Tyne and Wear Pension Fund

TCFD Report 2022/23

Tyne and Wear Pension Fund

South Tyneside Council providing pension services for Tyne and Wear Pension Fund

1 December 2023

Tyne and Wear Pension Fund

Fund year ending 31 March 2023
Taskforce on Climate-Related Financial Disclosures ('TCFD') Statement

Introduction

This statement sets out the approach of the Pension Committee ('the Committee') of the Tyne and Wear Pension Fund ('the Fund') with regard to assessing, monitoring and mitigating climate-related risks in the context of the Committee's broader regulatory and fiduciary responsibilities to their members.

The Committee believes that climate change is a *systemic risk* and an immediate concern. In order to ensure a sustainable future and to safeguard economic growth, the Committee believes that concerted global action is required to tackle the climate crisis. The Fund is a long-term investor, and the Committee believes that improved transparency on climate-related matters will lead to improved investment decisions which in turn will improve member outcomes. This has created focus and an imperative to act.

Therefore, the Committee is supportive of any initiative that helps improve disclosures and enhances transparency. The Taskforce on Climate-related Financial Disclosures ('TCFD') framework provides a structure for companies, asset managers, asset owners, banks and insurance companies to outline the steps they have undertaken to identify, manage and monitor climate-related risks and opportunities. The framework is designed to increase comparability but allow sufficient flexibility to communicate the specific approach adopted by each entity. Consequently, the Committee supports the TCFD recommendations.

The Fund is not yet required to produce an annual report in line with the TCFD framework. However, it is expected that Local Government Pension Scheme ('LGPS') funds will be expected to comply with TCFD requirements, including producing a report, in the coming years. As a result, the Committee has produced this disclosure to highlight to members the Fund's current position and current expectation actions to evolve this approach over time, including how the TCFD requirements will be applied after the response to the Government's consultation on TCFD for LGPS is published. Under this consultation, the first reports were expected to be due by December 2024, however this has been postponed until December 2025. The Committee is broadly supportive of the proposals outlined by the consultation so far whilst also noting that they may be subject to change.

This is the Fund's second disclosure in line with the TCFD framework, two years ahead of schedule, and this statement is therefore expected to evolve over time as the approach and the actions of the Committee develop, and upon further clarification of how the TCFD will be applied to LGPS Funds. This statement provides details of the Fund's approach against the four pillars set out by the TCFD.

- **Governance**: the Fund's governance and oversight around climate-related risks and opportunities.
- **Strategy**: the actual and potential impact of climate-related risks and opportunities on the Fund's investment strategy, and financial planning.
- **Risk management**: the processes used by the Fund to identify, assess and manage climate-related risks.
- **Metrics and targets**: the metrics and targets used to assess and manage relevant climate-related risks and opportunities.

As well as developing the Fund's reporting for TCFD, the Committee expects the Fund's underlying investment managers to be aligned with TCFD. The Committee will continue to monitor this through regular reporting and ongoing dialogue with the Fund's manager.

Report summary

TWPF is a defined benefit (DB) LGPS scheme, responsible for the pensions of over 179,000 members across more than 300 employer bodies. Over 67,000 members are currently in receipt of their pensions. Of the members not yet in receipt of their pension, over 61,000 are active members with a further 51,000 deferred members.

The average member age is c.55 years, so the Fund has adopted an investment horizon of 20 years in setting its investment strategy. However, the Fund has obligations to its members which extend from the present day over a much longer period, which is considered when managing its assets. The Fund's investment strategy is recorded in the Investment Report within the Annual Report and Accounts.

As at 31 March 2023, the Fund's total assets were c£12.4bn, with investments spread across a number of asset classes and geographies shown below.

Asset Class	Geography	%
Equities	UK	7.88
	North America	8.98
	Europe	7.49
	Japan	3.98
	Asia Pacific	3.02
	Emerging Markets	3.27
Factor Based Equities	Global	6.35
Fixed Interest	UK Gilts	1.37
	Sterling Non Govt	19.51
	Multi Asset Credit	4.55
Private Equity		10.83
Property	UK	10.25
Infrastructure		5.18
Private Debt		6.02
Climate Opportunities	UK	0.47
Cash		0.86

Throughout this report, there are instances where Environmental, Social, and Governance ('ESG') related issues are considered. Climate change is one of the key environmental factors included within the broader category of ESG. Responsible Investment ('RI') as referred to within this report is then the integration of ESG factors, including climate change, into investment decision-making and asset stewardship practices. Additionally, a number of key words and phrases throughout the report can be found within the glossary, which provides further explanation and detail.

A summary of this report across each of the four pillars of TCFD, as well as activities the Fund has undertaken over the reporting period that are relevant to these disclosures is set out below.

Governance

The Fund has a climate-change policy in place – available on the Fund's website – that sets out the approach to climate-related issues and key roles and responsibilities with respect to climate change and broader Responsible Investment (RI).

The Committee considers climate change to be a key risk to the Fund and so has embedded climate-related issues across strategic decision-making and other governance processes.

There are a number of parties that feed into the Committee's approach to climate change by way of advice, supporting implementation, training and other means. However, the Committee retains overall responsibility for the approach that is taken.

The investment beliefs in place for the Fund inform the decisions that TWPF take on managing risks like climate change and Fund's approach and expectation of asset stewardship accordingly. Therefore, in 2022/23 the Fund actively prioritised and were successful in making a report submission to the UK Stewardship Code, thereby becoming a UK Stewardship Code signatory. This recognises the approach and activities with respect to stewardship of the Fund's assets, including the direction and participation of the Fund in supporting a transition to a low-carbon economy in a responsible way.

Strategy

The Committee has undertaken work in order to understand risks within the Fund's overall strategy relating to climate change. The Committee has also embedded consideration of these risks with the Fund's overall planning and strategy.

The Committee has undertaken scenario analysis of the Fund's assets and liabilities to test the resilience of the investment strategy and funding level to various climate scenarios. This analysis suggested that, across all scenarios, the Fund is resilient to the risks posed by climate change.

The 2022 review of the investment strategy showed that the existing strategy remained appropriate. However, some small changes could be made to increase the allocations to lower carbon asset classes, which would be supportive of the Fund's carbon reduction targets. In summary, the changes which should assist in delivering the carbon reduction targets are set our below:

At the same time as undertaking the 2022 asset liability modelling and the review of the investment strategy, the Fund also undertook some climate change scenario analysis. This work confirmed that the Fund's current strategy remained appropriate and the Fund was well placed to respond to the challenges and opportunities from climate change

In March 2022, the Fund made a £465 million commitment to the new Climate Opportunities Fund developed by Border to Coast. This will seek to identify investment opportunities to help with the transition to a low carbon economy. Over time the allocation to these type of investments is targeted to reach 3% of the total Fund. Allocating a further 3% of the Fund's assets to other private market asset classes is expected to improve the Fund's climate metrics, all funded from quoted equities.

Risk management

The Committee has a clear approach to the management of risks posed to the Fund, which includes climate-related risks.

The Committee has identified environmental, social and governance (ESG) issues (including climate-related risks) as risks to the Fund and has clearly identified controls and actions in place to manage and monitor these risks.

The Committee has embedded the consideration of climate-related risks into the Committee's broader risk-management approach and considers climate risks as part of all the Committee does (e.g. investment strategy reviews, engagement with managers, etc.)

Metrics and targets

The Committee has selected a number of climate metrics by which to measure the Fund's position and exposure to climate risks and opportunities.

Currently, the Fund is performing better than the strategic benchmark across the chosen metrics. The Fund's position as measured at March 2023 has also improved since the baseline measurement date of March 2019. The Committee will receive reporting on these metrics annually.

The Committee has set an overall target for the Fund of net-zero emissions by "2050, or sooner". This target includes two interim targets to reduce the Fund's emissions by 2025 and 2030.

Next steps

The Committee has also identified the next steps that are expected to be taken over the coming year to 31 March 2024 and beyond. As this report is published a number of months into the 2023/24 year, some of the actions outlined below have already been progressed or completed. Next year's TCFD report will provide further updates on these actions.

- Regularly review the ongoing governance approach to climate change, including the policies and processes the Committee has in place to embed climate-related issues across the Fund's management.
- Monitor whether the Fund's specific short, medium and long term time horizons (2025, 2030 and 2050 respectively) remain appropriate.
- Consider at a high level whether the Fund's climate scenario analysis needs to be refreshed annually (for instance, in order to reflect interim strategy changes), with the expectation of refreshing it at least every three years.
- Further monitor and evolve the Committee's management of climate-related risks as appropriate.
- Undertake annual climate metric reporting against the chosen metrics for the Fund and use this to both monitor performance against the targets and to aid in investment decision-making, as appropriate.
- Review the options for investing in more ESG and climate friendly bond products. These are often referred to as "green" bonds.
- Consider transitioning out of the Fund's current single factor Fund into a multi factor product with strong ESG and climate change credentials.
- Deliver the actions in the service plan on RI and climate change, including:
  - undertaking an annual review of the climate-change policy
  - undertaking an annual carbon footprint exercise
  - further assessing the role of private markets in managing climate risk
  - continually assessing the implications of an exclusion policy if engagement is not working
  - actively engaging with managers to ensure that they are appropriately addressing the climate change-related risks, opportunities and threats.

The Committee will provide an update on these steps in the next report. The following pages provide detail on the Fund's climate risk disclosures for the year ending 31 March 2023.

Governance

Governance Disclosure 1: Describe the committee's oversight of climate-related risks and opportunities.

Investment beliefs and RI policy

The Fund's Climate Change policy sets out the Committee's key investment beliefs, including beliefs relating to climate change, and the approach that will be taken by the Fund's management to implement those beliefs. This policy was most recently reviewed by the Committee in November 2022. The Fund also has a broader Corporate Governance and Responsible Investment policy which sets out the Fund's policy and approach to Corporate Governance and Responsible Investment issues, which was also most recently reviewed in November 2022.

The Committee has overall responsibility for the oversight of climate-related risks and opportunities through its scope which includes the management and investment of the Fund's assets. The Committee has regular quarterly meetings to discuss RI matters and key aspects of the Fund's RI and climate policies that the Committee oversees. These include the Fund's commitment to be net zero by 2050 or sooner and the intention to reduce carbon emissions and achieve carbon neutrality across the administrative functions of the Fund by 2030.

The setting and implementation of the Fund's RI and climate policies also fall within the Committee's remit. This includes responsibility for ensuring all regulatory requirements are met and that the Fund's governance processes are sufficient to ensure the proper management of all ESG, including climate, related risks. The Local Pension Board also assists the Committee in ensuring that the Fund complies with appropriate regulatory requirements and legislation in relation to the governance and administration of the Fund.

Accountability and responsibilities

In fulfilling its duties, the Committee delegates certain responsibilities to other parties. This includes delegating the formal monitoring of the Fund's investments to an investment panel, which meets quarterly to discuss the investment objectives, investment management structure and the policy direction of the Fund's assets, thus including the overall implementation of the Fund's approach to climate change and broader RI. The investment panel reports to the Committee and recommends any further action. The Fund's officers are responsible for reviewing the content of the climate-change policy and monitoring developments that may affect the approach to the investment of the Fund, such as the appropriate RI considerations.

Training and discussion of climate change at meetings

The Pensions Committee has adopted the CIPFA Knowledge and Skills Framework for LGPS committee members and LGPS officers as the basis of its approach to training. The Committee recognises the importance of having the appropriate level of knowledge and understanding of climate-related issues required to make decisions and undertake appropriate action to meet the expectations and targets of the Fund with respect to these issues. Consequently, the Committee has undertaken training on climate change and broader RI matters, both over the longer term as well as significant training over the last year. The Committee expects to receive regular training on these topics over time. Training sessions on RI date back to 2003, with the first standalone training session on climate change specifically held in 2009. Over time, training on these topics has increased in frequency, as well as being considered more broadly and embedded within other areas of training.

Over the year to 31st March 2023, in-house training delivered to officers, board and committee members amounted to over 30 hours. In addition, the respective Chairs and Vice Chairs of the Committee and LPB, along with senior officers, also attended externally provided, professional development events amounting to over 60 hours. These included the Pensions and Lifetime Savings Association Conference in June 2022, LGC Investment Summit in September 2022, BCPP Annual Conference in September 2022 and LAPFF annual conference in December 2022, which each included sessions on engagement activities, climate change and education on ESG issues.

Oversight

The Committee maintains oversight of ESG-related risks and opportunities that are relevant to the Fund through the governance processes in place. The Committee maintains a governance document that records the current structure, the parties involved in the Fund's management and their roles in identifying, assessing and managing climate-related risks and opportunities. The governance structure and relationship between the respective parties within the Fund are set out in this document and the section below. The Committee report on their effectiveness and policy implementation annually.

Governance documents

The Committee also maintain a set of documents in place that support the governance of the Fund and are relevant to the risk management of climate-related issues for the Fund. These documents are set out below with further details on how they are used, as well as their relevance to the governance of climate-related issues.

Document	Purpose	Relevance for governance of climate-related issues
Investment Strategy Statement (ISS)	The ISS sets out the approach and arrangements with respect to the investment of the Fund's assets and decisions that have been taken on the Fund's investment policies.	The ISS includes acknowledgement that climate change is a financially material consideration when investing Fund assets and sets out how we consider this in the approach to both specific investments and overall investment strategy.
Investment manager agreements	Investment manager agreements set out the terms of appointment of investment managers for each of the Fund's underlying assets.	Investment manager agreements may include requirements for external managers in relation to ESG and climate change, as well as how managers should report on the activities they undertake with respect to these topics.
Terms of reference	There are different terms of reference in place for each of the Fund's committees in place. They set out the roles and responsibilities of sub-committees and other parties where appropriate.	The duties, roles and responsibilities set out in the terms of reference include those that are relevant for climate governance, such as investment risk monitoring and decisions on metrics and targets.
Meeting minutes	Meeting minutes set out the decisions made by the Officers and Fund committees at meetings.	Meeting minutes provide a record of the decisions made, including where climate change has been a consideration in those decisions.

Governance disclosure 2: Describe the Committee's role in assessing and managing climate-related risks and opportunities.

Case study: Processes for reviewing Fund governance documentation
The Fund has a fiduciary duty to employers and members and recognises the importance of being a responsible asset owner, which includes having a clear Investment Strategy Statement (ISS). The ISS was updated in 2022, with the addition of new investment beliefs reflecting the growing importance of ESG in general, and climate change in particular, as financial risk factors.

In 2022, the Fund also reviewed its vision statement, objectives, investment beliefs and strategy to ensure they would continue to serve as an appropriate foundation for the Fund and its stewardship activities. These were discussed at a workshop for Pensions Committee members so that their views could be expressed and incorporated. The Service Plan (i.e. the document that sets out the aims, objectives and actions that the Fund needs to achieve to meet its vision) was then updated in line with the revised vision statement and objectives and presented to the Pension Committee for approval.

The Fund will continue to monitor the investment beliefs, as it was done over the past year, to ensure that they remain appropriate to guide its strategy and to deliver long-term benefits for beneficiaries.

There are a number of parties with a role in the Fund's management, including the identification, assessment and management of RI issues, in particular climate-related risks and opportunities. These parties and their role in the Fund's overall approach to climate-related issues, including the assessment and management of climate risks and opportunities, are set out below alongside the methods the Committee uses to assess each party.

South Tyneside Council

South Tyneside Council (The Council) is the administering authority of the Local Government Pension Scheme for the administrative areas of Tyne and Wear and Northumberland. The Council has established a Pensions Committee to control and resolve all matters relating to the Pension Fund.

The Pensions Committee

Under the terms of the Council's constitution the Pensions Committee oversees the management of the Fund's assets and investments and the administration of the members' pensions. The Committee has nineteen members. South Tyneside Council has eight members and each of the other five councils within the Tyne and Wear and Northumberland areas have one member each. These other five councils are also able to nominate a substitute member, who can attend all meetings and participate fully in all debates but cannot vote unless the main member representative for that council is absent. In addition, the trade unions (representing scheme members) and the employers have three members each, who sit on the Pensions Committee in an advisory capacity.

The Committee is responsible for preparing and maintaining the Fund's RI and climate change policies. The Committee is also the risk owner of climate change and has responsibility to ensure appropriate levels of resource to meet all RI-associated requirements, including TCFD reporting. The Committee annually reviews its own role and responsibilities as well as those of the service providers to the Fund.

The Local Pension Board

The Local Pension Board consists of eight members who are responsible for assisting the Committee to ensure that the Fund complies with all regulations and legislation that the Fund is subject to in relation to its governance and administration. The Local Pension Board liaises with the Committee and also assumes a compliance role through its scrutiny of the Committee's actions. The Local Pension Board reports to the Committee.

The Investment Panel ('The Panel')

The Fund's Investment Panel has six members and undertakes the formal monitoring of the Fund's investments. It is expected to integrate ESG factors and RI considerations, to the extent possible, into its oversight of each of the Fund's mandates. The Panel meets quarterly to consider the RI objectives and policy of the Fund, as well as the investment management structure and performance of the Fund's assets against the investment managers in turn. The Panel makes formal recommendations on climate change and other investment matters to the Committee.

The Fund Officers

The Fund Officers comprise a senior management team, led by the Head of Pensions and including the Principal Investment Manager, the Principal Pensions Manager and the Principal Governance and Funding Manager.

These authorised officers provide a range of supporting roles to the Committee, Local Pension Board and Investment Panel in relation to the administration and RI of the Fund. These roles include reviewing the content of the RI strategy and climate-change policy.

Investment Advisers

The Fund's investment advisers, Hymans Robertson, are responsible for assisting the Committee to ensure climate-related risks and opportunities are embedded into all investment decisions. They provide advice and training to the Committee regarding regulatory requirements and are expected to incorporate RI considerations into any advice relating to strategy changes or manager appointments. The investment adviser also sits on the investment panel as a member and attends Committee meetings as required.

The Committee has set objectives for its investment adviser, which include objectives relating to the adviser's support in all RI considerations. The investment adviser is assessed against these objectives annually and the objectives themselves are assessed regularly to ensure they remain appropriate.

Actuarial Advisers

The Fund's Actuarial advisers, Aon, are responsible for identifying any RI considerations that should be incorporated into the Fund's funding strategy (both in the short and long term) and in the Fund's integrated risk-management plan. This will include setting individual financial and demographic assumptions. The Fund Actuary additionally has a responsibility to comment on climate risk within the triennial funding valuation.

Investment managers

On the appointment of any new manager, the Committee assesses each manager's RI capabilities, with assistance from their investment adviser, to determine if that manager's approach is aligned with the Committee's RI policy. Once appointed, the Panel monitors all managers regularly, assessing each manager's RI processes and policy and challenges managers on any issues identified. The Panel also liaises with the investment managers in relation to RI matters, as required, and maintains a record that is updated based on information provided by, and discussions held with, the investment managers.

Any issues identified and the outcome of the Fund's monitoring is fed back to the Committee at their regular meetings.

Case study: Stakeholder engagement

The Fund records the engagement it receives from scheme members and other stakeholders on all investment matters including stewardship. In 2022/23, a small number of letters were received from scheme members and lobby groups and some employers in the Fund in respect of climate change, and all received a comprehensive reply outlining the Fund's approach to the issues raised where appropriate. The queries received were used to hold meetings between Fund officers and key stakeholders to better understand and consider their perspectives and to share more about the work undertaken to develop the Fund's climate policy and investment strategy to mitigate climate risks, and the rationale for the approach taken.

Representatives from these lobby groups now regularly attend public meetings of the Pensions Committee and speak directly to members of the Committee. Officers of the Fund have also established periodic meetings with Climate Change Officers from the Fund's main employing bodies to share the latest developments from the Fund. Additionally, the Fund makes public a number of relevant reports and documentation for the Fund's membership to consider, enabling feedback on the Fund's activities on an ongoing basis. Wider communications on these issues will develop in line with the Fund's Communications Policy Statement, which was last approved in 2022.

Going forward, TWPF has plans to develop its member engagement strategy further, as detailed in the 2023-26 Service plan. Furthermore, recognising the importance of public reporting on the progress made to reduce the Fund's carbon footprint, the Fund produced its first Taskforce for Climate-related Financial Disclosure report in 2022 (in respect of FY 21/22). The Fund will continue to undertake the work expected as part of publishing these reports annually (including metrics to be monitored), updating the report as necessary to meet Department for Levelling Up, Housing and Communities' (DLUHC) TCFD reporting requirements once announced.

Strategy

Strategy disclosure 1: Describe the climate-related risks and opportunities the Committee has identified over the short, medium and long term.

When considering the impact on the Fund, climate risk may be defined as the potential impact on future outcomes (including elements such as financial returns or mortality) that may arise from climate change. Climate risks are typically divided into two categories – transition risks and physical risks. It is also important to consider the potential climate-related opportunities that may arise from a transition to a low-carbon economy (for instance, investment opportunities in renewable energy). Climate-related risks and opportunities may vary in likelihood and intensity over different time horizons and depend on how quickly and well the world transitions to a low-carbon economy. This is laid out in the diagram below.

Aggressive mitigation	Business as usual
Transition to a low-carbon economy: transition risks dominate • Policy changes, eg *carbon pricing*, seek to create the changes needed in society • Technology development, eg renewable energy, and adoption enable the changes to be adopted	**Physical risks and impacts dominate** • Chronic changes, eg sea level rise, failure of agricultural systems impact economic and social systems • Acute changes, eg storms and wildfires, create damage and give rise to costs of adaptation and reconstruction

Choosing time horizons for the Fund

The Fund is a long-term investor. Given the nature of climate change and the time horizons over which impacts of climate change may be felt, it can be expected that climate risk will impact the Fund in various ways. However, it is important first to define the different time horizons over which they may impact the Fund.

In the context of the Fund, short, medium and long term time horizons are considered. The Committee has already agreed time horizons for the Fund in the context of the target and interim target dates that have been set. As such, the short term can be aligned to 2025, in line with the first interim emissions reduction target; the medium term can be aligned to 2030, in line with the second interim target; and the long term can be aligned to 2050 in line with the overall long-term target for the Fund. The Committee is currently developing a roadmap providing more detail on steps that will be taken over these time horizons in order to achieve the agreed targets.

Climate-related risks and opportunities over the chosen time horizons

Transition risks are expected to feature more prominently over shorter time periods. This view is predominantly driven by the likely escalation in climate-change regulation over the short to medium term. Over longer-term periods, it is expected that physical risks will feature increasingly – however, the balance between the transition risks and physical risks experienced will depend on the approach taken to climate change and the speed with which the world transitions to a low-carbon economy. Both transition and physical climate risks will impact the Fund during its lifetime.

Identification and assessment of climate-related risks and opportunities

Risks and opportunities relating to climate change are identified through the various processes involved in managing the Fund, which are also set out in the risk-management section of this report. The Committee maintains a risk register that records the risks identified through these processes and is used to prioritise areas for action.

Climate risks may be identified, assessed and monitored in various ways. The Fund and officers do consider climate risks and opportunities with respect the Fund's investments and engage with their individual managers on these assets and improvements that can be made.

As an example, the highest-emitting assets are given particular consideration. This is due to the potential for transition risk to impact these assets more significantly, and so it is important to consider these to identify ways in which to reduce that risk.

However, for this second report, climate risks have been predominantly identified and assessed at an overall strategy level. The Committee assesses climate-related risks and opportunities when setting investment and funding strategy, to ensure a holistic and consistent approach. The table below sets out a summary of the key ESG and climate-related risks the Committee has identified and monitor. Within the coming year, the Committee will continue to consider and monitor relevant climate-related risks (broken down between physical risks and transition risks) and climate-related opportunities for the investment strategy and funding strategy, as well as at the overall strategy level. The Committee will also consider how the impacts of these risks will manifest over the short, medium and long term time horizons as agreed by the Committee.

Risk: The potential impact of climate change has not been sufficiently reflected in the Fund's investment strategy or by the investment managers, which could lead to financial losses.

Impact	Investment valuations are reduced as the impact of climate change is recognised in the investment market, affecting company asset valuations, revenue prospects, profitability and even company viability. The Fund receives criticism from members and the wider public for not confronting this matter. The Fund is perceived to have failed to comply with the law and statutory guidance on addressing climate change as a financial risk.
Controls	Climate change is recognised as a specific financial risk in the Fund's Investment Strategy Statement and corporate governance and RI policy. The Fund works closely with its investment managers, especially Border to Coast in developing its approach and policies in respect of RI and climate change. The documents say how climate change is taken into account in the selection, retention and realisation of investments as part of the wider approach to social, environmental and governance considerations. The Fund believes that engagement with companies is the most appropriate way to effect change and to manage the Fund's exposure to this risk. The Fund has invested in the L&G Future World Fund, which will improve the approach to ESG issues for assets managed passively. A carbon footprint review has been undertaken and reported to Committee. The Committee approved the climate-change policy and net-zero carbon ambitions, including carbon-reduction targets. A Climate Change Scenario Analysis has been undertaken on the Fund's investment strategy and this has concluded that the appropriate for a range of different climate outcomes.
Action Required	To challenge Investment Managers (including BCPP) on engagement process and reporting on exposure to climate-related risks and opportunities. Continue to work with Border to Coast on RI and climate change policies. Deliver the actions in the service plan on RI and climate change. Further information on these actions is included on page 11.

		Impact			
		Negligible	Marginal	Significant	Substantial
Likelihood	Near certain				
	Probable				
	Possible		✓ (Net risk: Moderate)		
	Improbable				

Risk: Insufficient attention to environmental, social and governance (ESG) issues can lead to reputational damage.

Impact	The Fund receives criticism for not fully observing and embracing this matter from scheme members and in the press. The Fund also needs to be aware of the statutory guidance in this respect which requires the Fund to make the pursuit of financial return its main concern. ESG factors can and should be taken into account, but only if doing so would not involve a significant risk of financial detriment to the scheme and the Committee believes that scheme members would support the decision.
Controls	The Fund's Investment Strategy Statement and corporate governance policy cover the extent to which social, environmental and governance considerations are taken into account in the selection, retention and realisation of investments. The Fund is a member of the Local Authority Pension Fund Forum (LAPFF). Climate change is recognised as a significant financial risk, and Fund has recently agreed a climate-change policy and a range of climate-related commitments. The Fund has a policy of requiring managers (including BCPP) to engage on ESG issues rather than divest. The Fund requires managers (including BCPP) to consider these issues. The fund is a signatory to the UK Stewardship Code.
Action Required	Enhance the management of ESG issues and climate change, including new potential investment products. Deliver the actions in the service plan on RI and climate change. Further information on these actions is included on pages 11. Monitor the Government's approach to directing investment strategies via statutory guidance and legislation. The website needs to be updated to increase the visibility of the Fund's approach to climate-change risk.

		Impact			
		Negligible	Marginal	Significant	Substantial
Likelihood	Near certain				
	Probable		✓ (Net risk: High)		
	Possible				
	Improbable				

The net risk as outlined for each of the risks above takes into account the implementation of risk controls. As such, were the outlined controls not in place, the Committee expects that the overall risk likelihood and impact would be higher than stated here.

Further information on the Committee's approach to risk management regarding climate change can be found in the next section of this report.

Strategy disclosure 2: Describe the impact of climate-related risks and opportunities on the Committee's business, strategy and financial planning.

The systemic nature of climate-change risk has the potential to reduce returns across all asset classes and will have a *macro-economic* impact that could affect the entire Fund. Equally, however, the need to transition to a *low-carbon economy* and the innovation which that will require presents a number of potential investment opportunities.

Resource

Over recent years, the Committee has dedicated considerable time and resource to ensuring that climate risk and opportunities are appropriately embedded within investment processes. This has largely been in the form of engaging with the Fund's investment managers and when setting investment strategy, considering the resilience of the strategy to climate-change risks.

Actions identified to manage climate-related issues

Across the different time horizons, the Committee has identified a number of actions that will be important to undertake to progress against the targets and commitments the Committee has agreed for the Fund. These are included within the Fund's roadmap, agreed in December 2022, which covers how the targets and commitments will be achieved in terms of strategy, metrics and governance arrangements, including risk management. The actions have been set out below at a high level.

	Short term	Medium term	Long term
Measuring climate risk	✓		
Pressuring managers to provide better climate data	✓	✓	
Strengthening climate engagement	✓	✓	
Reviewing investment strategy	✓	✓	✓
Altering current investment mandates	✓	✓	
Reallocating capital to climate-focused strategies	✓	✓	✓

Measuring climate risk

This comprises undertaking annual carbon footprint analysis and reporting on the metrics measure within each annual TCFD report. The metrics measured help inform progress towards the Fund's Net Zero '2050 or sooner' target. The metrics measured are reviewed on a regular basis to ensure they remain relevant and useful. Climate scenario analysis has also been undertaken for the Fund and is used to inform the Committee of potential climate-related risks; further detail on this is included under Strategy Disclosure 3.

Pressuring managers to provide better climate data

As part of the development of the Fund's approach to managing climate change risk and opportunities all of the Fund's Investment Managers have been asked to provide climate metric data along with explanations of the rationale for holding some of the higher carbon emitting companies. The Fund has been actively engaging with each manager to produce quarterly fund specific climate metrics and to identify the top three holdings in a number of categories such as carbon emissions and fossil fuel exposure. Additionally, the Fund has been in discussion with each of its private market managers to encourage and require them to respond to the challenge of poor climate data and develop suitable and robust reporting of climate metrics to clients.

A case study on how the engagement with Partners Group, one of the Fund's investment managers, has helped drive better climate data is included overleaf.

Case study: Pressuring managers to provide better climate data
The Fund has a number of investment mandates held with Partners Group investment managers. In previous years, Partners Group were unable to provide up-to-date data at a mandate level (in line with most private markets mandates across the industry). During the year, the Fund met with Partners Group to outline what was expected regarding data for the mandates they managed in order for the Fund to report on the chosen climate metrics and integrate into risk management and investment decision making processes. Further to this and supported by ongoing dialogue, the data provided for these mandates this year was much more complete and comprehensive.

Strengthening climate engagement

The Fund considers engagement is a key mechanism to successfully meeting it's Net Zero targets and, ultimately, the goal of reducing real economy emissions. This engagement starts with the Fund engaging directly with its investment managers who are in turn required to engage with companies in which they invest. Particular attention should be made by managers to high-emitting companies. The Fund's engagement is focused on priority areas in the first instance, including climate-related matters.

Case study: Strengthening climate engagement
The Fund increases their involvement and influence as investors by adding their voice to that of the Local Authority Pension Fund Forum (LAPFF), of which the Fund is a member. The LAPFF, as further outlined on page 25, is an engagement partner to the Fund through which further engagement practices are conducted. An example of how this engagement is undertaken, as described in the LAPFF's annual report, is below.

National Grid

Objective: As joint lead investor in the Climate Action 100+ collaborative initiative, LAPFF continued its long-term engagement with National Grid. Five meetings were held over the year, including a meeting solely with
LAPFF and company representatives.

Achieved: LAPFF welcomed the company's decision to put its plans to a vote at the July AGM. A voting alert was issued to members that noted positive progress in the group aligning its emissions reduction targets with the Science-Based Targets initiative. It was also considered positive that targets are for absolute (not intensity) emissions reductions. Ultimately, however, LAPFF advised members to oppose the plan. Opposition was recommended because despite draft climate action plans from Massachusetts and New York state agencies proposing that all of the nearly 10 million households in these states change their heating systems to electric heat pumps by 2050, National Grid still envisaged 50 percent of households in these states having some form of gas burning system by 2050.

LAPFF attended the AGM and noted the importance of government, companies, and regulators working constructively together to address the energy transition. Although it had been a difficult decision to not provide support for the company's AGM proposal, Paula Reynolds, the National Grid chair did give thanks for the quality of engagement undertaken.

In Progress: Engagement has continued to identify and unlock potential policy barriers to the delivery of decarbonisation in the power and utilities sector. These barriers include legislative challenges, measures to accelerate being contingent upon new net zero infrastructure, actions around affordability and a fair and just transition.

Source: LAPFF Responsible Investment Annual Report 2022

Reviewing investment strategy

The Fund's Investment Strategy was most recently reviewed in 2022 alongside the Triennial Valuation. Part of the review included considering how the asset allocation can be altered to help achieve the climate change targets without harming funding outcomes. This included modelling a carbon friendly strategy which involved an increase in allocations to a diversified mix of lower carbon asset classes such as private equity, private debt, and infrastructure. Following this review, the key actions include continuing to implement the strategy, identify suitable alternatives to help support the Fund's carbon reduction targets and monitor the position of a number of other funds in order to consider these further in the future.

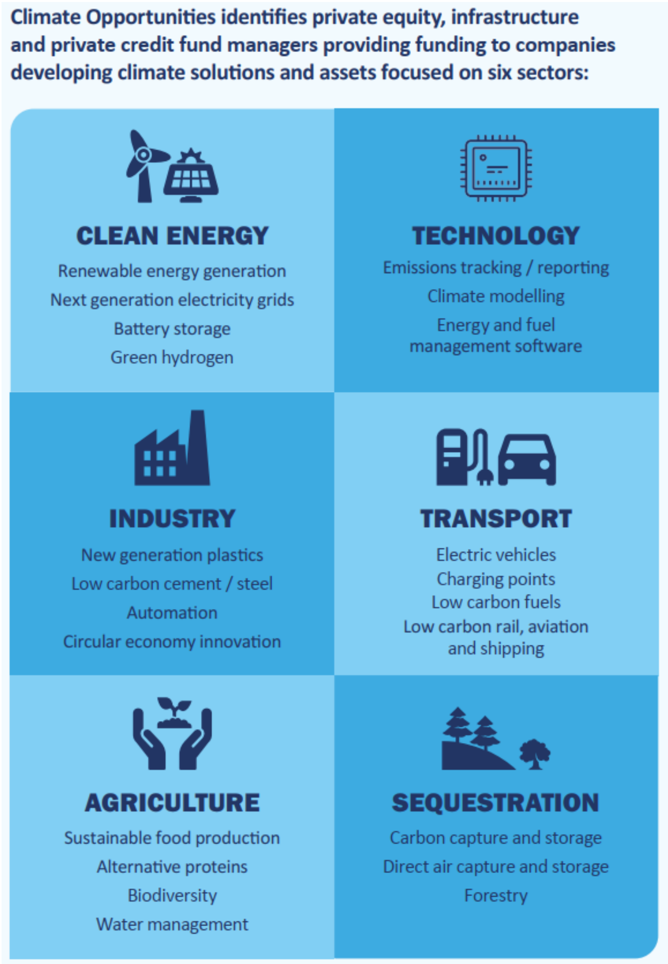
Altering current investment mandates

The Fund has been in regular discussion with all of its Investment Managers to understand how they are approaching climate change and to explain the Fund's Climate Change Policy. The Fund expects all of its Investment Managers to set a Net Zero target and to fully assess climate related risks within their investment processes. Going forwards, the Committee will continue to challenge the Fund's Investment Managers over their approach to climate change and work with their Property manager in particular to implement the agreed targets and produce annual updates of the relevant Net Zero pathway.

Reallocating capital to climate-focused strategies

As part of the 2022 review of the Investment Strategy, the Pensions Committee approved a £465 million commitment into the Border to Coast Climate Opportunities Fund which will invest in assets that will support the climate transition. The Fund also increased its allocation to private market assets notably Infrastructure, Private Equity and Private Debt. These asset classes provide the Fund with the opportunity to directly invest in the energy transition and support decarbonisation projects. On an ongoing basis, the Committee will also consider new investments with other providers with climate opportunity investment products, and the Fund's approach to carbon offsetting and the role of nature-based climate solutions as an investment opportunity to support the Fund's carbon reduction targets.

The graphic to the right provided within Border to Coast's 2022/2023 Climate Change Report offers further information on the types of investment considered and targeted within the Climate Opportunities Fund. Ahead of making a commitment to a new investment, Border to Coast require Fund managers to demonstrate how their investments are expected to have a positive climate impact and how this will be measured and reported.



Source: Border to Coast Climate Change Report 2022/2023

Time horizons considered for the Fund

The short, medium and long term referred to above do not necessarily align exactly with the defined time horizons as considered and set out in strategy disclosure 1 for the purpose of this report.

Additionally, climate change and broader ESG issues have been included within the Fund's risk register as requiring action. The actions identified to manage and mitigate ESG risks, including a number which the Committee are already undertaking, are set out below.

- The Fund's Investment Strategy Statement and Corporate Governance Policy cover the extent to which social, environmental and governance considerations are taken into account in the selection, retention and realisation of investments.
- The Fund has a Climate Change Policy and a range of climate related commitments. A number of actions are in the Service Plan and are monitored quarterly.
- The Fund has also published a Net Zero Roadmap and TCFD Report in 22/23.

- Climate change is recognised as a specific financial risk in the Fund's Investment Strategy Statement and Corporate Governance and Responsible Investment Policy.
- The Fund has agreed a Climate Change Policy and set a Net Zero Carbon target of 2050 and a range on intermediate targets.
- The Fund has undertaken work in order to become a UK Stewardship Code signatory, which they were successful in doing over the course of 2023.
- The Fund will continue to enhance the management of ESG issues and climate change, including new potential investment products and potential changes to existing mandates.
- Deliver the actions in the service plan on RI and climate change. These actions should continue to enhance the Fund's approach to managing climate-change risks and opportunities, ESG and RI and include:
  - undertaking an annual review of the climate-change policy;
  - developing a roadmap of actions to deliver against the targets in the climate-change policy;
  - undertaking an annual carbon footprint exercise;
  - agreeing a range of carbon metrics to help monitor carbon exposures;
  - assessing the role of private markets in managing climate risk;
  - assessing the implications of an exclusion policy if engagement is not working ;
  - actively engaging with managers to ensure that they are appropriately addressing the climate-change related risks, opportunities and threats;
  - preparing for the implementation of reporting requirements for the Taskforce on Climate-Related Financial Disclosures;
  - monitoring changes in statutory guidance and legislation; and
  - increasing the visibility of the Fund's approach to climate-change risk, including better and broader reporting to stakeholders.

A case study of how the Committee have implemented some of these actions is below, as well as a number of other case studies throughout this report.

Case Study: Integrating stewardship and investment in residential property

Mandate: Secure Income Fund (UK residential property), Henley

Background: In 2021 and 2022, TWPF increased its exposure to UK residential property by making commitments to a number of investment managers active in the affordable and social housing sector. Whilst the primary objective of all these investments is to generate a financial return, social impacts including increasing the volume and quality of housing stock accessible to less well-off members of the community were an important consideration.

Actions taken: TWPF evaluated managers' ability to assess and engage on issues such as: energy efficiency/carbon footprint, the quality and affordability relative to local incomes, and quality of service, prior to making commitments. At the selection stage, TWPF supported by its investment advisor, screened prospective managers on a range of high-level criteria characteristics including their approach to ESG integration and stewardship of assets. Due diligence questionnaires and interviews were then used to assess shortlisted managers on the effectiveness of their responsible investment processes and the outcomes achieved. Stewardship expectations were set out upon awarding mandates.

One of the ESG risks that had been anticipated crystallised in early 2022 when concerns were raised about the quality of asset management and tenant services provided by one of the registered providers of supported housing units. Henley, the fund manager responsible for the assets, was aware of the issues through its service partnership monitoring and management system.

Outcomes: The manager was able swiftly to agree a plan of remedial actions with the registered provider involved, demonstrating to TWPF effective stewardship of the assets, and proactive consideration of ESG risks being integrated with stewardship activity. Comprehensive disclosures were provided to TWPF, which enabled officers to evaluate the severity of the issues that had arisen and the effectiveness of the proposed remedies. The actions have now been implemented and improvements in the quality of asset management and the care provided are being reported.

Strategy disclosure 3: Describe the resilience of the Fund's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

In order to test the resilience of the Fund's investment strategy to climate risk, the Committee carried out climate scenario analysis, considering the Fund's assets and market conditions as at 30 September 2021 and liabilities projected from the 31 March 2019 valuation. This analysis was carried out over 2022 as part of an investment strategy review and included consideration of the resilience of the Fund's agreed strategy to climate-change risks, and any change in resilience from moving to alternative solutions.

The scenario analysis set out within this disclosure will be carried out on at least a triennial basis, alongside each future investment strategy review and triennial actuarial valuation. In the interim years, the Committee will consider whether to refresh the analysis, stating whether or not it chooses to do so and why in the relevant TCFD report covering that period.

As the most recent analysis was undertaken in 2022 in order to inform strategy changes, the Committee consider this analysis to still be relevant. However, the Committee note that the various limitations of current climate scenario analysis reduce its usefulness in making decisions or taking action over time, so will monitor whether or not to refresh this analysis on a regular basis. Therefore, should the Committee consider any material changes to the strategy, the analysis will be updated in order to inform these decisions. In the interim, information on the 2022 scenario analysis is included below.

The 2022 scenario analysis was based on top-down analysis of the Fund's strategy, using a model produced by the Fund's investment adviser, Hymans Robertson. The scenario analysis considers the impact of an investment strategy under three scenarios, which differ in how quickly and decisively the world responds (or fails to respond) to climate change. In the table below, the Committee summarise these scenarios.

Climate scenarios considered

The climate scenarios considered are outlined below. They align to the possible global approaches that may be realised in a transition to a low-carbon economy as outlined under Strategy disclosure 1.

Aggressive mitigation ← → **Business as usual**

Green Revolution	Delayed Transition	Head in the Sand
Concerted policy action starting now, e.g. carbon pricing; green subsidies Public and private spending on 'green solutions' Improved disclosures encourage market prices to shift quickly Transition risks in the short term, but less physical risk in the long term High expectation of achieving <2°C warming	No significant action in the short term, meaning the response must be stronger when it does happen Shorter and sharper period of transition Greater (but delayed) transition risks but similar physical risks in the long term High expectation of achieving <2°C warming	No or little policy action for many years Growing fears over ultimate consequences leads to market uncertainty and price adjustments Ineffective and piecemeal action increases uncertainty Transition risks exceeded by physical risks Low/no expectation of achieving <2°C warming

Timing of disruption: **Immediate** → **10+ years**

Intensity of disruption: **High** → **Very high**

Scenario analysis includes testing a number of elements of the Fund's overall strategy, such as:

- the current investment strategy, as well as a number of alternative investment strategies
- liability calculations based on different financial assumptions
- current amount of assets as well as an asset level of 10% higher or lower – i.e. if there was a positive or negative shock to the assets at the modelling date.

Further information on what was modelled is included within Appendix 2.

2022 Climate scenarios – conclusions

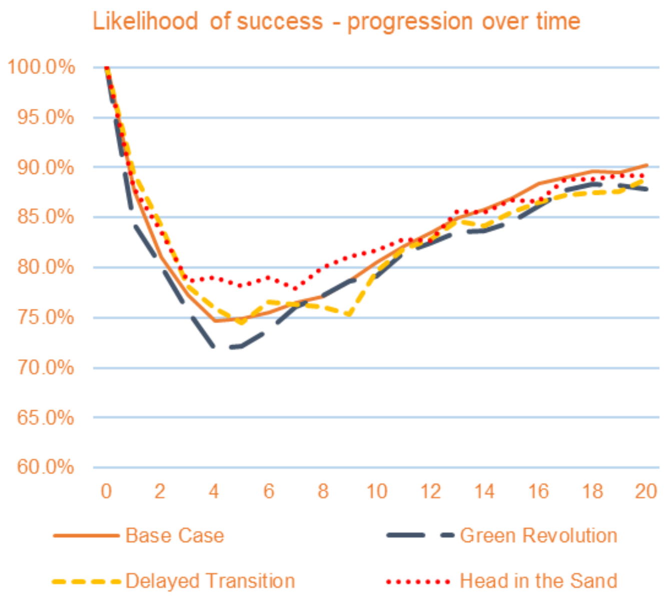
It is important to note that climate scenario analysis as has been undertaken below for the Fund is still in very early stages of development and is likely to evolve some way further. As such, there are a number of limitations with respect to the modelling that should be taken into consideration when contemplating the outputs below. In particular, climate scenario modelling is only one of the tools used by the Fund to consider the impact of potential climate-related risks; the output of this modelling therefore forms part of the discussions held with respect to the management of these risks. Additionally, the analysis does not try to answer how the Fund's funding and investment strategy will fare in a 2, 3 or 4-degree world, nor assign likelihood to any given climate outcome. Instead, it performs what is called a 'stress test' of the resilience of a funding and investment strategy under outcomes that may be expected under different climate pathways, where uncertainty over different periods is emphasised. Finally, as with any modelling, there is some subjectivity in the underlying assumptions chosen. As a result, interpretation of the outputs should be carefully considered and should *inform* decisions on potential investment strategy changes, rather than decide them; this is the approach that the Committee has taken in analysing the results of the scenario analysis as described below.

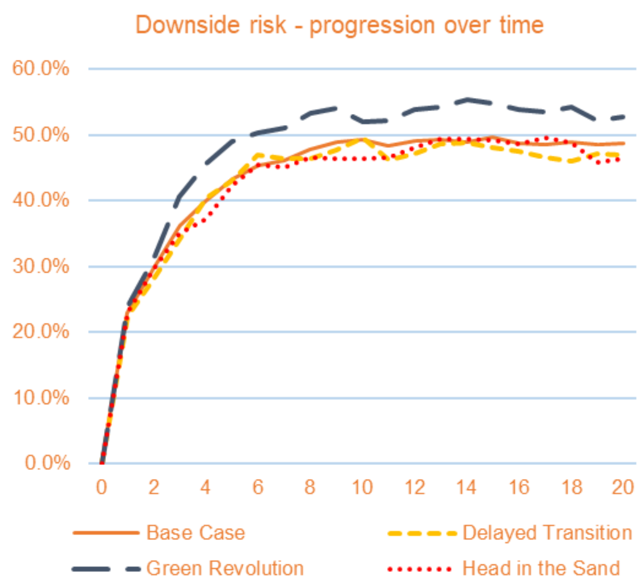
Outcomes in all three climate scenarios are expected to be worse than the base case, due to the assumptions of higher volatility. It is important that, in the absence of a strong belief in which climate scenario will be experienced, that the Fund continues to remain well diversified across a range of investments that will mitigate risk during different climate outcomes.

The Committee considered two key outputs when understanding the resilience of the Fund to each of the climate scenarios:

- **'Likelihood of success':** this means the probability that the Fund will be 100% funded (ie assets are at least equivalent to the liabilities) over time.
- **'Downside risk in 20 years':** this means the possible fall in the funding level over time in the worst 5% of cases.

The graphs overleaf set out the results of the scenario analysis for the Fund.





From this analysis the Committee was able to conclude that there was a lower likelihood of success for the Fund under the 'Head in the sand' scenario – this is likely due to the impacts of this scenario typically being felt in the longer term. Conversely, there is higher downside risk under the 'Green revolution' scenario. This will be due to the impacts of this scenario's risks being felt in the shorter term, which then compound over time. Over the short, medium, and long term time horizons as defined in the first instance by the targets the Committee has set, the impacts of the different climate scenarios are as set out below:

	Likelihood of success			Downside risk		
	2025	2030	2044*	2025	2030	2044*
Base case	74.7%	78.7%	91.7%	39.9%	48.9%	49.1%
Head in the sand	79.0% (↑)	81.1% (↑)	90.9% (↓)	37.3% (↓)	46.4% (↓)	45.7% (↓)
Delayed transition	76.0% (↑)	75.4% (↓)	88.8% (↓)	40.4% (↑)	47.6% (↓)	47.6% (↓)
Green revolution	71.9% (↓)	78.6% (↓)	89.0% (↓)	45.7% (↑)	54.0% (↑)	58.2% (↑)

* The scenario modelling did not extend as far as the 2050 long-term time horizon, so the figures shown in 2044 are at the latest date that the modelling extended to.

Green figures indicate an improvement in expected outcome versus the base case (i.e. higher for probability of success, lower for downside risk) and red figures a worsening in expected outcome.

Given the base case downside scenarios represent particularly poor economic scenarios (similar to a severe recession or depression) and the climate scenarios modelled are producing results that are similar to these, climate change could have a material impact on the funding level of the Fund. The impact is broadly similar across the scenarios because climate change could impact the scheme in different ways that all have a significantly negative impact on the Fund. As the particular scenario that will materialise is unknown remaining diversified is the best approach to address the risk.

Based on the output of the scenario analysis as well as broader investment strategy discussions, the Committee agreed to make some changes to the Fund's investment strategy and structure in order to manage climate risk and capture climate opportunities from the transition to a low-carbon economy. The Committee will continue to do this over time and it will be informed by scenario analysis as appropriate.

The Committee will also continue to measure its exposure to climate risk through the annual carbon footprint analysis, which will flag specific risks and opportunities in portfolio companies.

Risk Management

Risk Management Disclosure 1: Describe the Committee's processes for identifying and assessing climate-related risks.

As part of the Committee's responsibility for the setting and implementation of the Fund's RI policy, the Committee must ensure that ESG-related risks, including climate change, are identified, assessed and effectively managed. Therefore, it is crucial that the management of these risks is integrated into the overall risk management of the Fund. The Committee delegates aspects of this responsibility to other parties, but retains overall oversight, as set out previously in the Governance section of this report.

Risk management framework

The Fund's risk-management framework takes the form of a risk register which is monitored quarterly under the delegated authority of the Local Pension Board. The Committee still retains all oversight over risk management and continues to receive annual risk management reports. This is supplemented by an annual governance review, undertaken by Deloitte, which considers how the Fund is invested among other governance and risk-management areas. This report covered areas such as:

- **Effective decision making:** ensuring that decisions are made by those with the skills, knowledge, advice and resources necessary to make them effectively and monitor their implementation, as well as that there is sufficient expertise to be able to evaluate and challenge the advice they receive and manage conflicts of interest.
- **Clear objectives:** Making sure that an overall investment objective(s) is set for the fund and takes into account the liabilities, the potential impact on local tax payers, and the attitude to risk of the administering authority, and that these are clearly communicated to advisors and investment managers.
- **Risk and liabilities:** In setting and reviewing their investment strategy, administering authorities should take account of the form and structure of liabilities. These include the implications for local taxpayers, and longevity risk.
- **Performance assessment:** Arrangement should be in place for the formal measurement of performance of the investments, investment managers and advisors. Administering authorities should also periodically make a formal assessment of their own effectiveness as a decision-making body and report on this to Fund members.
- **Responsible ownership:** Adopt, or ensure their investment managers adopt, the Institutional Shareholders' Committee Statement of Principles (now the Investment Strategy Statement) on the responsibilities of shareholders and agents. Include a statement of their policy on responsible ownership in the statement of investment principles. Report periodically to Fund members on the discharge of such responsibilities
- **Transparency and reporting:** Administering authorities should: Act in a transparent manner, communicating with stakeholders on issues relating to their management of investment, its governance and risks, including performance against stated objectives; and provide regular communication to Fund members in the form they consider most appropriate.

Throughout each of the above, RI and climate-related issues, particularly with respect to climate-related risk management, was considered as appropriate. The report also provided a summary on the TCFD and climate reporting more widely as well as a comparison of the incoming expectations of local authority pension schemes with regard to climate reporting, and the progress the Fund has already made to date, in order to set out the key objectives to work towards in the coming years.

The 2023 report produced by Deloitte provided a number of suggested actions for the Fund and Committee to undertake in order to improve the position with respect to each of the above areas, as well as a number of formal recommendations across the four pillars of TCFD requirements as they are expected to be for LGPS Funds. The recommendations relevant to the Fund's approach to RI,ESG, climate change and TCFD are summarised below as relevant to each of the four areas of TCFD:

- ***"Governance:*** *The Fund should continue to review both i) the governance structure; and ii) its climate policy documents in place, on an annual basis to ensure ongoing suitability and completeness.*
- ***Strategy:*** *The Fund should continue to build on the planning and strategy work already undertaken to annually review and document the evolving climate risks facing the Fund and assess the evolving knock-on impact these will have on the Fund's planning and strategy on an annual basis. The Fund is also recommended to continue to refresh the scenario analysis for its annual TCFD report to ensure this is reviewed on a regular basis for the evolving climate change risks and wider changes in capital market outlook.*
- ***Risk management:*** *The Fund is recommended to continue to use and build on the output of its annual climate investment work to formally refresh and update the Fund's ongoing process for identifying, assessing, and managing climate related risks, and documentation in the risk register, as it continues to evolve.*
- ***Metrics and Targets:*** *The Fund has successfully achieved its TCFD reporting requirements to date and is recommended to takes a proactive approach to annual ongoing reporting to calculate its metrics, use them to assess climate-related risks and opportunities and measure the performance against the selected target (including giving consideration to whether the target should be retained or replaced). Reporting is a fast-moving area –for private markets, and recommend engaging with private market managers generally, and all managers on Scope 3 emissions, to further improve data coverage going forwards, and in turn consider its implications for climate-related risks and opportunities."*

Additionally, a periodic risk-management workshop is held, provided by an external provider and attended by both the Committee and the Local Pensions Board. The last workshop was undertaken in February 2023 and the exercise will be undertaken again in February 2025.

The Fund's approach to the identification, reporting and management of risk is set out as follows.

- The risk register is reviewed quarterly, or more frequently as necessary by Fund officers and is available publicly on the Fund's website.
- The Local Pension Board reviews the risk register in full each quarter.
- A summary of risks is noted in the Funding Strategy Statement and Investment Strategy Statement regarding the risks subject to both strategies, respectively.
- A risk assessment methodology is adopted based on net risk, which is ranked on a scale of critical, high, moderate and minor.

Identification of risks

ESG and, in particular, climate-related risks can be identified by various parties including the Committee, Local Pension Board, the fund officers, investment managers or the Fund's advisers as part of the ongoing management of the Fund. ESG risks are identified as part of the following processes.

- **Investment strategy reviews:** The Committee considers ESG risks as part of the Fund's regular investment strategy reviews that are carried out alongside each actuarial valuation and on an ad hoc basis as required. These reviews cover the extent to which environmental, social and governance considerations are taken into account in the selection, retention and realisation of investments. The Fund's investment advisers are expected to integrate ESG considerations into their strategy advice and to highlight any key risks that are included within any potential investment strategy.
- **Valuations:** The Committee considers ESG risks as part of the triennial actuarial valuation process ensuring that this analysis considers the funding and investment risks in a joined-up way. The fund actuary will incorporate the consideration of ESG risks in the actuarial assumptions advice and any projections that are considered to evaluate the possible long-term funding outcomes for the Fund.

- **Considering asset classes:** When assessing new asset classes, potential ESG risks are assessed and discussed as part of the training provided to the Committee. Key ESG risks are taken into account when comparing alternative options.
- **Selection of underlying investment managers:** When appointing a new investment manager, the Fund's investment adviser provides information and their view on each manager's ESG policy and capabilities. Each manager is also asked to provide information regarding their own ESG risk management processes as part of the selection process. This information allows Border to Coast (to whom a number of elements of these activities have been delegated) and, through them, the Committee to identify potential risks when comparing potential providers. The Fund's policy also requires investment managers to engage on ESG issues, rather than divest.
- **Individual mandates and investments:** The Fund also undertakes risk analysis at the asset mandate level and has adopted enhanced management and reporting of climate change issues, including new potential investment products. In this instance, the Fund's investment managers are responsible for the identification and assessment of climate-related risks and opportunities and will be expected to identify and disclose these risks to the Committee in the following ways:
    - as part of their regular reporting to the investment panel and fund officers and relevant ongoing dialogue;
    - during their presentations when meeting with the panel;
    - as part of their more in-depth meetings with the fund officers;
    - by providing climate metric data in line with the TCFD requirements; and
    - by providing any relevant scenario analysis.

The Fund's officers have met with each of the Fund's current investment managers to gain a more in-depth understanding of each manager's process and the risks inherent in each of the current mandates.

Assessment of risks

The impact of these risks on the Fund is assessed in detail in the triennial investment and funding strategy reviews, with the former focusing on the asset portfolio and the latter on the liabilities. Interim reviews of investment strategy, including reappraisal of market/systemic risks, are undertaken as necessary. Impacts are evaluated using both quantitative, asset-liability modelling ("ALM") and qualitative assessments. Both provide insights into potential future funding outcomes across a very wide range of scenarios, each of which are defined in terms of the future path of market/economic risk factors such as growth, inflation, interest rates and currencies. The range of scenarios considered include extreme scenarios designed to model the impact of systemic risk factors such as climate change, banking crises and war. Market risk cannot be eliminated, because the Fund needs to take such risk to generate a return on investments, but the level of exposure to both market and systemic risks is carefully controlled in line with the Fund's return requirements and risk appetite.

Any key risks identified are discussed by the Committee and are listed on the Fund's risk register to be monitored on an ongoing basis.

The Committee notes that evaluation of ESG-related risks and opportunities is based on relevant information and tools being available, as well as the quantification of ESG and climate-related risks and opportunities being a developing area based on continuously emerging information. The Committee actively engages with all managers to promote improvement in this area.

Case study: Annual Deloitte governance audit

On a yearly basis Deloitte undertakes a comprehensive governance audit of the Fund, in particular assessing TWPF's adherence to the Myners Principles as set out in the guidance published by the Chartered Institute of Public Finance and Accountancy (CIPFA) and how the Fund compares against recommendations of the Scheme's Advisory Board's ("SAB") Good Governance review. In the latest review conducted in 2022-2023, Deloitte awarded the highest level of assurance to the Fund.

Deloitte has noted that TWPF has a more self-sufficient and internal-based set-up when compared with other LGPS Funds. Regarding resources, Deloitte observed that TWPF benefits from having a strong base of experienced internal staff, familiar with and exclusively dedicated to monitoring the Fund full-time on a day-to-day basis. In addition, a formal training programme for all members of the Committee is implemented based upon the CIPFA Knowledge and Skills Frameworks. A training checklist is also maintained and benchmarked against the Pensions Regulator's Code of Conduct training requirements.

Two main recommendations were made by Deloitte in their conclusion to the January 2023 governance review, which were adopted as improvement points by TWPF. First, given the increased challenges on the UK labour market, TWPF were advised to formulate a more robust and sustainable strategy for staff hiring and retention and this objective was consequently entered in the 2023-26 Service Plan. Secondly, while Deloitte pointed out TWPF's significant improvements on climate reporting, a recommendation was made to strengthen engagement with private markets managers, requiring them to improve data coverage on carbon emissions reporting. TWPF is actively working on these areas and is committed to maintaining the highest standards of governance in support of its stewardship activity. Meetings have already taken place with a number of the investment managers, including BCPP and private market managers, to highlight the Fund's climate data requirements and to discuss actions to be taken to address previous deficiencies.

Risk Management Disclosure 2: Describe the Committee’s process for managing climate-related risks.

Prioritising risks and agreeing actions

Once risks are identified and added to the risk register, they are then evaluated and prioritised based on the overall threat posed to the Fund. The Committee prioritises risks based on its proprietary risk-assessment methodology with input from its advises and investment managers. This helps the Committee build a picture of the Fund’s risks more widely and to see where ESG risks sit in the overall risk-management framework.

The Committee prioritises risks based on the size, scope and materiality of the risk event. This includes rating the likelihood and impact of the risk event, reflecting the threat that the risk event poses to the Fund, then making a decision on the appropriate action (mitigation, control or acceptance) based on this assessment and available courses of action. Assessing the risk’s likelihood and impact may be informed by scenario analysis and calculated metrics, where relevant.

Management of risks

When the risks facing the Fund have been considered and prioritised, mitigation strategies will be established and monitored to ensure that they remain effective and that the appropriate courses of actions have been decided. The Committee will delegate the management of certain risks to other parties, as set out in the governance section.

As part of this work, the Committee has ranked the severity of ESG risks using their risk-assessment methodology as noted above and carried out scenario analysis at the total Fund level to assist in the identification and measurement of climate-related risks in the Fund’s overall strategy. ESG risks have been identified as having moderate to high net risks, thus require a strategy centred around proactive and immediate action. The proposed actions are outlined below.

- To enhance the management of ESG issues and climate change, including new potential investment products
- To deliver the actions in the service plan on RI and climate change, as outlined in further detail on pages 13 and 14. These actions should continue to enhance the Fund’s approach to managing climate-change risks and opportunities, ESG and RI.

Risks that are deemed to be high in likelihood, impact, or both after allowing for mitigating controls are deemed to take priority for future action. An action in the context of risk management will aim to either introduce an additional control to mitigate the likelihood of a risk occurring or reduce the impact of a risk should it occur. This discussion will also consider whether additional Committee training is required.

Examples of risks mitigation and management actions

The Committee will consider a range of alternative investment approaches to manage risks and opportunities related to climate change. These may include active management of carbon risk resulting in some reduction of exposure, such as increasing the portfolio’s weighting in low-carbon companies and assets, alongside company engagement and an increased allocation to low-carbon investment opportunities. One such approach that the Committee has implemented for the Fund is outlined in the case study below.

The Fund already has exposure to a range of low-carbon investments through its existing strategy in areas such as infrastructure (renewable energy) and private equity (clean tech). It looked at increasing these in the recent strategic review as well as adding new exposures such as green bonds. The Fund will consider other low carbon investments as appropriate.

Within the investment strategy, the Fund has a 5.2% allocation to global infrastructure. These investments already include a range of renewable energy projects, electric vehicle charging and the manufacture of electric trains and buses. These projects are using new technologies to remove carbon emissions and will hopefully lead to widespread adoption of these solutions.

All the Fund’s managers are required to take ESG factors including climate change into consideration in their investment decision making and stewardship activities. In addition, approximately 25% of passive equities are managed against benchmarks which explicitly tilt exposure to companies with good ESG characteristics based upon the investment managers assessment against 34 ESG metrics such as lower GHG emissions and/or companies providing decarbonisation solutions. Furthermore, in FY 22/23, the Fund made an initial commitment of 3% of its total assets to BCPP Climate Opportunities, a strategy which explicitly targets decarbonisation opportunities in private markets.

Expectations of investment managers

The Committee’s expectations of the investment managers with regard to the integration of ESG risks are set out in the Fund’s Investment Strategy Statement (ISS) and policies on climate change, corporate governance and RI. These documents are shared with the Fund’s investment managers who are asked to report regularly on how their strategy is aligned with the Committee’s intentions and to discuss with the Committee any investments that do not comply with these policies. The Committee monitors the RI activities of all managers through regular reporting and meetings, as set out above.

In summary, the Fund will expect all of its investment managers to:

- be aware of the investment risks and opportunities associated with climate change
- incorporate climate considerations into the investment decision making practices and processes
- monitor and review companies and assets in relation to their approach to climate change, ensuring that they are setting out and delivering plans to decarbonise
- consider the use of frameworks such as the Transition Pathway Initiative (TPI) to assess the progress made by companies towards limiting temperature rises to 1.5 degrees as part of the climate risk-management process.

The Committee engages with current investment managers when risks have been identified to agree a plan of action. This may include setting specific targets for certain mandates and more regular monitoring of mandates at higher risk. Further engagement practices are conducted through support of engagement partners such as the Local Authority Pension Fund Forum (LAPFF).

In addition, the Committee, with the assistance of its investment advisers, assesses and monitors the engagement and voting activities of investment managers.

Case Study: Undertaking stewardship activities

The Fund does not engage in direct investment. Instead, it delegates the task to investment managers who act on its behalf. Consequently, the Fund aims to encourage the incorporation of responsible stewardship into the process of making investment decisions, both within its own operations (such as defining its Investment Strategy) and externally (such as selecting expert advisors and investment managers to support its governance procedures and meet its investment needs).

The Fund's governance structure serves as the primary means to incentivise the incorporation of stewardship into internal investment decision-making. This involves establishing a transparent Investment Strategy and investment beliefs, as well as continuously evaluating the Fund's performance at various levels of detail. This includes monitoring the performance of individual investments and the ESG activities of investment managers at a granular level, as well as conducting strategic evaluations such as the triennial actuarial valuation and comprehensive reviews of the Investment Strategy.

Investment managers also have clear incentives on stewardship. Effective stewardship improves returns, and strong track records are critical to the commercial success of any investment manager. Furthermore, six of the Fund’s thirteen private markets investment managers earn performance fees and therefore can directly benefit from the value created by effective stewardship. All managers appointed by the Fund, including BCPP are expected to have appropriate governance and resources to ensure adequate stewardship of investments.

Risk Management Disclosure 3: Describe how processes for identifying, assessing and managing climate-related risks are integrated into the Committee's overall risk management.

As set out under Risk Management Disclosure 1, the management of ESG risks is integrated into the Fund's current risk-management processes in the following ways, with all risks considered in the context of the overall risks inherent in any strategy:

- **Valuations** – The Committee considers the extent to which any adjustment is needed to the funding approach or strategy as a result of any ESG risks identified through the 'identifying' stage described above. This will be considered in the context of the investment risks faced by the Fund, and may consider the appropriateness of actuarial assumptions and of overall security provided to the Fund.
- **Setting strategy and choosing asset classes** – Determining whether exposure to any asset class should be reduced, increased or avoided in light of the ESG risks identified.
- **Selection of investment managers** – The Committee considers whether or not to invest with managers whose mandates are expected to introduce an unacceptable level of risk or who do not have adequate processes for the identification and management of ESG risks.
- **Monitoring current investment managers/individual mandates and investments** – The Committee expects its investment managers to manage the ESG risks identified within their own mandates.

The integrated nature of climate change and its ability to impact most industries means that the Fund chooses not to take a sector-wide exclusion approach to its investments. Consistent with the Fund's investment strategy, engagement is also a long-term approach with the goal for companies and economies globally to be *carbon neutral* by 2050 and to enable those companies to transition effectively to a *carbon-neutral* economy.

The decisions to have no sector-wide exclusions and to prefer engagement to divestment, with divestment to be used as a last resort where engagement proved fruitless, were discussed at length and have been decided as the right approach for the Fund to take. This is due to the material implications for the Fund that sector-wide exclusions would have, as well as an intention to encourage decarbonisation across all sectors, rather than removing the Fund from discussions on decarbonisation.

The Committee sets the overall strategy and risk budget for the Fund and covers RI matters, including the integration of climate change within the Fund's investment strategies.

Climate change is included within the Fund's risk register in the context of the risk of the investment strategy or investment managers underperforming. Relevant controls and mitigating actions are also documented. The risk register is reviewed quarterly by the Management Team and the Local Pension Board and annually by the Pensions Committee.

As set out above, the Fund will continuously monitor and challenge all of its investment managers to support the net-zero commitments made by the Fund. This will also include a review of the voting and engagement activities carried out in respect of climate change and the approaches used to assess progress against individual climate-change plans, such as the Transition Pathway Initiative.

Metrics and targets

Metrics and Targets Disclosure 1: Disclose the metrics used by the Committee to assess climate-related risks and opportunities in line with its strategy and risk management process.

The Committee has previously commissioned reporting on climate metrics for the Fund further to agreeing a number of metrics that are helpful in understanding the Fund's position and informing future decision making. These metrics were decided based on that which best informed the Committee as to the Fund's position at the time were produced, as well as taking into consideration data availability of certain metrics at the time.

The metrics selected were not informed by incoming TCFD disclosure requirements given they are yet to be finalised. As such, the Committee acknowledges that the climate metrics chosen in 2021 may change over time to better meet future disclosure requirements, as well as to provide further information on the Fund's position with respect to climate risks and opportunities over time taking into account how Fund priorities may change. Whilst changes to the metrics chosen will likely not be frequent, this will help to ensure the best understanding of the Fund's position with respect to climate related risks and opportunities and how to integrate this information into decision making.

Whilst completion of the consultation and subsequent response from the Government is awaited, the Committee has begun to prepare the next report on climate metrics for the Fund. Preparation of this will consider the proposed metrics under the consultation and include them where possible. The table below indicates the metrics that the Fund has chosen and their categories as outlined within TCFD proposals. The appendix explains the TCFD proposals and categories for climate metrics in more detail.

Metric type	Metric chosen	Measurement
Absolute emissions metric	Total Greenhouse Gas (GHG) emissions	The volume of *scope 1* and *scope 2* emissions from the Fund's assets – expressed both in absolute terms (tons of CO_{2e}) and normalised by invested capital (CO_{2e} /capital invested)
Emissions intensity based metric	Weighted Average Carbon Intensity (WACI)	The volume of scope 1 and scope 2 emissions per unit of sales for each portfolio company, weighted by the size of allocation to each company within the Fund's assets – Measured in tons CO_{2e} per \$m sales. Additionally measured in tons CO_{2e} per \$m Enterprise Value Including Cash (EVIC).
Additional climate-change metric (non-emissions based)	Percentage of portfolio with exposure to fossil fuel reserves	The percentage of the portfolio with an industry tie to fossil fuels and, in particular, reserve ownership.
	Percentage of green revenues (weighted average)	The total of all revenues derived from any of six environmental impact themes: alternative energy, energy efficiency, green building, pollution prevention, sustainable water, or sustainable agriculture.
	Data quality	The percentage of assets under management covered by metrics actually reported and independently validated, rather than by estimates.
	Percentage of portfolio with exposure to thermal coal reserves	The percentage of companies with an industry tie to thermal coal, in particular reserve ownership, production and power generation.
	Percentage of assets subject to meaningful engagement	The percentage of the assets under management subject to meaningful engagement with managers on climate-related issues.
Portfolio alignment metric	Transition pathway alignment	The alignment of assets under management, in material emissions sectors, to different transition pathways as set out by the TPI.

The four metrics proposed for LGPS funds under the Government's recent consultation are provided in more detail within Appendix 1. The metrics selected by the Fund cover, and in fact go beyond, the requirements proposed in the consultation.

The absolute emissions metric chosen for the Fund is Total Carbon Emissions, aligning to the current proposals.

The primary emissions intensity metric chosen for the Fund is Weighted Average Carbon Intensity (WACI). This is measured with respect to sales. The Fund also measures emissions intensity with respect to Enterprise Value Including Cash (EVIC), which is equivalent to the carbon footprint metric proposed in the consultation.

The Fund intends to measure data quality as the percentage of assets covered by metrics actually reported and independently validated, which aligns with the Government's proposals. At present, due to data limitations, the Fund is reporting data coverage, i.e. the percentage of assets covered either by reported metrics or estimates. The Fund will continue to engage with managers in the meantime in order to encourage better reporting on data quality.

Finally, the portfolio alignment metric chosen for the Fund is transition pathway alignment. The consultation proposes measuring the percentage of assets which are already Net Zero or have made a public commitment to be so within the timeframe set out in the Paris Agreement. Transition pathway alignment is a richer metric than that proposed in the consultation, but the latter can readily be derived from the former if this becomes a requirement.

It should be noted that emissions metrics include both scope 1 and scope 2 emissions, with scope 3 emissions being included separately where available; currently this is only for the Fund's WA Emissions (tCO2e/ £m Equity) metric. This is due to the difficulties in collecting and reporting on scope 3 emissions and the subsequent poorer data coverage relative to scope 1 and scope 2 emissions. The Committee anticipates undertaking further work with the Fund's managers to improve the approach to scope 3 emissions and expect to include scope 3 data in future reporting if available. More information on the different scopes of emissions can be found in the glossary.

Case Study: Using climate metrics in equity mandates

TWPF holds a well-diversified selection of publicly traded equity mandates, with active UK and Global equities managed by BCPP, emerging market equities managed by JP Morgan, Japanese equities held through Lazard and other Asia Pacific equities managed by TT International. Passive listed equity investments are held through LGIM. Furthermore, the Fund invests in private equity through Lexington Partners, Coller Capital, HarbourVest, Pantheon, Capital International and Partners Group.

For listed equities managed directly by LGIM, ESG data and research from specialist providers is used along-side general stock and sector research to inform engagement and voting undertaken on the Fund's behalf.

Over the past year the Fund has been collecting data from the quoted equity and bond managers on the climate metrics of each mandate and how they compare to an appropriate index or benchmark. The intention is to keep this as a high-profile issue with the managers and ensure the Fund engages with them on this subject. As part of the data collection the managers have been asked to provide the top 3 exposures under the following headings:

- Carbon emissions by company in each Portfolio
- Fossil fuel exposures by company in each Portfolio
- Companies with the highest green revenues

The active managers are asked to provide the investment rationale for holding these positions in light of the Fund's Climate Change Policy and an explanation of how each position will improve its climate metrics including timescales. The same data is also collected for the passive mandates with updates on engagement activity. This information is collected each quarter and the managers are challenged to ensure the rationale remains valid and demonstrable progress is being made. The Pension Committee receives a report each quarter summarising the exposures and highlighting any material changes.

Metrics and Targets Disclosure 2: Disclose scope 1, scope 2 and if appropriate, scope 3 greenhouse gas (GHG) emissions and the related risks.

The tables below set out the Fund's position against the chosen metrics as at 31 March 2023 as well as in prior years to provide an indication of the progress made. 31 March 2019 was selected as the baseline year against which the Fund's current targets are set. Not all the metrics can be calculated as at 31 March 2019 due to limited data availability. The Committee also receives separate reporting of the chosen metrics for each individual portfolio in which the Fund invests. This better supports decision-making and enables the Committee to assess how well each element of the Fund's investment strategy is performing with respect to the management of climate risk and opportunities. The analysis highlighted how the majority of the Fund's active equity managers are already well below the benchmark level of carbon emissions in their respective markets.

Emissions Intensity

	WACI (Revenue), tCO2e/$m				
	Mar-19	**Mar-21**	**Mar-22**	**Mar-23**	**Change (2019-2023)**
Fund	171.6	145.7	134.6	**104.0**	-39.4%
Benchmark	195.5	181.9	158.1	**132.0**	-32.5%
Difference	**-12.2%**	**-19.9%**	**-14.9%**	**-21.2%**	**-**
Data Coverage (%Total Assets)	**-**	**-**	63.0%	**70.8%**	**-**

The Fund's Weighted Average Carbon Intensity (WACI Revenue), its primary decarbonisation metric, has decreased by 39% between March 2019 and March 2023 based on Scope 1 and Scope 2 emissions. At this point in time, Scope 3 emissions for WACI Revenue are not yet available to the extent that the Committee is comfortable reporting these without verification. The Committee is satisfied with the progress made which reflects the decisions it has taken on investment strategy such as the reallocation of capital to LGIM Future World solutions and private markets assets, decisions taken by the Fund's investment managers and the actions taken by portfolio companies to reduce emissions. The Fund will consider other reallocations of capital and will continue to engage with managers to drive further emissions reductions. The Committee expects this metric to improve over time but progress is unlikely to be smooth.

Data coverage as referred to above reflects the proportion of assets for which a metric was reported or estimated, as well as the coverage of the underlying fund holdings of that metric. Data coverage as a metric is only available for some emissions-related metrics measured by the Fund. Elsewhere within this section, instead of reporting data coverage, the % of assets in scope has been reported; this figure, however, does not allow for the data quality of each holding within a fund as that information is not yet available for non-emissions metrics.

Fluctuations from year to year are likely due to improved data coverage, data changes notably the inclusion of scope 3 emissions, and changes in the relative market valuation of high emissions companies amongst other factors. Data coverage continues to improve and is now high for public markets assets but low for private markets assets. Emissions intensity has been estimated for most of the Fund's private markets assets. The Committee has noted where the main gaps in data coverage lie and is taking steps to improve coverage in conjunction with the Fund's investment managers and data provider. This includes regular dialogue with the respective investment managers on the steps they are taking in order to improve data coverage of the chosen metrics.

Absolute Emissions

The Fund reports absolute emissions normalised by the volume of capital invested. This facilitates comparison of decarbonisation performance between funds of different size. The Fund tracks two measures of normalised emissions: Weighted Average Emissions per £m Equity and Weighted Average Emissions per $m EVIC. Both are tabulated below. The WA Emissions/Equity metric is strictly only valid for equity investments but is calculated below across all the available assets, with the metric for non-equity assets representative of the weighted carbon emissions were the amount invested an equivalent amount of equity. WA Emissions/EVIC is a more robust metric which can be applied across all asset classes but could not be calculated in prior years due to limitations on data availability. It is the Fund's preferred metric going forward.

	WA Emissions (tCO2e/ £m Equity*) Scope 1 and 2				
	Mar-19	Mar-21	Mar-22	Mar-23	Change (2019 to 2023)
Fund	226.4	196.8	119.4	**124.9**	**-44.8%**
Benchmark	223.5	218.2	165.1	**151.3**	**-32.3%**
Difference	**1.3%**	**-9.8%**	**-36.2%**	**-17.4%**	**-**
Data coverage (% Total Assets)	-	-	54.1%	**70.8%**	**-**

** In 2019 and 2021 this metric only includes coverage of public equity assets. However, over time, both as the Fund's strategy has developed and as data availability for emissions across other assets has improved, this metric has covered additional mandates. In 2023 the metric includes all public market assets in which the fund invests.*

The Fund's carbon emissions have decreased over time from March 2019 to March 2023. From 2019 to 2023, the percentage of the portfolio for which data is available has improved. This improvement is due to improved carbon emissions reporting across assets that previously were unable to report on carbon emissions.

The table below details the Fund's scope 3 emissions for March 2023; these are kept separate from scope 1 and scope 2 emissions due to the nature of these emissions and the reliability of measuring scope 3 emissions at this point in time.

	WA Emissions (tCO2e/ £m Equity) Scope 3				
	Mar-19	Mar-21	Mar-22	Mar-23	Change (2019 to 2023)
Fund	-	-	-	**810.8**	**-**
Benchmark	-	-	-	**1,046,3**	**-**
Difference	-	-	-	**-22.5%**	**-**
Data coverage (% Total Assets)	-	-	-	**43.4%**	**-**

The Committee's expectation is that while the data coverage of this scope 3 figure is initially quite low, there's an expectation that this figure will continue to improve over time as reporting on scope 3 emissions improves across reporting. Although it is possible that data may not improve every year.

Over time, the Committee expects the data coverage of the Fund's assets to improve, particularly across assets that currently find it difficult to measure emissions. Future reports will also include the data quality of carbon metrics, which will go into further detail on the proportions of data used for the carbon emissions metric and how this is split between data that is verified, reported, estimated or unknown.

	Weighted Average Carbon Emissions Intensity (tCO2/$m EVIC)				
	Mar-19	Mar-21	Mar-22	Mar-23	Change (2022-2023)
Fund	-	-	57.6	**52.3**	-9.3%
Benchmark	-	-	63.0	**65.4**	3.8%
Difference	**-**	**-**	**-8.6%**	**-20.1%**	**-**
% Fund assets in scope	-	-	86.5%	90.6%	-

WA Emissions/EVIC is below benchmark because five of the Fund's seven active managers have below benchmark emissions and because of the Fund's investments in LGIM Future World solutions and private market assets both of which have emissions below their respective listed market benchmarks. In future years, data coverage for this asset will also be collated.

Fossil Fuel Reserves

The Fund reports the percentage of assets under management relating to companies which have disclosed Fossil Fuel Reserves (FF Reserves). This is a prudent metric which is likely to overstate the prevalence of such reserves across the portfolio. This metric was not calculated in prior years due to limitations on data availability.

	% Fossil Fuel Reserves				
	Mar-19	Mar-21	Mar-22	Mar-23	Change (2022-2023)
Fund	-	-	5.0%	**4.2%**	**-16.4%**
Benchmark	-	-	5.8%	**7.0%**	**20.3%**
Difference	**-**	**-**	**-13.8%**	**-40.0%**	**-**
% Fund assets in scope	-	-	95.8%	92.8%	-

Fund FF Reserves continue to be below the benchmark which is expected as strategies that reduce WACI (Revenue) typically also have lower FF reserves.

Green Revenues

This metric measures the Fund's exposure to companies which provide products/services across six critical environmental themes:

	% Green Revenues				
	Mar-19	Mar-21	Mar-22	Mar-23	Change (2019-2023)
Fund	3.1%	4.4%	4.9%	**4.8%**	**54.5%**
Benchmark	3.2%	4.1%	5.4%	**4.4%**	**36.5%**
Difference	**-2.2%**	**7.3%**	**-10.1%**	**10.6%**	**-**
% Fund assets in scope	-	-	90.2%	92.8%	-

Thermal Coal Reserves

Like FF Reserves, the Fund measures the percentage of assets under management relating to companies which have disclosed Thermal Coal Reserves (TC Reserves). As noted above this is a prudent metric which is likely to overstate the prevalence of such reserves across the portfolio. This metric could not be calculated in prior years due to limitations on data availability.

	% Thermal Coal Reserves				
	Mar-19	Mar-21	Mar-22	Mar-23	Change (2019 to 2023)
Fund	-	-	-	**1.1%**	-
Benchmark	-	-	-	**1.7%**	-
Difference	-	-	-	**-37.8%**	-
% Fund assets in scope	-	-	-	92.8%	-

Percentage of assets subject to meaningful engagement

Across all public market assets excluding t JP Morgan EMAP Equity Mandates, the managers provided the % of the portfolio subject to engagement on climate-related issues for the year ending 31 March 2023. This, on average, comprised **16.2%** of these assets. However, the data provided by managers so far only comprises the percentage of the portfolio subject to any climate-related engagement, rather than those subject to meaningful engagement. Additionally, Border to Coast reporting on climate-related engagements across the mandates which they manage was provided as a % of financed emissions and therefore cannot be aggregated with the information provided by other managers. Improvements in reporting of this metric are expected to be forthcoming and further clarity will be provided within next year's TCFD report.

Transition pathway alignment

Additionally, on the Border to Coast funds and Lazard Japanese Equity fund data was collected on the transition pathway alignment for material emissions sectors with each fund as at 31 March 2023, as shown in the table below , TT Asia Pacific Equities and the Pantheon funds also provided transition pathway alignment data but only by % of AUM, Other managers were not yet able to provide this metric in line with the definition of the metric as agreed for measurement by the Committee.

Mandate	By % of AUM			
	Not aligned	Committed	Aligning	Aligned
Border to Coast UK Equity Alpha	3%	59%	38%	0%
Border to Coast Global Equities	8%	28%	64%	0%
Border to Coast Corporate Bonds	62%	9%	8%	22%
Border to Coast Multi-Asset Credit	62%	9%	8%	22%
Lazard Japanese Equity	11%	54%	8%	27%
TT Asia Pacific Equities	46%	23%	22%	1%
Pantheon Private Equity	45%	8%	23%	0%
Pantheon Private Debt	53%	9%	15%	0%
Pantheon Infrastructure	36%	40%	21%	0%

Currently, a proportion of the Fund's holdings are unable to be measured across the different metrics. This is in part due to the nature of some investments and the difficulties in measuring climate metrics across these types of investments. As part of ongoing dialogue with managers, the Committee will strive to improve this over time to ensure a fuller picture of the Fund's position is received.

This difficulty in measurement is particularly prevalent within private market assets (i.e. private equity, private debt, property and infrastructure – assets that are not publicly listed on markets). While this means that collection of data is difficult to achieve in the same way as public market assets, the Committee request additional information on individual funds from managers where possible, in order to reflect the work that is being done to support decarbonisation.

For instance, infrastructure funds across the pensions industry typically have poorer data quality on climate metrics and, where data is available, emissions are high, due to the nature of the assets in these types of funds. The Committee has focused on the Fund's investment in infrastructure with respect to climate issues and has significantly increased the allocation to green and low-carbon holdings. Collecting additional analysis on the Fund's infrastructure investment therefore enables the Committee to ensure that these actions are working as intended.

Additionally, a number of metrics above were measured for the first time in 2022. However, calculating these metrics as at the baseline date of 31 March 2019 was not possible due to the data being too poor or not available. Consequently, there are gaps in the historic performance of the Fund with respect to these metrics. The Committee will continue to monitor these metrics over time, however, and engage where there is limited to no improvement.

As noted above, the Committee also received separate analysis on the individual funds that the Fund is invested in. This better supports decision-making and enables the Committee to identify which elements of the Fund's investment strategy is performing best and worst. The analysis highlighted how the majority of the Fund's active equity managers are already well below the benchmark level of carbon emissions.

The Committee will also consider how the metrics may change upon changing the investment strategy, thus embedding climate-related issues and considerations into investment and strategic decision-making. Included

Case study: Using climate metrics in order to inform engagement

The services delivered to us in 2022 have met the Fund's needs to ensure the Fund are then delivering to the needs of fund beneficiaries and therefore have not taken any remedial action within the last year. However, the Fund has continued to challenge its managers on their investment decision making and stewardship of specific assets. During FY 22/23, for example, the Fund:

- Challenged Lazard (Active Japanese Equities) on their continued investment in Nippon Steel, one of the highest emitters of greenhouse gases in the portfolio. The manager defended the investment based on the actions the company is taking and the robust plans it has in place to decarbonise its operations, as well as strong prospective financial returns. The Fund continues to monitor the position closely.
- Challenged LGIM (Passive Global Equities) on the holding of high emissions stocks in its Future World range of ESG-driven passive funds. The manager justified these investments on the basis that its policy is to remain invested in such companies (albeit at lower capital weight) and to proactively engage with them on ESG-issues. In addition, some of the companies involved are engaged in the provision of products and services that are critical to the decarbonisation process.
- Challenged BCPP (Active Global Equities) on increasing the level of exposure to China and the appointment of a specialist manager to focus on this market. The Fund was concerned about standards of governance and the prospects for the Chinese economy and equity market returns given elevated geopolitical risk. The manager believes that China now represents too large a share of global capital markets to ignore, that careful stock selection and engagement is the best way of addressing governance concerns and that closer integration into global markets most effectively mitigates geopolitical risk.

In the search for improvement on climate metric reporting, the Fund is currently working with its private markets managers to ensure a better and more comprehensive picture in terms of their climate impact is provided.

below is a case study on the work that the Committee and the Fund has been undertaking with respect to the Abrdn property allocation, including how metrics and asset management plans were considered.

Metrics and Targets Disclosure 3: Describe the targets used by the Committee to manage climate-related risks and opportunities and performance against targets.

To date, the Committee has agreed the following targets for the Fund.

- To achieve net-zero GHG emissions by 2050 or sooner across the Fund’s portfolio
- An interim target to reduce emissions by 30%–35% by 2025
- An interim target to reduce emissions by 50%–60% by 2030.

The above targets have been agreed based on the 2019 baseline calculated in the carbon footprint analysis. In order to ensure that the Fund achieves its targets the Committee will undertake an annual carbon footprint analysis and regularly report on the progress being made.

As at 31 March 2023, the emissions of the Fund (using Weighted Average Carbon Intensity, tCO2/$m Sales) have decreased by 39.4% compared to the baseline date of 31 March 2019, despite an increase in the underlying asset data availability. Within their carbon risk reporting, the Committee have identified key mandates in which further progress can be made, as well as a number of individual holdings that contribute significantly and the Committee expects to engage on each of these.

This is the second year on which performance has been monitored against the targets set for the Fund. The Committee expect to continue monitoring performance over time and will further report on progress against targets in future TCFD reports.

The Committee note that, despite the good progress since 2019 and the resulting decrease in emissions, that progress over time may not be linear, slowing or even increasing from year to year depending on clarity of data, accuracy of estimates and the performance of underlying holdings. Should this occur, the Committee will take steps to understand why this is the case and identify key actions in order to continue to improve the position of the Fund, ensuring long term performance against the targets set.

The Committee will undertake a triennial review of the medium- and long-term targets to ensure that they remain appropriate and challenging, given the ever-changing, economic, environmental and technological environment. The review will look for opportunities to bring forward the net-zero targets where this is considered reasonable.

The Fund also commits to working with other investors along with the investment managers to promote the change necessary and to pursue efforts to limit the temperature increase to 1.5°C set out in the Paris Agreement. The Fund also supports the IIGCC Net Zero Investment framework and will use the approach set out in the framework to agree actions and ensure the investment strategy has a focus on:

- decarbonising investment portfolios in a way that is consistent with achieving a global net-zero GHG emissions by 2050
- increasing investment in the range of ‘climate solutions’ needed to meet that goal.

The Committee will also consider adopting and supporting other initiatives as appropriate that reflect their commitment to change and the journey the Committee wishes to take in order to transition to a low-carbon economy.

As the carbon footprint analysis also produced other metrics around fossil fuel exposure and green revenues, this will enable the Committee to monitor how well the Committee is performing against the approach set out by the IIGCC framework. These metrics have been incorporated into the Fund’s roadmap, which was developed to deliver the Fund’s net-zero commitments.

Appendix 1:

There are a number of categories across which climate metrics fall. Expectations for climate metrics with respect to TCFD reporting fall into the following categories:

- One **absolute emissions metric** is to be chosen and monitored;
  - Absolute emissions is just the total amount of emissions produced in tonnes of Carbon Dioxide (or equivalent). It measures the amount of greenhouse gases that are being released into the atmosphere.
  - There is only one choice of absolute emissions metric – Total Greenhouse Gas (GHG) emissions, however this can be normalised by the amount invested for assets.
  - **Total Carbon Emissions, which includes the Scope 1, 2 and 3 emissions reported separately, as well as the sum of the three, is the absolute emissions metric proposed by the Government's consultation on TCFD for LGPS. It should be noted that current government proposals may be subject to change following consultation.**
- One **emissions intensity metric** is to be chosen and monitored;
  - Emissions intensity is the volume of absolute emissions (as above), per unit of measurements such as £m invested, $m revenue of a company. It provides an idea of the amount of greenhouse gases that are being emitted versus activity, size or revenue, depending on the unit you use.
  - There are two ways of measuring this type of metric – Carbon Footprint or Weighted Average Carbon Intensity.
  - **Carbon footprint, i.e. Carbon Emissions divided by the total assets of the fund to which the data relates and calculated separately for Scope 1, Scope 2 and Scope 3 emissions is the emissions intensity metric proposed by the Government's consultation on TCFD for LGPS; this is subject to the final response.**
- An **additional climate change metric** that is non-emissions based; and
  - There is a wide variety of outcome based and process-based metrics that may be chosen. These metrics comprise metrics that measure different exposures and risks (e.g. % exposure to fossil fuels) as well as metrics around engagement (e.g. number of assets that have been meaningfully engaged with on climate related issues).
  - **The additional climate change metric proposed by the Government's consultation on TCFD for LGPS is a data quality metric, i.e. the percentage of assets for which Scope 1, 2 and 3 emissions are verified, reported, estimated or unavailable, in line with the GHG Protocol. However, this is subject to the final response.**
- A **forward-looking portfolio alignment metric:**
  - These metrics measure how aligned a portfolio is to different climate scenarios (or transition pathways) that target different outcomes (for instance, in line with the Paris Agreement target of a limit of 1.5 – 2°C temperature rise)
  - There are three different portfolio alignment metrics that may be chosen from – binary target (e.g. % of a portfolio that has net-zero commitments in place), benchmark divergence (e.g. comparison of the portfolio emissions to emissions projections for different climate scenarios (or transition pathways)) and implied temperature rise (e.g. the activity of the portfolio were translated to a global temperature increase in degrees Celsius).
  - **The portfolio alignment metric proposed by the Government's consultation on TCFD for LGPS is a binary target measurement metric, i.e. the percentage of the fund's assets for which a public Paris aligned commitment has been made, i.e. net zero by 2050; this is subject to the final response.**

Appendix 2: Glossary

Asset Class

An asset class is a group of investments that typically share a lot of the same characteristics, which may be subject to the same rules and regulations. For example, equities, bonds and property are three well-known asset classes.

Carbon neutral

Carbon neutrality is the state where the amount of carbon emissions being emitted is balanced out by the removal of the same amount of emissions. It can be achieved through carbon offsetting.

Carbon pricing

Carbon pricing assesses and quantifies the external costs of greenhouse gas emissions – for example, damage to crops or loss of property from flooding and sea level rises – and relays these costs back to the source of the emissions through a price, usually in the form of a price on the carbon dioxide (CO2) emitted.

Engagement

Engagement with respect to assets of the Fund means communication with a person or organisation, typically via investment managers, with the aim of driving change.

ESG

ESG refers to Environmental, Social and Governance issues, collectively a series of risk factors that could impact the value or future performance of an investment. Particular issues covered by ESG factors include:

- Environment: resource use, pollution, waste
- Social: human rights, workforce diversity and employee welfare
- Governance: management structure, business ethics and executive compensation

Fiduciary responsibilities

The responsibilities of the Committee to act in the best interests of the Fund's beneficiaries.

Financial Stability Board

The Financial Stability Board is an international body that monitors and makes recommendations about the global financial system. It was established after the G20 London summit in April 2009 as a successor to the Financial Stability Forum.

Greenhouse Gases (GHG)

Greenhouse gases are gases in the Earth's atmosphere that are capable of absorbing infrared radiation and thereby trap and hold heat in the atmosphere. The main greenhouse gases are:

- water vapour
- carbon dioxide (CO_2)
- methane (CH_4)
- nitrous oxide (N_2O)

IIGCC

Institutional Investor Group on Climate Change: membership body for investor collaboration on climate change, comprising 330+ members, mainly pension funds and asset managers responsible for €39+ trillion in assets under management.

Low-carbon economy

An economy based on energy sources that produce low levels of GHG emissions.

Macroeconomic

The area of economics concerning with large-scale (e.g. national or international) or general economic factors, such as interest rates and inflation.

Net Zero

Net zero refers to the amount of all GHG (which includes but is not limited to carbon dioxide) being emitted being equal to those removed. It typically also includes reduction of total emissions as much as possible, with only the remaining unavoidable emissions being offset.

Paris Agreement

The Paris Agreement on climate change is a 2015 global accord seeking to keep the rise in global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the increase to 1.5°C. As of 2021, the Paris Agreement has been signed by 191 countries, and ratified by 186 countries.

Responsible Investment

The integration of ESG factors into investment decision-making and asset stewardship practices.

Scope 1 Emissions

All Direct Emissions from the activities of an organisation or under their control. Including fuel combustion on site such as gas boilers, fleet vehicles and air-conditioning leaks.

Scope 2 Emissions

Indirect Emissions from electricity purchased and used by the organisation. Emissions are created during the production of the energy and eventually used by the organisation.

Scope 3 Emissions

All Other Indirect Emissions from activities of the organisation, occurring from sources that they do not own or control. These are usually the greatest share of the carbon footprint, covering emissions associated with business travel, procurement, waste and water.

Stewardship

Stewardship of assets is a tool that can shape corporate behaviour using methods including engagement and voting.

Systemic risk

Refers to a risk that impacts the entire market, not just a particular stock or industry.

Voting

When investors are shareholders in a company via the investments they hold, this typically provides them the opportunity to vote on company matters at meetings such as an Annual General Meeting (AGM). Issues that can be voted on include climate change plans, executive pay, the election of board directors, and much more. However, this opportunity only arises with certain types of assets, such as equities. Additionally, a lot of voting is undertaken on behalf of pension schemes by investment managers, due to pension schemes typically being one of many investors in a fund which then invests within companies.

Appendix 3: Scenario analysis – further details

This modelling is a form of asset-liability modelling (ALM).

Assets are projected forward from March 2021 using membership data at that date under 5,000 different outcomes for future market and economic conditions. See ‘Reliances, limitations and additional details’ appendix for details of the expected return on assets, economic conditions and the associated volatilities.

For each outcome (5,000 per scenario), the funding position is calculated annually throughout the projection period. The funding position uses the same methodology as at the 2019 formal valuation.

The 5,000 outcomes are then ranked from best to worst and plotted graphically. The range of outcomes can then be compared with other scenarios.

The ALM combines the Fund’s cashflows, an investment strategy including any hedging, contributions into the Fund and stochastic economic scenarios from Hymans Robertson’s economic model (ESS) to create stochastic projections of the funding positions.

While the model allows for the possibility of scenarios that would be extreme by historical standards, including very significant downturns in equity markets, large systemic and structural dislocations are not captured by the model. Such events are unknowable in effect, magnitude and nature, meaning that the most extreme possibilities are not necessarily captured within the distributions of results.

A summary of economic simulations used is included within the Fund’s scenario analysis; fuller information about the scenario generator, and the sensitivities of the results to some of the parameters, can be provided on request.

Tyne and Wear Pensi

Fund