South Tyneside Council

Local Pension Board

Date: 21st December 2022

Climate Change Policy and Net Zero Roadmap
(for information and discussion)

Report of the Head of Pensions

Purpose of Report

1. This report is based heavily on the recent report of the same name which was approved by the Pension Committee on 29th November 2022. The report includes the key policy documents which were presented to the Committee for approval.

2. The Service Plan for 2022/23 – 2024/25 includes a number of actions which related to responsible investment and climate change.

3. Two of the key actions in the Service Plan are the annual review of the Climate Change Policy and production of a Net Zero Roadmap which will set out the actions the Fund will take to achieve its Net Zero targets. These are both included as attachments to this report.

4. The report also highlights the carbon metrics which have been selected to measure the Fund's progress in terms of climate change and reports the 2021/22 Carbon Footprint analysis.

Recommendation

5. The Local Pension Board is recommended to note the publication of the revised Climate Change Policy and Net Zero Roadmap.

Contact Officer: Ian Bainbridge, Head of Pensions – Tel. 424 4112

Climate Metrics

6. Following the publication of the Fund's first Climate Change Policy and carbon footprint analysis in November 2021 work has been ongoing between officers, the Investment Adviser and a number of investment managers to develop an understanding of climate metrics available to measure the Fund against.

7. This period of research has led to a set of metrics being identified which the Fund is proposing to use to monitor and report progress against the Fund's Net Zero commitments. The Fund believes that the metrics and are consistent with those produced by Border to Coast.

8. Consideration has also been given to the metrics included in the Governments recent consultation on the governance and reporting of climate change risks in the LGPS. The Fund recognises that further changes may be required to the proposed metrics once the consultation is finalised but believes that the metrics shown below are the most appropriate for the Fund at the current time:

   - Weighted average carbon intensity (WACI), tCO2e/$m Revenue *
   - Weighted average emissions (tCO2e) normalised by:
     - Enterprise value $m (this can be used to calculate absolute total emissions)
     - Equity capital invested £m
   - Weighted average % of green revenues
   - Percentage of assets under management with fossil fuel reserves
   - Percentage of assets under management with thermal coal reserves
   - Transition pathway alignment, for material emissions sectors
   - Data quality, percentage of assets under management covered by metrics actually reported and independently validated, rather than by estimates
   - Percentage of assets under management of companies in material emissions sectors subject to meaningful engagement.

* WACI is the Fund's primary metric which will be used to measure the progress towards the Net Zero targets.

9. These metrics will be calculated as part of the annual carbon footprint analysis and the results reported in the TCFD Report each November. The appropriateness of these metrics will also be assessed periodically in discussion with the Investment Adviser, Border to Coast and all other Investment Managers. It is expected that some of these metrics will need to evolve with the legislative requirements and industry practice as this develops.

10. The Committee approved these metrics for the Fund which will be calculated and reported annually whilst recognising they may need to evolve over time.

Climate Change Policy

11. Climate change is a material financial risk to the Pension Fund. The focus and emphasis on this risk has increased substantially over the past couple of years and in November 2021 the Fund approved its first standalone Climate Change Policy.

12. The Policy sets out how the Fund is responding to the challenges posed by climate change and how this links to the Investment Strategy Statement and Responsible Investment Policy.

13. The Policy also covers the Fund’s views in terms of risk management and climate risks and the approach to issues such as carbon offsetting, engagement, and potential exclusions. It reflects the progress made by the Fund’s investment managers in developing their approach to climate change and how this is being implemented in terms of investment decisions and company engagement.

14. The Policy has been aligned to the Fund’s Investment Beliefs, which underpin the overall approach to investment. The full range of Investment Beliefs are included in the Investment Strategy Statement.

15. The Policy sets out a number of commitments from the Fund in relation to climate change. These include the Net Zero 2050 or sooner pledge and interim targets to reduced carbon emissions. There was also a commitment to review the Climate Change Policy on an annual basis and a revised version for 2022 is attached at Appendix A with the changes highlighted in yellow. This revised version was approved by Committee at the meeting in November 2022.

16. There are no material changes to the Policy, or the commitments made but the revised version includes the carbon metrics shown above which the Fund is planning to report against. The new Policy also reflects the latest carbon footprint results which show the Fund is making further progress in terms of reducing carbon emissions.

17. The only other significant changes are the inclusion of the updated climate scenario analysis and the changes to the investment strategy as part of the 2022 review. Notably this includes the 3% allocation to the new Climate Opportunities fund launched by Border to Coast.

Carbon Footprint Analysis

18. Data provided by each investment manager has been included in previous reports and presentations to the Committee. This has summarised the position of existing managers' carbon emissions versus the benchmark or market in which they operate.

19. This information along with an explanation of the position and an update on the top three carbon emitters in each portfolio has been made available to Committee each quarter.

20. The Fund commissioned Hymans Robertson in 2021, through their partnership with MSCI, to produce a whole Fund carbon footprint. This type of analysis and detail was still relatively new to the LGPS and the Fund was the first Hymans LGPS client to request this level of information.

21. As stated in the 2022/23 Service Plan actions, the Fund will update the carbon footprint analysis on an annual basis to highlight the progress made against the primary target and other metrics during the year. These metrics have also been incorporated into the Fund's first TCFD report which is included elsewhere on the agenda.

22. The carbon footprint analysis for 2022 builds upon the report issued in 2021 and whilst a similar approach has been taken this year the methodology has been refined to reflect increased understanding and progress across the investment industry in this area. A copy of final footprint report for 2022 is attached at Appendix B.

23. The analysis shows the Fund's carbon footprint as at March 2022 and compares this to March 2021 and also goes back to the agreed baseline date of March 2019. Further analysis was also undertaken in 2021 to take the baseline back to 2010 to give a longer term perspective and to see how the Fund has decarbonised over a longer period.

24. The carbon footprint work undertaken shows that the Fund continues to make good progress in reducing Weighted Average Carbon Intensity (WACI) with a 21% reduction over the three year period, from 2019 to 2022. This is the Fund's primary risk metric. This represents an improvement of 6% from 2021. The interim target for 2025, set by the Fund is to reduce this WACI metric by between 30% and 35%. Whilst it needs to be recognised that progress towards this target may not be linear, the reduction over the last year is positive and in line with the level of reductions required to hit this first interim target.

25. In addition, using the results calculated for March 2010 shows there has been a 34% reduction in carbon emissions from the Fund from this date through to March 2021. As at March 2022 the Fund is also 14% below the benchmark level of emissions based upon WACI.

26. The exercise to produce the carbon footprint and establish the position against the climate metrics (as noted in the section above), has been extremely informative. One of the key take aways is the level and poor quality of data which is available. As previously reported to Committee this is one of the biggest challenges when looking to make decisions on the data available. Whilst the position is clearly improving there is still a lot of work to be done in this area, before a high level of reliance can be placed on this information.

27. The Fund's primary climate metric WACI (Revenue), is considered to be one of the more robust data measures but even with this metric the market coverage of the data is only 68% and the Fund level coverage is lower at 63%. The Fund level data is expected to be lower as the Fund often invests in off benchmark assets. Whilst this level of coverage is low it is a material improvement on the position from 2019 of 34%.

28. In some instances, it has not been possible to produce any data against the Fund's chosen metrics such as the percentage of assets with thermal coal reserves as the data coverage was so low.

29. The full range of scores against the carbon metrics are shown in Appendix B. Due to the low level of reliability on much of this data, specific targets against these metrics (with the exception of WACI) have not been set. This will follow when the reliability of the data improves.

30. All of the carbon metrics shown in the carbon footprint report are based upon Scope 1 and 2 emissions. As explained in the Climate Change Policy there is insufficient coverage and reliability of Scope 3 emissions across all asset classes and so they have not been included. Along with all climate data the Scope 3 emissions are improving but are not yet considered robust enough to be reported. As previously mentioned it is likely that when Scope 3 emissions are included they will materially change the results which will impact upon decision making, therefore using poor quality data could result in sub-optimal investment choices.

31. Given the complexity and range of information provided in the carbon footprint report it is proposed to hold a separate training session for the Committee and Local Pension Board.

Net Zero Investment Framework

32. When setting its first Climate Change Policy the Fund considered the Net Zero Investment Framework established by the Institutional Investor Group on Climate Change (IIGCC). The Fund supported the Asset

Owners Commitment included in the Framework to achieve net zero greenhouse gas emissions (GHG) by 2050 or sooner which was incorporated into the Fund’s own Climate Change Policy.

33. As part of this Framework, organisations are asked to commit to transitioning investments to achieve a Net Zero Carbon Fund by 2050, or sooner. Once this commitment is made, organisations are required to develop a Climate Action Plan or Roadmap setting out a range of objectives and interim targets, within one year of making the commitment in order to deliver against it.

Net Zero Roadmap

34. In line with the IIGCC framework and as included in the 2022/23 Service Plan actions the Fund has now produced a Net Zero Roadmap which is attached at Appendix C. This Roadmap was approved at Pensions Committee in November 2022.

35. The Roadmap sets out the actions the Fund will undertake in the short, medium and long term to achieve its Net Zero or sooner target.

36. The Roadmap highlights the work that is ongoing between officers, the investment adviser and investment managers, including Border to Coast, to manage climate related risks and improve reporting in this area.

37. The actions identified in the Roadmap cover the work needed to meet the commitments made by the Fund in the Climate Change Policy. These cover the measurement of climate risk and working with the Fund’s investment managers to improve data quality and strengthen engagement on climate-related issues.

38. There are also a number of actions in relation to the work the Fund is doing around the Investment Strategy and reviewing existing mandates as well as seeking new investment in climate change solutions.

Task Force for Climate Related Financial Disclosures (TCFD)

39. The Fund has now produced its first TCFD Report for 2021/22 which is included as a separate report on the agenda. This report is two years ahead of the proposed legislative timetable for production of this report by LGPS Funds.

40. The TCFD reports explains the Funds approach to managing climate-related risks covering governance, strategy, scenario analysis, risk management, metrics and targets.

41. The TCFD report will be published annually and will show the progress the Fund is making towards its carbon emission reduction targets through the metrics agreed in the Climate Change Policy.

Border to Coast Climate Change Policy

42. Border to Coast have also recently revised their Climate Change Policy.

43. The revised policy recognises the importance of a Just Transition and also highlights the Net Zero Implementation Plan which they have published and joining the Net Zero Asset Manager Initiative (NZAM).

44. Specific developments include launching the Climate Opportunities fund and setting specific carbon metrics at both asset class and portfolio level.

45. Finally, the changes to the voting policy are recognised and particularly the strengthening of the approach to companies in high emitting sectors that are not making sufficient progress against the Transition pathway initiative and net zero benchmarks.

Recommendations

46. The Local Pension Board is recommended to note the publication of the revised Climate Change Policy and Net Zero Roadmap.

Appendix A

Tyne and Wear Pension Fund

Climate Change Policy

November 2022

Introduction

As stated in the Fund's Corporate Governance and Responsible Investment Policy, the Committee's fiduciary duty is to act in the best interests of the Fund's beneficiaries. This requires recognition that Environment Social and Governance (ESG) issues, including climate change, can positively and negatively impact on the Fund's financial performance.

The Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 (LGPS Investment Regulations) require the Fund to set out its approach to ESG issues within its Investment Strategy Statement (ISS). Included within the ISS are the Fund's Investment Beliefs and summarised below are the beliefs relating to Climate Change:

- Well run companies will produce superior returns for shareholders over the long term. There should be a focus on governance and engagement over disposal.
- ESG issues can represent long term financial risks to the Fund and its holdings. Climate Change is one of the most significant of these risks, reflecting the changing nature of the world we live in. The investment strategy includes approaches to addressing these issues for both actively and passively managed assets.
- Effective Oversight of Responsible Investment requires monitoring of ESG and Climate Related Metrics.
- It is not just through the shareholding in public companies but also holdings in bonds, property and private market investments that can influence and effect improved outcomes over the longer term.
- Engagement with companies on climate related issues can be effective in creating change to protect shareholder value.
- Climate change provides investment opportunities as well as risks.
- Asset owners and managers have a responsibility to ensure there is effective engagement on climate related issues.

The Pension Fund views climate change risk as a materially important factor that could significantly impact its long-term investment performance given its systemic nature and the effects it could have on global financial markets and has therefore decided to produce this policy document on its approach to climate change.

The climate change policy will assist the Fund to develop its approach towards Governance, Investment Strategy, Risk Management and Metrics and Goals.

Implications of Climate Change

Climate change refers to long-term changes to climate patterns, such as changes to temperatures or precipitation. A significant element of climate change is global warming; the long-term rise in the average temperature of the Earth's climate system. Global warming has been demonstrated to have increased significantly over recent decades. The Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report concluded, *"It is extremely likely that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in greenhouse gas (GHG) concentrations and other anthropogenic forcings together".*

The impacts of climate change are wide ranging and include more extreme temperatures, more natural disasters (flooding, fires etc), permanent loss of land due to rising sea levels, disruption to infrastructure networks (e.g. electricity, water supply), loss of ecosystems, and a severe impact on food supplies. There are also secondary impacts, such as on migration patterns. All of these have the potential to impact on both individual investments and financial markets more generally.

In 2015 the United Nations Climate Change Conference (COP21) was held in Paris. The agreement that was reached brought most of the world's nations together to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries. The central aim of the Paris Agreement is to keep a global temperature rise this century to below 2 degrees above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees.

In order to meet the Paris Agreement goals countries will have to take significant policy action. What these policies are and how they operate will be key drivers in how climate change mitigation impacts on investments.

It is acknowledged that irrespective of the action taken to reduce global warming some climate related impacts, such as rising sea levels, are already expected to occur due the greenhouse gas emissions to date.

Governance

South Tyneside Council is the administering authority of the Tyne and Wear Pension Fund. The Council has set up a Pensions Committee to control and resolve all matters relating to the Fund. The Council has also established a Local Pension Board to assist in the areas of governance and administration.

The Pensions Committee has responsibility for the direction of policy and has access to expert advice to support any decisions taken. Responsibility for the implementation of this policy lies with the Fund's Head of Pensions. Regular monitoring reports setting out how the policy is being implemented will be presented to the Committee and to the Local Pension Board.

The Fund is required by the LGPS Investment Regulations to invest its assets through one of the LGPS investment pools. In response to this requirement, the Fund, along with ten other local government pension funds, created its own Financial Conduct Authority (FCA) regulated investment management pooling company. This is a company called Border to Coast Pensions Partnership. The Fund is currently in the process of transitioning its assets to Border to Coast. This is a process that will take a number of years to complete. Until all assets have transitioned the Fund will maintain relationships with a number of other investment managers across a range of asset classes.

The requirement to invest assets through Border to Coast does not include those assets invested passively on behalf of the Fund. These assets have been specifically excluded and are currently under management with a company called Legal and General.

Whilst all of the Fund's investment managers including Border to Coast and Legal and General invest the assets on the Fund's behalf, the responsibility for responsible investment and ensuring the appropriate consideration of ESG issues remains with the Fund. The Fund expects all its investment managers to implement this policy on its behalf across all its investments; it will monitor implementation and require reports from them at least annually in order to fulfil its obligations under the LGPS Investment Regulations.

The Fund will require all of its investment managers to explain and report upon their approach to Climate Change and to consider the Fund's approach as set out in this policy. The Fund has supported its pool company, Border to Coast, in the development of its own Climate Change Policy and endorses the approach taken. We also expect all investment managers to provide information on climate metrics and their ongoing engagement and voting activities which support this policy.

Climate Metrics and Decarbonisation challenges

The Fund must remain focused on its primary obligation to pay benefits to its members, including consideration of any associated risks. It is recognised that decarbonising a Pension Fund which is invested globally, across many sectors is more challenging than decarbonising an individual organisation. In order to decarbonise the planet without causing grave damage to global economies and living standards will take many years and a balanced approached is required.

The world needs to decarbonise quickly, but without causing grave economic damage and widespread poverty. Decarbonising companies in certain key sectors will take time and require capital. Those companies require support and engagement from long-term investors like the Fund. It is important to recognise that Climate Change is already happening and so investments in adaptation and resilience are also an important part of the investment universe and can present opportunities in climate solutions.

The Fund has commissioned its own carbon footprint, as explained below, to measure future carbon reduction targets against. However, as the Fund has developed its approach to carbon footprint analysis it is important to recognise the existing limitations around the climate metrics which have been produced. Many companies are not yet fully reporting carbon emissions and hence in some cases estimates are being used based upon geography and sector level experience. As the level of reporting increases this could affect the figures reported for individual portfolios and at the total Fund level. There is also a lack of consistency in terms of the methodology in producing metrics and the use of different metrics between sectors. Changes in the approach used will have a material impact upon the figures calculated.

In addition, some asset classes, primarily quoted equities, have made more progress in developing and reporting climate metrics. Other asset classes such as Fixed Income and Private Markets have less developed reporting and so initial carbon footprint analysis has involved estimation to produce a whole Fund position.

Following a period of research and discussion between the officers, Hymans Robertson and Border to Coast the Fund has agreed a set of metrics which it will use to monitor and report progress against the Fund's Net Zero commitments. The Fund believes that the approach and targets are consistent with those produced by Border to Coast.

At the Pension Committee meeting in November 2022 the following metrics were adopted:

- Weighted average carbon intensity (WACI), tCO_2e/$m Revenue *
- Weighted average emissions (tCO_2e) normalised by:
    - Enterprise value $m (this can be used to calculate absolute emissions)
    - Equity capital invested £m
- Weighted average % of green revenues
- Percentage of assets under management with fossil fuel reserves
- Percentage of assets under management with thermal coal reserves

- Transition pathway alignment, for material emissions sectors
- Data quality, percentage of assets under management covered by metrics actually reported and independently validated, rather than by estimates
- Percentage of assets under management of companies in material emissions sectors subject to meaningful engagement.

*** This is the Fund's primary metric which will be used to measure the progress towards the Net Zero targets.**

These metrics will be calculated as part of the annual carbon footprint analysis and the results reported in the TCFD Report each November. The appropriateness of these metrics will also be assessed periodically in discussion with the Investment Adviser, Border to Coast and all other Investment Managers. It is expected that some of these metrics will need to evolve with the legislative requirements and industry practice as this develops.

Working with the Fund's Investment Adviser, Hymans Robertson, a carbon footprint analysis has been produced to identify the current and past carbon exposures using a range of metrics including the Fund's primary climate metric Weighted Average Carbon Intensity (WACI) Revenue.

A total Fund position including all assets was calculated for WACI Revenue as at March 2010, March 2019 and March 2022. As explained above the approach taken involved using estimates and assumptions where more accurate data was not available. In particular, the March 2010 results involved a higher level of estimates and assumptions and hence less reliance is placed upon these figures. For this reason, the March 2019 results will be used as the baseline for future carbon reduction targets as they provide a more robust position.

The carbon footprint work undertaken shows that the Fund has already made good progress in reducing carbon emissions (as measured by the Fund's primary metric WACI Revenue) with a 21% reduction over the three year period from 2019 to 2022. In addition, using the results calculated for March 2010 shows there has been a 34% reduction in carbon emissions from the Fund from this date through to March 2022.

Climate metrics are often backward looking, and companies carbon disclosures can be up to two years out of date. There is the need therefore, to make use of forward-looking metrics to forecast expected carbon exposures and to align with the Fund's carbon reduction targets. Forward-looking climate metrics are important because they measure the credibility of companies plans to decarbonise and their commitment to deliver them. Engagement with companies and policy makers is a key part of the approach to secure commitments on emissions reduction targets and to improve reporting on progress made against climate strategies.

Currently, there are three widely accepted different categories for measuring carbon emissions as follows:

Scope 1 – 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 – 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 – 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.

Currently most carbon metrics focus on Scope 1 and 2 emissions, as there is very little data available for Scope 3. Therefore, some companies may currently be assessed as a low carbon company, but once better reporting is available on Scope 3 emissions, this position may materially change.

The Fund does not have a policy of divesting from specific sectors such as Oil and Gas and considers active engagement with companies a more productive approach to effecting change. Once the Fund divests, its ability to influence both the short-term and long-term direction of individual companies is severely curtailed. This policy of active engagement is strongly supported by the Fund's investment managers, including Border to Coast, Legal and General and the Investment Adviser, Hymans Robertson.

At present only one third of UK companies are currently aligned with Net Zero 2050 targets i.e. restricting temperature rises to 1.5 degrees. This means that there are a significant proportion of companies yet to make the necessary climate change commitments. The Fund believes active engagement with these companies is more likely to encourage companies to respond positively to this challenge rather than divestment.

A Paris aligned world requires significant changes to the global economy; this has significant societal implications in terms of employment, access to energy and the affordability of energy. The Fund supports the Just Transition, seeking to manage the social and economic impacts of the transition to a low carbon economy. The Fund supports the work of the Local Authority Pension Fund Forum (LAPFF) in this area and through company engagement will ensure decarbonisation plans consider the implications for communities, workers, consumers and supply chains.

Investment Strategy

We are aware that climate change will impact all asset classes over the lifetime of the Fund. As a result, many assets will be re-priced. The timing of this is uncertain and the impact will vary by asset class due to geography, liquidity and the underlying life of our assets. We recognise that there is uncertainty over the direction and speed of policy changes in this area. We aim to integrate climate change considerations into the Investment Strategy in a number of ways.

Climate Change has the potential to impact returns across all asset classes (not just individual companies or sectors) and therefore has very material financial implications. 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 and
- 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.

During 2022 the Committee undertook a review of the Investment Strategy alongside the 2022 valuation. The new strategy was approved at Pensions Committee in September 2022.

The review showed that the current strategy remained appropriate. However, it also identified some opportunities to switch some of the holdings in Growth Assets into Income Assets which will also involve moves from public market assets to private market assets.
These switches only provide for a marginally better long term outcome for the Fund and also a marginally reduced downside risk and are probably not justified on financial grounds alone. However, these switches also provide a good opportunity for the Fund to increase the allocations to lower carbon asset classes, which would be supportive of the Fund's carbon reduction targets.

The new high level strategy involved a 3% allocation to the climate opportunities fund from Border to Coast, and a further 3% increase in the allocation to other private market asset classes, which the Fund's carbon foot printing suggests have improved carbon and climate metrics, all funded from quoted equities.

Asset Allocation and Investment Management Structure

We 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 which results in some reduction of exposure, such as a tilt towards low-carbon companies and assets, alongside company engagement and an increased allocation to low-carbon investment opportunities.

The Fund already has exposure to a range of low carbon investments through its existing strategy in areas such as fixed income (green bonds), infrastructure (renewable energy) and private equity (clean tech). The increased allocation to private markets including the new Climate Opportunities fund will provide a greater focus on investment in climate solutions. The Fund will consider other low carbon investments but notes that many have limited capacity and due to competitive pricing, these could lead to adverse impacts on financial returns.

In July 2020 the Fund committed 6% of its assets (15% of the overall long term quoted equity allocation) to the Legal and General Future World regional equity funds. These funds use an ESG (Environmental, Social and Governance) framework to score companies to select the best performing. This framework includes a number of climate related metrics which means the overall exposure to companies with carbon reserves drops by around 47%. In addition, the Fund's investments in the Border to Coast UK Equity Fund and Global Equity Fund have benefitted from carbon emissions scores around 50% below the benchmark level.

Within our investment strategy the Fund now has a 6.5% allocation to global infrastructure and these investments already include a range of renewable energy projects, electric vehicle charging and the manufacture of electric trains and buses. These projects are utilising new technologies to remove carbon emissions and will hopefully lead to widespread adoption of these solutions.

Border to Coast have now launched a Climate Opportunities fund and the Fund has made a commitment of £465 million over three years. This fund represents an opportunity to increase the Fund's allocations to investments involved in the transition to a low carbon economy and the associated energy transition globally which is a step towards achieving the Funds climate ambitions. To be considered for investment, an asset will need to make a material positive impact on the climate transition over the long term.

Property is a significant asset class and we are aware that buildings are responsible for around one fifth of total greenhouse gas (GHG) emissions in the UK. For directly held properties, the Fund commissioned its property manager to assess all of the Fund's UK commercial properties in terms of the impact of climate change and to establish the feasibility of a range of measures to minimise carbon exposures. The outcome of this work was presented to Pensions Committee in February 2022 and this exercise will be repeated annually to review progress and this will be reported to the Pension Committee.

The review identified a number of opportunities within the existing portfolio to deliver a reduction in carbon emissions through a combination of renewable energy sources and a reduction in overall energy consumption. These measures range from better insulation and improved glazing to the use of Solar Panel and LED lighting. All of these options will be considered as part of the asset management and capital expenditure requirements of new and existing commercial properties.

The Fund will work with our property manager to improve energy management and to gather more data from occupiers to reduce carbon emissions, and we expect indirectly held property managers to do likewise.

Carbon Exposures

Through the carbon footprint analysis, the Fund has identified carbon metrics for each asset class and individual portfolios. This has enabled the Fund to understand the regions with higher carbon emissions such as Asia and the Emerging Markets and asset classes such as listed equities and corporate bonds. This information will be incorporated into the development of the Investment Strategy in line with our commitments set out below. The analysis has also shown the carbon emissions at portfolio level and this has facilitated discussions with the Investment Managers to explain the drivers behind these figures and helps in understanding the rationale for holdings in specific companies.

The carbon footprint analysis also produced other metrics around fossil fuel exposure and green revenues that have been included in the TCFD Report which explains the Funds approach to climate related risks and monitors progress against the Fund’s Net Zero commitments. This demonstrates the positive benefits of the Fund’s investments in Infrastructure and Private Equity and also highlights how the majority of the Fund’s active equity managers are already well below the benchmark level of carbon emissions.

The impact of benchmarks on the carbon metrics has become an increasing focus for the Fund and is an area that will be investigated further. In order to achieve the commitments made in this policy the use of benchmarks which recognise the need to reduce carbon emissions in line with the Paris agreement will be considered. However, many of the recently constructed benchmarks have a very limited track record and it is important that the Fund fully appreciates the implications of any changes in benchmark before any decision is taken. This includes the risk and return expectations and particularly any unintended consequences such as an overweighting to certain low carbon sectors, as measured by scope 1 and 2 emissions, such as Financials and Technology which may be identified as having higher scope 3 emissions over time.

The Fund believes that blanket exclusion policies are not in the long term interests of the Fund's stakeholders and will not contribute to our shared ambition of global decarbonisation. It should be noted however, that the Fund does not invest in pure coal and tar sand companies in its investments with Border to Coast and the Future World series of funds with Legal and General. Any decision on divestment should be based upon investment criteria including climate risk at an individual stock level. If it is determined that a company is not making the necessary progress towards the energy transition and this raises concerns over the risk and return prospects of this company, it will not be held by the Fund. By taking this considered and balanced approach it is believed that the Fund can help drive global decarbonisation and meet the fiduciary duty of acting in the best financial interests of the members and employers.

The progress to carbon neutrality is unlikely to be linear for any company or sector. The pace and size of reduction will vary across portfolios, strategies and asset classes. There will also need to be different pathways to carbon neutrality depending on the starting point of each company, the sector in which it operates and the region/country in which it is located.

Carbon Offsetting

For a pension fund to hit net zero it needs not only to reduce emissions attributed to it because of the companies in which it invests but also to take out of the atmosphere any of the remaining emissions caused by its investments – also known as offsetting.

We do not plan to materially offset at Fund level at this stage. This is in line with the IIGCC Net Zero Investment Framework which currently advocates as a general principle, for investors to not use purchased offsets at the portfolio level to achieve emissions reduction targets. Instead the focus should be on reducing carbon emissions which will ultimately contribute towards the reduction in global warming.

Some companies which we invest in may offset and some may provide offsetting opportunities to others. Where offsetting is used, we think it should focus on proven nature-based solutions and use technology that is shown to be clean and viable. Whilst carbon offsetting is a reasonable tool for some companies or sectors, ultimately it does not solve the problem and it is believed that companies should not use this as an alternative to reducing carbon emissions.

Whilst the Fund has no plans to use financial offsets it expects that through its existing and new investments there will be positive carbon impacts which can be offset against its overall carbon emissions. This would include current assets in infrastructure and potential new areas of investment such as agriculture and forestry which could be considered as part of future investment opportunities.

Risk Management

- 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.

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.

The risks and opportunities related to Climate Change are summarised below:

- Physical impacts – damage to land, infrastructure and property due to extreme weather events, rising sea levels and flooding
- Technological changes - technological innovations such as battery storage, energy efficiency, and carbon capture and storage will displace old technologies with winners and losers emerging
- Regulatory and policy impact - financial impairment due to policy and regulation changes such as carbon pricing or levies, capping emissions or withdrawal of subsidies.
- Transitional risk - financial risk associated with the transition to a low-carbon economy, also known as carbon risk. It may entail extensive policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change, creating investment opportunities as well as risks.
- Litigation risk - litigation is primarily aimed at companies failing to mitigate, adapt or disclose.

Attached at Appendix 1 is a summary of the climate change scenario analysis undertaken by the Fund's Investment Adviser, Hymans Robertson, as part of the 2022 investment strategy review. The analysis suggest that the current investment strategy is reasonably placed in terms of the scenarios considered but the position needs to be continually monitored. The Fund will consider updating the climate scenario analysis on an annual basis.

There are also significant risks in attempting to decarbonise significantly more quickly than the economies in which the Fund invests. This would require policymakers globally to take additional action to bring forward carbon reduction targets and for new technologies to be developed for these changes to be delivered in practice. This could result in additional market exposure risks and could lead to lower investment returns.

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.

Engagement and Collaboration

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. Undoubtedly in every sector there will be best in class and worst in class companies, representing both investment risks and opportunities. The Fund chooses therefore, to engage with its investment managers, companies and where possible, policy makers, to influence them directly to move towards a sustainable financial strategy that ultimately provides long term value for its shareholders. 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 Fund has been a long-standing member of LAPFF which engages directly with companies on behalf of the LGPS on a range of ESG issues from executive pay and reliable accounts to a just transition to a net zero economy. The Forum has been engaging with major companies on climate risk, for many years and also works with other investors through initiatives such as Climate Action 100+ and 'Say on Climate'.

The Fund will use its shareholder rights to engage directly, collaboratively (including with LAPFF) and through our fund managers, with companies exposed to the greatest risks, to encourage them to adapt their business models to ones that are better aligned to a net zero-carbon economy. We further encourage companies to take account of the Financial Stability Board's Taskforce on Climate-Related Financial Disclosure (TCFD) recommendations. Company responsiveness to engagement is taken into account in voting activity and the Fund will co-file and support relevant shareholder resolutions where appropriate. Where possible, we extend this engagement to investee companies across all asset classes.

The Fund believes collaboration with other investors helps influence and improve market best practice standards as well as strengthening the voice of asset owners and their pension beneficiaries. Consequently, through our Investment Managers including Borders to Coast and by our membership of the LAPFF, we aim to support maximum 1.5 degree temperature rise scenarios through:

- engagement with companies to improve their approaches to climate change as well as encourage them to report on their actions for future business model scenarios;
- influencing policy makers;
- promotion of relevant research projects in areas such as developing standardised carbon intensity measures and investment initiatives that improve information flow and investment opportunities.

One of our investment managers, Legal and General has published a "Climate Change Pledge". This is a commitment to engage with the world's largest companies to address climate change, leading to voting and investment decisions. This is designed to effect positive change in the companies in which we invest. In some of their funds including the Future World series in which we are invested, where it is clear that the engagement is not working and companies continually breach the standards of the climate change pledge, this can result in Legal and General divesting. At the current time 13 companies have been divested from over concerns they are not appropriately engaging and addressing climate change risks. These companies range across a range of sectors and include oil companies such as Exxon Mobil and Rosneft.

Border to Coast has identified the Transition Pathway Initiative (TPI) as a means of assessing how individual companies are progressing and using this approach is likely to identify those companies that are not making sufficient progress. The Fund will continue to challenge Border to Coast in this area and support any climate related engagement at the companies within the portfolios.

Commitment and Targets

The Tyne and Wear Pension Fund commits to transitioning its investment portfolios to net-zero GHG emissions by 2050 or sooner and to the reduce emissions by 50% - 60% by 2030 based upon the 2019 baseline calculated in the carbon footprint analysis. In addition, a reduction of 30% – 35% will be targeted by 2025 and reporting against these targets will be published annually.

The Fund also commits to undertake climate based financial risk assessments and to report the results as part of an annual Taskforce for Climate Related Financial Disclosures (TCFD) Report. This will require the Fund to develop a range of metrics and targets. The exact metrics to be used are the subject of an ongoing government consultation on the adoption of TCFD reporting in the LGPS. The 2021/22 TCFD report includes the metrics set out above which the Fund believes are the most appropriate at the current time. The Fund has produced its first TCFD report in November 2022, two years ahead of the legislative requirement to do so.

In order to ensure that the Fund achieves its targets we will undertake an annual carbon footprint analysis and regularly report on the progress being made.

In addition, we will undertake a triennial review of the medium and long term targets along with an annual update of the Roadmap 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 our 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. This includes our Pool Company, Border to Coast, who have made a similar commitment and we support their policy objectives.

The Fund supports the IIGCC Net Zero Investment framework and will utilise the approach set out in the framework to agree our actions and ensure our 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 Fund has developed published a clear Net Zero Roadmap which will cover how these commitments will be achieved in terms of the strategy, metrics and targets to be implemented and the governance arrangements which will oversee this plan. The Roadmap contains a number of actions under the categories set out in the table below along with indicative timescales:

	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	✓	✓	✓

The Fund will monitor and challenge the climate approach of all of its Investment Managers including their commitments to the IIGCC Net Zero Investor framework and publication of Climate Change policies. We also expect all of our investment managers to support the UNPRI and to work towards the production of appropriate climate metrics to enable the Fund to monitor its overall position.

The Fund will continue to identify and invest in green solutions which will help build a clean, biodiverse and climate-resilient world. The Fund will determine a suitable metric (Green Revenues) to measure this ambition and report progress against this metric as part of our annual reporting.

The Fund will seek to reach this Commitment through its investment activity as well as through advocating for, and engaging on, corporate and industry action for a low-carbon transition of economic sectors in line with science and under consideration of associated social impacts. This Commitment is made in the expectation that governments will follow through on their own commitments to ensure the objectives of the Paris Agreement are met.

This commitment covers all investments made by the Pension Fund over all asset classes. The Pension Fund is aware that some asset classes are more progressed in the level of disclosure and transparency around climate risks and so may take longer to reach a point where assessment can be undertaken appropriately.

The Pension Fund also commits to achieving net-zero GHG emissions on its own administrative operations by 2030 in line with target set by South Tyneside Council who are the Administering Authority of the Fund.

Appendix 1

Tyne and Wear Pension Fund

Climate Change Scenario Analysis 2022

Summary of Analysis Produced by Hymans Robertson

The 2022 review of the Investment Strategy undertaken by Hymans Robertson included a climate change scenario analysis which looked at how the investment strategy would perform under three different climate change scenarios:

- **Head in the Sand** – A range of outcomes resulting from a total lack of response to climate risk from global policymakers and asset owners: global crop failures, influx of new diseases, severe temperature fluctuations/extreme weather patterns, etc.

- **Challenging times** – Some adaptation is achieved: peak oil flow is reached constraining economies of the future, increasing fuel prices, constrained government finances, difficulty obtaining access to imported foods, etc.

- **Green revolution** – Rapid technological advances leading to positive adaption to climate change: healthier lifestyles prevail (walking, cycling, etc.), diets improve with less processed food consumption, homes protected against extreme temperatures etc.

The analysis was undertaken on the on different climate change scenarios and how the effective the proposed investment strategy may be under those scenarios.

A summary of the observations coming out of the analysis is shown below:

- The proposed new investment strategy is unlikely to be significantly impacted by any of the three climate scenarios. This suggests it is resilient to climate change risk.

- 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 absence of a strong belief of which climate scenario we may experience, that the Fund continues to remain well diversified across a range of investments that will do well during different climate outcomes.

This has led to the following conclusions and next steps

- The analysis suggests that the 2022 Review of the Investment Strategy should be implemented.

- The Fund can and should continue taking action to manage climate risk or benefit from the transition to a low carbon economy as it has done with the Border to Coast Climate Opportunities Fund and Legal and General Future World Funds, e.g. by exploring options regarding the Future World and RAFI allocations in the future (this is a recommendation in the 2022 review of the Investment Strategy).

- The Fund also continues to measure its exposure to climate risk through the annual carbon foot printing exercise, which will flag up specific risks and opportunities at individual mandate level and across asset classes.

In summary the Fund is considered to be a good position to manage the risks from Climate Change, but the position needs to be continually monitored. No specific additional action is needed, other than the actions already contained in the service plan and those detailed in the 2022 Review of the Investment Strategy.

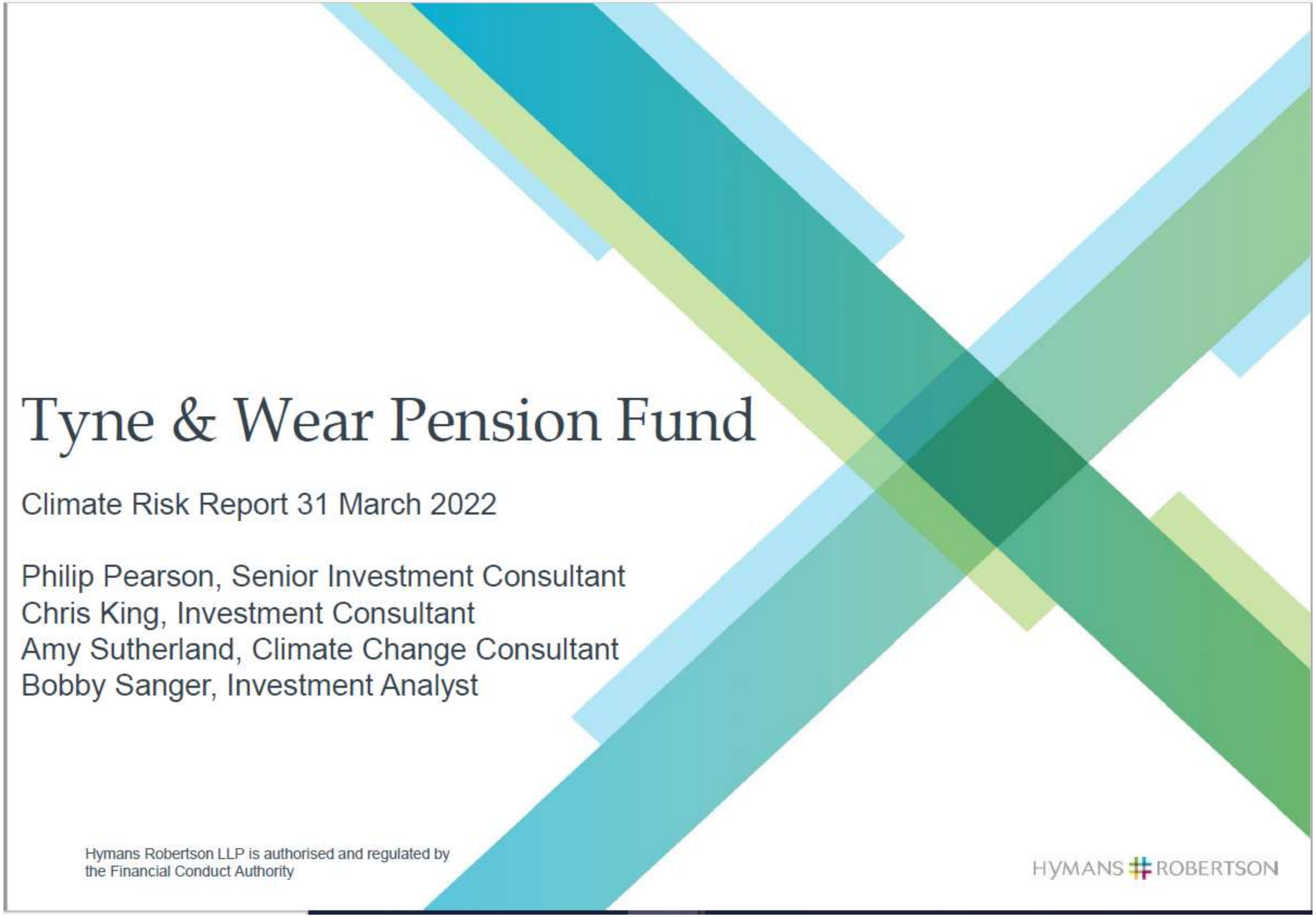
As part of the 2022 Triennial Valuation the Fund Actuary will undertake climate scenario analysis and reflected the results in the final report. It is expected that this will be repeated in future triennial valuations. The usefulness of updating the climate scenario analysis on an annual basis will be considered.

The climate change scenario analysis highlights the financial risks to the Fund, especially if sufficient action is not taken by policy makers, organisations and individuals to address these risks. The report, however, confirms that the actions the Fund has identified to address these risks are appropriate. Although the Fund still needs to deliver against these actions.

Glossary

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
ESG	Environmental, Social and corporate Governance
Responsible Investment	The integration of ESG factors into investment decision making and asset stewardship practices
Scope 1 emissions	GHG emitted directly by the company in conducting its operations
Scope 2 emissions	GHG emitted in the generation of energy consumed by the company
Scope 3 emissions	Indirect GHG emissions arising from a company's supply chain and use/disposal of its products
Transition pathways	Technologically achievable, scientifically-derived, decarbonisation roadmaps which are being developed for high-emissions sectors
TCFD	Taskforce on Climate-Related Financial Disclosures. Standards are expected to be adopted by DLUHC in 2022/23 for all LGPS funds
Material sectors	Companies undertaking activities material to the transition to net zero, specifically NACE code categories A-H and J-L

Appendix B



29th November 2022

Background

The Tyne and Wear Pension Fund has committed to transitioning its investment portfolio to Net Zero GHG emissions by 2050 or sooner. In addition, a target has been set to reduce emissions intensity by 30% - 35% by 2025 and 50% - 60% by 2030 relative to the 2019 baseline

The Committee has agreed a number of metrics that are helpful in understanding the Fund's position and informing future decision making. These were:

- Weighted average carbon intensity (WACI) per $m revenue – WACI Revenue
- Weighted average emissions normalised by:
  - Enterprise Value Including Cash in $m – abbreviated WA Emissions/EVIC
  - Equity in £m – abbreviated WA Emissions/Equity
- Weighted average % of green revenues
- Percentage of assets under management with fossil fuel reserves
- Percentage of assets under management with thermal coal reserves
- Percentage of assets under management of companies, in material emissions sectors, subject to meaningful engagement
- Transition pathway alignment, for material emissions sectors
- Data quality, percentage of assets under management covered by metrics actually reported and independently validated, rather than by estimates

2

Background

The metrics were chosen based on those it was believed would best inform the Committee as to the Fund's position, as well as taking into consideration data availability at the time they were produced. Each metric is defined in the Appendix

The climate metrics chosen may change over time to better meet future disclosure requirements, to provide a better understanding of the Fund's position with respect to climate risks and opportunities and to inform decision making. Changes to the metrics chosen are not likely to be made frequently.

Data availability is challenging in some cases and the Fund is committed to working with investment managers and other market participants to improve this. The Fund uses data gathered and validated by MCSI in the first instance and, for sub-portfolios where this is not possible, the approach is to:

1. Use metrics reported by the sub-portfolio's investment manager
2. Estimate metrics based on the sector mix of the sub-portfolio and listed market proxies
3. Exclude the sub-portfolio from the calculation of whole fund metrics.

3


Whole Fund
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Whole Fund

The Fund's Weighted Average Carbon Intensity (WACI Revenue) has fallen by 21% vs baseline due to decarbonisation of portfolio companies and the reallocation of capital to LGIM Future World solutions and private market assets which have lower WACI than prior investments.

Fund WACI is 14% lower than benchmark for the same reasons plus 5 of 7 actively managed public market mandates report below benchmark emissions.

The Fund has decarbonised faster than the benchmark, but the relative rate is lower than expected given the portfolio changes referred to above; this requires further investigation

Reallocating capital to lower carbon strategies (more Future World, low carbon factor equities, low carbon credit) and engaging with managers should drive further reductions.

Fund data coverage is lower than benchmark due to benchmark mismatches (eg BCPP MAC) and off benchmark positions (eg TT)

Data coverage has improved but remains limited for private markets. Further work is required to cover scope 3 emissions and private markets.

Emissions Intensity Metrics

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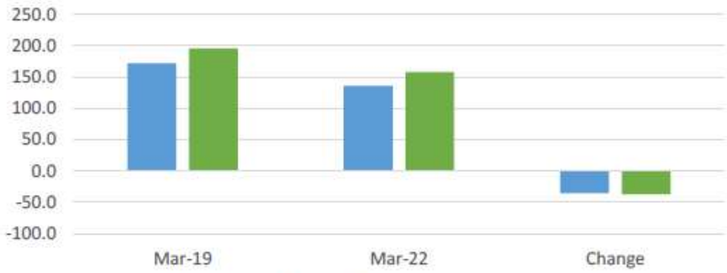
Mandate	WACI (Revenue) (tCO2e/$m)[1]				Data Coverage (%AUM)[2]			
	Mar-19	Mar-21	Mar-22	Change 2019-22	Mar-19	Mar-21	Mar-22	Change 2019-22
Fund	171.6	145.7	136.0	-20.7%	34.1%	-	63.0%	85.0%
Benchmark[3]	195.5	181.9	158.1	-19.1%	-	-	68.0%	-
Difference	-12.2%	-19.9%	-14.0%	-	-	-	-8.1%	-

Notes:

1. Weighted Average Carbon Intensity per $m Revenue (WACI Revenue) is the Fund's primary climate risk metric, and is calculated across all asset classes except Property and Index Linked Gilts, and covers scope 1 and 2 emissions only
2. Assets covered by metrics reported or estimated by MSCI as a percentage of total assets. Metrics for other asset classes not reported by MSCI were estimated by Hymans Robertson
3. Composite benchmark based on mandate benchmarks (public markets), listed market equivalent benchmarks (Private Equity, Private Debt, Multi-Asset Credit), or mandate return (Infrastructure, no suitable listed equivalent)

WACI (Revenue) – shows absolute change 2019-22



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Whole Fund

WA Emissions/£m Equity has fallen in line with WACI but at a faster rate, reflecting the increase in corporate equity valuations over the period.

The metric should strictly be applied only to equity investments.

WA Emissions/$m EVIC also measures normalised emissions but can be applied across all asset classes. It is the preferred metric going forward.

The actions the Fund can take to reduce WACI (Revenue) will also drive down WA Emissions/ EVIC over time.

Absolute Emissions Metrics

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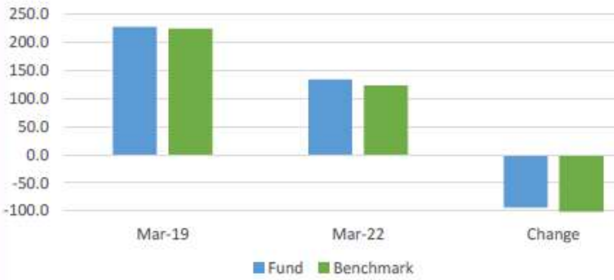
Mandate	Weighted Average Emissions/£m Equity (tCO_2e/£m)[1]				Weighted Average Emissions/$m EVIC ($tCO_2e$/$m)[1]			
	Mar-19	Mar-21	Mar-22	Change 2019-22	Mar-19	Mar-21	Mar-22	Change 2019-22
Fund	226.4	196.8	133.0	-41.3%	-	-	57.6	-
Benchmark	223.5	218.2	122.3	-45.3%	-	-	63.0	-
Difference	1.3%	-9.8%	8.7%	-	-	-	-8.5%	-

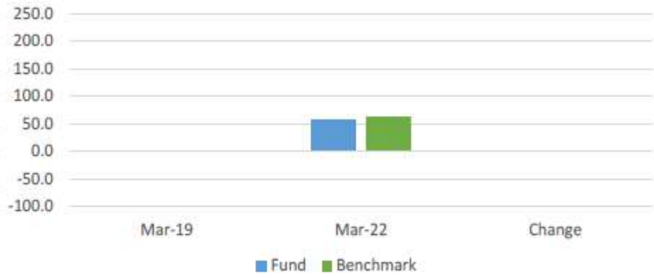
Notes:

1. Weighted Average Emissions/£m Equity measures absolute emissions normalised by capital invested. It is calculated across public markets.
2. Weighted Average Emissions per $m Enterprise Value including Cash (EVIC) is a more flexible measure of normalised emissions. It is calculated across all asset classes except Property and Index Linked Gilts. Metric cannot be calculated for prior years due to lack of data.
3. WA Emissions/EVIC is lower than WA Emissions/Equity because of the different currency basis and because EVIC includes a company's debt as well as equity.

WA Emissions Equity – shows absolute change 2019-22



WA Emissions/EVIC



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As noted, the FF Reserves metric is likely to overstate the exposure to such reserves.

Fund FF Reserves are below benchmark which is to be expected as strategies which reduce WACI typically also have lower FF Reserves. This is not always the case. BCPP UK Equity and JP Morgan EM Equity have lower WACI, but higher FF Reserves than benchmark.

Green Revenues have increased by 46% but remain below benchmark. There is often a trade-off between reducing emissions and increasing green revenues, and in the past the low carbon strategies the Fund has invested in (eg LGIM Future World) have prioritised emissions reduction.

BCPP Climate Opportunities will give greater weight to green revenues, and the Fund may wish to consider further investments in such strategies

Given the above, it is vital that manager selection and engagement activity considers the full range of climate metrics.

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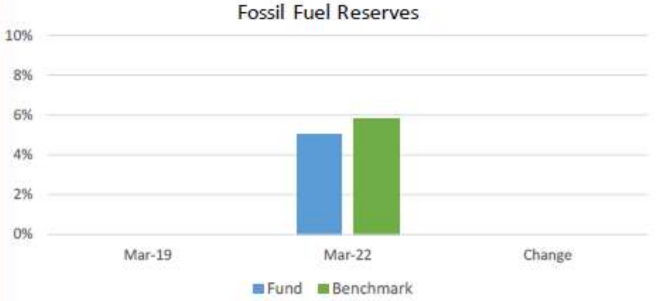
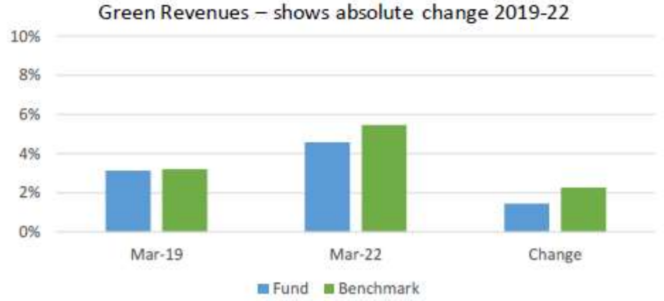
Fossil Fuel Reserves and Green Revenues

Mandate	Fossil Fuel Reserves (%AUM)[1]				Weighted Average Green Revenues (%Revenues)[4]			
	Mar-19	Mar-21	Mar-22	Change 2019-22	Mar-19	Mar-21	Mar-22	Change 2019-22
Fund	-	-	5.0%	-	3.1%	4.4%	4.6%	46.2%
Benchmark	-	-	5.8%	-	3.2%	4.1%	5.4%	70.3%
Difference	-	-	-13.8%	-	-2.2%	7.3%	-16.1%	-
Data coverage	-	-	55.8%	-	-	-	54.0%	-

Notes:

1. Percentage of assets under management relating to companies disclosing fossil fuel reserves. This is a measure of exposure to climate risk and is calculated across all asset classes except Private Debt and Index Linked Gilts. Property and Infrastructure are assumed to have zero reserves.
2. This is a prudent metric that is likely to overstate the level of exposure to fossil fuel reserves, for the following reasons:
   - Companies reporting fossil fuel reserves are reflected at their full capital weight even if the reserves represent a small percentage of total assets
   - Exposure to fossil Fuel reserves is assumed to be the same for companies which have reported reserves as those which have not. Disclosure is more likely amongst companies with reserves
3. Insufficient data are available to calculate exposure to thermal coal reserves reliably
4. WA percentage of revenues derived from products/services in specified environmental impact areas. This is a measure of exposure to climate opportunities and is calculated across all assets classes except Property and Index Linked Gilts.





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Whole Fund

Holding the management of portfolio companies to account for delivering decarbonisation plans depends on effective engagement.

The level of engagement appears low but this need not be an issue if focused on companies in high emissions sectors.

The current metric requires refinement to cover all asset classes, to focus on high emissions companies and to measure the quality of engagement, not just quantity.

Alignment with recognised decarbonisation pathways is a key measure of prospective emissions. Only BCPP and TT were able to provide alignment metrics in the required format, which complies with IIGCC guidelines. Some managers provided alternative measures of alignment.

Decarbonisation pathways are a relatively new concept and the IIGCC guidelines are challenging, so it is not surprising that the % of emissions aligned is low. The high % aligning is a positive.

Increasing the level of alignment should be a key engagement priority going forward.

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Thermal Coal Reserves

Notes:

1. Insufficient data were available to calculate a reliable estimate for this metric

Climate Engagement Metric

Percentage of AUM subject to engagement, 12m to 31 March 2022 (%)[1]	Data coverage (%AUM)[2]
22.1%	50.8%

Notes:

1. Metric not available for prior years due to lack of data
2. As reported by managers. Calculated across all public market assets (excluding BCPP mandates) plus Pantheon private equity, HPS private debt and Partners Group Infrastructure. BCPP provided engagement metrics but on a different basis (% financed emissions, rather than AUM). This basis is valid but the metrics reported cannot be aggregated with those provided by other managers.

Transition Pathway Alignment

As at 31 March 2022[1]	By % of AUM				By % of Emissions			
	Not aligned	Committed	Aligning	Aligned	Not aligned	Committed	Aligning	Aligned
Border to Coast UK Equity Alpha	46%	39%	15%	0%	29%	19%	52%	0%
Border to Coast Global Equities	59%	35%	6%	0%	26%	7%	67%	0%
Border to Coast Corporate Bonds	78%	20%	2%	0%[2]	8%	13%	78%	1%
Border to Coast Multi-Asset Credit	78%	20%	2%	0%[2]	8%	13%	78%	1%
TT Asia Pacific Equities	60%	20%	16%	-	Not provided			

Notes:

1. Metric not available for prior years due to lack of data
2. Actual amount aligned is 0.03% of assets under management

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Data Quality

Data Quality is improving but remains a challenge with disclosure limited from some markets.

The Fund is committed to working with the investment managers and other market participants to improve data quality.

Data coverage metrics

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Fund Metrics	Data coverage (%AUM)[2]
WACI (Revenue)	63.0%
WA Emissions/£m Equity	54.1%
WA Emissions/$m EVIC	50.7%
Fossil Fuel Reserves	55.8%
Green Revenues	54.0%
Percentage of AUM subject to engagement, 12m to 31 March 2022	50.8%

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Asset Class
Comparison
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Asset class comparison

WACI (Revenue)
- Listed UK equities and credit generally lower than global equivalents, likely reflecting sector mix and UK progress in decarbonisation
- Private equity and debt assessed to be lower than listed equity due to higher exposure to low carbon sectors – tech, healthcare, business services
- Infrastructure WACI highly dependent on specific asset mix. Partners Infrastructure is relatively high WACI, but high emissions too, highlighting the trade-off between the two metrics.

Exposure to fossil fuel reserves
- Listed UK equities higher than global equivalents due to importance of oil & gas sector
- Private equities assessed to be lower than listed equity due to higher exposure to low carbon sectors
- Property has zero direct exposure, but indirect exposure via tenants possible.

Green revenues
- Generally low reflecting manager focus and the fact that many green technologies are at an early stage of development.
- Specialist funds (such as BCPP COF) will likely be required to increase exposure at present.

Metrics by asset class

Note. All classes based on actual mandates held by the Fund.

Equity regions

WACI (Revenue)

- The UK and US have lower emissions intensity, likely reflecting higher exposure to tech. and services sectors.
- Higher emissions intensity in Asia and EM likely reflects increased exposure to manufacturing and natural resources sectors

Fossil Fuel Reserves

- Europe and the US have the lowest exposure, Asia and the UK the highest, again likely due to greater exposure to oil & gas and coal mining

Green Revenues

- The UK's low green revenues likely reflects low exposure to manufacturing generally and to alternative energy and energy efficiency solutions in particular.
- Allocation to UK equities was reduced in the 2022 strategy review and further reductions could be considered going forward

Equity metrics by geographic region

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Appendix

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Understanding the Climate Risk Metrics

Metric	Description/ Methodology
Weighted Average Emissions	This represents the portfolios estimated Scope 1 + Scope 2 greenhouse gas emissions. This is expressed in terms of thousand tons of CO2 equivalent emitted by the companies invested in by the portfolio, weighted by the size of the allocation to each company.
Weighted Average Carbon Intensity	A measure of a portfolio's exposure to carbon-intense companies. This is expressed in terms of tons of CO2 equivalent emitted per million dollars of revenue, weighted by the size of the allocation to each company. Is measured using scope 1 + scope 2 emissions. Scope 1 emissions are those from sources owned or controlled by the company, typically direct combustion of fuel as in a furnace or vehicle. Scope 2 emissions are those caused by the generation of electricity purchased by the company.
% Green Revenues	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.
Weighted Average Carbon Intensity (EVIC)	A measure of a portfolio's exposure to carbon-intense companies. This is expressed in terms of tons of CO2 equivalent emitted per million dollars of enterprise value including cash.
% Fossil Fuel Reserves	Companies with evidence of owning fossil fuel reserves regardless of their industries, including companies that own less than 50% of a reserves field. Fossil reserves are defined as proved and probable reserves for coal and proved reserves for oil and natural gas. Evidence of owning reserves includes companies providing the exact volume of reserves, and companies making a statement about their ownership of reserves. This includes companies where the ownership of a reserve may be only a small part of their business assets, however the flag for ownership will then apply to all holdings within that company.
% Thermal Coal Reserves	As above for thermal coal reserves
% Data Coverage	The % of public market assets for which emissions metrics reported by portfolio companies or estimated by MSCI are available.

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Appendix

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- This presentation is not intended for use for any other purpose.
- This presentation must not be released or otherwise disclosed to any third party except with our prior written consent, in which case it should be released in its entirety.
- Hymans Robertson LLP accept any liability to any party other than the trustees unless we have expressly accepted such liability in writing.

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Appendix C

Tyne and Wear Pension Fund

Net Zero Roadmap

November 2022

Introduction

Responding to climate change is a key priority for the Pension Fund and will be a significant factor in the ongoing investment of the Fund's assets. In November 2021, the Pensions Committee approved the Fund's first Climate Change Policy and Net Zero targets. The Policy has been updated in November 2022 to reflect the progress made to this point and to include the regulatory and industry developments around climate change.

The targets set and commitments made in the Climate Change Policy are entirely in line with global efforts to reduce the impact of climate change and minimise rising temperatures.

The Fund supports the Institutional Investors Group on Climate Change (IIGCC) Net Zero Investor Framework and committed to publishing a Net Zero Roadmap within 12 months of our initial Net Zero Commitment in November 2021. This document sets out the Fund's "roadmap" to achieving its net zero goals by 2050, or sooner on its investment portfolio.

In addition, the Fund has committed to achieving net-zero GHG (Green House Gas) emissions on its own administrative operations by 2030 in line with a target set by South Tyneside Council who are the Administering Authority of the Fund.

All of the actions included within this Roadmap are primarily aimed at reducing climate risk, but due consideration is also given to broader environmental, social and governance (ESG) issues as set out in the Climate Change Policy.

Governance and Strategy

The governance arrangements for the Tyne and Wear Pension Fund are set out in the Climate Change Policy which highlight the role of the Pensions Committee in relation to climate change. As part of the Climate Change Policy, the Fund has committed to achieving Net Zero carbon emissions by 2050 or sooner. Interim targets to reduce emissions have also been set.

Included within the Investment Beliefs in the Investment Strategy Statement are the following beliefs related to climate change:

- Engagement with companies on climate related issues can be effective in creating change to protect shareholder value.
- Climate change provides investment opportunities as well as risks.
- Asset owners and managers have a responsibility to ensure there is effective engagement on climate related issues.

In addition to the Net Zero and interim carbon emission reduction targets, the Climate Change Policy also provides a number of other commitments the Fund will strive to achieve. These are set out in actions below:

No	Action	Target date
1	Review Climate Change Policy	November 2022 and then annually thereafter
2	Undertake full triennial review of the Investment Strategy based on asset liability modelling. Part of this process is to identify opportunities to support the Fund's climate change objectives within the fiduciary role of the Fund	September 2025 and every three years thereafter
3	Consider undertaking an annual "health check" of the investment strategy between triennial reviews including identifying opportunities to support the Fund's climate change objectives within the fiduciary role of the Fund	December 2023
4	Undertake triennial review of the medium and long term targets set out in the Climate Change Policy	November 2024 and every three years thereafter
5	Publish a roadmap of actions and report on progress annually	November 2022 and then every year thereafter
6	Work with South Tyneside Council on the delivery on net zero GHG emissions on our administrative operations	Ongoing with a backstop date of 2030

Targets and Objectives

The Tyne and Wear Pension Fund has committed to transitioning its investment portfolios to Net Zero GHG emissions by 2050 or sooner and to the reduce emissions by 50% - 60% by 2030 based upon the 2019 baseline calculated in the carbon footprint analysis. In addition, a reduction of 30% – 35% will be targeted by 2025 and reporting against these targets will be published annually.

The Fund also commits to undertaking climate based financial risk assessments and to report the results as part of an annual Taskforce for Climate Related Financial Disclosures (TCFD) Report. This will require the Fund to develop a range of metrics and targets.

In order to ensure that the Fund achieves its targets we will undertake an annual carbon footprint analysis and report publicly on the progress being made.

In addition, we will undertake a triennial review of the medium and long term targets along with an annual update of the Roadmap 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 and in accordance with the fiduciary duty.

The Fund also commits to working with other investors along with our Investment Managers to promote the change necessary and to pursue efforts to limit the temperature increase to 1.5°C as set out in the Paris Agreement. This includes our Pool Company, Border to Coast, who have made similar commitments to the Fund and we support their policy objectives.

Set out in the Climate Change Policy are a number of key actions which the Fund will address in this Roadmap. These are shown in the table below and are explained in further detail in the sections that follow:

	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

Carbon Footprint Analysis

In order to understand the Fund's current carbon emissions, a carbon footprint analysis was undertaken in 2021 in conjunction with the development of the Fund's first Climate Change Policy. The analysis was based on the investment portfolio as at 31st March 2021 with an assessment also undertaken as at 31st March 2019 in order to set a baseline position.

Despite the limitations around the quality and availability of data across every asset class, a whole fund carbon footprint was calculated with estimates used for those mandates and assets where reliable data could not be provided by the Investment Managers.

An updated carbon footprint analysis has been undertaken as at March 2022.

Climate Metrics

The annual TCFD Report will set out the metrics the Fund intends to use to help measure progress towards the Net Zero '2050 or sooner' target. These metrics will be updated annually as part of the carbon footprint analysis and the results published in the TCFD Report. The Fund will publish its first TCFD report in November 2022, two years ahead of the expected statutory requirement for LGPS funds.

Following a period of research and discussion between Fund Officers, Hymans Robertson, and Border to Coast, the Fund has agreed a set of metrics which it will use to monitor and report progress against the Fund's Net Zero commitments. The Fund believes that the approach and targets are consistent with those produced by Border to Coast. These metrics were approved at the Pensions Committee meeting in November 2022 and are included in the Climate Change Policy.

The appropriateness of the metrics to be used by the Fund will be assessed periodically in discussion with the Investment Adviser, Border to Coast and all other Investment Managers. The ongoing Government consultation covering the TCFD reporting requirements for LGPS funds will also be monitored and the requirements of the final legislation will be incorporated into the metrics used by the Fund, where appropriate.

It is expected that some of the metrics currently being used by the Fund will need to evolve with legislative requirements.

2022 Carbon Footprint Analysis and TCFD Report

The TCFD report shows the Fund's progress against its agreed climate metrics and its primary target of reducing the Fund's Weighted Average Carbon Intensity (WACI).

The exercise to produce the Fund's first TCFD report and 2022 carbon footprint analysis has provided the opportunity for the Fund to measure its position against a wide range of climate metrics agreed by Pension Committee. However, this has confirmed the overall quality and reliability of data is poor especially in private markets. Consequently, whilst the Fund remains comfortable with the metrics chosen it is too early to set specific targets across all of these metrics with the exception of the primary target of reducing WACI.

To illustrate the point, one of the metrics determined by the Fund is in relation to data quality, however, it is apparent that this metric is not sufficiently robust at the current time. Therefore, the TCFD report includes a metric on data coverage rather than data quality which is considered to be more informative at the current time. This position will be monitored along with all the other climate metrics and specific targets for each metric will be set when the data improves.

Climate Scenario Analysis

The Fund has undertaken a review of its Investment Strategy during 2022. One of the key aspects of this review was a Climate Change Scenario Analysis. This Climate Change Scenario Analysis was presented to the Pensions Committee and the Local Pension Board on 15th July 2022.

The analysis was undertaken on three different climate change scenarios and assessed how effective the proposed investment strategy may be under each of those scenarios. The results and conclusions of the analysis are included in the Climate Change Policy.

In summary, the Fund is considered to be in a good position to manage the risks from Climate Change, but the position needs to be continually monitored. No specific additional action is needed, other than the actions already contained in the Service Plan and the implementation of the results of the 2022 Review of the Investment Strategy detailed in the Investment Strategy Statement.

As part of the 2022 Triennial Valuation, the Fund Actuary will undertake climate scenario analysis in respect of the Fund's liabilities. The results of this assessment will be set out in the Valuation Report. It is expected that similar assessments will be required at future triennial valuations.

Scope 3 Emissions

The Fund's carbon footprint analysis and metrics are based upon Scope 1 and Scope 2 carbon emissions only, as this reflects the most accurate and reliable data currently available. Consideration will be given to including Scope 3 emissions in the future when there is sufficient confidence that the Scope 3 data is reliable and can be used to inform the approach the Fund takes to addressing climate-related risks.

Key actions for monitoring climate risk are:

No	Action	Target date
7	Publish annual Carbon Footprint analysis to measure climate metrics	November 2022 and annually thereafter
8	Publish annual TCFD Report to report on the climate metrics	November 2022 and annually thereafter
9	Undertake Climate Scenario Analysis to align with the triennial review of the investment strategy	September 2025 and every 3 years thereafter
10	Consider undertaking additional Climate Scenario Analysis in the period between triennial reviews	December 2023 and annually thereafter
11	Report on climate related risks within the Triennial Valuation Report	31 March 2023 and then triennially
12	Ensure all of the Fund's Investment Managers are fully incorporating climate risk into their investment decision making processes	Ongoing
13	Consider the reliability of Scope 3 emissions data for inclusion in future carbon footprint analysis. The formal review to be aligned with the triennial review of net zero targets.	November 2024
14	Consider setting specific targets for each of the climate metrics once the robustness and reliability of the data improves	November 2024
15	Introduce a data quality metric to the TCFD report and consider setting specific targets for other climate metrics where there is confidence in the data	November 2023

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 the following categories, including a rationale for the decision of holding high carbon investments:

- Total carbon emissions
- Fossil fuels exposures
- Green revenues

This information has been collated and reported to the Pensions Committee, to highlight the overall carbon exposures of each portfolio and the main drivers of each portfolio's climate metrics.

In addition to this quarterly reporting, the Investment Managers are required to provide data to help the Fund measures its overall position against the climate metrics and targets that have been set.

Particular attention is focused on the Funds two largest investment managers: Border to Coast and Legal & General. Further details of the work with these managers is covered in sections below.

Border to Coast

The Fund has been working with Border to Coast to set targets for each individual portfolio and drive the decarbonisation of the Fund's investment portfolio. Aligning to Net Zero within each portfolio is a key part of the approach to reaching our overall target and to ultimately reducing real economy emissions.

Border to Coast are being encouraged to develop plans to expand the targets to cover multi-asset credit investments and private markets assets as and when methodologies and data availability permit. In order to reach their targets, Border to Coast will focus on a number of levers available to them to encourage companies the Fund is invested in to reduce emissions. This includes the approach to engagement and the escalation strategy.

The existing targets set by Border to Coast include the following funds managed on behalf of TWPF:

- UK Equity Alpha.
- Global Equity Alpha.
- Sterling Investment Grade Credit.

The Multi Asset Credit fund is expected to have its own asset class target within the next twelve months and plans are also being developed to also have targets for private markets funds as soon as practically possible.

Legal & General

All of the Fund's passive investments are held with Legal & General. The Fund has engaged with Legal & General on a range of ESG issues and especially climate change. Over the past two years, Legal & General have been developing their reporting capabilities to provide a range of climate metrics to the Fund for each portfolio. In addition, Legal & General has made a 'Climate Impact Pledge' to focus on climate related engagement activity and the outputs from these engagements are published on an annual basis. Further details on Legal & General's Climate Impact Pledge can be found below.

Private Markets

Carbon emissions data in respect of private market investments has been difficult to gather but progress is clearly being made. In producing the Fund's carbon footprint analysis in 2021 and 2022, estimates were used for some parts of the portfolio where actual data was not available. The need for more timely and accurate data is a challenge for all asset classes but private markets have lagged public markets mainly due to the nature of the investment vehicles.

The Fund has been in discussion with each of its private market managers to encourage and require them to respond to this challenge and develop suitable and robust reporting of climate metrics to clients. Whilst this is an ongoing process and the majority of the Fund's managers have responded to the challenge and have either improved the data provision in 2022 or are looking to introduce the data provision in the coming year, it is clear further work is needed with these managers.

Key actions in respect of climate data are:

No	Action	Target date
16	Work with each of the Fund's Investment Managers to improve the quality of data provided across all of the Fund's metrics	November 2023 and annually thereafter
17	Contribute to the development of Border to Coast's climate metrics and reporting	Ongoing
18	Continue to work with the private market mangers to develop climate metrics reporting to better inform the annual Carbon Footprint analysis	Ongoing

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.

As set out in the Corporate Governance and Responsible Investment Policy, the Fund participates in collaborative engagement through Border to Coast, Legal & General and other investment managers and through the Local Authority Pension Fund Forum (LAPFF).

Each of these organisations has a policy on climate change which aligns with the Fund's Climate Change Policy, and all share the Fund's belief that engagement is more effective than divestment when seeking to influence company behaviour.

Border to Coast

The Fund now invests around 34% of its assets through our pooling company Border to Coast. The Fund is actively involved in the development of the approach to managing climate change risks and opportunities at Border to Coast.

Border to Coast is required by the Fund to engage with the companies in which it invests on the Fund's behalf. The Fund has been actively involved in setting the key engagement themes for Border to Coast. Below is a summary of their approach which is supported by the Fund**:**

- Border to Coast portfolio managers and the Responsible Investment Team **engage directly** with our investee companies.
- Border to Coast **expect external managers to engage** with companies as part of their mandate on our behalf.
- Border to Coast use an **external voting and engagement services provider** to enable meaningful engagement with global companies.
- Border to Coast will **work collaboratively** with other like-minded investors to maximise

Border to Coast's influence on behalf of Partner Funds.

- Border to Coast and all Partner Funds are members of LAPFF, which engages on behalf of its members, which are Local Government Pension Funds and pools, across various ESG themes to maximise their influence as shareholders.

Legal & General Climate Impact Pledge

In 2016, Legal & General launched its Climate Impact Pledge with targeted voting and investment sanctions for companies, creating an annual ranking of companies on climate change. The Fund is fully supportive of this Pledge, which is considered to be a very important part of Legal & General's approach to engagement with companies on climate change issues.

In 2020, Legal & General expanded its programme to about 1,000 global companies in 15 'climate-critical' sectors and published the first results of this new expanded methodology in June 2021.

Within the Climate Impact Pledge, Legal & General have set out minimum voting standards where they would vote against a company if they do not meet at least one of the minimum standards set by Legal & General. In 2022, the number of companies sanctioned for failing to meet minimum standards fell to 80 from 130 in 2021 which shows a notable improvement.

The Climate Impact Pledge includes a number of 'Red Lines' for priority engagement with companies. Failure by a company to engage on climate issues, or crossing Red Lines, will lead to sanctions which may include divestment from certain investment products by Legal & General.

As noted above, Tyne and Wear Pension Fund supports the Climate Impact Pledge and regularly engages with Legal & General on the progress made globally and by individual companies to achieve the Net Zero 2050 or sooner target.

Local Authority Pension Fund Forum (LAPFF)

The Fund is a member of the Local Authority Pension Fund Forum (LAPFF) and is represented on the Forum's Executive. LAPFF engagement spans a wide range of issues including climate risk. LAPFF is a strong supporter of the 'Say on Climate' initiative which asks companies to set out their strategy to managing the transition to a net zero emissions business.

LAPFF recognises that climate change is a significant and urgent investment risk. Academics and investment experts put the price of inaction in the trillions of dollars. To safeguard the investments of LGPS funds and the pensions of their beneficiaries, LAPFF's main engagement objectives are for companies to align their business models with a 1.5 degrees scenario and to push for an orderly net-zero carbon transition.

For pension funds to make informed investment decisions and understand the climate value at risk of investing in individual companies they and their investment managers require companies to disclose data on emissions and set carbon targets. LAPFF therefore also considers that companies should report on their emissions and approach to carbon management as part of their business strategy.

The Fund has also recognised the importance of a Just Transition in its Climate Change Policy and will support the work of LAPFF in this area and seek to promote this initiative with the Fund's Investment Managers.

Private Markets

Whilst most engagement activity tends to focus on quoted markets, notably equites, private market managers are often uniquely placed to engage and influence the behaviours of the companies which they own. The Fund will continue to liaise with its private market managers to ensure this engagement is taking place and improvements are made.

Voting

The Fund has retained all voting rights on its active portfolios, including Border to Coast (who in turn have retained voting rights on all externally managed funds), and the Fund expects external managers to engage with investee companies and bond issuers in line with the Fund's Corporate Governance and Responsible Investment Policy.

Voting records are provided by all Investment Managers and reviewed for compliance with the Fund's policies. In addition, voting alerts issued by LAPFF are shared with all relevant Investment Managers along with a request for an explanation of the Investment Manager's approach to voting on the issue.

Key actions in respect of engagement on climate-related matters are:

No	Action	Target date
19	Working with investment managers to ensure engagement is focused on priority areas including climate related matters.	Ongoing
20	Actively participate in the development of the Border to Coast approach to climate change and continue to review Border to Coast policies to ensure alignment with Tyne and Wear policies.	Ongoing
21	Actively participate in LAPFF discussions on climate change and promote LAPFF voting alerts to the Fund's Investment Managers	Ongoing
22	Recognise the work of LAPFF to promote a Just Transition and ensure the Fund's and Investment managers policies reflect this initiative.	Ongoing
23	Work with private market managers to improve reporting on engagement and outcomes for the assets which they own.	Ongoing

<u>Review investment strategy</u>

The Fund's Investment Strategy has been 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. The strategy had a limited impact in terms of funding outcomes which was reassuring in showing that the Fund could make these changes without compromising financial returns.

The proposed changes provide for a marginally better long-term outcome for the Fund, and a marginally reduced downside risk. These changes were probably not justified on financial grounds alone given their small impact, but the changes also provide a good opportunity for the Fund to increase its allocation to lower carbon asset classes which helps with achieving the Fund's carbon reduction targets.

The key recommendations from the review of the Investment Strategy, insofar as they impact on the Fund's management of climate change risks and opportunities, were:

- Transition 6% out of quoted equities and 3% into private equity, infrastructure and private debt and a further 3% into a Climate Opportunities Strategy. These private market asset classes are believed to have lower carbon footprints and will assist in the overall management of climate risk and opportunities.
- Retain the current exposure to the Legal & General Future World Index Funds for now but consider further commitments once further experience with these funds has been gained.
- Replace the Fund's holding in the Legal & General RAFI Global Reduced Carbon Pathway 3.5% Index Fund with a strategy which provides balanced exposure to a wider range of factors and a significantly lower climate risk profile.
- Work with Legal & General and Border to Coast to identify and implement solutions to reduce the climate risk associated with the corporate bond portfolios.

Key actions following the recent review of the Investment Strategy are:

	Action	Target date
24	Continue to implement the new investment strategy and specifically the increased allocation to private market assets, including Infrastructure.	Ongoing. It will take several years to achieve the Fund's long term target allocations
25	Identify suitable alternatives to the RAFI Fundamental Global Equity Index Fund which will support the Fund's carbon reduction targets.	December 2023
26	Monitor the position of the Legal & General Future World series of funds and consider further investment as part of the 2025 Strategy Review.	September 2025 or sooner
27	Consider the Legal & General Future World Corporate Bond Fund	December 2023
28	Consider the role of "green bonds" within the Fixed Income portfolios	March 2024

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.

In 2021, the Fund asked all of its Investment Managers to complete a questionnaire on their approach to climate change to assist the Fund to develop its own approach. The results highlighted the progress being made and the increasing focus on climate change within the investment processes.

Active Equity and Fixed Income

Each of the Fund's investment mandates have been assessed as part of the Carbon Footprint analysis which has highlighted those with the highest emissions. This has led to discussion with all managers around how they are working towards Net Zero and how this will align with the Fund's own targets. This work is ongoing, and each manager is developing a response appropriate to their region and asset class. The Fund officers will continue to assess these responses and provide challenge where further progress is considered necessary.

Passive Investments

The Fund has a longstanding relationship with its passive manager, Legal & General, who has a strong focus on engagement activity given the passive nature of these mandates. Legal & General have been developing their reporting tools to improve the quality of information provided on each portfolio. In addition, the Future World series of funds which incorporate a range of Environmental, Social and Governance (ESG) factors have been evolving to reflect an increased focus on climate related issues.

UK Commercial Property

Regarding the UK Property Portfolio, further engagement has been undertaken with the Fund's UK commercial property manager, Abrdn and work has been commissioned on developing a net zero pathway for the assets held in the UK commercial property portfolio. The outcome of this work was presented to Pensions Committee in February 2022. This analysis will help inform future decisions around property purchases and capital expenditure.

Following the analysis of the UK commercial property portfolio, the following targets were agreed with Abrdn:

- Align the portfolio with the Fund's interim carbon emissions reduction target of 50% to 60% by 2030
- Undertake Net-Zero analysis in due diligence for future property acquisitions
- Adopt green clauses in leases
- Include Net Zero considerations in EPC audits from 2022/23
- Commence solar panel Installations
- Install Electric Vehicle charging points following suitable due diligence.
- Target 80% data collection by tenant floor area by 2025

In order to achieve the targets, there are a number of opportunities within the existing portfolio to deliver a reduction in carbon emissions through a combination of renewable energy sources and a reduction in overall energy consumption know as energy efficiency (EE). These measures range from better insulation and improved glazing to the use of solar panels and LED lighting. All of these options will be considered as part of the asset management and capital expenditure requirements of new and existing commercial properties.

Private Markets

The Fund has a range of private market investments across Private Equity, Global Property, Infrastructure and Private Debt which reflect a number of themes which would be considered supportive of climate change issues. These include renewable energy, electric vehicle infrastructure and digitalisation.

Each of the private market managers have been challenged to demonstrate how their portfolios support the Fund's own climate change targets and this includes the provision of better data as set out above. These discussions are ongoing but progress is being made.

Key actions in altering the Fund's current investment mandates are:

No	Action	Target date
29	Continue to challenge all of the Fund's Investment Managers over their approach to climate change.	Ongoing
30	Work with the UK Commercial Property manager to implement the agreed targets and report on progress annually	March 2023 and annually thereafter
31	Produce annual updates of the Net Zero pathway for UK Commercial Property and agree targets	March 2023 and annually thereafter
32	Continue to promote climate change as a key investment theme in private markets and encourage the establishment of net zero roadmaps in all private companies.	Ongoing

Reallocating capital to climate-focused strategies

Climate Opportunities Fund

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 Climate Opportunities Fund will invest in a range of low carbon infrastructure assets and private companies operating or promoting decarbonisation technologies, using both equity and debt investments.

The Climate Opportunities Fund represents an opportunity to increase the Fund's allocations to investments involved in the transition to a low carbon economy and the associated energy transition globally which is a step towards achieving the Fund's climate ambitions, as well as further pooling of the Fund's assets.

To be considered for investment by the Climate Opportunities Fund, an asset will need to make a material positive impact on the climate transition over the long term. Before a commitment is made, fund managers are required to demonstrate how these investments are expected to have a positive impact and how this will be measured and reported.

Private Markets

As part of the investment strategy review 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. By increasing the strategic allocations to these asset classes, the Fund believes this will contribute to the Net Zero targets.

This new investment is in addition to the many millions of pounds that the Fund has already invested in wind farms, solar farms and other renewable energy products across the world.

The Fund will look to recycle its existing committed capital to new strategies that will accelerate emissions reduction and/or increase green revenues as opportunities arise.

Nature Based Solutions

Officers of the Fund have held discussions around the potential role of nature-based solutions within the investment strategy. These funds are part of a wider approach around offsetting strategies which the Fund will monitor as they develop. There are a range of land based and technological solutions which could reduce carbon emissions and/or create carbon offsets. Further analysis of this strategy is required before any investment of this type could be recommended.

Green Revenues

Included within the climate metrics approved by the Fund in November 2022 and reported in the TCFD Report is the "weighted average % of green revenues". This metric is highlighting how the investment portfolio is contributing towards the energy transition and shift to renewable/green energy. Data will be provided by all of the Fund's Investment Managers to calculate this metric and the target is to achieve a year-on-year increase in the reported figure.

Key actions in respect of climate-focused strategies are:

No	Action	Target date
33	Invest £465 million to the Climate Opportunities Fund with Border to Coast	March 2025
34	Consider new investments with other providers with climate opportunity investment products	Ongoing
35	Consider investing in the follow on Border to Coast Climate Opportunities fund which should be available for consideration in 2024/25.	March 2025
36	Consider the Funds approach to carbon offsetting and the role of nature-based climate solutions as an investment opportunity to support the Fund's carbon reduction targets.	November 2023

Roadmap of Actions

The table below summaries each of the actions the Fund is currently undertaking in chronological order to achieve its Net Zero ambitions.

No	Action	Target date
1	Review Climate Change Policy	November 2022 and then annually thereafter
5	Publish a roadmap of actions and report on progress annually	November 2022 and then every year thereafter
7	Publish annual Carbon Footprint analysis to measure climate metrics	November 2022 and annually thereafter
8	Publish annual TCFD Report to report on the climate metrics	November 2022 and annually thereafter
11	Report on climate related risks within the Triennial Valuation Report	31 March 2023 and then triennially
30	Work with the UK Commercial Property manager to implement the agreed targets and report on progress annually	March 2023 and annually thereafter
31	Produce annual updates of the Net Zero pathway for UK Commercial Property and agree targets	March 2023 and annually thereafter
15	Introduce a data quality metric to the TCFD report and consider setting specific targets for other climate metrics where there is confidence in the data	November 2023
16	Work with each of the Fund's Investment Managers to improve the quality of data provided across all of the Fund's metrics	November 2023 and annually thereafter
36	Consider the Funds approach to carbon offsetting and the role of nature-based climate solutions as an investment opportunity to support the Fund's carbon reduction targets.	November 2023
3	Consider undertaking an annual "health check" of the investment strategy between triennial reviews including identifying opportunities to support the Fund's climate change objectives within the fiduciary role of the Fund	December 2023
10	Consider undertaking additional Climate Scenario Analysis in the period between triennial reviews	December 2023 and annually thereafter
25	Identify suitable alternatives to the RAFI Fundamental Global Equity Index Fund which will support the Fund's carbon reduction targets.	December 2023
27	Consider the Legal & General Future World Corporate Bond Fund	December 2023
28	Consider the role of "green bonds" within the Fixed Income portfolios	March 2024
4	Undertake triennial review of the medium and long term targets set out in the Climate Change Policy	November 2024 and every three years thereafter
13	Consider the reliability of Scope 3 emissions data for inclusion in future carbon footprint analysis. The formal review to be aligned with the triennial review of net zero targets.	November 2024
14	Consider setting specific targets for each of the climate metrics once the robustness and reliability of the data improves	November 2024
33	Invest £465 million to the Climate Opportunities Fund with Border to Coast	March 2025

35	Consider investing in the follow on Border to Coast Climate Opportunities fund which should be available for consideration in 2024/25.	March 2025
2	Undertake full triennial review of the Investment Strategy based on asset liability modelling, part of this process is to identify opportunities to support the Fund's climate change objectives within the fiduciary role of the Fund	September 2025 and every three years thereafter
9	Undertake Climate Scenario Analysis to align with the triennial review of the investment strategy	September 2025 and every 3 years thereafter
26	Monitor the position of the Legal & General Future World series of funds and consider further investment as part of the 2025 Strategy Review.	September 2025 or sooner
	The ongoing actions are set out below:	
6	Work with South Tyneside Council on the delivery on net zero GHG emissions on our administrative operations	Ongoing with a backstop date of 2030
12	Ensure all of the Fund's Investment Managers are fully incorporating climate risk into their investment decision making processes	Ongoing
17	Contribute to the development of Border to Coast's climate metrics and reporting	Ongoing
18	Continue to work with the private market mangers to develop climate metrics reporting to better inform the annual Carbon Footprint analysis	Ongoing
19	Working with investment managers to ensure engagement is focused on priority areas including climate related matters.	Ongoing
20	Actively participate in the development of the Border to Coast approach to climate change and continue to review Border to Coast policies to ensure alignment with Tyne and Wear policies.	Ongoing
21	Actively participate in LAPFF discussions on climate change and promote LAPFF voting alerts to the Fund's Investment Managers	Ongoing
22	Recognise the work of LAPFF to promote a Just Transition and ensure the Fund's and Investment managers policies reflect this initiative.	Ongoing
23	Work with private market managers to improve reporting on engagement and outcomes for the assets which they own.	Ongoing
24	Continue to implement the new investment strategy and specifically the increased allocation to private market assets, including Infrastructure.	Ongoing. It will take several years to achieve the Fund's long term target allocations
29	Continue to challenge all of the Fund's Investment Managers over their approach to climate change.	Ongoing
32	Continue to promote climate change as a key investment theme in private markets and encourage the establishment of net zero roadmaps in all private companies.	Ongoing
34	Consider new investments with other providers with climate opportunity investment products	Ongoing

Climate Change Policy and Net Zero Roadmap

The following is a list of the background papers (excluding exempt papers) relied upon in the preparation of the above report:

Background Paper	File Ref:	File Location
Climate Change Files		Investments Office, South Shields Town Hall

Contact Officer: Ian Bainbridge, Head of Pensions – Tel. 424 4112