All-Wales Climate Report

February 2024

Executive Summary

The Welsh Government declared a climate emergency in 2019, with a commitment to reduce its greenhouse gas (GHG) emissions by at least 95% by 2050. The Government's most recently published progress report in June 2023 acknowledged that the first five-year carbon budget had been achieved, but that Wales needs to significantly outperform its second carbon budget to remain on track to meet future targets. Additionally, the Welsh Government has highlighted a desire to work with the Wales Pension Partnership (WPP) on plans for the decarbonisation of local government pension scheme (LGPS) funds.

The eight Welsh LGPS Funds (the Funds) provide benefits to thousands of current and former public-sector employees. The Funds had collective assets of £22.9 billion as of 31 March 2022, the analysis date used in this report, with assets invested broadly across different geographies and asset classes, with the primary goal of generating returns that will allow benefits to continue to be paid in future.

Climate change is a complex subject that must be examined through multiple lenses. Climate risk cannot be represented by a single number. Equally, there isn't one simple means by which climate change can be addressed within the investments of a pension fund. This reflects the way our global economy has been constructed and its broad reliance on energy from fossil fuels. Correcting our current trajectory cannot be accomplished by changing one part of the system. Instead, we must ensure that all parts of the system work towards a common goal.

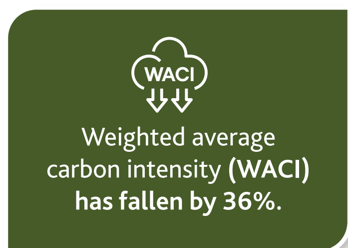
The Funds recognise that climate change poses a material risk to the financial outcomes of their collective investments. But opportunities will also arise for Fund investment against this backdrop. This report was commissioned by the eight Constituent Authorities with responsibility for the Funds and has been prepared on their behalf by Hymans Robertson LLP. These Authorities are also all stakeholders in the WPP, the pooling arrangement established in 2017 to consolidate management of the Funds' assets. The purpose of this exercise has been to:

1. Assess, as far as possible, exposure to different aspects of climate-related risk across all assets within the Funds, not just those at the Pool level.
2. Assess how the introduction of pooling has changed exposure to climate risks between 2019 and 2022, the two assessment dates used for our analysis.
3. Consider what steps can be taken by the Funds and the WPP to further address climate risk and develop climate policy.

A more detailed report was prepared for and discussed with Funds, the Officers Working Group (OWG) and the Joint Governance Committee (JGC). This report provides a summary of the key results and outcomes from this exercise.

Observations

Over the three years to 31 March 2022, within the Funds' collective equity exposure:



As at 31 March 2022, 49.4% of the Funds' assets fell within the direct scope of the WPP's climate policy, with a further 23.3% of assets passively managed (and therefore within scope of the Funds' collective governance arrangements). While there is a significant tail of smaller allocations, the WPP believes that it could bring up to 95% of total assets within its collective climate-governance arrangements over the long term, with an interim goal of 75% seen as achievable in the short-to-medium term.

In addition, since end-March 2022, the development of WPP Sub-Funds has progressed, with new strategies across private debt, private equity, and infrastructure, as well as the Sustainable Active Equity Sub-Fund, all becoming available for investment by the Funds. This is expected to demonstrate further improvement in our climate metrics, as well as see further capital allocated to climate solutions.

Our next steps

This exercise has provided a solid basis for the WPP to continue to evolve its approach to climate-risk management. The JGC has agreed to a series of further steps:

- Over 2024, in consultation with the Funds, the WPP will develop a climate framework to help support future discussion and consensus building on climate ambition. Such a framework will include agreeing a common taxonomy and a common basis for setting climate targets, recognising the work that some Funds have already undertaken. This will support future product development, policy evolution and reporting to be addressed in a consistent manner.
- The WPP will assess its existing Sub-Funds against the common climate framework to consider how climate ambitions may be developed and explore the ongoing evolution of its investment offerings.
- The WPP will review its current passive-equity requirements. It will consult Funds on meeting their passive-equity demands and associated climate goals, and consider how these can be practically implemented. In doing this, the WPP will consider how its Stewardship Policy can be extended across passive assets.
- WPP will develop further monitoring of asset transition alignment, noting that development of associated targets is also an issue on which asset owners can have influence over organisations, typically via voting & engagement.
- WPP will review and evolve its current climate-related stewardship theme. WPP will agree a list of 'climate-focus' companies that will be further scrutinised, across both active and passive mandates (within equity allocations in the first instance). The list will be comprised of those stocks within those materially impacted sectors where there is the greatest climate risk.
- WPP will continue to assess and report progress against the metrics for WPP assets on an annual basis, and will repeat this 'whole of Wales' exercise as at 31 March 2025.

Climate change is an issue that affects us all – and it's vital that the Funds can address this issue collectively. The WPP is therefore delighted to have completed this exercise, which has, once again, demonstrated the strength of collaboration across the Welsh LGPS Funds. We look forward to progressing the actions identified and updating our stakeholders on progress.

Councillor Ted Palmer
Chair of the JGC

February 2024

How we manage our assets

The LGPS is a funded, public-service pension scheme. While its rules are made with the approval of Parliament, schemes themselves are administered locally by pension funds across England and Wales. Those pension funds decide how pension contributions are invested. A Local Pension Board helps each pension fund administer the LGPS and comply with the Scheme rules.

Primary responsibility for decision-making lies with a local Pension Committee, represented by elected members. The Pension Committee is responsible for determining investment policy, objectives and strategy. To achieve this, Pension Committees draw input, advice and governance support from Officers and external advisers. The day-to-day management of assets is generally outsourced to third-party investment managers. Pension Committees also have responsibility for reviewing performance of the strategy against objectives.

While historically each Fund appointed its own asset managers, the formation of the WPP has provided a consolidation route for the management of assets, as illustrated below. A collaboration between the eight Constituent Authorities, decision-making is vested in the JGC, which comprises the chairs of the underlying Pension Committees, supported by the OWG, which serves to develop policy and provide oversight. The Responsible Investment Working Group provides scrutiny and oversight for all of WPP's responsible-investment activities.

Implementation of strategies by the WPP is largely outsourced to third parties.

Waystone (previously Link) acts as the Operator, facilitating the delivery of effective investment-management solutions and manager oversight.

Russell Investments is the Investment-Management Solutions Provider, working with Waystone to implement and oversee pooled investment vehicles, including portfolio construction and manager selection, with climate risk a key consideration.

Robeco engages companies across all WPP pooled assets (both active and passive), as well as voting on WPP's behalf across the active Sub-Funds, in line with WPP's Stewardship Policy.

Hymans Robertson also supports the WPP as Oversight Advisor, part of which is the scrutiny of how WPP's Climate Risk Policy is effectively implemented.

The more-recent private-market appointment of **Schroders, GCM Grosvenor** (alongside other infrastructure managers) and **Russell Investments** have expanded this list of partners'

The Funds recognise that climate change presents material financial risk to their collective stakeholders, with the potential to disrupt social, environmental and economic systems. The transition to a low-carbon economy also offers investment opportunity. The Funds have individually sought to develop their own climate objectives, while also collectively agreeing on a Climate Risk Policy for the WPP. This policy operates in conjunction with the WPP's broader Responsible Investment Policy and its Stewardship Policy . An assessment of progress made against each of the commitments within the Climate Risk Policy is published annually.

The WPP provides a forum for collaboration and the implementation of local Fund policy, rather than to drive or influence the climate policy and objectives of the Funds. For example, this collaboration led to progress on various climate issues, including the launch of the Sustainable Active Equity Sub-Fund in 2023, the development of a climate-related stewardship goal and the completion of this collective reporting exercise.

While the Funds have acknowledged that building solutions via the WPP to meet different local climate ambitions may be challenging, their experience is one where compromise has been reached through collaboration. This has allowed Funds to progress their climate ambitions at their own pace.

To ensure there is ongoing consistency, the WPP will work to agree a common climate framework to support future consensus-building, and to support monitoring and reporting. This framework will ensure there is a collective understanding of climate-related goals and language across all the Welsh Funds. This will facilitate future product development, and allow for policy evolution and reporting to be addressed in a consistent manner – including regulatory requirements for reporting in line with the Task Force on Climate-Related Financial Disclosures (TCFD), which is expected to become mandatory for LGPS funds in coming years.

Where our assets are invested

To understand how climate change is being addressed within the assets of the Welsh LGPS Funds, it is first necessary to understand how these assets are being invested. Based on detailed information provided by each of the eight Funds, we have summarised how our assets are collectively invested as of 31 March 2022, with a comparative position as of 31 March 2019 also shown.

Combined asset allocation

	Position as of 31 March 2019			Position as of 31 March 2022		
Asset class	Value (£m)	Allocation	Number of mandates	Value (£m)	Allocation	Number of mandates
Listed Equity	11,239.4	67.8%	43	14,738.4	64.4%	26
Fixed Income	3,065.9	18.5%	23	4,489.1	19.6%	12
Property	1,176.5	7.1%	43	1,690.3	7.4%	50
Private Equity	522.3	3.1%	128	812.2	3.5%	136
Infrastructure	123.4	0.7%	22	302.1	1.3%	28
Multi Asset	129.3	0.8%	3	294.0	1.3%	3
Private Debt	36.2	0.2%	4	126.6	0.6%	7
Alternatives*	293.4	1.8%	15	432.7	1.9%	14
Total	**16,586.5**	**100.0%**	**281**	**22,885.5**	**100.0%**	**276**
Of which **WPP controlled	**7,063.5**	**42.6%**		**16,642.2**	**72.7%**	

Source: Constituent Authorities. Figures may not sum due to rounding.
*Alternatives includes hedge funds, timberland & agriculture. ** This includes both actively managed Sub-Funds, as well as the passive allocations through BlackRock

Our assets are primarily invested in listed markets, with 85.3% of collective assets invested across equity, multi-asset and fixed-income mandates as at 31 March 2022. This represents a shift over the three years from 2019 (from 87.1%), albeit allocations to listed-equity assets have fallen by 3.4% in total. Over the three years, Funds have sought to diversify away from equity. Allocations to private-market mandates (property, private equity, infrastructure and private debt) have increased, with further allocations also made into listed fixed-income strategies. Asset pooling accelerated during this period, with the WPP launching several Sub-Funds between 2019 to 2022, primarily covering listed-equity and fixed-income mandates.

This distribution of assets informs the extent to which the application of climate policy and management of climate risks can be addressed centrally by the WPP (compared to being addressed locally by individual Funds). As of 31 March 2022, 49% of assets fell within the direct responsibility of the WPP, invested across nine actively managed Pooled Sub-Funds. As time passes, we expect the assets of the Funds to be progressively switched towards solutions offered at the Pool level. The WPP believes that a long-term goal of having 95% of assets fall within the direct scope of our common climate policy is achievable, with an interim target of 75% reflecting a reasonable ambition.

Sub-Fund development is a key part of WPP's workplan, with the consideration of climate risk a critical element in both the development of future Sub-Funds and the management of existing Sub-Funds. Of the WPP's Pooled Sub-Funds (as of 31 March 2022), the Global Opportunities and Emerging Markets Sub-Funds incorporated an explicit climate-related objective, with our manager (Russell) mandated to maintain the carbon footprint of these Sub-Funds at least 25% below that of the benchmark. Changes were also made within the Global Growth Sub-Fund, with one of the underlying mandates switching to a Paris-aligned strategy.

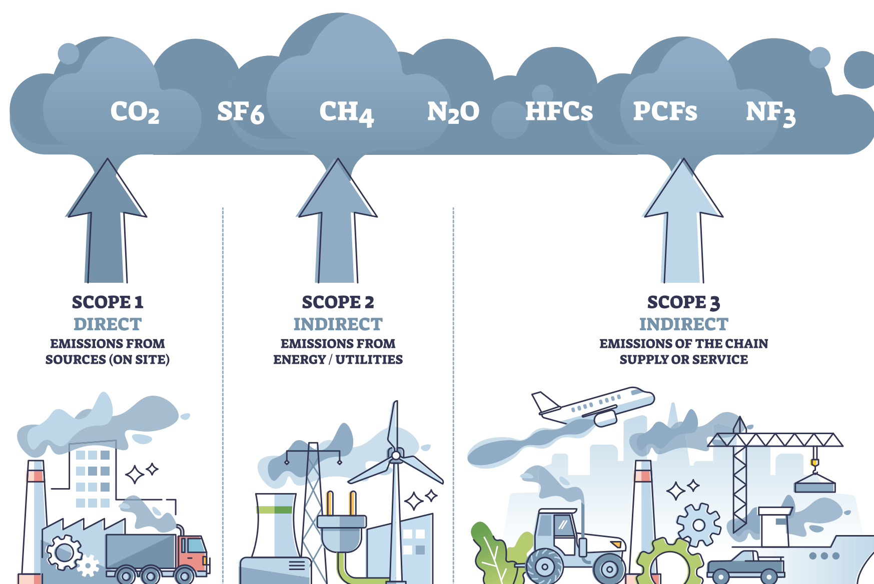
Assessing climate exposures across assets

There is no single way of assessing exposure to climate-related risks. All assets will be impacted by the effects of climate change to a greater or lesser extent, and methodologies will continue to evolve. However, there are several places where we can start. In our analysis, WPP has explored four aspects of climate-related risk: emissions; exposure to fossil-fuel companies; transition alignment; and climate solutions.

We have focused on listed-market exposures within this report, which represent about 85% of our total assets. Consideration was given to our private-market exposures within the broader exercise, although data limitations impact our ability to report on these. Improving data collection to allow greater scrutiny remains a goal for the Funds.

Carbon emissions

Emissions from the burning of fossil fuels have been the primary contributor to the increase in atmospheric CO2 levels and the growing risk from climate change. We recognise that there is a global need for economic activity to be decarbonised. Assessing the extent to which the economic activity of assets held by the Welsh Funds are dependent on carbon emissions can therefore provide an indication of the need for change. Emissions are generally attributed to a particular source, as illustrated below.



Scope 1 emissions are those directly produced by the operations and processes of a company.

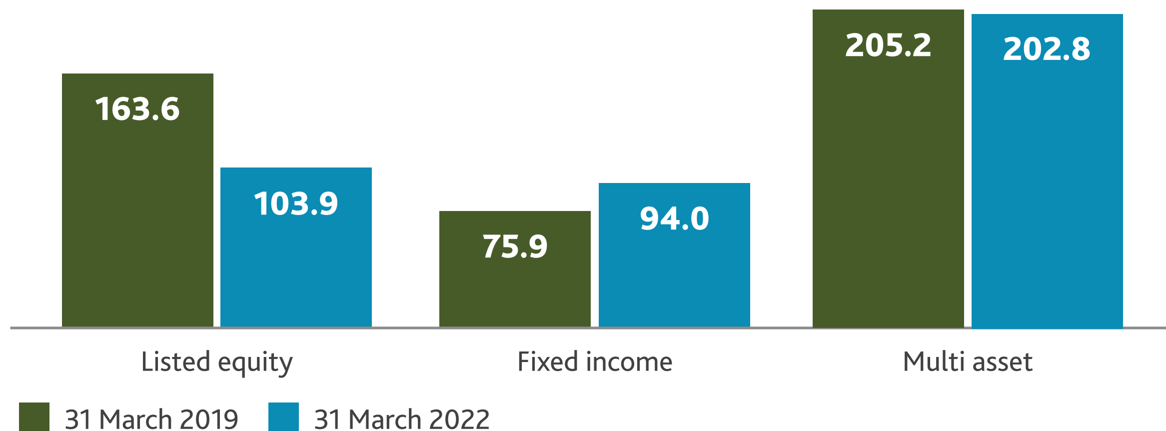
Scope 2 emissions are those that arise from the purchase of energy.

Scope 3 emissions are those that arise indirectly, either in the supply chain of a company or in the use of a company's products and services.

The consideration of Scope 3 emissions, particularly within the downstream use of a company's products, is important for understanding the broad dependence of our global economy on fossil-fuel energy. However, the measurement of emissions is itself a challenge. While Scope 1 and Scope 2 emissions have been increasingly well reported, particularly by listed companies, Scope 3 emissions are more challenging to measure, with data therefore less readily available. Due to these limitations, the measurement of emissions within this report focuses only on Scope 1 and Scope 2 emissions. The WPP will seek to ensure that data coverage and availability improves over time through engagement with its partners.

We have assessed our exposure to carbon emissions using a metric known as weighted-average carbon intensity (WACI). This is a measure of the carbon emissions produced by companies to generate a given level of revenue. A higher WACI means, for every dollar of revenue, the underlying activities generate more emissions.

WACI by asset class (tCO_2e/USD1m revenue)



Source: Hymans Robertson calculations.

Our collective equity exposure, which represents 65% of the Funds' total assets, have demonstrated a c.36% reduction in WACI over the three years to 2022. This can be attributed in part to the evolution and consolidation of our equity investments within the Pool. As at end-March 2022, our equity allocations were spread across just 19 strategies (compared to 40 in 2019). We introduced an explicit low-carbon overlay within the Global Opportunities and Emerging Markets Sub-Funds, and the Welsh Funds also shifted passive exposures into lower-carbon strategies.

The increase in emissions intensity seen within our fixed-income allocations comes from the launch of our Multi-Asset Credit Sub-Fund, which has exposure to more carbon-intensive assets. That said, given data limitations, we are only able to measure emissions on about half of this Sub-Fund. The WPP is committed to reporting its current position, as far as practicable, and will seek to improve the underlying availability of data. The WPP will also explore the practical steps it can take to reduce emissions intensity, recognising the goal of real-world emissions reduction.

Overall, multi-asset funds represent a small proportion of our overall total assets. The underlying funds are invested to generate positive absolute returns and do not have explicit climate-related objectives. However, a small fall in overall emissions intensity has been noted.

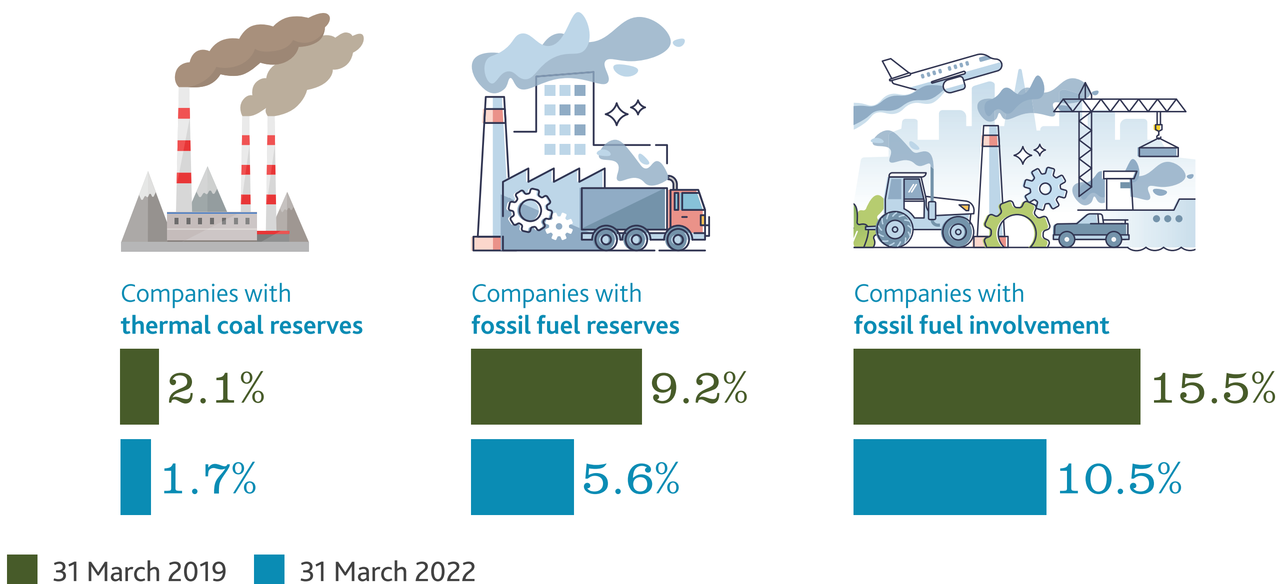
More generally, the WPP, as part of work around its proposed climate framework, is considering how to develop its fixed-income offerings. This will include the evolution of existing fixed-income Sub-Funds (including the Multi-Asset Credit Sub-Fund) and any new strategies.

Fossil-fuel exposures

While we acknowledge that the continued exploitation of fossil fuels will be needed over the short and medium term, such exploitation gives rise to ongoing carbon emissions. Efforts to decarbonise activities, particularly products and services that place great reliance on fossil fuels as an input, could give rise to the risk of stranded assets. This depends on issues such as the pace of policy change and the speed of technological development.

Fossil-fuel companies include those involved in extraction and refining processes, but also those involved in the generation of energy from burning fossil fuels. We assess three different metrics to give a sense of scale of exposure within the Welsh Funds:

Figure 2: exposure to fossil fuels within listed equity exposures



Source: Hymans Robertson calculations.

This latter measure can be regarded as the broadest assessment of those companies with an element of their business directly related to fossil fuels. For example, within the supply chain of fossil-fuel companies. However, this does not give an idea of the significance of such involvement based on revenues generated, an issue the WPP intends to explore further.

Between 2019 and 2022, exposure to companies with fossil-fuel reserves within equity exposures fell from 9.2% to 5.6%. This can be attributed to the changes made to the equity strategies developed by the WPP, as well as those passive strategies managed by BlackRock in which the Welsh Funds are invested. The Sustainable Active Equity Sub-Fund recently launched by the WPP has further fossil-fuel-related exclusions.

Transition alignment

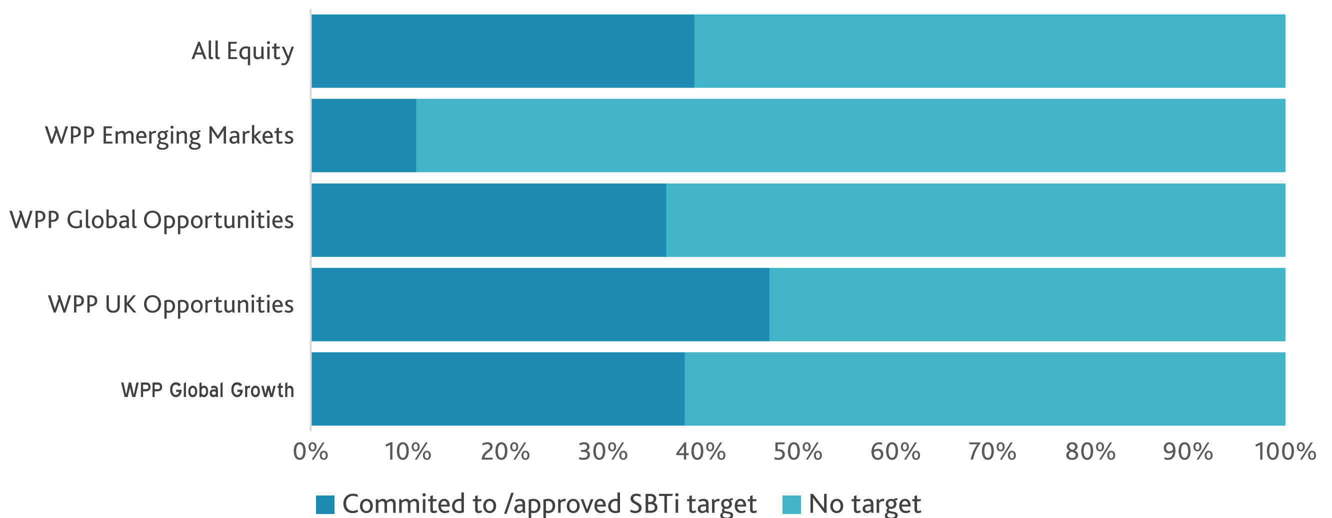
The 'transition to a low-carbon economy' refers to the changes that our financial and social systems must undergo to reduce the emissions arising from economic activities, stabilising carbon emissions at a level where there is balance. This matters, as it implies the need for change. While some organisations may need relatively little change, others face greater challenges to ensure that the provision of goods and services can be achieved with little to no carbon emissions. While the environment will continue to react to the actual level of emissions, the pace at which change will take place will be determined by policymakers, technological change, societal pressures and business interests.

Change takes time for any organisation, but it needs to be planned to ensure that it is effective. One means of demonstrating that an organisation is engaging with the process of change is to develop a clear strategy and have this strategy approved by a third-party organisation, such as the Science Based Targets initiative (SBTi). This would allow organisations to gain some level of comfort that the companies in which they are invested are addressing climate change.

The SBTi is a partnership that focuses on providing companies with clearly defined science-based targets to reduce emissions in accordance with the goals set out under the Paris Agreement. The SBTi follows a step-by-step process for the setting of science-based emissions targets aligned with a transition to a net-zero economy, as follows:

For the Funds' combined equity portfolios, we have assessed the extent to which companies are putting in place such plans.

Figure 3: companies addressing transition through SBTi as of 31 March 2022



Source: Hymans Robertson calculations.

Data demonstrates that across all equity holdings, approximately 40% of holdings by value have committed to, or have gained approval of, appropriate targets from the SBTi. While broadly consistent across most of the equity funds illustrated above, the notable outlier is the Emerging Markets Sub-Fund. We would comment here that emerging-market issuers appear less advanced in the development of emissions-reduction plans and targets, certainly to the extent to which they are seeking external verification of such targets.

Transition alignment will be integral to the Funds' climate considerations as a means of assessing progress against net-zero objectives. While this analysis provides an assessment of whether companies have climate plans in place, it does not consider the quality of the plan (other than with reference to the SBTi approval process), nor does it assess the trajectory of companies' decarbonisation.

The WPP will develop its monitoring of asset transition alignment. The development of associated targets is also an issue on which asset owners can have influence over organisations, typically via stewardship (voting & engagement). We address this in Section 5.

Climate solutions

Climate solutions may capture a range of investment opportunities within areas such as renewable energy, resource management, forestry, agriculture and technology. However, this is not yet clearly defined for the WPP. Within the equity allocations, consideration can be given to the contribution made by individual companies within equity portfolios to financing climate solutions. Our assessment considered six environmental impact themes: alternative energy; energy efficiency; green buildings; pollution prevention; sustainable water; and sustainable agriculture.

Analysing our collective equity portfolio, we see a positive trend over the last three years, with 26.5% of companies deriving some revenue from environmental solutions as at 31 March 2022. The launch of the Sustainable Active Equity Sub-Fund should see exposure to climate-related solutions continue to increase. The infrastructure mandates (which include direct and indirect allocations to renewable infrastructure) will further increase our collective exposure to climate solutions.

Source: Hymans Robertson calculations.

The broader discussion of climate ambition and allocations to climate solutions should be an element of any net-zero strategy. While it is for individual Funds to determine their own strategy and target allocations to climate solutions, the WPP could support this by providing an appropriate framework within which such considerations can take place. The WPP will incorporate a clear definition of climate solutions into its climate framework.

Exercising stewardship

While the WPP's Stewardship Policy covers those assets directly controlled by the WPP (within the active Sub-Funds), the exercise of stewardship on all issues, including climate, extends across all the underlying asset managers employed by the Funds. The oversight of stewardship for non-pooled assets lies with individual Funds, while the WPP has the collective responsibility for the exercise of stewardship across its Sub-Funds, acting through its partners.

The WPP has appointed Robeco as its primary stewardship provider, responsible for voting & engagement across WPP Sub-Funds, as well as engagement across the passive holdings. The WPP annually reviews the Robeco Proxy Voting Policy to ensure it is in keeping with WPP's objectives. On climate-related issues, the WPP's climate expectations are as follows:

Policy goal	
Paris-aligned GHG targets over short/medium/long term	Expected
Targets covering all emissions	Scopes 1, 2 and 3
Robust strategy/plans for achieving targets	Expected
Governance structure for managing climate risks	Expected
Clear disclosures in line with regulatory standards	Expected

Source: Robeco Proxy Voting Policy

The WPP considers the voting policy it has in place to be sufficiently demanding of investee companies and, noting that climate-transition strategies differ for different industries, sector-assessment frameworks are used to determine if a climate-transition strategy is of sufficient quality. The WPP reports on voting to individual Funds on a quarterly basis and publishes a summary of voting in its annual UK Stewardship Code report.

Beyond the WPP's own voting policy, voting is exercised by both BlackRock in respect of passive-equity holdings and by individual fund managers for other equity strategies held by the Funds outside the Pool. Given equity assets remain the single largest allocation across the Funds, efforts could be made to further align voting, particularly (though not exclusively) regarding climate issues. The WPP will therefore explore BlackRock's 'Voting Choice' options to help better align voting policy across assets under WPP control. The WPP notes that bringing the management of passive strategies directly under the control of the WPP would also allow the imposition of the WPP's voting policy.

Engagement is the mechanism by which the WPP and the Funds seek to have influence over corporate activity beyond the exercise of voting. Though the WPP, within its Responsible Investment Policy, has a stated preference for engagement over divestment, it is still necessary to understand both how engagement works, and the goals that the WPP and Funds are seeking to achieve.

Investment is a highly intermediated activity; there is a disconnect between asset owners and the companies in which they invest, with asset managers (as well as allocators, such as Russell, that are employed by the WPP) as intermediaries. Engagement on climate (and other) issues is undertaken by multiple organisations on behalf of the Funds, whether they are employed directly by the Funds or by the allocators. Such organisations include: Robeco; BlackRock; Russell Investments; other asset managers and their agents; as well as the Local Authority Pension Fund Forum (LAPFF), of which all the Funds and the WPP are members.

The WPP has some influence on the topics on which these parties engage, but seeks to ensure that engagement efforts are aligned with the WPP's own climate-related engagement theme:

> ***Focusing on Net Zero: organisations, particularly those in materially affected sectors, should be developing and implementing transition plans to ensure that the long-term migration to a low-carbon economy is orderly. Companies should ensure than plans are published, and climate-management disclosures are comprehensive and available for investor scrutiny.***

While this frames the climate goals that the WPP is seeking to achieve, it does not compel others to act. That said, it allows the WPP to assess the extent to which its delegates are seeking consistent goals through the engagement programmes that they undertake on behalf of the WPP, either directly or indirectly. The goals currently being pursued by the WPP's partners include:

Robeco	Robeco currently has three engagement themes that are directly related to climate outcomes: • **Net-Zero Carbon Emissions** focuses on four key emitting industries: oil & gas; electric utilities; steel; and cement. • The **Acceleration to Paris** engagement programme is focused on those companies at greatest risk from the energy transition; those that are also lagging peers in putting robust transition plans in place. • **Climate Transition of Financial Institutions** assesses companies on the four pillars of the TCFD: governance; strategy; risk management; targets and metrics.
BlackRock	'Climate and natural capital' is one of five policy priorities set out by BlackRock in 2023 and 2024. The policy emphasises the importance of companies disclosing strategies they have in place that mitigate – and are resilient to – any material risks to their long-term business model associated with a range of climate-related scenarios. This underpins BlackRock's approach to engagement.
Russell Investments	One of Russell's engagement focus areas is 'climate change resilience', which encourages transparency on climate-related disclosures and practices. In addition, Russell also undertakes collaborative initiatives through Sustainalytics, CA100+ and, more recently, the Net Zero Engagement Initiative through the IIGCC.
LAPFF	LAPFF continues to request that boards set out their strategy in managing the transition to net-zero emissions business operations, asking companies to provide shareholders with the opportunity to support the disclosure of GHG emissions and reduction plans.

The engagement goals summarised above are broadly consistent, albeit varying in ambition and in the outcomes sought. This creates the potential for divergence in the exercise of climate policy for the Funds. This also raises a challenge for the Funds and the WPP in ensuring that engagement fully reflects their collective ambitions (and is not contradictory) and that the outcomes of engagement activity can be properly recorded.

To seek to ensure consistency, the WPP will take the following actions:

- Recognising the growing focus on individual corporate outcomes, the WPP will develop a focus list of companies that will be subject to enhanced scrutiny and reporting.
- The WPP will review its climate-related stewardship theme to ensure it is sufficiently strong in its expectations of investee entities. It will review the information it is able to capture from its Service Providers and other third parties that would better allow it to demonstrate progress against this theme. Any changes in approach at a WPP level will be cascaded to individual Funds, who will frame their expectations to others outside the pooling environment.
- In line with its existing commitment, the WPP has pledged that specific consequences are connected to companies not meeting climate-engagement objectives, with a strict escalation strategy for companies that do not make sufficient progress. This escalation policy will be published during 2024.

Developments since 31 March 2022

Since the effective date of this report, the WPP has undertaken several actions within the management of its Sub-Funds to address climate-related risks.

1. Within its listed-equity Sub-Funds, the WPP has expanded the carbon 'overlay' to the UK Opportunities Sub-Fund.

2. The WPP has agreed the parameters for a Sustainable Active Equity Sub-Fund. This Sub-Fund is managed by Russell Investments and was launched in July 2023 with commitments totalling over £1.2bn from all eight Funds. The Sustainable Active Equity Sub-Fund has the following explicit climate-related objectives:
   - Investment in thermal coal, tar sands, arctic oil & gas, shale energy and palm oil is explicitly excluded.
   - By 2040, 100% of assets are to be either net zero or net zero aligned.
   - By 2030, at least 90% of financed emissions are either assessed as net zero, aligned with a net-zero pathway, or the subject of direct or collective engagement and stewardship actions.
   - By 2030, reduce Scope 1 and 2 carbon emissions (CO2e) for the portfolio to 50% of benchmark (based on WACI).

3. Within private markets, the WPP has appointed allocators within three asset classes. While these mandates do not have explicit climate-related objectives, the selection process emphasised the importance of sustainability issues.

Asset class	Managers	Climate attributes
Closed-ended infrastructure	GCM Grosvenor	Bias within target strategy towards renewables and energy-transition assets. Aim to exclude assets related to shale oil, tar sands and thermal coal.
Open-ended infrastructure	CBRE, IFM, Octopus	The Octopus strategy invests in renewable energy infrastructure, while the IFM strategy also has an allocation to a net-zero fund.
Private equity	Schroders	Focus of mandate expected to be towards technology, business services, healthcare and consumer companies. Limited exposure to industrials.
Private debt	Russell Investments	No explicit climate objective stated, albeit an implicit expectation that sustainability and climate issues should be reflected in portfolio construction.

Appendix 1: Glossary

Carbon-dioxide equivalent (CO_2e): a metric used to show the impact of various greenhouse gases in a standardised way, by presenting emissions in terms of the aggregate amount of CO_2 that would create the same level of global warming.

Carbon intensity: a measure of the level of emissions that are owned by or financed through an investment, typically expressed in tons of CO_2e/1GBPm.

Climate solutions: assets, products, or services which directly or indirectly contribute to the mitigation of climate change. Examples include but are not limited to renewable energy; sustainable materials; resource management; pollution prevention; forestry; agriculture; clean technology; mitigation technologies.

Decarbonisation: the reduction of emissions of CO_2 or other greenhouse gases from a product, organisation, or country with the overarching aim to eliminate them (as far as possible). In practice, this means shifting from using fossil fuels to alternative low-carbon energy sources, as well as reducing the emissions produced more widely across the value chain (as well as just energy usage).

Greenhouse gas (GHG) emissions: harmful gases emitted, particularly because of human activities, which exacerbate the effects of climate change. For example, burning fossil fuels (coal, oil and natural gas) releases carbon dioxide (CO_2).

Net-zero ambition: the goal of reducing global emissions produced by economic activity to a level where they are balanced by natural or man-made process that sequester such emissions, i.e. emissions and emissions removal are in balance.

Paris Agreement: an international treaty on climate change agreed by 175 countries in Paris in 2015. It came into force in November 2016. Its key aim is to limit global temperature increase to 2 degrees above industrial levels by the end of this century, and ideally keep temperature rises below 1.5 degrees.

Science Based Targets initiative (SBTi): a partnership run by the Carbon Disclosure Project (CDP), the UN Global Compact, the World Resources Institute and the Worldwide Fund for Nature. The initiative helps companies set emissions reduction targets backed by climate science.

Scopes 1, 2 and 3 emissions: GHG emissions are categorised into three ‘scopes’, which allow companies to accurately measure and report their emissions, both in their own operations and in their wider supply chains.

Stranded assets: assets that may become less valuable in the transition to a low-carbon economy. Coal mines, for example, are likely to become less valuable as society becomes less reliant on burning fossil fuels to generate electricity.

Ties to fossil fuels: a measure of a portfolio’s exposure to companies with an industry tie to fossil fuels (thermal coal, oil & gas); in particular reserve ownership, related revenues and power generation.

Transition alignment: a measure of how aligned a portfolio (or company) is with the transition to a low-carbon economy. The SBTi allows companies to measure how well aligned their business models are with reducing emissions in line with the goals set out under the Paris Agreement, including sector-specific guidance.

Taskforce on Climate-related Financial Disclosures (TCFD): a framework through which organisations can report on how they manage their exposure to climate-related risks and opportunities.

Weighted-average carbon intensity (WACI): an emissions-intensity metric that shows a portfolio’s exposure to carbon-intensive companies, typically expressed in tons of CO_2e/1USDm revenue.

Appendix 2: Data quality and data sources

One key consideration in our calculations has been the availability of data. This considers where emissions data has been reported, ie calculations are based on actual data, and where emissions data has been estimated, either at a company or an asset-class level. The WPP should seek to ensure that emissions data quality is clearly reported and addressed within analysis to ensure that appropriate conclusions can be drawn, and informed decisions taken. Where possible, the WPP will work with its Service Providers to encourage improvements in data capture and reporting.

Data on listed assets is generally well reported or otherwise estimable and thus available for calculation. The same is broadly true of listed bond markets, except for sovereign debt. Emissions metrics within listed-equity, fixed-income and multi-asset mandates is with reference to the actual holdings within underlying portfolios based on data reported by or estimated for companies (as provided by MSCI), with average data quality being noted below.

Quality of underlying emissions data

	31 March 2019			31 March 2022		
	Reported	**Estimated**	**Total**	**Reported**	**Estimated**	**Total**
Listed Equity	56.2%	39.7%	95.9%	82.4%	16.8%	99.2%
Fixed Income	56.1%	11.5%	67.6%	60.8%	14.9%	75.7%
Multi Asset	66.8%	10.1%	76.9%	79.6%	5.6%	85.2%

Source: Hymans Robertson analysis using MSCI data

The methodology for calculating emissions metrics for sovereign issuers is still evolving; given there is no consistent basis for calculation, and sovereign debt holdings have been excluded from the metrics presented. As at 31 March 2022, 8.4% of total assets directly represented investment in sovereign bonds and cash, predominantly investment in UK government debt (although the total proportion will be higher where government debt is held in other funds). Emissions and any future carbon-reduction strategy is therefore directly linked to government policy. Beyond sovereign debt, cash, hedge fund mandates, timberland and other alternative strategies were also excluded from calculations.

Data quality offers a further source of error when aggregating information across different asset classes and constructing combined positions. For example, where data quality is high (say 95%), assuming the remaining 5% of holding where data is missing have the same carbon emissions is reasonable, with limited variation in the actual outcome. However, where data quality is substantively lower, this assumption introduces further variation.

Of the portfolios analysed, the two with poorest data quality are the WPP Absolute Return Bond Fund (49% data available) and the WPP Multi Asset Credit Fund (59% data available). While our calculations assume that the whole fund has the same carbon intensity, this is noted as a potential source of discrepancy.

Data for private-market holdings (private equity, private debt, infrastructure, property) is also less well reported and has been excluded from this report.

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