West Midlands Pension Fund

CLIMATE RELATED DISCLOSURE 2021

Report prepared in alignment with the recommendations of the Taskforce on Climate-related Financial Disclosures

Report prepared in collaboration with LGPS Central Limited

DECEMBER 2021

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INTRODUCTION AND OVERVIEW

The West Midlands Pension Fund ("the Fund/WMPF") is one of the largest funds within the Local Government Pension Scheme in the UK. An open defined benefit pension scheme with more than 750 employers, the Fund has assets under management in excess of £20 billion and invests for the long-term across a wide range of asset classes to deliver returns to pay pensions to over 340,000 Fund members within the West Midlands.

This stand-alone report marks the fifth year in which the Fund has prepared and disclosed its action and approach to assessing and managing the risks associated with climate change. The Fund's response to climate change is embedded within the Fund's Investment Strategy Statement and is supported by our Climate Change Framework and Strategy (2021-2026) and wider Responsible Investment (RI) Framework.

Our climate-related disclosure report is based on the recommendations set by the Task Force on Climate-related Financial Disclosures (TCFD) and provides an overview of the governance, strategy, risk management tools and metrics employed by the Fund to inform and continue to develop our response to climate change.

INVESTMENT STRATEGY STATEMENT 2021

CLIMATE CHANGE FRAMEWORK AND STRATEGY 2021

RESPONSIBLE INVESTMENT FRAMEWORK 2021

West Midlands Pension Fund

£20bn+ assets under management

334,030 members

791 employers

As at 30th September 2021

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OUR APPROACH TO CLIMATE-RELATED DISCLOSURE

Climate change, and the risks and opportunities it presents to us as long-term investors, form part of our critical thinking not just in the way we approach investment, but in the Fund's wider objectives and delivery themes which aim for global influence alongside delivering for local people. We recognise the need for action to address climate change on a global scale and that we have a role to play in ensuring the shift to a lower carbon economy, ensuring a "just transition" for workers and communities, with the potential for substantial economic and social benefits. In collaboration with others, WMPF is taking action and will continue to contribute to change by engaging governments, companies, investors and individuals to ensure the long-term sustainability of our planet.

Openness and transparency are important ways in which we demonstrate the actions we are taking to address climate change. An initial assessment of the Fund's exposure to climate-related risks under a range of forward-looking climate scenarios was initially carried out by an external provider in 2017 and used to inform our Strategic Asset Allocation. Alongside an increased pace of global engagement and policy change, we established our first Climate Change Framework and Strategy in 2019 and revised our Strategic Asset Allocation in our Investment Strategy Statement in 2020. Based around short-term targets over four years, our objective was to ensure that our climate policy actions were set in context of progressive ambition.

In 2020 and 2021 we undertook further climate risk analysis in partnership with our Pool company LGPS Central Ltd. Through a combination of bottom-up and top-down analysis, the 2020 report provided WMPF with a view of the climate risk across the major parts of the investment portfolio. The 2021 report analysed progress against the measurable baseline of data and recommendations established in 2020 and reviewed progress against the actions established. Analysis to date has focused on our listed equity and fixed income portfolios; we will expand the coverage of analysis to include more asset classes over the next five years to 2026.

Our **Climate Change Framework and Strategy for 2021** was approved by the Fund's Pension Committee in September 2021. In line with Fund's approach to policy development and review, progress against the 2021 Climate Change Framework and Strategy objectives will be reviewed annually, in keeping with best practice and evolving regulations, with full review and the next phase of the Framework due to be developed, no later than 2026/27.

As a supporter of the TCFD recommendations, since they were first published in 2017, we published our climate-related financial disclosure against the TCFD recommendations in our Annual Report & Accounts between 2017 and 2019. For the first time in 2020 we published a separate stand-alone TCFD Report to further enhance transparency and disclosure around our approach to climate risk management. We will continue to consider further TCFD developments, , and guidance applicable to the Fund, amongst wider regulatory changes pertaining to the physical and transition risks of climate change and developing reporting standards, in future reviews of our climate strategy and reporting.

ANNUAL REPORT AND ACCOUNTS

In order to assess progress towards a lower carbon economy it is essential for WMPF to measure its climate risk exposure at regular intervals and to seek appropriate coverage. In line with our Climate Change Framework and Strategy key climate-related risk metrics are reported against annually; wider risk and forward-looking scenario analysis is undertaken every three years, with the next analysis due to be carried out in 2022/23, alongside our triennial actuarial and investment strategy reviews and engagement with our employers. We expect that our Climate Change Framework, in tandem with our climate-related financial disclosure, will both inevitably, and desirably, evolve as climate related financial tools and data availability continues to advance, and the understanding of the complex issues, evident in practical and academic research, improves.

Action on climate change requires commitment by all parties on a worldwide scale. As a global investor the Fund believes that it has a crucial role to play in leading that change through a proactive and collaborative approach. The Fund recognises that climate-related risks are financially material, and that the due consideration of climate risk falls within the scope of the Fund's fiduciary duty and aligns with the Fund's wider beliefs as set out in the Fund's **Investment Strategy Statement**. Given the Fund's long-dated liabilities and the timeframe in which climate risks could materialise, a holistic approach to risk management covering all sectors and all relevant asset classes is warranted. We aim to increase coverage as further decision useful information becomes available.

Stong Governance

Providing assurance on the services we deliver with effective decision making.

Customer Focused

Enabling, educating and supporting our customers on complex issues and flexing our services to our customer's evolving needs.

Global Influence

Shaping the industry in which we operate, leading by example on key issues, including regulatory change, investment cost management, and responsible investment.

Delivering for local people

Enhancing our reach through developing our engagement model and supporting our communities through opportunity.

Figure 1: West Midland Pension Fund's Four Commitments

This TCFD report describes the way in which climate-related risks are managed by the Fund. In the interest of being transparent with the Fund's beneficiaries and broader stakeholder base, this report discloses the results of Carbon Risk Metrics Analysis and Climate Scenario Analysis undertaken in 2020 and 2021 in order to assess the resilience of the Fund's invested assets.

The TCFD recommendations are based on the financial materiality of climate change and are structured according to the TCFD's four thematic areas of governance, strategy, risk management and metrics and targets [Figure 2].

This report covers our actions and alignment against each of the core elements in turn.

Governance
The organisation's governance around climate-related risks and opportunities

Strategy
The actual and potential impacts of climate-related risks and opportunities on the organisation's business, strategy, and financial planning

Risk Management
The processes used by the organisation to identify, assess, and manage climate-related risks

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

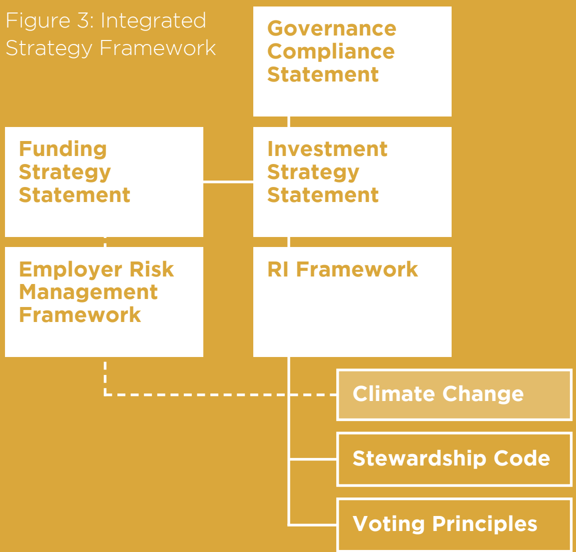
Figure 2: Core Elements of Recommended Climate-Related Financial Disclosures

Introduction
Governance
Strategy
Risk Management
Metrics & Targets

GOVERNANCE

TCFD Recommended Disclosure
Describe the board's oversight of climate-related risks and opportunities

Figure 3: Integrated Strategy Framework



The City of Wolverhampton Council is the LGPS Administering Authority for the West Midlands Pension Fund. Within its constitution, the Council has delegated responsibility for the Pensions Fund to the Pensions Committee.

WMPF is governed by the Pensions Committee which sits as the decision making body, setting strategy and policy as to how WMPF is managed. The Pensions Committee delegates the day-to-day running of the Pension Fund to the Director of Pensions who in turn delegates to the Senior Management Team and officers.

The Local Pensions Board, made up of equal member and employer representatives, sits in an advisory role to the pension fund, supporting the good governance of the scheme. The Local Pensions Board oversees investment governance including developments and changes to WMPF's Responsible Investment Framework and Climate Change Framework and Strategy and ongoing stewardship activity. WMPF communicates responsible investment activity and action on climate through online, event and written communications.

WMPF's Investment Committee is responsible for the day-to-day management and oversight of assets including implementation of the Investment Strategy Statement (ISS), asset allocation, and Responsible Investment. Following the creation of LGPS Central in 2018, the pool and pool company provide investment products, analysis and advice to support implementation of the ISS and RI Framework. The Fund utilises a range of collaborative partnerships and initiatives to develop and enhance its engagement and stewardship programme.

WMPF is committed to continue to evaluate and build knowledge and skills appropriate for both our Fund Officers and Governing Bodies in an evolving regulatory landscape and have dedicated Employee and Governing Body Training Policies. More information on the governance of WMPF can be found in our Governance Compliance Statement and in our Investment Strategy Statement.

INVESTMENT STRATEGY STATEMENT 2021

GOVERNANCE COMPLIANCE STATEMENT

TCFD Recommended Disclosure

Describe management's role in assessing and managing climate-related risks and opportunities

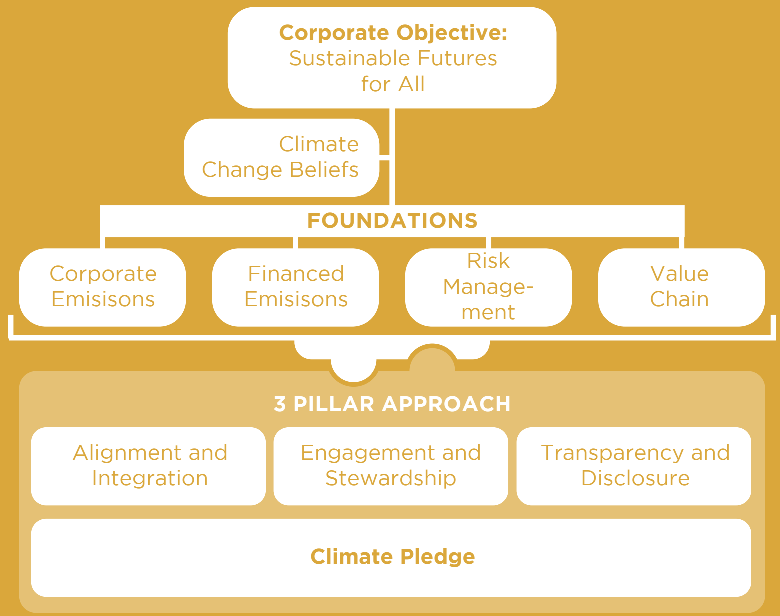


Figure 4: Corporate Climate Objectives

The Fund's Investment Advisory Panel and independent advisers appointed to this oversee implementation and advise the Director of Pensions and the Fund's Internal Committees on the Fund's consideration and response to climate change. A specific focus is placed upon minimising adverse financial impacts and maximising the opportunities for long-term growth on invested assets.

Day-to-day management of the Fund's climate change strategy is delegated to the Director of Pensions and in turn to Senior Officers (Management Team) and the internal committees they lead (collectively "Fund Officers").

Fund Officers have engaged with market actors including proxy advisers, investment consultants, and data service providers, to collate data and analysis to test and inform climate-related risks, both from a "top-down" and "bottom-up" perspective. This aids the identification, quantitative and qualitative assessment of risk and informs actions aligned to the context of the Climate Change Framework and Strategy.

This supports the governance of the Fund's response to climate change by defining corporate sustainability objectives across four foundations, grounded in investment beliefs, and corporate values. The approach is defined across three broad pillars and tangible commitmentsfor action set out within our Climate Pledge (figure 4).

In line with the Fund's Climate Change Framework and Strategy, Fund officers give due consideration and assessment of climate-related risks and opportunities when discussing both existing investments and any new investments.

STRATEGY

The Fund as a large asset owner with long-term liabilities considers climate-related risks and opportunities across multiple timeframes and across a diversified asset-base and employer-base, as well as the broader potential impacts across the Fund.

We identify short-term risk as stock market movements, medium-term risk as changes in consumer behaviour, driven by policy and technological change, and long-term risk as physical damages to real assets and resource availability.

The Fund identifies climate-related issues through research and collaboration (notably with the PRI, IIGCC, LAPFF, TPI and Climate Action 100+). The Fund has made use of the Transition Pathway Initiative (TPI) Toolkit to observe climate risk management in large listed equity stocks. A subset of risk and opportunity factors considered is outlined in table 1 below:

TCFD Recommended Disclosure

Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long-term

Table 1: Risk and Opportunity Factors

	Short & Medium-Term	Long-Term
Risks	• Carbon prices • Technological change • Regulatory & Policy tightening • Consumer preferences • Asset valuations under a range of climate scenarios • Biodiversity	• Resource scarcity • Extreme weather events • Sea level rise • Fund employers • Asset valuations under a range of climate scenarios • Just Transition & employment
Opportunities	• Engagement to support transition • Ability to influence • Resource efficiency • Technological change	• Engagement to support transition • Improvements to long-term health • Resource efficiency • Training & upskilling
Asset Class	• Listed equities • Growth assets • Energy-intensive industry • Oil-dependent sovereign issuers • Carbon-intensive corporate issues • Currencies	• Infrastructure • Property • Agriculture • Commodities • Insurance • Private Assets

TCFD Recommended Disclosure

Describe the impact of climate-related risks and opportunities on the organisation's business, strategy and financial planning

As a pension fund and asset owner we seek to understand the risks and opportunities associated with climate change; ensure fund resilience as we decarbonise; and champion effective collaboration, we have increased transparency in our approach, as we continue to forge our pathway to net zero and contribute to building sustainable futures for all.

We adopt an evidence-based approach to climate change and believe there is overwhelming evidence to support that climate changes poses both risks and opportunities to the economy and society and the Fund's investments and risk management activity.

We are considering climate change across a broad platform – our own emissions, financed emissions, funding risk and value chain – identifying actions required to protect and enhance our organisational response in all that we do.

A period of co-ordinated and collaborative action is required by multiple stakeholders (governments, regulators, companies, investors and consumers) to manage the financial risks and realise the opportunities associated with the transition to a lower carbon economy.

Climate change is a fiduciary issue. As a Fund within the Local Government Pension Scheme, WMPF has multidecadal time horizons, with both long-term investment beliefs and evolving liability profiles to take into consideration. Significant uncertainty remains, and no single tool can provide an accurate and complete observation on a pension fund's climate risk. For responsible investors looking to proactively manage climate risk, we believe a combination of metrics and methodologies represents the best possible information set currently available.

We seek to identify and assess top-down and bottom-up climate-related risks at the total Fund, asset class and individual asset levels. As far as possible climate risks are assessed in units of investment return, in order to compare with other investment risk factors. This assessment is used to review and inform our response and policy development – influencing engagement and stewardship activity and informing asset allocation and investment appraisal.

We expect our appointed investment managers to identify, assess and report emerging and evolving climate-related risks. Existing fund managers are monitored on a regular basis through the Fund's stewardship programme. Engagement activity is conducted with investee companies through selected stewardship partners including, but not limited to: LGPS Central Ltd; EOS at Federated Hermes; the Local Authority Pension Fund Forum (LAPFF); and Climate Action 100+.

TCFD Recommended Disclosure

Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

CLIMATE CHANGE FRAMEWORK AND STRATEGY 2021

Climate scientists currently anticipate that the world will be between 2°C and 4°C warmer by 2100[1]. This is substantially higher than the ambition set by the Paris Climate Change Agreement[2] – to keep global surface temperature rise to well below 2°C above preindustrial levels and to pursue efforts to limit the temperature increase to 1.5°C.

As reported in the Fund's 2020 TCFD report, an initial assessment of the Fund's exposure to climate-related risks under a range of forward looking climate scenarios was carried out by an external provider in 2017 and 2020 and used to inform the 2019 and 2020 Strategic Asset Allocation reviews respectively. All asset classes were reviewed within 2°C, 3°C, and 4°C scenarios as per the table 2 below.

Table 2: Annualised Climate Change impact on portfolio returns – to 2030 and 2050[3]

Scenario	Timeline	2019 Asset Allocation	2020 Strategic Asset Allocation
2°C	2030	0.20%	0.34%
	2050	0.01%	0.09%
3°C	2030	-0.01%	-0.01%
	2050	-0.07%	-0.07%
4°C	2030	-0.07%	-0.08%
	2050	-0.14%	-0.15%

As outlined in our Climate Change Framework and Strategy 2021, we will continue to scenario test our long-term funding and investment strategies against forward-looking temperature increase scenarios to understand and inform action required to develop resilience.

In line with the Net Zero Investment Framework[4], we will take action to reduce greenhouse gas emissions across the value chain, consistent with the Paris Agreement's goal of limiting global average temperature increase to below two degrees Celsius above pre-industrial levels, aiming for 1.5 degrees.

1 https://www.ipcc.ch/sr15/chapter/spm/
2 https://ec.europa.eu/clima/policies/international/negotiations/paris_en
3 Extract above from Mercer Limited's (Mercer) report "Climate Change Scenario Analysis" dated 26 June 2020 prepared for and issued to LGPS Central Limited for the sole purpose of undertaking climate change scenario analysis for West Midlands Pension Fund.
4 https://www.iigcc.org/download/net-zero-investment-framework-implementation-guide/?wpdmdl=4425&refresh=613e33e07cf191631466464

RISK MANAGEMENT

TCFD Recommended Disclosure

Describe the organisation's process for identifying and assessing climate-related risks

Climate change, and the risks and opportunities it presents to us as a long-term investor and a pensions provider form part of our critical thinking, not just in the way we approach investment, but in the Fund's wider commitments which strive for global influence alongside delivering for local people.

WMPF considers the impact of climate change on its asset allocation, investment and funding strategy when making decisions. We recognise that climate-related risks are financially material, and that the due consideration of climate risk falls within the scope of our fiduciary duty.

Through engagement with our invested assets, underlying companies, investment managers, advisers, and employers, we seek to identify risks, understand, and test the measures in place to manage and monitor change.

The Fund seeks to identify and assesses top-down and bottom-up climate-related risks at the total Fund level, asset class and at the individual asset level. As far as possible climate risks are assessed in units of investment return, in order to compare with other investment risk factors. Currently, tools for assessing climate metrics have some limitations but it is pleasing to see that this is a rapidly developing area, and we look forward to working with enhanced reporting tools. Our preferred metrics to date have been evidenced based impact returns, informed by forward-looking climate scenarios, and a thematic review of asset classes with the greatest exposures to this risk factor.

Our 2021 Climate Change Framework and Strategy outlines our approach for identifying and assessing climate-related risks, how we will measure our progress and continue to adapt to the changing policy and regulatory environment. At this point in time we find it hard to quantify exactly what this will mean, but it will be a further material reduction in exposure to the inherent physical and transition risks associated with the shift to a net zero economy and further investment in climate solutions. Over the next five years we will expand the scope and quality of measurement and data collection, to continue to inform decision making, ensure meaningful change and alignment across our investments and our own operations.

The Fund manages climate related-risks in different ways according to the nature, duration, magnitude and time-horizon of the risk itself. Either directly or through Fund management arrangements, WMPF puts its responsible investment and climate change beliefs into practice through actions taken both before the investment decision (which we refer to as the selection of investments) and after the investment decision (the stewardship of investments).

Table 3: A Summary of WMPF's Responsible Investment and Climate Change Beliefs

Responsible Investment (RI)	Climate Change
• RI ensures the long-term value of assets are protected and where possible, enhanced • RI should be integrated throughout the entire investment process • Investing responsibly reduces risk over time • There is investment opportunity to be realised in environmental and social challenges • Robust governance structures protect investee companies • Strong RI practises advocate engagement over exclusion • Collaborative engagement delivers improvements to the way in which companies are managed • Working in tandem with other investors can positively influence wider policy	• Science-based evidence demonstrates that climate change poses both risk and opportunities for investors • If climate change is not managed it will have long-term consequences for funding levels and financial returns • National policy changes must align with the Paris Agreement target of limiting warming to 1.5°C above pre-industrial levels • Climate risk exposure should be measured at regular intervals • A "just transition" to a low carbon economy with careful society considerations is essential • Collaborative investor engagement is essential in informing government and policy change

TCFD Recommended Disclosure

Describe the organisation's process for managing climate-related risks

TCFD Recommended Disclosure

Describe the organisation's process for managing climate-related risks

LGPS Central Voting Principles

WMPF Voting Principles

External fund managers are monitored in order to ensure the ongoing application and efficacy of their approaches to responsible investment and stewardship. WMPF expects asset managers to be aligned with our climate performance targets and we will seek to ensure that our manager's increase alignment with Net Zero. We meet with our managers regularly and continue to work with them to develop meaningful analysis and reporting on climate related risks.

Our pooling company, LGPS Central Ltd, develops and monitors all pooled investment funds to meet a set standard of "Responsible Investment Integrated Status" (RIIS), from concept - through the lifespan of WMPF investments; consideration of climate change is a crucial component of the decision making process.

RIIS criteria to be met will typically include:

- Responsible investment and climate change beliefs relevant to the asset class or mandate in question.
- Relevant RI and climate change risk/opportunity related documentation that supports the decision to invest, e.g. policies and procedures of external managers or co-investors.
- Fund managers factor RI, ESG and climate change into their selection of portfolio assets.
- Fund managers are transparent in their reporting to clients and the wider public.
- RI reviews are carried out by WMPF managers at regular intervals (usually quarterly).
- Stewardship responsibilities are carried out thoroughly (engaging with companies, shareholder voting, manager monitoring, industry participation).

Engagement and shareholder voting are integral aspects of the Fund's approach to managing climate-related risk. The Fund engages on a global scale on a range of financially material ESG investment factors. Engagement activity is conducted with investee companies through key partnerships including, but not limited to: LGPS Central Ltd; EOS at Federated Hermes; the Local Authority Pension Fund Forum; the UN Principle for Responsible Investment; The Institutional Investors Group on Climate Change, Climate Action 100+; and the Transition Pathway Initiative.

The Fund's Voting Principles reflect the Fund's strategy to engage with its investee companies and other key stakeholders through partnerships and on its own. The Fund supports the LGPS Central voting principles which have been developed in consultation with the Fund and through which the majority of the Fund's votes are now transacted. LGPS Central will, in cases where escalation of an engagement is deemed appropriate, consider co-filing shareholder resolutions that relate to climate change. The Fund reports quarterly to Pensions Committee on its voting and engagement activities through its Responsible Investment report.

THE FUND'S COLLABORATIVE AND ENGAGEMENT PARTNERSHIPS

LGPS Central Limited

LGPS Central Ltd is the Fund's investment pooling partner to deliver the benefits of investment pooling, which includes benefits of scale in responsible investment & engagement and analysis of climate change risks. Climate change is one of LGPS Central's stewardship themes, with quarterly progress reporting available on the website. The Responsible Investment Team at LGPS Central engages companies on WMPF's behalf.

Federated Hermes

EOS at Federated Hermes is engaged by LGPS Central to expand the scope of the engagement programme, especially to reach non-UK companies.

Local Authority Pension Fund Forum

WMPF is a founding member of the Local Authority Pension Fund Forum (LAPFF). LAPFF conducts engagements with companies on behalf of local authority pension funds.

PRI Principles for Responsible Investment

WMPF is a signatory of the UN PRI which seeks to set out investment principle and actions that investors can take across a range of responsible investment activities including climate change. WMPF has been a member of the PRI since 2011. In the 2020 assessment WMPF achieved A+/A across all metrics.

IIGCC Institutional Investors Group on Climate Change

WMPF is a member of the IIGCC which is a leading global investor membership body and the largest one focusing specifically on climate change. IIGCC help define the investment practices, policies and corporate behaviours required to address climate change. During 2021, WMPF made a public commitment to be a Net Zero Asset Owner.

Climate Action 100+ Global Investors Driving Business Transition

WMPF is member of Climate Action 100+ an investor initiative launched in 2017 to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change. More than 615 investors with over $60 trillion in assets collectively under management are engaging companies to: curb emissions; improve governance; and strengthen climate-related financial disclosures.

Transition Pathway Initiative

The Transition Pathway Initiative (TPI) is a global, asset-owner led initiative which assesses companies' preparedness for the transition to a low carbon economy. Rapidly becoming the go-to corporate climate action benchmark. WMPF supports the TPI, created for the global investor community and which collectively has $39trn AUM.

TCFD Recommended Disclosure

Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management

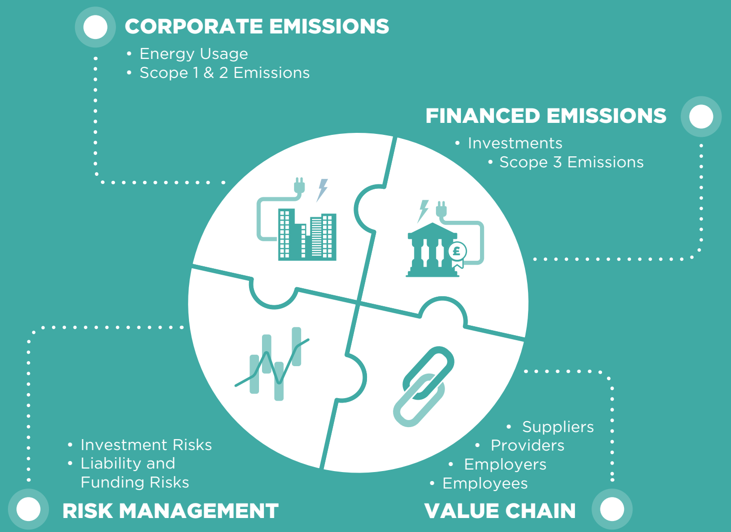


Figure 5: The Foundations of WMPF's Climate Pledge

Climate change has the potential to impact the funding level of the pension fund through impacts on employer covenant, asset pricing, longer-term inflation, interest rates and life expectancy. Climate change is recognised within the Fund's Investment Strategy Statement, Responsible Investment Framework and expanded upon in the Climate Change Framework & Strategy. These documents are reviewed at least annually and formally approved by the Pensions Committee.

The Fund's Responsible Investment Framework has identified four key themes for engagement for 2019 -2023. Climate change has been a key engagement theme for the Fund for a number of years and is included in the most recent framework for engagement. Annual training includes focused sessions on climate change to ensure those charged with governance are provided with the knowledge and skills with which to assess climate risks and to ensure they are integrated into the Fund's overall risk management.

Our 2021 Climate Change Framework and Strategy is holistic in that it incorporates climate change and risk considerations across Fund operations and the investment and funding strategies. We consider potential financial risks by changing economic and demographic risks as well as changing employer covenant. The Foundations of our Climate Pledge (**pg. 10**) are categorised into four key groups: risk management; corporate emissions; financed emissions; and value chain (**pg. 18**).

We continue to access the latest information on the risks and opportunities presented by a changing climate, as relevant for our Fund. This includes consideration of how our investment returns and/or contribution requirements may be impacted by transition risks and opportunities, and physical risks and opportunities.

We continue to scenario test our long term funding and investment strategies against forward-looking temperature increase scenarios to understand and inform action required to develop resilience. The Fund's investment and funding strategy risk will be further assessed through the continued development of an integrated selection and monitoring framework for Fund assets. Targeted engagement is undertaken to enhance understanding of risks and mitigating actions and employer covenant indicators are considered through climate-related risk factors.

TCFD Recommended Disclosure
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.

METRICS AND TARGETS

Climate risk analysis was undertaken through our Pool company LGPS Central Ltd in 2020 and 2021.

The scope of the analysis comprises the listed equities and corporate fixed income portfolios as at 31st December 2020. The results are compared to a data collected as at 31st December 2019 and as at 31st December 2018. The analysis is based on a data set provided by MSCI ESG Research LLC (MSCI) and seeks to identify and assess how the portfolio carbon risk metrics have changed within this timeframe.

As detailed in our Climate Change Framework and Strategy 2021, we will expand the coverage of analysis to include more asset classes over the next five years to 2026.Carbon risk metrics aid LGPS Central and WMPF in observing and assessing the potential climate-related risks to which investment mandates are exposed and identifying areas for further risk management, including company engagement and fund manager monitoring.

The carbon risk metrics analysis included:

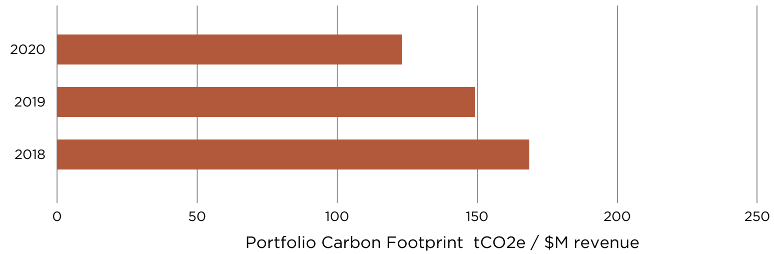
- **Portfolio carbon footprint (weighted average carbon intensity).**
- **Exposure to fossil fuel reserves.**
- **Exposure to clean technology.**
- **Carbon risk management via the Transition Pathway Initiative.**

TCFD Recommended Disclosure

Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

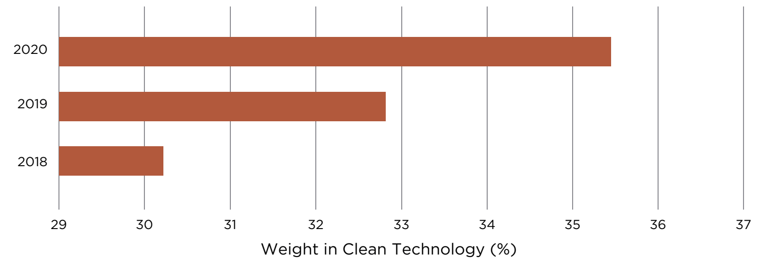
In line with TCFD guidance, we provide the results of three carbon risk metrics using analysis undertaken as at 31st December 2018, 2019 and 2020. Findings are presented here at the 'Total Portfolio' level, which comprises analysis undertaken on WMPF's listed equity and corporate fixed income portfolios. Analysis is limited to these portfolios as unlisted asset classes do not have sufficiently complete and comparable data to facilitate carbon risk metrics analysis at this time.

Figure 6: Portfolio[5] Carbon Footprint (tCO_2e / \$M revenue) reduction between December 2018 and December 2020



Management of carbon risk by the Fund continues to be ahead of relevant benchmarks, with reducing exposure over time. The carbon footprint of the Total Portfolio decreased between 2018 and 2020 and as of 31st December 2020, was 28.9% lower than as at 31st December 2018.

Figure 7: Increase in Portfolio[5] weight investment in Clean Technology companies (%) between December 2018 and December 2020.



The Total portfolio weight in clean technology increased between December 2018 and 2020. As at 31st December 2020, the weight in clean technology was 17% higher than as at 31st December 2018.

[5] Total Portfolio comprises both the listed equity and corporate fixed income portfolios

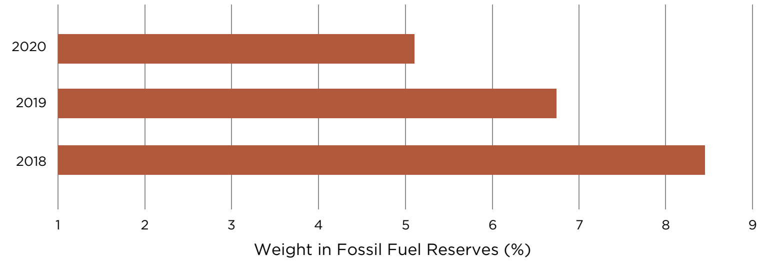
TPI FRAMEWORK

The Transition Pathway Initiative (TPI) framework evaluates companies based on their climate risk management quality and their carbon performance. The former includes an assessment of policies, strategy, risk management and targets. There are six management quality levels a company can be assigned to:

- **Level 0** – Unaware of (or not Acknowledging) Climate Change as a Business Issue
- **Level 1** – Acknowledging Climate Change as a Business Issue
- **Level 2** – Building Capacity
- **Level 3** – Integrated into Operational Decision-making
- **Level 4** – Strategic Assessment
- **Level 4*** – Satisfies all management quality criteria

[6] Total Portfolio comprises both the listed equity and corporate fixed income portfolios

Figure 8: Portfolio[6] exposure to Fossil Fuel Reserves (%) reduction between December 2018 and December 2020



The Total Portfolio exposure to fossil fuel reserves fell between December 2018 and 2020 and as of 31st December 2020, was 39.2% lower than as 31st December 2018.

The Fund has made progress in enhancing its responsible investment and climate change practice in the past year. The Fund has achieved its 2019 – 2023 Climate Change Framework and Strategy targets. As at 31st December 2020 15.5% (target 15%) of the Total Portfolio[6] was invested in low carbon and sustainable investments and only 0.016% (target <1%) of the Total Portfolio was invested in invested in pure-play thermal coal producers.

As of 31st December 2020, 75% of the companies in the Total Equities portfolio were ranked by the TPI as 'best in class' in terms of climate risk management. This indicates that the Fund's appointed portfolio managers are, on average, investing in above average to 'best in class' companies in terms of climate risk management.

The number of companies aligned with the Paris Agreement, however, is significantly lower than the proportion with good management quality. The Fund will target Paris-alignment through company engagement (to be executed via the Fund's portfolio managers and service providers) to further improve the management of carbon risk within the Fund. As per LGPS Central Ltd's Voting Principles 2020, LGPS Central will consider voting against the company Chair on behalf of the Fund, and other relevant directors or resolutions if a company is assessed by the TPI's management quality framework to be at a Level 2 or lower.

TCFD Recommended Disclosure

Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

As documented in the Fund's Climate Change Framework and Strategy, approved September 2021 the Fund reviewed the targets and metrics used by our organisation to manage climate-related risks and opportunities and performance against targets.

Building on the progress to date and consistent with the principles set out in the Fund's Climate Pledge (**pg. 10**), we have set a number of interim targets:

- A 50% reduction in investment portfolio carbon emissions by 2030 (vs 2019 levels).
- 60% asset coverage by 2026 – we will develop and utilise the measurement tools and methods of analysis across a wider range of asset classes.
- Increase the awareness and measurement of our emissions in our day-to-day activities, aligning to net zero with a 50% reduction targeted by 2030.

Our approach and targets are expected to evolve as the landscape and industry develop. The targets outlined here are subject to change and are reliant on the developing global governmental commitments and policies. Progress against the new targets will be incorporated into the 2022 TCFD Report.

Metrics and targets set for WMPF investments will be reported against annually; wider risk and forward-looking forward looking scenarios will be undertaken, with the next analysis due to be carried out in 2022/23, alongside our triennial actuarial and investment strategy reviews and reported over 2023/24.

CLIMATE CHANGE FRAMEWORK AND STRATEGY 2021

GLOSSARY

Carbon Footprint/ Portfolio Carbon Footprint A proxy for a portfolio's exposure to potential climate-related risks (especially the cost of carbon), often compared to a performance benchmark. It is calculated by working out the carbon intensity (Scope 1+2 Emissions / $M sales) for each portfolio company and calculating the weighted average by portfolio weight.

Clean Technology/ Weight in Clean Technology The weight of a portfolio invested in companies whose products and services include clean technology. Products and services eligible for inclusion include Alternative Energy, Energy Efficiency, Green Building, Pollution Prevention, Sustainable Water.

Climate Solutions We note here that there is currently no standard definition for investments which classify as Climate Solutions but this is an area the Fund is advocating development.

Engagement Dialogue with a company concerning particular aspects of its strategy, governance, policies, practices, and so on. Engagement includes escalation activity where concerns are not addressed within a reasonable time frame.

ESG Factors Determinants of an investment's likely risk or return that relate to issues associated with the environment, society or corporate governance.

Fossil Fuel Reserves / Weight in Fossil Fuel Reserves The weight of a portfolio invested in companies that own fossil fuel reserves.

Just Transition A Framework developed to encompass a range of social interventions needed to secure workers' rights and livelihoods when economies are shifting to sustainable production, primarily combating climate change and protecting biodiversity.

Net Zero Emissions A state in which the greenhouse gas emissions created by an organisation are counterbalanced by the greenhouse gases sequestered by an organisation over a given timeframe.

Paris Agreement The Paris Agreement is a legally binding international treaty on climate change. Its goal is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.

Physical Risk/ Climate Physical Risk The financial risks and opportunities associated with the anticipated increase in frequency and severity of extreme weather events and other phenomena, including storms, flooding, sea level rise and changing seasonal extremities.

Responsible Investment The integration of financially material environmental, social and corporate governance ("ESG") factors into investment processes both before and after the investment decision.

Scope 1 Greenhouse Gas Emissions Direct emissions from owner or sources controlled by the owner, including: on-campus combustion of fossil fuels; and mobile combustion of fossil fuels by institution-controlled vehicles.

Scope 2 Greenhouse Gas Emissions	Indirect emissions from the generation of purchased energy.
Scope 3 Greenhouse Gas Emissions	Indirect emissions that are not controlled by the institution but occur as a result of that institutions activities. Examples include commuting, waste disposal and embodied emissions from extraction.
Stewardship	The promotion of the long-term success of companies in such a way that the ultimate providers of capital also prosper, using techniques including engagement and voting.
Thermal Coal Reserves/ Weight in Thermal Coal Reserves	The weight of a portfolio invested in companies that own thermal coal reserves.
Transition Risk	The financial risks and opportunities associated with the anticipated transition to a lower carbon economy. This can include technological progress, shifts in subsidies and taxes, and changes to consumer preferences or market sentiment.
Voting	The act of casting the votes bestowed upon an investor, usually in virtue of the investor's ownership of ordinary shares in publicly listed companies.

West Midlands Pension Fund

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