assets relating to the Fund's risk management strategies are governed by Brunel legal agreements. Brunel are committed to managing climate change risk and opportunities, dedicating significant resources to this area.

A comprehensive guide to their climate change policy can be found [here](#) and this policy is already delivering real-world impacts, using its influence to challenge the asset management industry with a five-point plan "to build a financial system which is fit for a carbon zero future". Brunel expects companies and fund managers to effectively identify and manage the financially material physical, adaptation and mitigation risks and opportunities arising from climate change as it relates to entire business models.

A five-point plan "to build a financial system which is fit for a carbon zero future"

They have an expectation that companies should:

- Put in place specific policies and actions, both in their own operations and across their supply chains, to mitigate the risks of transition to a low carbon economy and to contribute to limiting climate change to below 2°C.
- Disclose climate-related risks and actions to mitigate these in line with latest best practice guidelines e.g., TCFD disclosures.
- Include an assessment and scenario analysis of possible future climate change risks in addition to those that have already emerged. As part of its manager selection and ongoing monitoring Brunel use data from the Transition Pathway Initiative (TPI) and carbon footprinting. These tools greatly inform portfolio construction and design.

With our support, Brunel aims to be a catalyst for change in the financial system and is in a unique position to make this happen given their position as a recognised industry leader in responsible investment, Climate and ESG globally. Brunel's own TCFD disclosures can be accessed [here](#).

1.3 Assessing and Managing Climate-related Risks and Opportunities

Day-to-day responsibility for implementation and oversight of the Fund's climate policy lies with Officers of the Fund, with advice and monitoring support provided by external consultants with specialist ESG expertise. Significant resource and budget is set aside to ensure the Fund fully integrates climate change into the investment decision making process. This includes an internal senior officer with direct responsibility for ESG disclosures, industry group member representation and management of projects relating to carbon footprinting and emissions analysis, among other duties. As our assets are primarily managed by Brunel, the implementation of much of the management of climate-related risk is delegated to Brunel.

Brunel is monitored on a regular basis by the Client Group. This group comprises senior officers from the local authority (partner) funds that are shareholders in Brunel and provides oversight through monthly updates, while acting as a forum to discuss their Committees' strategic priorities and emerging issues. It is used to discuss and approve changes to Brunel's investment products or services, providing input and adjustments where necessary. A dedicated RI sub-group, also comprising partner-fund representatives, meets monthly to focus on RI specifically. This group acts as a forum for updates from the pool and other funds, sharing ideas and best practice from the industry and feeding in suggestions to the main Client Group. Discussion topics at these meetings can include stewardship interests, accessing expertise and consulting on policy design and development.



Section 2

Strategy



Strategy

The Fund was early to recognise the significance of climate change, reporting it as a long-term financial risk in 2016, and subsequently publishing details of our carbon footprint in 2017 and annually thereafter. In the same year we began investing in specific Low Carbon funds, alongside setting climate targets that we continue to monitor and update (see section ‘Metrics & Targets’)

We seek to address both the transition risk and physical risks associated with climate change by investing in low carbon assets and allocating capital to renewable and sustainable assets which enable the Fund to access optimal return opportunities. We expect the financing of renewable infrastructure projects (via funds) to have wider positive impacts by playing its role in mitigating the physical risks of climate change over time. This is undertaken within an overall framework whereby the expected return on the assets helps support the long-term funding of the liabilities, within acceptable levels of risk.

Climate change scenario modelling has helped the Fund understand keys risks over the short (1-5 years), medium (5-10+ years) and long term (10-20+years).

Risks range from short-term market adjustments on the back of regulatory change (for example the introduction of carbon pricing to certain markets), to wider movements in public policy, and over the longer-term, the need to reassess the operating viability of real assets such as infrastructure under extreme climate conditions.

Over the medium-term, transition risks, both in terms of technology and policy, are expected to be material, whereas over the long-term physical risks are expected to dominate. Climate risks are therefore a major focus of the investment portfolios managed by Brunel and are key considerations in their manager selection process. Once appointed, regular monitoring by Brunel’s portfolio managers and Responsible Investment team takes place and, while strict exclusion policies are not applied, managers must be able to justify a holding’s inclusion. If managers cannot credibly explain how climate-risk has been accounted for and effectively integrated, then they are considered for replacement.

Engagement with managers can often lead to positive outcomes that may not have been possible through simple dissociation. One such example is BlackRock. Having previously faced criticism around a lack of climate change policies, rather than simply switching manager, Brunel extensively engaged with BlackRock, including holding a one-to-one meeting with their CEO, Larry Fink, leading to the company agreeing to prioritise sustainability through their investment and stewardship approach. BlackRock also then joined Climate Action 100+, an investor group requiring its members to put pressure on companies to align themselves with the Paris Agreement, alongside disclosing the financial risks of climate change and assigning board accountability.

One relatively new portfolio where environmental considerations are particularly prevalent is in Multi Asset Credit, which invests in an array of different debt instruments. Here, a comprehensive responsible investment policy is key as the managers are directly lending to organisations that can either be aligned or not to the transition, and debt holders do not have the same ability to influence corporate boards as shareholders have. Prospective managers were assessed on how integrated responsible investment practices were in their business model and if they could adopt Brunel’s Climate Change Policy. Those managers that stood out understood the goal of achieving Net Zero, knew which assets were 2°C (or lower) aligned and showed thought leadership in this area.

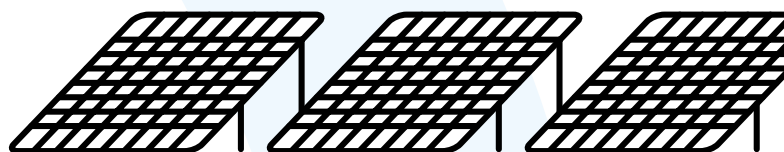
Bondholders are often faced with more resistance when approaching companies through traditional channels as investors financing companies through loans typically do not possess the same voting rights as shareholders, which often leads to a less impactful dialogue between lender and borrower. To overcome this, Brunel have been working with their underlying managers within the Private Debt portfolio, to which we have a 5% strategic allocation, to develop new ways of engaging with and influencing the underlying borrowers on ESG issues. Lenders are increasingly financially incentivising borrowers to embrace ESG best practice and reduce their carbon footprint through the terms of loan agreements. For example, a manager within the portfolio currently incentivises one of its investments, a large European glass testing firm, by offering more favourable lending rates upon achieving certain high standards in a sustainability assessment of its supply chain, based on ratings covering areas such as environment, ethics, human rights and sustainable procurement.

Positive opportunities also exist for companies prepared for the low carbon transition and those generating green revenues^[1]. For the Fund, examples include a new multi-fuel facility set up in Slough which uses waste as an energy source and greenhouses in East Anglia warmed by heat pumps using water from near-proximity recycling centres.

Even for companies generating green revenues, further efficiencies are always being explored. In our Brunel Infrastructure portfolio this included a major wind energy provider looking to reduce emissions in the construction of its assets by carrying out geological borehole surveys at its sites. Those surveys that found rock close to the surface allowed construction of the wind turbines to include a 'rock anchor' foundation.

This type of rock anchor required 70% less concrete than traditional foundations and resulted in a 27% drop in emissions.

Another holding, a French renewable-power producer, is seeking ways to effectively recycle its used wind-turbine blades and solar panels.



¹ Company revenue exposure to products and services that deliver environmental solutions per an agreed framework such as the EU taxonomy.

2.1 The Impact of Climate-related Risks and Opportunities on Business Strategy and Financial Planning

Our climate change objectives are designed to maximise the impact we can have as a relatively small investor in the global context. Success will only be achieved if our actions make real reductions in global carbon emissions and if companies and governments implement changes to ensure the transition to a low carbon economy is delivered as soon as possible.

The Fund's policy is to integrate RI across its investment decision-making process for the entire portfolio, adopting a flexible approach to managing the investment strategy and asset allocation in order to ensure the strategy is robust from a risk and return perspective.

When setting the investment strategy and objectives, the analysis includes the impact of ESG issues such as climate change on each asset class, the materiality of these risks and whether there are any strategic opportunities that would generate value. This analysis led to the Fund being one of the first pension funds to invest in passively managed low carbon equities (although the Fund has more recently evolved its approach, investing in a more ambitious "Paris aligned" portfolio – see below for further details).

2.2 Asset allocation

Asset allocation remains one of the Fund's primary tools to help meet our ambition to become a net zero investor. Following a full risk/return analysis the Fund exited its dedicated allocation to emerging market equities in 2021. A contributory factor was the limited ability to directly influence climate policy, at appropriate levels, in these geographies. The Fund subsequently invested in a newly launched "Paris aligned" passive index. Developed jointly by FTSE Russell and Brunel, the index targets material reductions in emissions today as well as into the future. At launch, we switched our 10% (c. £575m) strategic allocation from a first-generation low carbon fund into the new Paris Aligned fund, setting a precedent for the wider investment industry.

The Fund now has a combined £1.4bn in Paris -aligned passive and sustainable listed equities.

We have committed £380m to renewable infrastructure projects across a number of portfolios, covering wind and solar energy generation as well as emerging technologies including bioenergy and energy storage solutions. The Fund also seeks, where possible, to integrate climate risks and opportunities into its credit portfolios, benefitting from Brunel's robust due diligence and manager selection process as outlined earlier.

In addition to our £380m renewable infrastructure capital commitment, our £440m core infrastructure portfolio, managed by IFM, has recently taken steps to improve its sustainability credentials. Most notably in 2022, the General Infrastructure Fund, which the Fund has a 5% strategic allocation to, provided seed-capital, and acquired a large initial stake in a newly launched Net Zero fund. This Net Zero fund seeks to accelerate the world's transition to a net-zero emission economy by targeting investment opportunities in areas such as renewable power, energy storage, electricity transmission and distribution, electric transport infrastructure, low-carbon fuels and carbon capture.

Furthermore, the Fund's cash management strategy, which uses a basket of exchange-traded funds (ETFs) to replicate the Fund's strategic benchmark, was recalibrated with a significant portion allocated to an ETF designed to track a Paris-aligned equity index.

The Fund will continue to explore innovative ways of achieving net zero alignment in its risk management framework by, for instance, utilising synthetic instruments in less well-advanced areas of the market where structural and regulatory hurdles still exist and will also consider the potential to build its exposure to green gilts in a cost-effective way as issuance increases.

2.3 Stewardship

Engagement forms a critical part of the Fund's approach to climate risk. Significant progress was made recently in a number of areas through Climate Action 100+, the world's largest investor initiative on climate change (CA100+), of which the Fund is a supporter alongside 615 signatories representing \$65 trillion USD in assets under management. 167 companies were engaged with over 2021 to help them reach net zero with successes including;

- Rolls-Royce (aerospace and defence) - mapped out detailed decarbonisation plans, with clearer short- and medium-term targets. It committed to making all its civil aero-engines compatible with 100% Sustainable Aviation Fuel (SAF) by 2023 and embedded this target into its executive remuneration policy.



- Nissan Motors (automobile manufacturer) - set goals to achieve carbon neutrality across operations and the life cycle of its products by 2050, investing USD 17.6 billion over the next five years to speed up electrification of its products. The company also aims to have 100% of all new vehicle offerings in key markets electrified by the early 2030s.

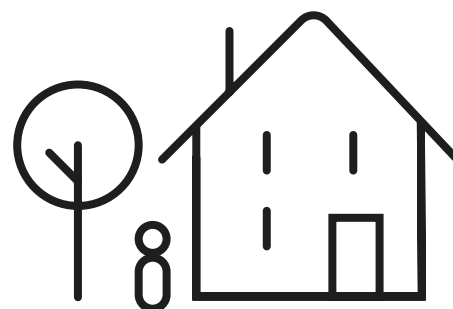


Our voting and engagement partner, EOS, also engaged with luggage manufacturer Samsonite on climate change, product innovation and circularity. This led to the launch of a sustainability strategy to 2030, which includes plans to use 100% renewable energy while achieving operational carbon neutrality by 2025. Samsonite will also collect and recycle products for up to 20 years post-purchase.

2.4 Operational considerations

Environmental decisions also factor into the Fund's daily operations. While day-to-day considerations such as access to offices could be disrupted by physical climate change risk and severe weather events like flooding, the ability of staff to work remotely and the provision of the necessary technology aids business continuity and helps minimise risk to service delivery. Bath & North East Somerset Council, who administer the Fund, are working towards their own Net Zero goal by 2030 and this desire to reduce emissions is reflected in staff policy, from hybrid working arrangements allowing some meetings to be held remotely to, where an office presence or travelling is required, encouraging public transport use, and providing bike storage.

Separately the pension fund has an ongoing digitalisation programme to improve IT infrastructure, reduce the use of printed/posted material and increase electronic communication with members and employers. Whilst all employers and many members are set up for electronic communication, we recognise that not all members wish to communicate with the Fund electronically or by self-service access.



2.5 Organisational Resilience Under Different Climate-related Scenarios

We believe that investing to support the Paris goals that deliver a well below 2°C temperature increase is entirely consistent with securing long-term financial returns and is aligned with the best long-term interests of our beneficiaries.

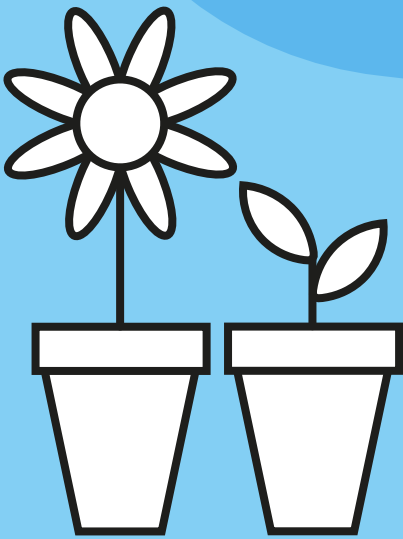
We initially undertook climate change scenario modelling in 2019 to help us understand the impact on the Fund of different temperature increases. This included modelling the returns of alternative portfolios with increased allocations to sustainable equities and low carbon real assets under different climate change scenarios and timeframes. Results showed that a portfolio with increased allocations to sustainable assets has the potential to improve returns under all but the most extreme scenario (+4°C), which would see all model portfolios suffer as the physical risks of climate change are realised. In addition, the analysis identified the potential to capture a 'low carbon transition premium' by investing over the medium term to 2030 in sustainable and transition aligned assets.

The analysis helped support the decision to increase our allocation to Global Sustainable Equities from 3.5% to 10% (which has since increased again to 15%) of total assets, alongside a dedicated 5% allocation to Renewable Infrastructure.

The Fund has commissioned an independent consultant to undertake annual climate transition analysis to help us monitor progress on a periodic basis against the 2019 baseline year. In addition to well established climate metrics such as absolute emissions and weighted average carbon intensity, this analysis helps the Fund understand its decarbonisation trajectory by assessing, among other things, the implied temperature rise associated with its equity portfolios.

Further information on the Analytics for Climate Transition ('ACT') tool is set out in the 'Metrics & Targets' section of this statement.





Section 3

Risk Management

Risk Management

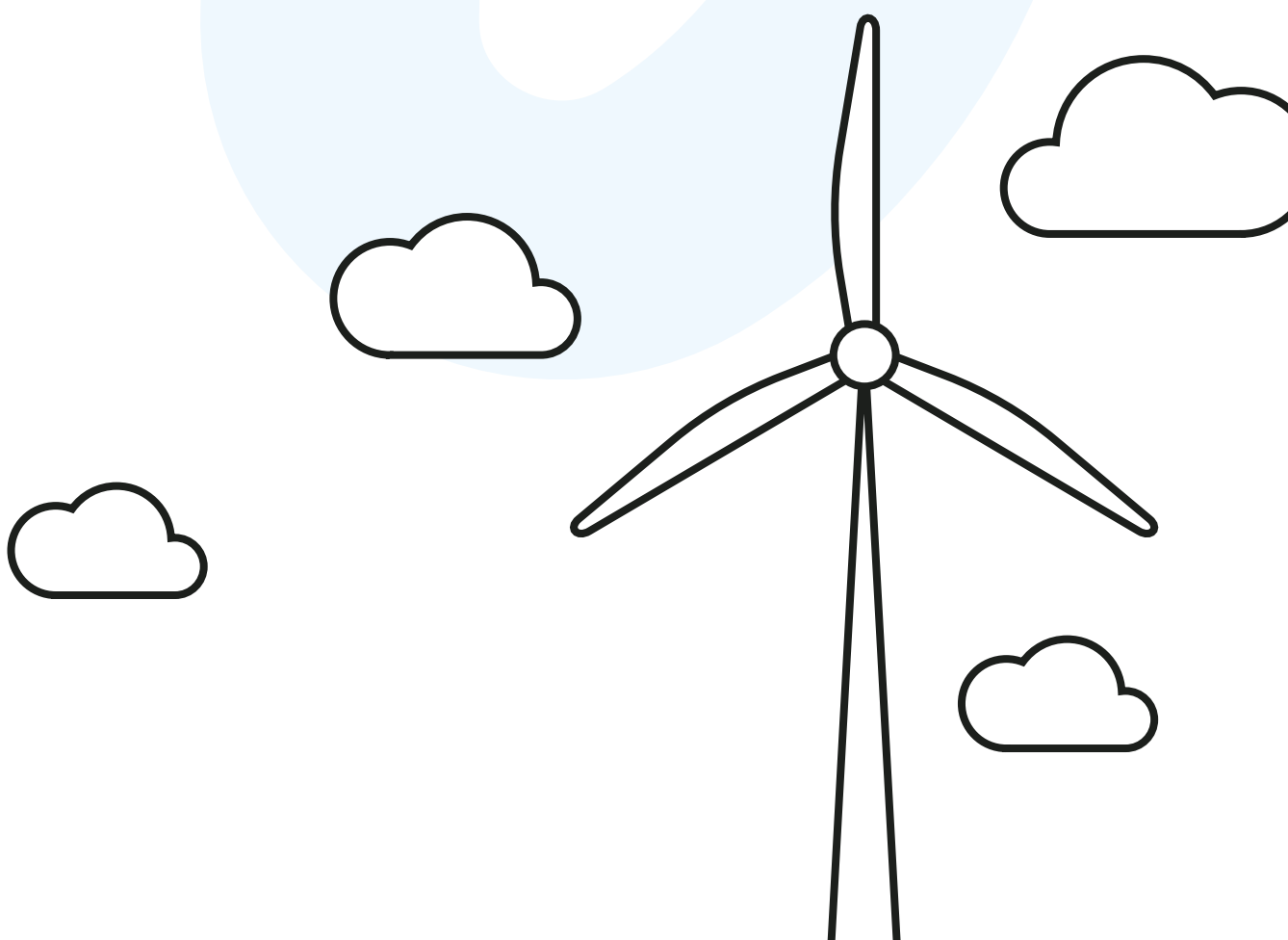
3.1 Identifying, Assessing & Managing Climate-related Risks

The Fund's Risk Register identifies the governance, operational, funding and investment risks that the Fund is exposed to and, having evaluated the financial and operational impact of the risk on the Fund's objectives, states the actions taken to mitigate and effectively manage the risk.

There is a process in place to identify, evaluate and implement processes or controls to mitigate risks and record them on the risk register. The register is reviewed regularly by the management team and is reported quarterly to the Committee. Climate change has been a 'Top 10' material risk since 2019.

The Fund's Investment Strategy Statement (ISS) evaluates the material financial and operational risks that may impact the investment strategy and expected future returns, alongside actions needed to mitigate those risks.

Principal risks covered include Liquidity Risk (the inability to convert assets to cash), Counterparty Risk (the possibility that counterparties default and cannot meet obligations), and Climate Change. The ISS includes measures utilised by the Fund to manage the financial risk presented by climate change, and wider ESG risks, such as active policy development (which drives asset allocation decisions), a monitoring and review framework which includes full Strategic Investment Reviews every three years and modelling designed to quantify the risk climate change presents to the Fund's assets.



The Fund's processes for identifying and managing climate-related risks include the following:

- Climate modelling and metrics – Routine climate scenario modelling, carbon footprinting, absolute emissions and weighted average carbon intensity help to inform strategic decisions relating to climate change and to chart progress towards our interim and long-term climate change objectives. The Fund also works with its strategic partners to promote best practice in carbon analytics and disclosures. In 2021 we collaborated with Brunel and the Institutional Investors Group on Climate Change (IIGCC), to test the Paris Aligned Investment Initiative (PAII) [Investment Framework](#), which provides the first practical blueprint for investors to achieve net zero targets.
- Engagement activity - The Fund adopts a pragmatic approach to engagement, recognising companies need time to successfully adapt their business models to manage climate risk in the context of generating long-term shareholder value and real reductions in carbon emissions. Equally, those companies that are intentionally failing to take account of climate transition risk and adapt their business models accordingly should be candidates for divestment, due to the financial risk they pose. The Fund is keen to ensure that all companies make progress in tackling climate change and selective divestment will be considered as an option where companies have made insufficient progress following the Paris Agreement's Global Stocktake, led by the UN.
- Voting guidelines - In 2021, with the support of the RI sub-group, Brunel published enhanced voting guidelines which specified that they would vote against the re-election of a company chair where Oil & Gas, Utilities and all European companies had not reached level 4 of the TPI framework (or level 3 for US and Asian companies) and where companies' net zero strategies were materially misaligned with the goals of the Paris Agreement.
- Private Markets - Climate risk, in terms of both transition and physical risk, is embedded into the approach of the Fund's investments in private markets. For instance, the investment in Brunel's Secured Income portfolio comprises a 30% allocation to the Greencoat Renewable Income Fund which invests in a diversified portfolio of UK renewable infrastructure assets with a focus on solar, wind and biomass, with selected other green infrastructure opportunities such as renewable heat.
- Property – our UK Property portfolio is given a sustainability score by GRESB, a leading global provider of ESG real estate assessments. This assessment helps identify how sustainable the portfolio may be compared to its peers and hence its potential climate change resilience. Our 2021 portfolio results showed that we exceeded the peer average in overall ESG performance. Contributors to this score included boosting biodiversity at an industrial park near Birmingham by installing 'bug hotels' at the front of the park, fitting bird boxes on mature trees and sowing wildflowers across grass areas. These initiatives all help to support the UN Sustainable Development Goal to halt biodiversity loss and build on the park's previous sustainability improvements such as installing energy efficient LEDs and procuring only renewable electricity. In Coventry, alongside annual sustainability audits, £1.4 million has now been allocated to Skydome, a leisure and entertainment complex, for energy saving upgrades. This includes replacing legacy boilers to reduce energy consumption by 25% and installing solar panels on the roof to cover almost 11% of the building's electricity needs while reducing grid demand.
- Risk Management Framework – This year we continued to develop ways of integrating climate change into our risk management framework by investing cash held for collateral purposes in a fund that lends to companies and financial institutions with above average environmental practices, while placing exclusion criteria around areas such as fossil fuels and thermal coal.

As a significant proportion of the Fund's assets are managed through Brunel, they, alongside the fund managers they appoint to each portfolio, are expected to help the Committee in the identification and assessment of climate-related risks. The Fund's legacy fund managers (i.e. those that are not accessed via Brunel) are monitored on a regular basis to review the integration of climate risks into their portfolios and to understand their engagement activities.

In addition, the Fund independently participates in investor led initiatives such as Climate Action 100+, Local Authority Pension Fund Forum (LAPFF) and the Institutional Investors Group on Climate Change (IIGCC) to increase pressure on companies and governments to align with the Paris goals and lobby for further climate change progress. Recent actions by the Fund included becoming an initial signatory of the '2022 Global Investor Statement to Governments on the Climate Crisis', coordinated by IIGCC, calling on governments worldwide to step-up their activities in regard to the climate crisis and meeting the Paris Agreement goals. This statement includes requests to strengthen national targets before COP27, helping to meet the global Methane Pledge, scaling up climate finance and strengthening financial disclosures.

Climate risk is also taken into account when the Fund sets its funding strategy, as the funding basis to value the liabilities reflects the expected real return of the investment portfolio. Therefore, the more climate risk is actively managed via the investment strategy, the less impact it has on the funding strategy.

In the future we expect to include more climate scenario analysis when determining our funding strategy and the actuarial assumptions underpinning the strategy.

3.2 2022/23 Strategy review and Brunel Stocktake

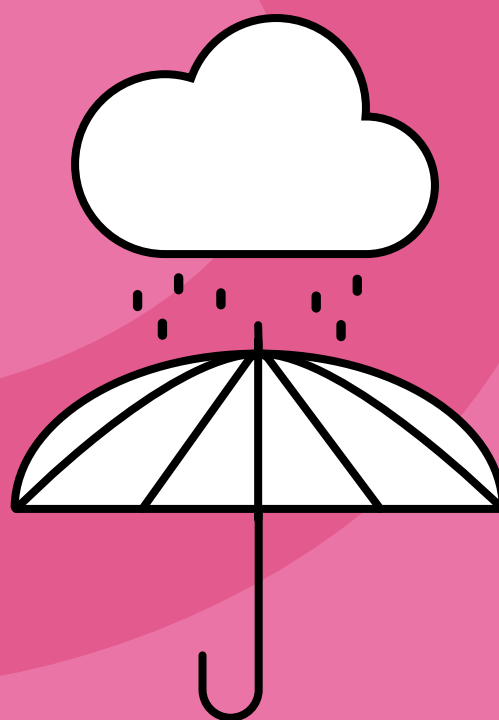
In 2022 the Fund began to work with Brunel as part of its climate change stocktake to evaluate its approach to managing climate risk. Critically the stocktake will seek to address whether actions taken so far have been effective, how emerging research and broader stakeholder views can be integrated into future climate strategy and whether there are any companies that we should not invest in. The Fund's own forthcoming investment strategy review will provide the first opportunity to measure progress and revisit the appropriateness of targets, ultimately, to serve the best interests of our members.

The results of scenario and climate analysis carried out on the Fund's behalf will be considered as part of both reviews and will be key to setting more granular targets across climate solutions and stewardship, which will include identifying the most strategically important sectors and companies from a climate perspective. Future iterations of ACT analysis will seek to expand the net zero approach beyond listed assets to real estate and infrastructure (data permitting) and will also serve to enhance the Fund's climate-related disclosures, noting that further work is still required on data consistency, and industry adoption of common definitions of net zero 'aligned' or 'aligning' companies and 'climate solutions'.



Section 4

Metrics & Targets –
Listed Equity Portfolio



Metrics & Targets – Listed Equity Portfolio

Our overarching goal is to achieve net zero emissions alignment by 2050 or earlier, in accordance with the Paris Aligned Investment Initiative Net Zero framework, co-created by the IIGCC.

To help our progress towards Net Zero and in recognition of the need to accelerate our trajectory towards this goal over the next 10 years, the Fund has also set targets to reduce the absolute emissions in our equity portfolio by:

- (I) **43% by 2025; and**
- (II) **69% by 2030, compared to its 2020 levels.**

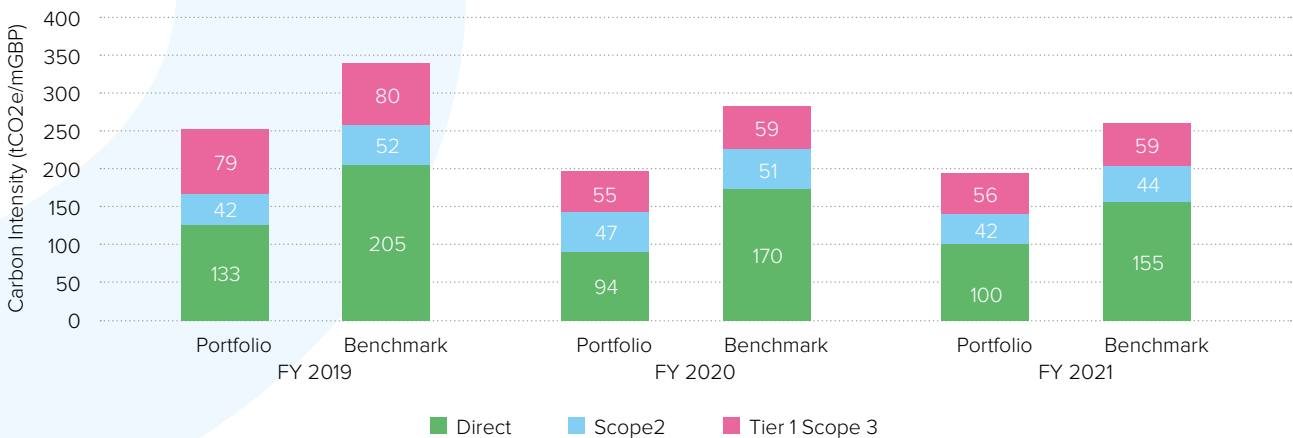
As part of our commitment to the IIGCC framework, we have also set qualitative ‘climate solutions’ targets across different areas that build on the allocation decisions we have already made.

A comprehensive list of our short-, medium- and long-term targets can be viewed here alongside the targets of other Net Zero signatories. We routinely report absolute emissions, the Weighted Average Carbon Intensity (WACI)², fossil fuel related revenues, reserves exposure and the disclosure rates among companies within the portfolios we invest in.

The analysis covers Scope 1, 2 and downstream Scope 3 emissions (i.e. emissions generated by usage of end-products by consumers).

This year’s Carbon Metrics Report shows that all the active equity portfolios the Fund invests in exhibit a lower WACI than their respective benchmarks and the aggregate portfolio, relative to its benchmark³, is 24% more efficient (or less carbon intensive).

Weighted Average Carbon Intensity (WACI)



² Weighted Average carbon Intensity or ‘WACI’ quantifies a portfolio’s exposure to carbon intensive companies. The metric takes the carbon intensity (total carbon emissions divided by total revenue) of a company and multiplies it by its weight in the portfolio.

³ Proxied using a custom benchmark composed of a series of market-cap based indices.

In terms of stranded asset risk, the Fund is less exposed to both fossil fuel revenues (0.62% vs 1.72%) and future emissions from reserves (0.90 MtCO₂ vs 3.11 MtCO₂) than its benchmark. The year-on-year improvement in future emissions from reserves and fossil fuel reserves are due to a combination of factors including decarbonisation of the underlying portfolios (driven by investment managers allocating capital to less carbon intensive sectors and/or companies) and the Fund's own strategic asset allocation; principally the removal of the more energy intensive emerging markets allocation and an increased allocation to the Brunel global sustainable equity portfolio which has a nil exposure to future emissions from reserves.

The proportion of companies in the Fund's listed equity portfolios which fully disclose carbon data was 60% (carbon weighted method) and 46% (investment weighted method).

4.1 Data Quality

The Carbon Metrics Report highlights the importance of looking at a range of metrics that incorporate both backward- and forward-looking inputs. The improvement in WACI brought about by the Fund's decision to exit emerging market equities has been partially offset by its switch from the legacy passive low carbon equity fund (which focussed on portfolio decarbonisation) to the next generation Paris-aligned index which weights companies based on their transition capability and, for this reason, is far more likely to lead to real-world emissions reductions.

Focussing on certain metrics in isolation can often lead to misinterpretation or erroneous conclusions being drawn. For instance, the Fund's global high alpha equity portfolio has the lowest WACI of all active equity portfolios but has the highest future emissions number, whereas the sustainable equity portfolio exhibits the reverse, with a relatively high WACI driven by investments in companies who are at the forefront of the energy and industrial transition to net zero.

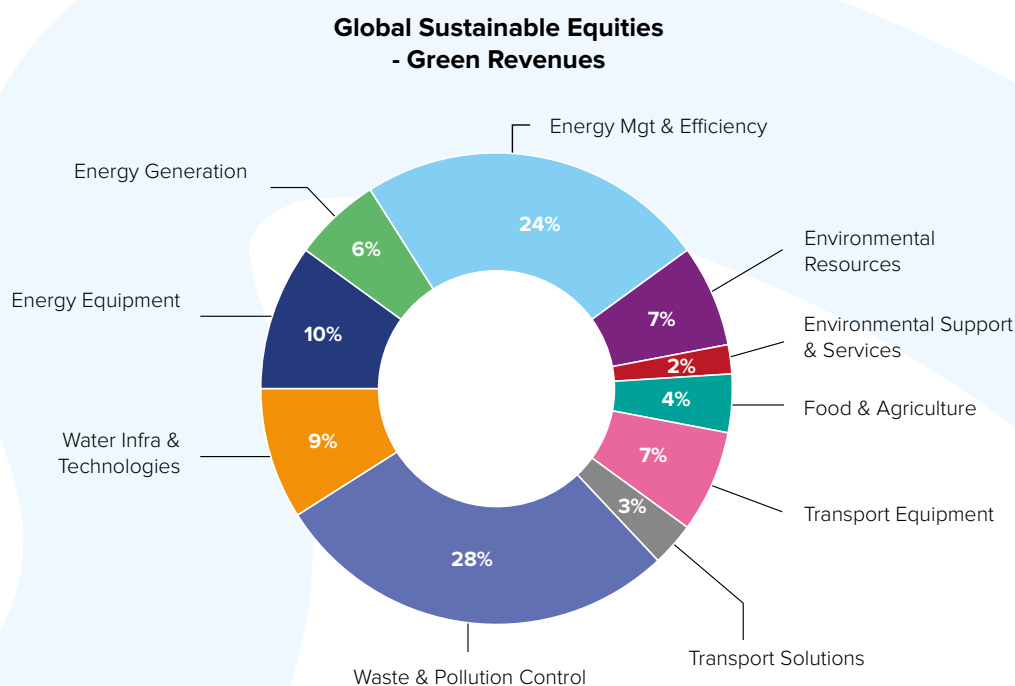
While the rates for full disclosure of carbon data via the carbon-weighted measure have increased since 2020, indicating disclosure rates among extractive companies have increased, full disclosure via the investment-weighted measure has fallen since 2020. This is primarily due to a change in methodology implemented by the data provider which makes it harder for smaller companies, who lack the resources of larger firms, to meet all disclosure requirements needed. These scores still indicate scope for improved reporting among investee companies remains, which continues to be a core aim of the engagement work adopted by the Fund, Brunel and its strategic partners.

Looking ahead, we expect improvements in carbon metrics at the Fund's overall portfolio level to be more incremental given the significant changes to strategic asset allocation implemented in previous years.

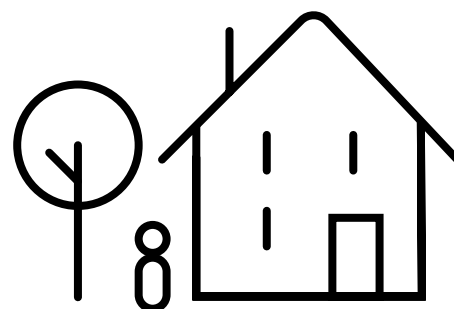
These companies are leaders in challenging and difficult-to-abate sectors and often have a higher carbon intensity today than companies in other sectors, whose own transition journey is dependent on such companies.

Additionally, it is well recognised that corporate reporting on downstream Scope 3 emissions remains incomplete and inconsistent. Work on standardising Scope 3 methodologies and reliable accounting for downstream emissions is ongoing through a number of bodies including the IIGCC's Paris Aligned Investment Initiative (PAII). This Initiative recognises the challenges presented by the lack of Scope 3 disclosures and the risk that portfolio level emissions reporting is often subject to double-counting (where the Fund holds shares in two companies and where Company A's Scope 3 emissions are equivalent to Company B's Scope 1 emissions). Notwithstanding these challenges, and as data becomes more reliable, the Fund will factor in Scope 3 downstream emissions when setting interim and long-term climate change targets to the greatest extent possible.

The Fund is supportive of the development of a wider set of metrics that can provide a more rounded perspective on companies vital to the transition and, in time, will utilise measures such as green revenues to help quantify the proportion of our investments in climate solutions. We were encouraged this year by Brunel's progress with respect to measuring the positive impact of its listed equity portfolios by piloting the FTSE Russell methodology to assess revenues of companies across various sectors that have exposure to products and services that deliver environmental solutions.



The Global Sustainable equity portfolio has 10.9% of exposure to green revenues compared to 8.5% in a standard global equity benchmark. The majority of green revenues (28.7%) come from waste and pollution control technologies and solutions, followed by energy management and efficiency (23.8%) and energy equipment (10.1%). Critically, the top portfolio contributors to green revenues are the same companies that exhibit the highest carbon intensities today.

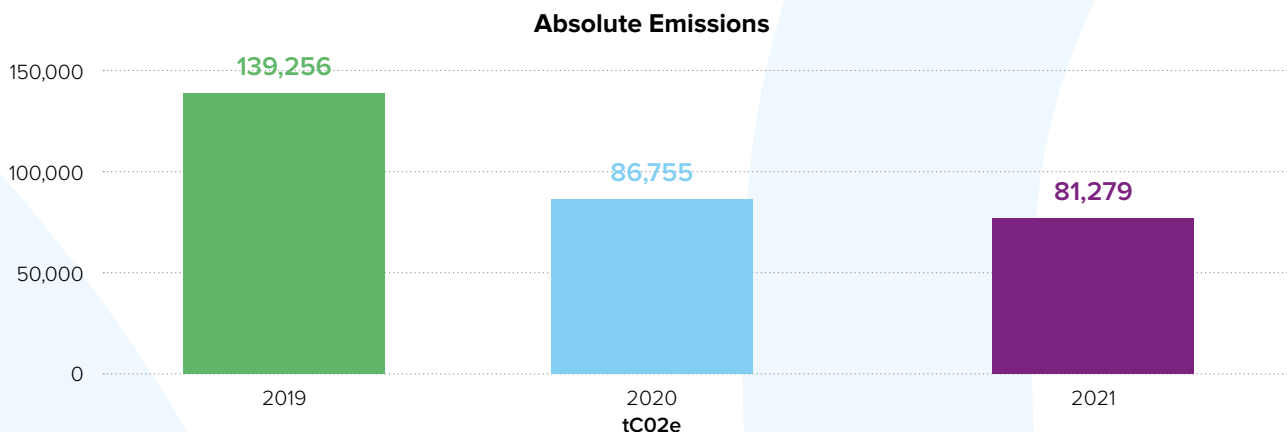


4.2 Analytics for Climate Transition (ACT) Tool

In order to monitor progress and, over time expand the scope of what is covered under our climate objectives, the Fund undertakes supplementary bottom-up analysis of its portfolios designed to highlight what is driving the Fund’s carbon exposure across mandates, geographies and sectors. This year the analysis includes details of how the Fund has decarbonised relative to the prior year (and the 2019 baseline year), how the transition alignment of the portfolios has evolved and a progress check against the Fund’s overarching 2050 net zero flightpath. The outcome of the 2022 analysis (December 2021 data) shows the equity portfolio has decarbonised across all three metrics faster than the decarbonisation flightpath used to determine emissions reductions on a Scope 1 + 2 basis required to meet net zero by 2050.

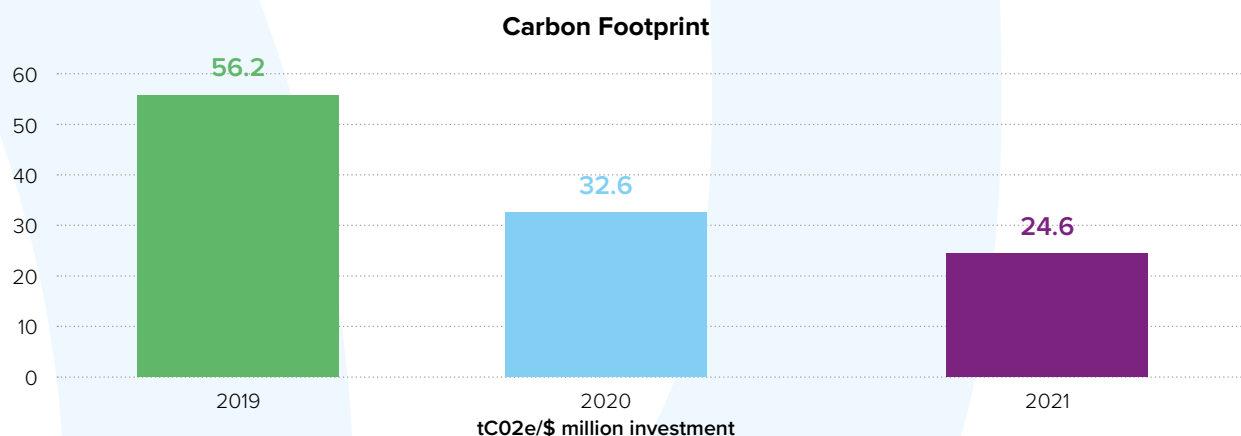
(i) Absolute emissions

The equity portfolio has decarbonised by 6.3% versus 2021 and by 41.6% versus the 2020 (December 2019 data) baseline year despite having increased the strategic allocation to equities in the period covered by the analysis (from 37.5% to 41.5%). Absolute emissions are required to decrease by a further 2% to hit the Fund’s 2025 interim decarbonisation target.



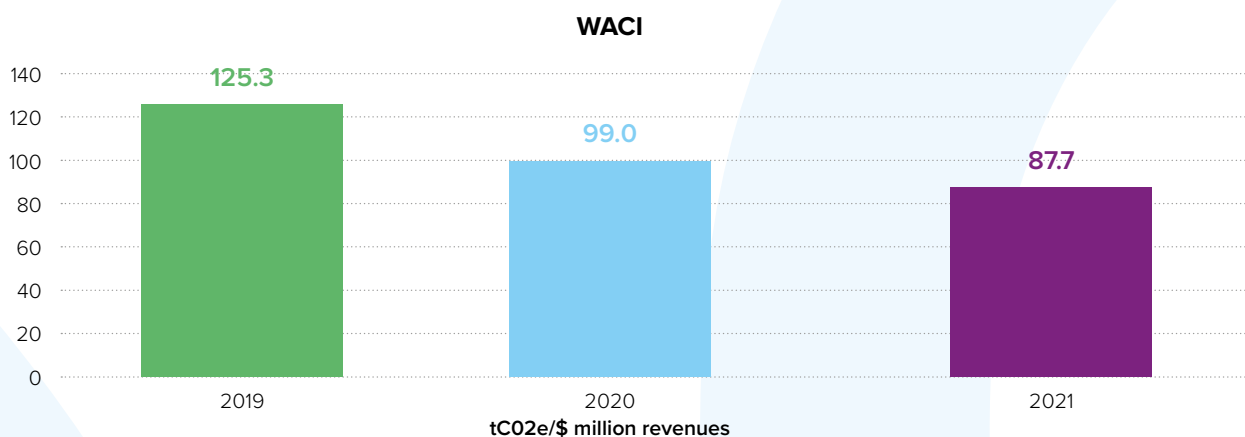
(ii) Carbon footprint

The equity portfolio saw a 24.7% reduction in intensity versus 2021 and a 56.3% reduction versus the baseline year.



(iii) Weighted Average Carbon Intensity (WACI)⁴

WACI saw an 11.4% decrease versus 2021, which equates to a 30% decrease versus the baseline year.



(iv) Transition Alignment

Along with providing emissions intensity data, Mercer’s ACT analysis also categorises the holdings within our listed equity portfolios from ‘Grey’ to ‘Green’ showing a spectrum of those assessed to be ‘high carbon intensity with low transition potential’ to those with ‘high transition capacity’ with respect to a low carbon transition. The transition alignment categorisation is assigned with the use of a variety of metrics such as carbon emissions intensity and fossil fuel reserves combined with transition scores and green revenues a company produces. This helps us identify the portfolios, and investment sectors, where more engagement may be needed, and pressure applied. Alternatively, it could have the potential to identify areas unable to successfully transition and hence our continued investment may need to be re-assessed. The 2022 analysis showed 20.5% of the Fund’s listed equities are invested in so-called ‘green’ assets, a significant increase from 5.7% in 2021, although we note this was largely driven by changes to the methodology.

Asset transition rating	2021 (data as at 31/12/2020)	2022 (data as at 31/12/2021)
Green	5.7%	20.5%
In-between	93.7%	79.0%
Grey	0.6%	0.5%

Source: Mercer, 2022

Here the ‘Green’ assets are those deemed well aligned and ‘Grey’ assets not well aligned with a low carbon transition. The methodology was also updated between 2020 and 2021 to include a number of new factors, one of which was the measurement of companies with Science Based Targets initiative (SBTi) approved targets. The Fund will continue to use the most accurate and up-to-date data and methodologies available as the quality of data and resources improves over time.

⁴ WACI figures may differ to the Annual Carbon Metrics Report undertaken by Brunel Pension Partnership on behalf of the Fund due to exclusion of Scope 3 Tier 1 emissions

(v) Implied Temperature Rise (ITR⁵)

One important metric drawn from this analysis was the Fund's implied temperature rise. In 2021 results showed the then current equity portfolio was on a +2.2°C pathway on a weighted average basis, based on MSCI's ITR metric. This analysis directly influenced investment policy and was a key driver in increasing our positioning with strategies that were Paris-Agreement aligned and more resilient to temperature changes.

The ACT tool will enable the Fund to set more granular climate targets and measure progress and assess the proportion of the portfolio aligned to a low carbon transition over time. It will also improve the focus of our stewardship policies. It will support the development of a framework to engage with the most strategically important companies in the Fund from a climate perspective by assessing companies' transition risk, whether transition plans are credible and have been subject to independent assessment and whether companies have been identified by leading collaborative engagement initiatives as key to driving the net zero transition. The results of the 2022 ACT analysis will be fed into our wider investment strategy review in 2022/23 and Brunel's 2022/23 climate policy review and stocktake.

4.3 The Just Transition

We fully support the idea of a 'Just Transition' and a key goal for the Fund is to use its power as a shareholder to encourage companies and policy makers to adapt their activities to support the transition to a low carbon economy. In 2021/22 the Fund attended evidence sessions of the All Party Parliamentary Group for Local Authority Pension Funds enquiry into 'Responsible investment for a just transition', supported by LAPFF. These evidence sessions heard from investors, industry, academics, community groups, trade unions, and other non-government organisations and produced a report seeking to inform politicians, policymakers and the public on the roles and responsibilities that investors can play, with government support, in enabling a just transition to net zero carbon emissions.

The conclusions were multifaceted but possible investor actions included understanding the risks and opportunities of climate change and the potential social impact on companies of transitioning to net zero. From there, investors can seek to identify where the greatest material transition risks are and engage with companies on these issues, setting clear expectations around how they can address explicit concerns. Additional areas of focus included specific reporting around just transition risks and outlining why they matter, alongside engaging with policymakers themselves to ensure they've considered the social dimension to any climate reforms.



⁵ <https://www.msci.com/our-solutions/climate-investing/net-zero-solutions/implied-temperature-rise>

Important notices from data providers

Mercer

Past performance does not guarantee future results. Information contained herein has been obtained from a range of third party sources. While the information is believed to be reliable, Mercer has not sought to verify it independently. As such, Mercer makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability (including for indirect, consequential or incidental damages), for any error, omission or inaccuracy in the data supplied by any third party. The information does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities and/or any other financial instruments or products or constitute a solicitation on behalf of any of the investment managers, their affiliates, products or strategies that Mercer may evaluate or recommend.

Mercer Limited is authorised and regulated by the Financial Conduct Authority. Registered in England and Wales No. 984275. Registered Office: 1 Tower Place West, Tower Place, London EC3R 5BU

MSCI

In addition, some of the underlying data has been provided by MSCI which is ©2022 MSCI ESG Research LLC. Reproduced by permission.

Although information providers, including without limitation, MSCI ESG Research LLC and its affiliates (the “ESG Parties”), obtain information from sources they consider reliable, none of the ESG Parties warrants or guarantees the originality, accuracy and/or completeness of any data herein. None of the ESG Parties makes any express or implied warranties of any kind, and the ESG Parties hereby expressly disclaim all warranties of merchantability and fitness for a particular purpose, with respect to any data herein. None of the ESG Parties shall have any liability for any errors or omissions in connection with any data herein. Further, without limiting any of the foregoing, in no event shall any of the ESG Parties have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

