

Pension Fund Investment Sub-Committee

Date: Monday 12 June 2023
Time: 10.00 am
Venue: Committee Room 2, Shire Hall

Membership

Councillor Bill Gifford
Councillor Brian Hammersley
Councillor Christopher Kettle
Councillor Sarah Millar
Councillor Mandy Tromans

Items on the agenda:

1. **Appointment of Chair**
To appoint a Chair of the Pension Fund Investment Sub-Committee for the 2023/24 municipal year.
2. **Appointment of Vice Chair**
To appoint a Vice Chair of the Pension Fund Investment Sub-Committee for the 2023/24 municipal year.
3. **General**
 - (1) **Apologies**
 - (2) **Members' Disclosures of Pecuniary and Non-Pecuniary Interests**
 - (3) **Minutes of the Previous Meetings** 5 - 12
To consider the minutes of the meetings held on 6 March 2023 and 16 May 2023.
4. **Review of the Minutes of the Warwickshire Local Pension Board Meeting of 31 January 2023** 13 - 20
5. **Governance Report** 21 - 62
6. **Climate Risk Report** 63 - 78

7. Reports Containing Exempt or Confidential Information

To consider passing the following resolution:

‘That members of the public be excluded from the meeting for the items mentioned below on the grounds that their presence would involve the disclosure of exempt information as defined in paragraph 3 of Schedule 12A of Part 1 of the Local Government Act 1972.’

- | | |
|---|-----------|
| 8. Engagement Report | 79 - 100 |
| 9. Passive Tilted Global Equity Review Report | 101 - 144 |
| 10. Funding Update | 145 - 154 |
| 11. Quarterly Investment Monitoring Report Q1 2023 | 155 - 184 |
| 12. General Activity Update | 185 - 198 |
| 13. Exempt Minutes of the Previous Meeting | 199 - 206 |
- To consider the exempt minutes of the meeting held on 6 March 2023.

Monica Fogarty
Chief Executive
Warwickshire County Council
Shire Hall, Warwick

To download papers for this meeting scan here with your camera



Disclaimers

Disclosures of Pecuniary and Non-Pecuniary Interests

Members are required to register their disclosable pecuniary interests within 28 days of their election of appointment to the Council. Any changes to matters registered or new matters that require to be registered must be notified to the Monitoring Officer as soon as practicable after they arise.

A member attending a meeting where a matter arises in which they have a disclosable pecuniary interest must (unless they have a dispensation):

- Declare the interest if they have not already registered it
- Not participate in any discussion or vote
- Leave the meeting room until the matter has been dealt with
- Give written notice of any unregistered interest to the Monitoring Officer within 28 days of the meeting

Non-pecuniary interests relevant to the agenda should be declared at the commencement of the meeting.

The public reports referred to are available on the Warwickshire Web
<https://democracy.warwickshire.gov.uk/uuCoverPage.aspx?bcr=1>

COVID-19 Pandemic

Any member or officer of the Council or any person attending this meeting must inform Democratic Services if within a week of the meeting they discover they have COVID-19 or have been in close proximity to anyone found to have COVID-19.

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Pension Fund Investment Sub-Committee

Monday 6 March 2023

Minutes

Attendance

Committee Members

Councillor Christopher Kettle (Chair)
Councillor Bill Gifford (Vice-Chair)
Councillor Brian Hammersley
Councillor Sarah Millar
Councillor Mandy Tromans

Officers

John Cole, Senior Democratic Services Officer
Jan Cumming, Senior Solicitor and Team Leader, Commercial and Contracts
Andy Felton, Assistant Director, Finance
Paul Higginbotham, Investment Analyst (Pensions and Investment)
Victoria Moffett, Lead Commissioner – Pensions and Investment
Chris Norton, Strategy and Commissioning Manager (Treasury, Pension, Audit and Risk)

Others Present

Rob Bilton, Hymans Robertson
Anthony Fletcher, Independent Advisor
James Glasgow, Hymans Robertson
Philip Pearson, Hymans Robertson
Bob Swarup, Independent Advisor

1. General

(1) Apologies

There were no apologies.

(2) Members' Disclosures of Pecuniary and Non-Pecuniary Interests

There was none.

(3) Minutes of the Previous Meeting

Resolved:

That the minutes of the meeting held on 3 February 2023 be approved as a correct record and signed by the Chair.

There were no matters arising.

2. Review of the Minutes of the Warwickshire Local Pension Board Meeting of 18 October 2022

Resolved:

That the Pension Fund Investment Sub-Committee notes the minutes of the Local Pension Board meeting of 18 October 2022.

3. Governance Report

Victoria Moffett (Lead Commissioner – Pensions and Investment) introduced the report which provided updated governance information relating to Warwickshire Pension Fund's forward plan, risk monitoring, training, and policy. She highlighted the changes that had been made to risk ratings including the key high-risk areas of climate change, cyber security, and long-term market risk. She advised that, at the recent quarterly risk meeting, there had been discussion of the effect on the Fund's cashflow of the recent 10.1% CPI rise which could potentially lead to higher pension payments. There had also been discussion of the risks arising from increased costs of living which could increase the likelihood of attempted scams targeted at pensioners.

Victoria Moffett reported that the results of the Hymans Robertson 'Knowledge and Skills Assessment' had been released. Take up of the Assessment by Warwickshire Pension Fund was lower than levels for pension funds elsewhere. She stated that councillors' feedback would be welcomed to ensure that the Training Programme could be as effective as possible.

Councillor Gifford stated that it was sensible to maintain an awareness of long-term market risk. However, he highlighted the economic pressures that had been experienced in recent years; the Fund had continued to perform well during this period, demonstrating that the investment policy was working effectively.

Councillor Millar highlighted the intersectionality of cyber security and the increased risk of scams targeted at pensioners. She welcomed the enhanced focus on these areas.

In response to the Chair, members agreed to approve the recommendations of the report.

Resolved:

That the Pension Fund Investment Sub-Committee:

1. Notes the items contained within the Governance Paper, and
2. Approves the new Risk Policy.

4. Funding Strategy Statement and Valuation Report

Victoria Moffett (Lead Commissioner – Pensions and Investment) introduced the report. She thanked Hymans Robertson personnel for their work to develop the Funding Strategy Statement (FSS), for which approval was sought from the Sub-Committee.

Rob Bilton (Hymans Robertson) introduced the FSS, stating that a valuation of the Pension Fund was undertaken every three years to review the financial position of the Fund and set employer contribution rates. The FSS had been reviewed in detail as part of the valuation. He highlighted the scale of the valuation exercise which required engagement with Fund employers over an 18-month period. This process had run smoothly, and he thanked Fund officers for their support. There had been no material changes to the funding strategy following the valuation. However, he highlighted a slight change to arrangements for academies to introduce further stability to their funding strategy. This was an appropriate course of action given that the employers have a guarantee from central government to provide cover for any LGPS liabilities which could arise in the event of closure of an academy trust.

Rob Bilton advised that the layout of the FSS had been refreshed to make it easier to navigate. The main body of the Statement provided a high-level summary; where detail was needed around specific policies, these were included as appendices. He advised that employers had been consulted on the draft FSS. During the consultation, a comment had been raised by an Academy Trust relating to the assumptions and mechanisms used for dealing with pass-through arrangements – for example, when an employer outsourced a service. He advised that there was no perfect solution in these circumstances; however, engagement with the Academy Trust had led to an improvement.

Rob Bilton advised that the FSS was not significantly different from the initial draft provided to the Sub-Committee in December 2022. Once finalised, the FSS would be published on the Fund's website.

Councillor Hammersley stated that the FSS was thorough and comprehensive. He commented that, by taking a prudent long-term view to secure long-term solvency, the Strategy was focused on the right areas.

In response to the Chair, Rob Bilton advised that a stabilised approach was a prudent longer-term strategy for the Fund's local authorities. The size of an employer was an important factor when determining the stability of contribution rates, including where there was a high level of confidence that an employer would be able to fund benefits. In respect of Nuneaton & Bedworth Borough Council and Stratford-on-Avon District Council being designated as mature authorities, he advised that several factors were taken into consideration to determine maturity, including the sensitivity of the contribution rate to movement in assets and liabilities, and the ratio of liabilities against payroll. The review of the Strategy in March 2022 had focused on the robustness of arrangements for contribution rates. Modelling had been undertaken leading to confidence that the right approach was in place. He stated that a material change in liabilities would prompt further analysis. The Strategy was regularly reviewed.

In response to the Chair, Rob Bilton advised that mechanisms were in place to respond to circumstances when an outsourced service provider went out of business or became insolvent. However, this occurred very rarely. The strain that would be placed on the Fund in these

circumstances had been assessed. There were no recent cases of non-payment of strain costs by an employer.

Councillor Hammersley highlighted the complexity of modelling work to project outcomes against different economic scenarios. This provided a good level of confidence that robust measures were in place to safeguard the Fund against future economic conditions.

In response to the Chair, members agreed to approve the recommendation of the report.

Resolved:

That the Pension Fund Investment Sub Committee approves the final version of the Funding Strategy Statement, as attached at Appendix 1 of the Report.

5. Reports Containing Exempt or Confidential Information

Resolved:

That members of the public be excluded from the meeting for the items mentioned below on the grounds that their presence would involve the disclosure of exempt information as defined in paragraph 3 of Part 1 of Schedule 12A of the Local Government Act 1972.

6. Climate Risk Policy and Update

The Sub-Committee held a confidential discussion.

7. Q3 Investment Monitoring Report

The Sub-Committee held a confidential discussion.

8. Alternatives Commitments

The Sub-Committee held a confidential discussion.

9. General Activity Update

The Sub-Committee held a confidential discussion.

10. Exempt Minutes of the Previous Meeting

Jan Cumming (Senior Solicitor and Team Leader, Commercial and Contracts) commented that she had been listed as an attendee for the exempt part of the meeting on 3 February 2023. As she had not been present for this part of the meeting, she requested that the attendance list be amended. Subject to this amendment, the minutes were approved as an accurate record of the meeting.

Resolved:

That the exempt minutes of the meeting held on 3 February 2023 be approved as a correct record and signed by the Chair.

There were no matters arising.

The meeting rose at 13:01.

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Chair

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Pension Fund Investment Sub-Committee

Tuesday 16 May 2023

Minutes

Attendance

Committee Members

Councillor Bill Gifford

Councillor Brian Hammersley

Councillor Christopher Kettle

Councillor Sarah Millar

Councillor Mandy Tromans

1. General

(1) Apologies

There was none.

(2) Members' Disclosures of Pecuniary and Non-Pecuniary Interests

There was none.

2. Appointment of Chair

Appointment of a Chair will be determined at the meeting of the Sub-Committee on 12 June 2023.

3. Appointment of Vice Chair

Appointment of a Vice Chair will be determined at the meeting of the Sub-Committee on 12 June 2023.

The meeting rose at 11:44.

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Chair

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Pension Fund Investment Sub-Committee

12 June 2023

Review of the Minutes of the Warwickshire Local Pension Board Meeting of 31 January 2023

Recommendation

That the Pension Fund Investment Sub-Committee notes and comments on the minutes of the Local Pension Board meeting of 31 January 2023.

1. Executive Summary

- 1.1 Set out at appendix 1 are the minutes of the Local Pension Board meeting of 31 January 2023 for information.

2. Financial Implications

- 2.1 None

3. Environmental Implications

- 3.1 None

4. Timescales associated with the decision and next steps

- 4.1 None

Appendices

- 1. Appendix 1 – Minutes of the Warwickshire Local Pension Board meeting of 31 January 2023.

	Name	Contact Information
Report Author	John Cole	johncole@warwickshire.gov.uk Tel: 01926 736118
Assistant Director	Andrew Felton, Assistant Director – Finance	andrewfelton@warwickshire.gov.uk
Strategic Director	Rob Powell, Strategic Director for Resources	robpowell@warwickshire.gov.uk
Portfolio Holder	Councillor Peter Butlin, Deputy Leader and Portfolio Holder for Finance and Property	peterbutlin@warwickshire.gov.uk

The report was circulated to the following members prior to publication:

Local Member(s): not applicable

Other members: none

Warwickshire Local Pension Board

Tuesday 31 January 2023

Minutes

Attendance

Committee Members

Keith Bray (Chair)
Jeff Carruthers
Keith Francis
Councillor Ian Shenton
Mike Snow

Officers

Andrew Felton, Assistant Director - Finance
Andy Carswell, Democratic Services Officer
Liz Firmstone, Service Manager (Transformation)
Victoria Jenks, Pensions Admin Delivery Lead
Victoria Moffett, Pensions and Investments Manager
Chris Norton, Strategy and Commissioning Manager (Treasury, Pensions, Audit, Risk & Insurance)
Nichola Vine, Strategy and Commissioning Manager (Legal and Democratic)
Martin Griffiths, Technical Specialist Pensions Fund Policy and Governance

Others Present

Rob Bilton, Hymans Robertson

1. Introductions and General Business

The Chair welcomed Councillor Ian Shenton to his first meeting since being appointed as a member of the Board.

(1) Apologies

Apologies were received from Alan Kidner.

(2) Board Members' Disclosures of Interests

The Chair stated that he worked for the Local Authority Pension Fund Forum and also for a firm of American lawyers which had Pension Fund clients, although these did not include Warwickshire.

(3) Minutes of the Previous Meeting

The minutes of the meeting held on 18 October 2022 were approved as an accurate record,

subject to an amendment on page 3 to say LGA instead of LGPS.

Arising from the minutes and responding to a question raised by the Chair, Chris Norton (Strategy and Commissioning Manager – Treasury, Pension, Audit and Risk) said he was not aware of any changes to the capacity issues being experienced by auditors since the last meeting. He said Warwickshire's external audit had been reported to the Audit and Standards Committee the previous week and would go on to Council on the 7th February for approval. The audit report would be sent to members after the meeting, along with the climate change metrics report.

The Chair clarified comments he made at the previous meeting about the merits of having the same firm acting as advisor and actuary. He said he was in favour of this but only if there were other independent advisers involved, particularly in relation to investments. He was pleased to note this was the case with Warwickshire.

2. 2022 Valuation

The update on the 2022 valuation was given by Rob Bilton of Hymans Robertson, who explained that although the valuation had yet to be fully completed it was appropriate for members to consider its contents. Members were reminded valuations were carried out on a triennial basis and the current valuation period was due to end on 31 March. New employer rates would then take effect from 1 April, lasting until 31 March 2026. Members were reminded of the purpose of the valuation, which included calculating employer contribution rates analysing actual experience against assumptions that had been made regarding each employer. It also ensured the Fund complied with legislation. Rob Bilton said the valuation would consider the balance of each employers' liabilities against its assets, and had to ensure future contributions and future investment returns would cover liabilities.

Rob Bilton said Hymans Robertson was reliant on the data received from the Fund being complete and up to date. He said the information received from the Warwickshire Fund was amongst the best that Hymans Robertson dealt with. The timeline for how the valuation was processed and completed, and what data sets were considered, was set out for members. Hymans Robertson had engaged with the Pension Fund Investment Sub Committee to work on agreeing strategic decisions and the assumptions that the valuation would be based on. Rob Bilton said there had been a good level of engagement and the detail supplied had been very helpful to Hymans Robertson. Engagement with employers had also been important in the valuation process.

Members were told the funding position had improved since the last valuation in 2019. The funding level had increased from 92 per cent to 104 per cent. Rob Bilton said this was due mainly to an investment return of nearly 30 per cent, which had offset the higher inflation expectations. Employer contribution rates had remained steady. The situation in Warwickshire was comparable with other LGPS Funds. Members were reminded that current markets were volatile and were liable to change on a daily basis.

The reclassification of colleges from private sector to public sector meant that the Department for Education was reviewing the need for a guarantee for colleges in the Fund, similar to that used for academies. Currently there is no guarantee in place. The Fund would revisit the risk factor associated to colleges once there was an update on this.

There had been no material changes to the contents of the funding strategy statement since the last valuation. Some of it had been simplified to make it more user friendly to employers. Its contents had been put out to consultation to scheme employer members, which was due to close the following day. Any comments would lead to any necessary amendments being made by the 31 March deadline.

Responding to a point raised by Keith Francis, Chris Norton said in any valuation there would be some employers that may struggle with their pension contributions, for a variety of reasons. The Fund would work with these employers to see what contributions they could afford, or what could be done to mitigate the risk to the Fund. A number of smaller organisations, including many charities, had left the Fund in recent years, and out of more than 200 employers with active members, significant challenges only remained over two of them. Fund officers were working with both employers to agree on a suitable contribution rate.

Responding to a question from Jeff Carruthers, Vicky Jenks (Pensions Admin Delivery Lead) said no concerns had been raised by employers in relation to the funding strategy. She noted that one of the Fund members was a Multi Academy Trust that also paid into two other Funds, and it had drawn comparisons with the other Funds. Vicky Jenks reminded members that it was a condition of a government White Paper that all schools needed to convert to academies by 2030. Schools were tending to join existing Trusts rather than creating new ones.

Mike Snow said Hymans Robertson had noted the quality of the data being provided by the Warwickshire Pension Fund, and said officers should be praised for their work.

Rob Bilton said councils were in a position to stabilise pension contributions as they had tax raising powers, and academies also had stabilised contributions due to a DFE guarantee. However this guarantee did not currently apply to colleges who had recently been reclassified.

Responding to a question from the Chair, Rob Bilton said the Fund's current funding level may be above the 104 per cent noted in the report as asset returns had been good and inflation expectations had gone back down. The Chair stated his belief that of the four actuaries that produced valuations for local authorities, Hymans Robertson was the most conservative with its forecasts and stated his belief the funding rate could be even higher. Rob Bilton said the final funding level would be included in the final report. Chris Norton said ownership of the assumptions laid with Pension Fund Committee officers and the Pension Fund Investment Sub Committee.

3. Pensions Administration Activity and Performance update

The item was introduced by Vicky Jenks, who drew members' attention to some of the highlights in the report. Use of the Member Self Service portal was continuing to increase gradually, with pensioners due to be contacted to encourage them to sign up. There would also be a targeted exercise after analysis of which demographic groups were using the portal and those that were not. New starters were encouraged to use the portal and it was hoped this would eventually become the norm, but it was accepted more work needed to be done to actively promote this.

The majority of the key performance indicators were on track to be met despite the additional work the team had taken on in relation to the valuation. The number of breaches had decreased as issues that had previously existed with a Multi Academy Trust's payroll provider had been resolved and information was now being supplied to the Fund on time. The Fund was anticipating receiving

guidance from the Education and Skills Funding Agency on schools having outsourced contracts, and how these could be impacted if the school converted to an academy.

Responding to a question from Councillor Shenton, Vicky Jenks said there was no longer a requirement for paper payslips to be sent out but they would be if one was requested if a pensioner was unable to use the portal. She added that P60 forms would continue to be paper based.

Vicky Jenks clarified green breaches were those that had occurred once and been noted, and amber breaches had been noted after more than one occurrence. Red breaches were significant in consequence and required reporting to the regulator.

Responding to points raised by the Chair, Vicky Jenks said there had been changes to the processes for handling letters detailing transfers and sending out an initial letter notifying of a member's death to improve efficiency. There had been a recent increase in the number of transfer letters being required, partly because the workforce was now more transient and a member was more likely to have been a member of more than one pension scheme previously.

4. Governance Report

The item was introduced by Martin Griffiths (Technical Specialist, Pension Funds Policy and Governance). He stated the training schedule would be updated depending on the needs of members of the Board and Staff and Pensions Committee, and there had been some input from Hymans Robertson on what training was required. He said extra training could be provided if members felt they needed it.

Martin Griffiths said there had been a couple of minor changes to the risk register. Some of these related to the greater relationship between the Pension Fund and Border to Coast.

The Admission and Termination Policy had been amended and approved at the 12 December meeting of the Staff and Pensions Committee. The Conflicts of Interest Policy had been updated to include officers as well as elected Members, and this would be published on the Council's website. Some changes were being made to the Corporate Governance Policy Statement due to the UK Stewardship Code.

It was noted that the Consumer Prices Index announced a 10.1 per cent rate of inflation. Rob Bilton said although this was a high rate, it would be offset by the value of the investments being made.

The Chair said he was in favour of a simplified version of the risk register being created, stating his belief that an information overload could be created if it was too complicated. Regarding training, the Chair said that a previous complaint he had made had now been rectified. He said that previously people taking training tests would be told their results, but not which questions they had answered incorrectly and so could not learn from them.

5. Pension Fund Business Plan Update

Chris Norton advised there were no significant issues to report. Some KPIs had changed rating to amber, and the report highlights which issues are outside of the Fund's control. Members were

reminded the accounts had had a red rating for the last update, but these had now been completed and were due to be considered by Full Council the following week.

Vicky Jenks said there was still no indication on when the results on the local government consultation on McCloud may be announced and the issue resolved. The most recent update had said there would be an announcement in the spring. However Vicky Jenks said the Fund would be in a good position to proceed once the final announcement was made, due to the amount of data collection work that had taken place.

6. Investment update

The item was introduced by Victoria Moffett (Lead Commissioner, Pensions and Investments), who said the funding level for the Fund remained above 100 per cent due to the falling long-term inflation expectation that had already been mentioned during the meeting, and because of a decrease in liabilities. The overall funding value had decreased slightly however, and net cashflow was broadly neutral. Victoria Moffett said there may be the possibility of negative cashflow in the future if inflation rates remained high, as this would increase the amount the Fund had to pay out. Members were told that the Pension Fund Investment Sub Committee had agreed to split the Fund's new private debt allocation into two separate funds to diversify the risks. This was done in the hope it would reduce the volatility of the Fund.

Members were informed that since the last meeting a new Chief Investment Officer had been appointed at Border to Coast. Victoria Moffett said Border to Coast had updated its responsible investment and climate change policies. The voting rights of the portfolio holders at Border to Coast, and also the holders at Legal and General, had been considered by the Investment Sub Committee. Responding to a point raised by the Chair, Victoria Moffett said 40 per cent of the Fund was handled by Border to Coast and an additional 40 per cent by Legal and General.

Victoria Moffett said the annual report and accounts remained in draft format as there had been delays due to external auditor capacity and delays in receiving guidance from central government. The Competition Markets Authority objectives had been signed off and submitted.

The Chair said the contents of the Fund's AGM had been excellent, but felt the room where it was held was not the most suitable.

7. Any Other Business

Members noted the contents of the minutes of the most recent meetings of the Staff and Pensions Committee and the Pension Fund Investment Sub Committee. The Chair said if members wished to raise any issues later then they should email Martin Griffiths and copy him in.

Members agreed that the next meeting should take place in-person, with a revised start time of 11am. Keith Francis stated he would not be available for the meeting and submitted apologies.

8. Reports Containing Exempt or Confidential Information

It was resolved unanimously to approve the motion to exclude the public from the remainder of the meeting.

9. Cyber Security

Members received a confidential update on cyber security.

The meeting rose at 12.55pm

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Chair

Pension Fund Investment Sub-Committee

12 June 2023

Governance Report

Recommendations

That the Pension Fund Investment Sub-Committee:

1. Considers and comments on the items contained within this Governance Report.
2. Comments on and approves the revised Investment Strategy Statement provided by Hymans Robertson (Appendix 6).

1. Executive Summary

This report summarises the main governance issues currently affecting the Warwickshire Pension Fund. These areas include the Forward Plan, Risk Monitoring, updated Policies and Training.

2. Financial Implications

There are no financial implications arising directly from this report. Where changes to policies are recommended, any implications arising from those changes are covered in the body of the report.

3. Environmental Implications

As stated in previous Governance Reports, Climate Risk is identified as a key risk on the Fund's Risk Register.

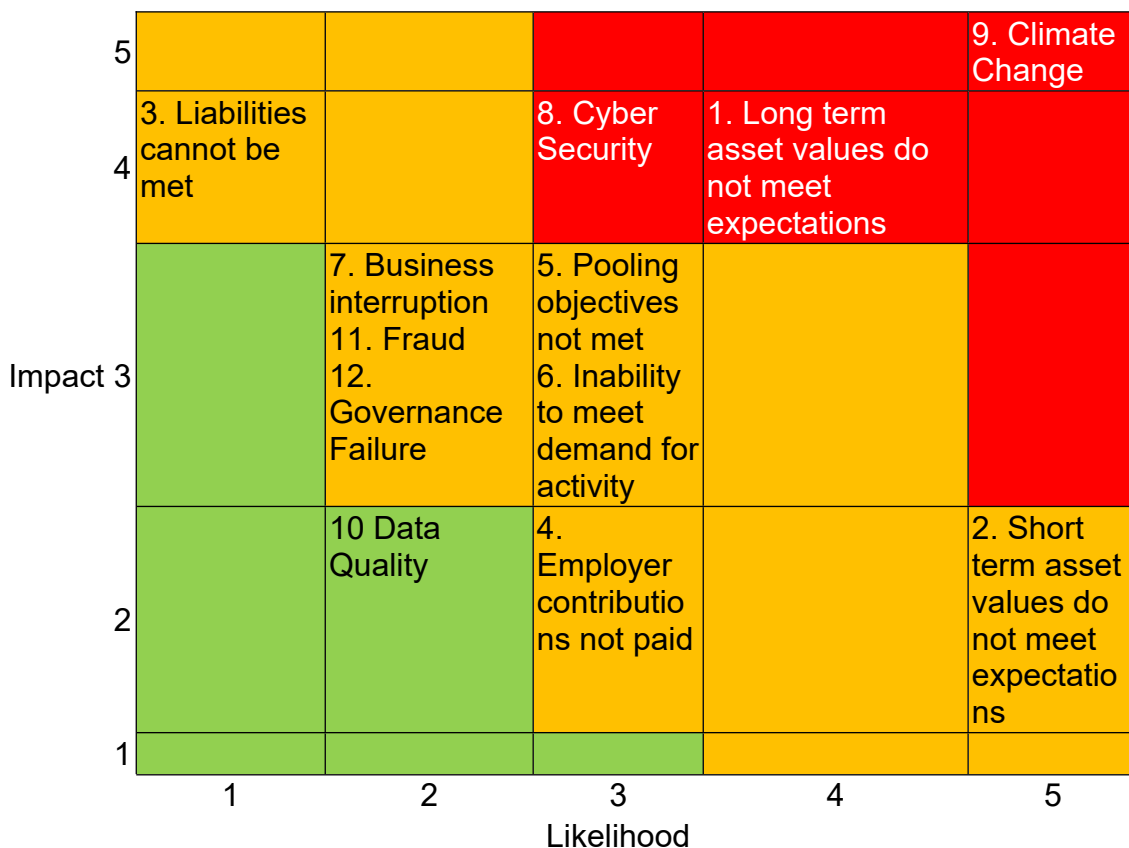
4. Supporting Information

The Forward Plan

- 4.1 The purpose of including the Forward Plan in this Report is to provide an updated version of the document for the Pension Fund Investment Sub-Committee. It has been rolled forward to cover the year ahead. The Plan is set out (in Appendix 1) and Committee's comments are welcomed.

Risk Monitoring

- 4.2 This section provides an update on the risks facing the Fund and the management actions necessary to address them. Fund Officers have reviewed the risks and do not consider that any amendments are required to the Risk Register for this period.
- 4.3 As mentioned and agreed in previous reports, the full Risk Register will be provided once a year in the June Committee. Therefore, (Appendix 2) reproduces the Fund’s risk appetite. (Appendices 3 and 4) reproduce the criteria for scoring risks and (Appendix 5) provides the current full risk register. In April Fund Officers were joined by Hymans Robertson to review the Warwickshire Risk Register.
- 4.4 Fund Officers ask members to pay particular attention to the red risks shown on the register. They are Climate Change, Long Term Market Risk, and Cyber Security. The high-risk items have not altered since our last Governance Report in March 2023.
- 4.5 Any updates to the commentary in the risk register made since the latest review are presented in red font, and where future actions have become current actions, these are highlighted in a green font.
- 4.6 The Warwickshire Pension Fund’s Net Risk chart is shown below:



Policies

- 4.7 The Voting and Stewardship Policy has been reviewed by officers and it was felt that no changes are required to this document.
- 4.8 Our Investment Strategy Statement (Appendix 6) has been reviewed and updated by Hymans Robertson. The changes that have been made include:
- Funding risk - section added to highlight the transition to a higher inflation and interest rate environment.
 - Asset Risk – We have added a comment on geopolitical risk
 - BCPP – changed to BTC

Training

- 4.9 The current Training Plan can be found in (Appendix 7).
- 4.10 Fund Officers will continue to support members in providing them with the training they require. The Training Plan has been developed to ensure any knowledge gaps are filled as identified by the Knowledge and Skills Assessment, are met as well as covering areas that are due to be discussed at meetings.

5. Timescales associated with the decision and next steps

- 5.1 None

Appendices

- Appendix 1 – Forward Plan
Appendix 2 – Fund's Risk Appetite.
Appendix 3 – Risk Scoring Convention and Likelihood Definitions
Appendix 4 – Impact Score Definitions
Appendix 5 – Full Risk Register (June 2023)
Appendix 6 – Investment Strategy Statement
Appendix 7 – Training Plan

	Name	Contact Information
Report Author	Martin Griffiths, Victoria Moffett, Chris Norton	martingriffiths@warwickshire.gov.uk, victoriamoffett@warwickshire.gov.uk, chrisnorton@warwickshire.gov.uk
Assistant Director	Andy Felton, Assistant Director for Finance	andrewfelton@warwickshire.gov.uk
Strategic Director	Rob Powell, Strategic Director for Resources	robpowell@warwickshire.gov.uk
Portfolio Holder	Councillor Peter Butlin, Portfolio Holder for Finance and Property	peterbutlin@warwickshire.gov.uk

The report was circulated to the following members prior to publication:

Local Member(s): n/a

Other members: Councillor Christopher Kettle and Councillor Bill Gifford

APPENDIX 1

Pension Fund Investment Sub-Committee

Forward Plan

Standing items

Forward Plan
Governance & Risk Monitoring
General Investment Activity Update
Investment Fund Performance
LGPS Pooling Update
Local Pension Board Minutes of Meeting

Specific items

12 June 2023	11 September 2023	11 December 2023	4 March 2024
			National Knowledge and Skills Assessment

Manager Presentations (Regular Border to Coast Partnership Presentations)

12 June 2023	11 September 2023	11 December 2023	4 March 2024

Manager Presentations, now made outside the PFISC Meetings

Training Schedule can be found in Appendix 7

Policy Reviews by the Pensions and Investment Sub-Committee

12 June 2023	11 September 2023	11 December 2023	4 March 2024
Voting and Stewardship Policy	ESG Policy	Accounting Policy	Training Policy
Investment Strategy Statement			Risk Management Review & Policy Climate Risk Policy
			Voting and Stewardship Policy
			Investment Strategy Statement

Policy Reviews by the Staff and Pensions Committee

12 June 2023	11 September 2023	11 December 2023	4 March 2024
Breaches Policy	Administration Strategy	Cyber Security Policy	Fraud Prevention Policy
Communications Policy	Admission and Termination Policy	Conflicts of Interest Policy	Business Continuity Plan
Data Retention Policy	Governance Compliance Statement Policy *		Internal Disputes Resolution Procedure Review
			Fund Discretions
			Governance Process *
			Business Plan

- Review will take place this year on the release of SAB Good Governance Review

The review of other Policies may move between quarters to meet legal and regulatory needs

Risk Appetite

Appendix 2

Risk Category	Description	Risk Appetite
Liability profile	Risk that actual benefit costs are higher than expected leading to increased contributions or investment risk to make up the shortfall. This includes higher inflation, increased longevity and changes to the composition of membership i.e. maturing fund	Minimalist
Governance	Actuarial, legal or investment advice is not sought, or is not heeded, or proves to be insufficient in some way. This includes Committee and officer skills, the decision-making structure and operational abilities.	Minimalist
Climate risk	Climate change affects liabilities (increased mortality), operational processes (physical disruption), and investment returns (pricing into company returns and covenant).	Cautious
Data	Administering Authority holds incorrect data so the Fund collects incorrect contributions and/or sets an inappropriate funding plan. This could impact the funding level.	Averse
Financial - Matching Assets (strategic)	Requirement to manage operating cashflows and ensure assets meet liabilities over the lifetime of the Scheme.	Cautious
Financial - Non-matching Assets (implementation)	Requirement to generate enough returns to meet future liabilities whilst minimising employer contributions.	Open
Regulatory	Changes by Government to LGPS rules e.g. employer participation, altered requirements. Also includes direct intervention. Could impact on funding and/or investment strategies	Averse
Administration	Pensions Act/GDPR or other breaches because of process risks around holding data, in particular member data, but also asset administration and the Pension /Fund's payroll.	Averse

Risk Appetite	Risk Appetite Description
Averse	Avoidance of risk and uncertainty is a key organisational objective
Minimalist	Uncertainty is to be avoided unless essential; only prepared to accept the possibility of very limited financial loss
Cautious	Tolerance for risk taking is limited to events where there is little chance of significant downside impact
Open	Tolerance for decisions with potential for significant risk, but with appropriate steps to minimise exposure
Hungry	Eager to pursue options offering potentially higher rewards despite greater inherent risk

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Risk Scoring Convention and Likelihood Definitions

Appendix 3

Scoring Convention

Risks are assessed on a five-point scale across likelihood and impact, with impact weighted as follows:

$$\text{Total Risk} = (\text{Likelihood} \times \text{Impact}) + \text{Impact}$$

Risks with a high impact / low probability are therefore more highly prioritised because over a long time span low probability events are more likely to occur eventually.

Likelihood Definitions

Score	Description		Likelihood of Occurrence
1	Highly Unlikely	The event may occur in only rare circumstances (remote chance)	1 in 8+ years
2	Unlikely	The event may occur in certain circumstances (unlikely chance)	1 in 4-7 years
3	Possible	The event may occur (realistic chance)	1 in 2-3 years
4	Probable	The event will probably occur (significant chance)	1 in 1-2 years
5	Very Likely	The event is expected to occur or occurs regularly	Up to 1 in every year

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Impact Score Definitions

Appendix 4

Score	Description	Members and Employers	Investments and Funding	Administration
1	Insignificant	<p>Negligible impact - not noticeable by members or employers, no complaints or issues likely to be raised by members or employers.</p> <p>Example - Member or employer communication newsletter issued a few days later than planned.</p>	<p>Negligible impact - of a level that would not register for investment action.</p> <p>Example - Normal volatility levels being experienced in the investment portfolio.</p>	<p>Negligible impact - low level administrative issues resolved internally with no impact on key performance indicators</p> <p>Example - A manageable backlog of data to be uploaded to the administration system that has no impact on actual member payments.</p>
2	Minor	<p>Minor impact on members and/or employers which may cause correspondence about issues that can be resolved at source.</p> <p>Example - A member not being given the correct information first time when corresponding with the Fund and this having to be corrected, but having no impact on benefits paid</p>	<p>Minor impact on investment operations requiring monitoring and attention but not requiring anything other than business as usual actions.</p> <p>Example - minor adverse fund investment event, such as a credit default within a private credit portfolio which is of a business as usual nature.</p>	<p>Minor impact on administration performance requiring action within business as usual parameters.</p> <p>Example - an employer experiencing persist difficulty in providing correct data resulting in the need for extra training/support/correspondence to resolve</p>
3	Moderate	<p>Material adverse impact on members or employers that is of cause for concern to them and the Fund and requires escalation for non-business as usual resolutions</p> <p>More likely to be isolated issues but could have some scale.</p> <p>Example - Inability to finalise and sign off an admission agreement with a new employer resulting in escalation.</p>	<p>Material impact requiring bespoke corrective action, but manageable within the existing Investment Strategy</p> <p>Examples - Significant drift or step change in actual in asset allocation taking the Fund risk profile out of tolerances, or significant slippage in the implementation of a significant Fund transfer</p>	<p>Material impact on administration performance, but manageable within approved policies and procedures.</p> <p>Examples - Inability to agree a transfer of membership and liabilities from another fund, requiring arbitration by a third party, or disappointing data quality scores resulting in a need for an improvement plan.</p>
4	Major	<p>Significant adverse impact on members or employers that result in a direct impact on benefits paid or contributions due or member or employer satisfaction with Fund performance. Likely to result in complaints.</p> <p>More likely to be systemic issues.</p> <p>Examples - A significant delay in the issue of member annual benefit statements, or persistently charging an employer an incorrect contribution rate.</p>	<p>Major impact requiring significant corrective action and a change in Investment Strategy or Funding Strategy, or the significant sale of assets under distress. May result in noticeable changes to employer contributions.</p> <p>Examples - Major change in the world economic outlook, or in the present value of future liabilities requiring a change in strategy, or inability to implement a significant Fund launch.</p>	<p>Major failure of administration function, likely to be systematic in nature, of a high profile nature to members and employers.</p> <p>Example - Widespread and persistent failure to meet key performance indicators such as dealing with certain types of administration query or action within deadlines, and receipt of significant numbers of complaints from members.</p>
5	Catastrophic	<p>Serious and systematic errors in benefits payments or administration KPIs, or significant volatility or increase in employer contributions.</p> <p>Significant breaches of the law</p> <p>Serious complaints and reputational harm caused</p> <p>Example - Systematic failure to monitor employer contributions resulting in subsequent identification of a large number of contribution deficits that employers cannot then catch up with.</p>	<p>Resulting in significant volatility or increase in employer contributions, inability to pay member benefits, or a need to significantly increase investment risk exposure.</p> <p>Significant failure to meet legal or regulatory requirements.</p> <p>Serious reputational harm caused</p> <p>Example - Catastrophic deterioration in the ability of employers to pay contributions resulting in a need for emergency investment and cashflow measures in order to keep paying benefits.</p>	<p>Catastrophic failure of administration function leading to inability to pay benefits accurately or at all on a large scale.</p> <p>Significant breaches of the law</p> <p>Serious complaints and reputational harm caused</p> <p>Example - Wholesale failure of the pension payroll function resulting in no member payments being made.</p>

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WPS Risk Register					Appendix 4										
Risk No.	Risk Description	Risk appetite	Risk Identification		Inherent Risk Scoring			Existing Risk Controls			Residual Risk Scoring			Further Risk Controls	
			Risk Causes	Risk Consequences (Effect)	Likelihood	Impact	Risk Score	Likelihood	Impact	Risk Score	Likelihood	Impact	Risk Score		
9	Climate Change	Caution	<ul style="list-style-type: none"> Net global carbon production in excess of Paris Agreement's 2 degree target Policy response and actions globally and nationally to combat climate change or to build resilience to long term climate, or may have negative financial or demographic consequences Fund actions or inactions exacerbating climate change and its impact 	<ul style="list-style-type: none"> Expected transition to a low-carbon economy Impact on the value of assets held, for example: <ul style="list-style-type: none"> Investment assets, or impact on the productivity and profitability of carbon sectors, companies, etc Impact on future quality of life and life expectancy (e.g. longevity) of members Impact on future inflation and value of benefits paid to members 	5.00	5.00	25.00	<ul style="list-style-type: none"> Fund considers this when allocating assets and appointing Fund Managers Climate, national and industry regulations Climate Risk Strategy reviewed in March 2023 Responsible Investment Policy Regular training on Climate Risk and mitigation actions PCF sign up to not occur before 2020 Agreed climate risk reporting metrics and an annual review of these 	5.00	5.00	25.00	<ul style="list-style-type: none"> Review 2022 UK Stewardship Code requirements and take steps to become a signatory Review Fund actions and responses to Task Force on Climate Related Financial Disclosures (TCFD) requirements Engage further with organisations around the world - Responsible Investment, including Climate Risk, objectives 			
1	Long term market risk	Misaligned	<ul style="list-style-type: none"> Inappropriate strategic asset allocation Inability to implement or adjust asset allocation Poor fund manager performance Fundamental long term events e.g. climate change, systemic risk, inflation, geopolitics Inappropriate products developed by the Border to Coast Pension Partnership Inappropriate (too high) expectations 	<ul style="list-style-type: none"> Asset values do not meet expectations Employer contributions forced to increase above expectations in a large amount at short notice Investment risk is forced to increase Future benefits cannot be paid by the Fund out of existing assets Positive inflation would increase liabilities and potentially decrease asset values 	4.00	5.00	20.00	<ul style="list-style-type: none"> Bid policy and governance arrangements including the setting of an appropriate investment strategy and funding strategy, including climate risk, the use of professional staff, consultants, and advisors, quarterly reporting to committee, appropriate asset allocation Only participate long term returns on a relatively prudent basis to reduce risk of under-performance Engagement with Border to Coast - developing funds and monitoring performance Appropriate monitoring of investment behaviour and performance Positive inflation would increase liabilities and potentially decrease asset values Regular review of Strategic Asset Allocation and Investment Strategy 	4.00	4.00	16.00				
8	Cyber Security	Averse	<ul style="list-style-type: none"> Systemic cybersecurity events (e.g. taking down financial trading institutions globally) Local cyber security events (e.g. targeting the Council) Personal cyber security events (e.g. phishing emails targeting staff) Inadequate system security, including threats to core systems Inadequate staff training and staff vigilance 	<ul style="list-style-type: none"> Loss of data and/or data disruption Reputational damage Breaches of the law Fines Costs of fixing issues Business interruption 	4.00	5.00	20.00	<ul style="list-style-type: none"> Use of schema administrator systems and system security Staff training Regular fund cyber security policy Business continuity and disaster recovery planning session with consultants Implementation of Cyber security policy Arrange for systems testing, including of the Business Continuity Plan Arrange for an audit once Member Self Service is live Regular meetings with WCCY Cyber Security team 	3.00	4.00	12.00				
2	Short term market risk	Open	<ul style="list-style-type: none"> Significant reductions in asset values Active management (BCPF) Rapid changes in the economic environment e.g. interest rate risks and inflation Inappropriate asset allocation Poor fund manager performance Global events e.g. pandemics Global political and trade tensions, including regulatory risk Event Asset bubbles Poor fund development and procurement Natural fund and market volatility Resiliability of asset value, resilience to the bond term over view 	<ul style="list-style-type: none"> Asset values do not meet expectations Cashflow requirements cannot be met efficiently or effectively Being unable to meet payment deadlines Being forced to sell assets under duress Being unable to pay benefits to members due to liquidity constraints Introducing volatility to employer contributions to these employees close to exit 	5.00	3.00	15.00	<ul style="list-style-type: none"> Diversification of assets Regular committee and officer monitoring of investment asset allocations and fund manager performance relative to benchmarks and absolute Being able to sell assets under duress Cashflow planning to avoid selling assets under duress Maintain sufficient allocation to liquid assets Long term approach to employer contributions, promoting their stability Role of fund manager presentations to the investment sub-committee Regular review of Strategic Asset Allocation 	5.00	2.00	10.00				
6	Ability to meet demand for activity	Averse	<ul style="list-style-type: none"> Growth in membership numbers Growth in complexity and difficulty of employer issues New and complex LPS regulations (e.g. McCloud, ERSI exit cap) Increasing cost of fund investments Increasing complexity of fund investments Traces of staff capacity/resilience due to long term remote working Inability to recruit / retain appropriately skilled staff Inability of the Fund officers to keep up with demand (capacity or skills) Permanently increasing customer expectations Unpopular government decisions impacting on LPS Inability to secure agreement to increasing resources Capacity at contract / service providers Increased demand on pension services due to cost of living crisis 	<ul style="list-style-type: none"> Quality of services reduce Governance failures Key administrative performance measures not met Sub-optimal investment decisions made Reputational risk Decline in health increases early retirement requests Positive inflation increases demand for SNI membership 	4.00	3.00	12.00	<ul style="list-style-type: none"> Medium term forecasting of demand and planning for the capacity and resources required Investing in quality and productivity of staff through training and development Investing in systems development Use of management information to monitor and manage performance Succession planning Procuring appropriate services through contracts Regular internal monitoring for administration team Staff training Data quality reviewed continuously Monitoring of governance arrangements and actions Responding to Government consultations Responding to Pension Specialist tender being progressed - Post new bill Introduction of medium term resource planning (Admin and Investment) Member Self Service (MSS) 	3.00	3.00	9.00	<ul style="list-style-type: none"> Investing in systems development and systems testing 			
7	Business Interruption	Averse	<ul style="list-style-type: none"> Pandemics Industrial action Small specialist teams with single person risks Significant changes in adviser and consultant personnel Lack of systems maintenance Systems failure Disaster event - fire, flood, etc Lack of remote working facilities 	<ul style="list-style-type: none"> Delays in decisions or their implementation Failure to meet performance targets Reputational damage Data quality deterioration Whistleblowing Significant restoration costs Asset allocation skills off target Fund investment risks and performance cannot be monitored Stakeholder dissatisfaction 	3.00	4.00	12.00	<ul style="list-style-type: none"> Building resilience requirements into service contracts Digital working Disaster data back up off site Disaster holding investment data Monitoring close links with advisers, consultants, and external organisations, leading to the creation of a Cyber Security Policy and Staff Loss Mitigation Strategy Use of off systems to work securely Business continuity and disaster recovery planning session with consultants 	3.00	3.00	9.00	<ul style="list-style-type: none"> Completion of documentation of investment purchase 			
11	Fraud	Averse	<ul style="list-style-type: none"> Increased financial pressure on individuals The passing of time since any previous targeted review of Fraud risk Fraud mitigated by any Fund stakeholders, e.g. members, officers, Fund trustees, trustees, and employees Scams carried out by fraudsters e.g. misrepresenting as private financial advisers or consultants 	<ul style="list-style-type: none"> Members lose benefits to fraudsters Reputational risk Time spent tackling the fraud Fraudulent members gain benefits they are not entitled to Fund incurs costs to recover losses Investment assets lost to fraud or irregularity Investment losses not reported if covered up 	3.00	3.00	9.00	<ul style="list-style-type: none"> Application of Administering Authority code of conduct to fund officers, Fraud strategy, and whistleblowing policy Application of division of duties and approval processes for financial transactions and administration Periodic independent internal audit reviews of administration and investment activity and controls Regular internal audit review Financial industry regulatory regimes governing fund manager conduct and prevention Fraud, Bribery and Corruption Framework Ongoing training to staff Actively sharing information about potential scams with members Employee's lines Regular review of Fraud management 	2.00	3.00	6.00				
12	Governance Failure	Averse	<ul style="list-style-type: none"> Lack of capacity to service governance requirements Lack of training Lack of continuity in staffing, advisors or committee / board members Inadequate checking/review of standards compared to requirements and best practice Complexity in light of recent governance improvements Out of date policies and controls Local government elections impact committee continuity Unusually revised overall governance structure and responsibility for decision making and actions Unpopular government decisions impacting on LPS Inability to sign off pension fund accounts Lack of attendance at meetings 	<ul style="list-style-type: none"> Adverse impact on Fund's reputation Exposure to operational risk or poor administration and investment performance Breaches of the law Poor decisions Decisions that are not appropriately authorised Customer dissatisfaction 	3.00	4.00	12.00	<ul style="list-style-type: none"> Training plan for committee, board, and staff created using the Knowledge and Skills Assessment Quarterly committee and board meeting cycles Training needs analysis Approval processes to be made available to all committee and Board members Management of a Fund policy schedule Quarterly risk monitoring at committee and board Quarterly monitoring of Business Plan delivery at board Use of digital technology - remote working and remote meetings Responding to government consultations Light review of compliance with Code of Practice 14 	2.00	3.00	6.00	<ul style="list-style-type: none"> Signing up to UK Stewardship Code 2020 Review of committee arrangements and Terms of Reference Review recent reporting timescales 			
3	Financial mismatch	Averse	<ul style="list-style-type: none"> Fund assets fail to grow in line with the developing cost of meeting liabilities Inadequate contributions asked of employers Employers do not pay contributions required Treatment returns lower than expected Inflation risk Inappropriate funding assumptions used Actual membership experience materially different from expectations Incorrect membership or cashflow data used to determine funding strategy Cashflow negative 	<ul style="list-style-type: none"> Funding level deteriorates Higher investment risks being taken Employer contributions increasing Being unable to pay benefits to members out of fund assets 	2.00	5.00	10.00	<ul style="list-style-type: none"> Fund valuation process using an updated investment strategy and Funding Strategy on a periodic basis Triennial valuations for all employers 4-monthly reporting on funding evolution to Committee, using relevant data Annual monitoring of longevity risk via Club Vita participation Use of professional advisers to support setting of appropriate funding assumptions Asset liability modelling focus on probability of success and level of downside risk Annual cashflow review Ongoing data quality review Understand the assumptions used in any analysis and modelling. Compare these with our own and risk levels Review of individual employer covenants, including consideration of their specific risk factors 	1.00	4.00	4.00	<ul style="list-style-type: none"> Incorporate a regular review of individual employers with bonds in place 			
4	Employer risk	Averse	<ul style="list-style-type: none"> Displaced employees General economic / financial pressure on employers Deterioration in employer financial positions Deterioration in quality of employer administration functions Inadequate support from the Fund to employers Inadequate monitoring of employers by the Fund Administrative agreements inadequate or not agreed Employer contribution rates higher than deemed affordable Some significant changes in employer base (e.g. large staff transfers between employers, and a large number of further academy conversions expected in the next year) 	<ul style="list-style-type: none"> Employers cannot pay the required contributions because contribution requirements increase too quickly or too far Employers cannot pay the required contributions because employer financial liability reduces Increased administration costs Reputational damage to the fund and its members Paying employers having to pick up costs of non paying employers Liabilities falling back to underwriting employers Over cautious investment strategy requiring higher contribution rates 	3.00	3.00	9.00	<ul style="list-style-type: none"> Creation debt or security/guarantee Spread pro-rata among all employers Employer covenant review and checking that Bonds are in place where appropriate Substitution mechanisms to limit sudden increases in contributions Branches monitoring Employer training day Fund AGM Administrative and Fundraising Policy and Funding Strategy Statement updated following the valuation Cashflow planning to provide cashflow resilience / contributions reduce CS having appropriate regard to risk and meeting the Fund's objectives Connect Liability breaches monitoring, regularly reviewed Additional liaison with known future or exiting employers on pension fund matters 	3.00	2.00	6.00				
10	Data Quality	Averse	<ul style="list-style-type: none"> McCloud impact Permanently increasing customer service expectations Good impact on member health and wellbeing - increasing the adverse impact of any problems with pensions Member benefits paid incorrectly Employer contributions higher than deemed affordable or thought necessary Inadequate data quality / Unable to meet the requirements of the Pension Dashboard when it is launched Inadequate administration systems and processes Poor data provided by employers or payroll providers 	<ul style="list-style-type: none"> Diversity cautious investment strategy requiring higher employer contributions Incorrect benefit payments to scheme members Complaints and queries from scheme members Negative reputational impact 	3.00	3.00	9.00	<ul style="list-style-type: none"> Administration governance review actions and maintenance of those standards Link with Council payroll service Maintenance of Fund website Funding Strategy having appropriate regard to risk and the meeting of fund objectives Data quality scores and reviews Staff training Performance monitoring of employer data quality Performance monitoring of administration team KPIs Connect implemented Member Self Service Light review of compliance with Code of Practice 14 Regular liaison with Scheme Employers Preparation for McCloud has been implemented, and once regulations are in place the team is ready to do the reconciliation work. Need to ensure data is available for Pension Dashboard at their introduction. 	2.00	2.00	4.00	<ul style="list-style-type: none"> UK Stewardship Code 2020 			
	Risk Identification						Inherent Risk Scoring				Existing Risk Controls		Residual Risk Scoring		Further Risk Controls

Share email with outline of changes

Reintroduce summary sheet


Column setting out whether progress has been made, or if risk level needs upgrading

Present more narrative around the red risks


Flag changes or new items quarterly - reporting by exception

Annual review

Comment further on RI engagement (in General Activity update)

Risk Category Entry Options Return Home: 			
Risk Category	Description	Risk Appetite	Risk Appetite Description
Liability profile	Risk that actual benefit costs are higher than expected leading to increased contributions or investment risk to make up the shortfall. This includes higher inflation, increased longevity and changes to the composition of membership i.e. maturing fund	Minimalist	Uncertainty is to be avoided unless essential; only prepared to accept the possibility of very limited financial loss
Governance	Actuarial, legal or investment advice is not sought, or is not heeded, or proves to be insufficient in some way. This includes Committee and officer skills, the decision-making structure and operational abilities.	Minimalist	Uncertainty is to be avoided unless essential; only prepared to accept the possibility of very limited financial loss
Climate risk	Climate change affects liabilities (increased mortality), operational processes (physical disruption), and investment returns (pricing into company returns and covenant).	Cautious	Tolerance for risk taking is limited to events where there is little chance of significant downside impact
Data	Administering Authority holds incorrect data so the Fund collects incorrect contributions and/or sets an inappropriate funding plan. This could impact the funding level.	Averse	Avoidance of risk and uncertainty is a key organisational objective
Financial - Matching Assets (strategic)	Requirement to manage operating cashflows and ensure assets meet liabilities over the lifetime of the Scheme.	Cautious	Tolerance for risk taking is limited to events where there is little chance of significant downside impact
Financial - Non-matching Assets (implementation)	Requirement to generate enough returns to meet future liabilities whilst minimising employer contributions.	Open	Tolerance for decisions with potential for significant risk, but with appropriate steps to minimise exposure
Regulatory	Changes by Government to LGPS rules e.g. employer participation, altered requirements. Also includes direct intervention. Could impact on funding and/or investment strategies	Averse	Avoidance of risk and uncertainty is a key organisational objective
Administration	Pensions Act/GDPR or other breaches as a result of process risks around holding data, in particular member data, but also asset administration and the Pension Fund's payroll.	Averse	Avoidance of risk and uncertainty is a key organisational objective

n.b. If more risk categories are required, please insert a row between row 6 and 7 to ensure the drop down options in tab 2 updates correctly

Risk Appetite Descriptions	
	Return Home: 
Risk Appetite	Risk Appetite Description
Averse	Avoidance of risk and uncertainty is a key organisational objective
Minimalist	Uncertainty is to be avoided unless essential; only prepared to accept the possibility of very limited financial loss
Cautious	Tolerance for risk taking is limited to events where there is little chance of significant downside impact
Open	Tolerance for decisions with potential for significant risk, but with appropriate steps to minimise exposure
Hungry	Eager to pursue options offering potentially higher rewards despite greater inherent risk

WCC - Corporate

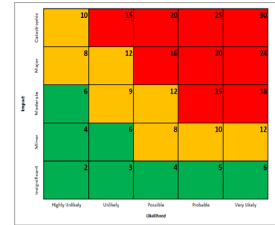
Risk Identification		Inherent Risk Scoring			Residual Risk Scoring		
Risk No.	Risk Description	Likelihood	Impact	Risk Score	Likelihood	Impact	Risk Score
1	Long term asset values do not meet expectations	Likelihood	Impact	#VALUE!	Likelihood	Impact	#VALUE!
12	Governance Failure	Inherent Risk Scoring	0.00	#VALUE!	Residual Risk Scoring	0.00	#VALUE!
2	Short term asset values do not meet expectations	5.00	5.00	30.00	5.00	5.00	30.00
3	Liabilities cannot be met	4.00	5.00	25.00	4.00	4.00	20.00
4	Employer contributions not paid	4.00	5.00	25.00	3.00	4.00	16.00
6	Inability to meet demand for activity	4.00	3.00	15.00	3.00	3.00	12.00
5	Pooling objectives not met	5.00	3.00	18.00	5.00	2.00	12.00
7	Business interruption	3.00	4.00	16.00	2.00	3.00	9.00
9	Climate Change	3.00	3.00	12.00	3.00	2.00	8.00
8	Cyber Security	2.00	5.00	15.00	1.00	4.00	8.00
10	Customer satisfaction	3.00	3.00	12.00	2.00	2.00	6.00
11	Fraud	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!

1. Risk Assessment Criteria				
Score	Description	Probability of Occurrence	Likelihood of Occurrence	
1	Highly Unlikely	The event may occur in only rare circumstances (remote chance)	1 in 8+ years	
2	Unlikely	The event may occur in certain circumstances (unlikely chance)	1 in 4-7 years	
3	Possible	The event may occur (realistic chance)	1 in 2-3 years	
4	Probable	The event will probably occur (significant chance)	1 in 1-2 years	
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Score	Description	Members and Employers	Investments and Funding	Administration
1	Insignificant	Negligible impact - not noticeable by members or employers, no complaints or issues likely to be raised by members or employers. Example - Member or employer communication newsletter issued a few days later than planned.	Negligible impact - of a level that would not register for investment action. Example - Normal volatility levels being experienced in the investment portfolio.	Negligible impact - low level administrative issues resolved internally with no impact on key performance indicators Example - A manageable backlog of data to be uploaded to the administration system that has no impact on actual member payments.
2	Minor	Minor impact on members and/or employers which may cause correspondence about issues that can be resolved at source. Example - A member not being given the correct information first time when corresponding with the Fund and this having to be corrected, but having no impact on benefits paid	Minor impact on investment operations requiring monitoring and attention but not requiring anything other than business as usual actions. Example - minor adverse fund investment event, such as a credit default within a private credit portfolio which is of a business as usual nature.	Minor impact on administration performance requiring action within business as usual parameters. Example - an employer experiencing persist difficulty in providing correct data resulting in the need for extra training/support/correspondence to resolve
3	Moderate	Material adverse impact on members or employers that is of cause for concern to them and the Fund and requires escalation for non-business as usual resolutions More likely to be isolated issues but could have some scale. Example - Inability to finalise and sign off an admission agreement with a new employer resulting in escalation.	Material impact requiring bespoke corrective action, but manageable within the existing Investment Strategy Examples - Significant drift or step change in actual in asset allocation taking the Fund risk profile out of tolerances, or significant slippage in the implementation of a significant Fund transfer	Material impact on administration performance, but manageable within approved policies and procedures. Examples - Inability to agree a transfer of membership and liabilities from another fund, requiring arbitration by a third party, or disappointing data quality scores resulting in a need for an improvement plan.
4	Major	Significant adverse impact on members or employers that result in a direct impact on benefits paid or contributions due or member or employer satisfaction with Fund performance. Likely to result in complaints. More likely to be systemic issues. Examples - A significant delay in the issue of member annual benefit statements, or persistently charging an employer an incorrect contribution rate.	Major impact requiring significant corrective action and a change in Investment Strategy or Funding Strategy, or the significant sale of assets under distress. May result in noticeable changes to employer contributions. Examples - Major change in the world economic outlook, or in the present value of future liabilities requiring a change in strategy, or inability to implement a significant Fund launch.	Major failure of administration function, likely to be systematic in nature, of a high profile nature to members and employers. Example - Widespread and persistent failure to meet key performance indicators such as dealing with certain types of administration query or action within deadlines, and receipt of significant numbers of complaints from members.
5	Catastrophic	Serious and systematic errors in benefits payments or administration KPIs, or significant volatility or increase in employer contributions. Significant breaches of the law Serious complaints and reputational harm caused Example - Systematic failure to monitor employer contributions resulting in subsequent identification of a large number of contribution deficits that employers cannot then catch up with.	Resulting in significant volatility or increase in employer contributions, inability to pay member benefits, or a need to significantly increase investment risk exposure. Significant failure to meet legal or regulatory requirements. Serious reputational harm caused Example - Catastrophic deterioration in the ability or employers to pay contributions resulting in a need for emergency investment and cashflow measures in order to keep paying benefits.	Catastrophic failure of administration function leading to inability to pay benefits accurately or at all on a large scale. Significant breaches of the law Serious complaints and reputational harm caused Example - Wholesale failure of the pension payroll function resulting in no member payments being made.

1. Risk Assessment Criteria			
Risk Likelihood			
Score	Description		Likelihood of Occurrence
1	Highly Unlikely	The event may occur in only rare circumstances (remote chance)	1 in 8+ years
2	Unlikely	The event may occur in certain circumstances (unlikely chance)	1 in 4-7 years
3	Possible	The event may occur (realistic chance)	1 in 2-3 years
4	Probable	The event will probably occur (significant chance)	1 in 1-2 years
5	Very Likely	The event is expected to occur or occurs regularly	Up to 1 in every year


Risk Impact



Score	Description	Members and Employers	Investments and Funding	Administration
1	Insignificant	Negligible impact - not noticeable by members or employers, no complaints or issues likely to be raised by members or employers. Example - Member or employer communication newsletter issued a few days later than planned.	Negligible impact - of a level that would not register for investment action. Example - Normal volatility levels being experienced in the investment portfolio.	Negligible impact - low level administrative issues resolved internally with no impact on key performance indicators Example - A manageable backlog of data to be uploaded to the administration system that has no impact on actual member payments.
2	Minor	Minor impact on members and/or employers which may cause correspondence about issues that can be resolved at source. Example - A member not being given the correct information first time when corresponding with the Fund and this having to be corrected, but having no impact on benefits paid	Minor impact on investment operations requiring monitoring and attention but not requiring anything other than business as usual actions. Example - minor adverse fund investment event, such as a credit default within a private credit portfolio which is of a business as usual nature.	Minor impact on administration performance requiring action within business as usual parameters. Example - an employer experiencing persist difficulty in providing correct data resulting in the need for extra training/support/correspondence to resolve
3	Moderate	Material adverse impact on members or employers that is of cause for concern to them and the Fund and requires escalation for non-business as usual resolutions More likely to be isolated issues but could have some scale. Example - Inability to finalise and sign off an admission agreement with a new employer resulting in escalation.	Material impact requiring bespoke corrective action, but manageable within the existing Investmetn Strategy Examples - Significant drift or step change in actual in asset allocation taking the Fund risk profile out of tolerances, or significant slippage in the implementation of a significant Fund transfer	Material impact on administration performance, but manageable within approved policies and procedures. Examples - Inability to agree a transfer of membership and liabilities from another fund, requiring arbitration by a third party, or disappointing data quality scores resulting in a need for an improvement plan.
4	Major	Significant adverse impact on members or employers that result in a direct impact on benefits paid or contributions due or member or employer satisfaction with Fund performance. Likely to result in complaints. More likely to be systemic issues. Examples - A significant delay in the issue of member annual benefit statements, or persistently charging an employer an incorrect contribution rate.	Major impact requiring significant corrective action and a change in Investmet Strategy or Funding Strategy, or the significant sale of assets under distress. May result in noticeable changes to employer contributions. Examples - Major change in the world economic outlook, or in the present value of future liabilities requiring a change in strategy, or inability to implement a significant Fund launch.	Major failure of administration function, likely to be systematic in nature, of a high profile nature to members and employers. Example - Widespread and persistent failure to meet key performance indicators such as dealing with certain types of administration query or action within deadlines, and receipt of significant numbers of complaints from members.
5	Catastrophic	Serious and systematic errors in benefits payments or administration KPIs, or significant volatility or increase in employer contributions. Significant breaches of the law Serious complaints and reputational harm caused Example - Systematic failure to monitor employer contributions resulting in subsequent identification of a large number of contribution deficits that employers cannot then catch up with.	Resulting in significant volatility or increase in employer contributions, inability to pay member benefits, or a need to significantly increase investment risk exposure. Significant failure to meet legal or regulatory requirements. Serious reputaitonal harm caused Example - Catastrophic deterioration in the ability or employers to pay contributions resulting in a need for emergency investment and cashflow measures in order to keep paying benefits.	Catastrophic failure of administration function leading to inability to pay benefits accurately or at all on a large scale. Significant breaches of the law Serious complaints and reputational harm caused Example - Wholesale failure of the pension payroll fuction resulting in no member payments being made.

Corporate Risk Register Guidance

* Example used is loss of key staff

Return Home: 

Risk Identification

Heading	Description	Additional Guidance	Example
Risk No.	A reference number for identifying the risk in the register and on the risk map	Numbers should be sequential	1, 2, 3 etc.
Risk Description	A brief outline of the risk scenario	This should be a specific and realistic scenario	Loss of key talent / skillsets within the organisation
Risk Causes	Events or situations that can cause the risk to crystallise or cause the controls to fail	Causes should be written as a list of processes, actions or events	1. Inability to replace vacancies in a timely manner 2. Lack of adequate succession planning
Risk Consequences	Events or situations that may arise following the occurrence of the risk identified	Give a list of credible outcomes that may impact the organisation or business unit if the risk occurred	1. Loss of key skillsets and / or knowledge 2. Inability to meet strategic objectives
Risk Category	Defines the specific category the risk relates to	See risk category options in tab 5	Strategic
Risk Owner	The individual who is accountable for the risk and has enough authority to implement action	The risk owner should be the 'go to' person if you needed further information on the risk	John Smith / Head of HR
Aligned Strategic Objective	Defines which strategic objective relates to the specified risk	-	Grow quickly, globally

Inherent Risk Scoring

Heading	Description	Guidance	Example
Likelihood	Likelihood of the risk occurring with no controls in place	Mean score must lie between 1 and 5 - see Risk Assessment Criteria in tab 2	3.2
Impact	Impact of the risk occurring with no controls in place	Mean score must lie between 1 and 5 - see Risk Assessment Criteria in tab 1	2.8
Risk Score	Risk score based on likelihood and impact with no controls in place	Risk score is automatically generated by multiplying risk likelihood by impact and adding the impact score	8.96

Risk Controls

Heading	Description	Guidance	Example
Current Controls	Details the controls currently in place used to mitigate the risk	Controls should be listed sequentially	1. Strong internal career progression opportunities
Control Effectiveness Score	State whether the current controls are effective, fair or poor	-	Fair
Control Improvement Option	Details controls that could be implemented to improve risk mitigation	Controls should be listed sequentially	1. Implement flexible working and better employee benefits structure

Residual Risk Scoring

Heading	Description	Guidance	Example
Likelihood	Likelihood of the risk occurring with current controls in place	Mean score must lie between 1 and 5 - see Risk Assessment Criteria in tab 2	3.2
Impact	Impact of the risk occurring with current controls in place	Mean score must lie between 1 and 5 - see Risk Assessment Criteria in tab 1	2.8
Risk Score	Risk score based on likelihood and impact with current controls in place	Risk score is automatically generated by multiplying risk likelihood by impact and adding the impact score	8.96

Target Risk Scoring

Heading	Description	Guidance	Example
Likelihood	Likelihood of the risk occurring with controls in place that the organisation would like to attain in the future	Mean score must lie between 1 and 5 - see Risk Assessment Criteria in tab 2	3.2
Impact	Impact of the risk occurring with controls in place that the organisation would like to attain in the future	Mean score must lie between 1 and 5 - see Risk Assessment Criteria in tab 1	2.8
Target Risk Score	The risk score the organisation would like to attain in the future	Risk score is automatically generated by multiplying risk likelihood by impact and adding the impact score	6.5

Risk Review

Heading	Description	Guidance	Example
Risk Review Period	Intended date when any action measures will be in place	-	30/06/19
Additional Notes	Any additional notes regarding the risk	-	Continue to monitor risk and reassess as necessary

Note: Corporate Risk Register has been created and developed by Marsh Advisory (part of Marsh Limited). Please refer to Marsh Advisory with any queries relating to functionality of the document.

Source: Funding Strategy Statement

Risk Category	Description	Risk Appetite
Administration - Member Services	Risk of failure to pay benefits or failure to maintain complete and correct data	Averse
Administration - Employer Services	Risk of failure to collect appropriate data or contributions from employers, or failure to have appropriate governance in place, for example having admission agreements in place and appropriate contribution rates calculated	Averse
Cashflow	Risk of inability to pay benefits due to members and other amounts due to third parties (e.g. capital calls), and risk of becoming a forced seller of assets	Minimalist
Investment - Income and Protection Assets	Risk of failure to manage operating cashflows, failure to provide suitable diversification and risk reduction, counterparty exposure risk.	Cautious
Investment - Growth Assets	Risk of failure to generate enough returns to meet future liabilities whilst minimising employer contributions	Open
Long term funding strategy	Risk of failure to adequately forecast and manage funding risk resulting in insufficient funds available to pay benefits, inappropriately high/low or volatile employer contribution requirements, etc	Cautious
Governance	Risk of governance failure or not meeting regulatory requirements	Averse
Climate Change	The risk of climate change impacting adversely on the ability of the Fund to meet its objectives	Cautious

Financial risks		
Matching	Long-term asset returns	Fund assets fail to deliver returns in line with the anticipated returns underpinning the valuation of liabilities and contribution rates over the longterm.
Matching	Inflation	Pay and price inflation significantly more than anticipated.
Non-matching	Investment strategy	Inappropriate long-term investment strategy.
Non-matching	Active management	Active investment manager under-performance relative to benchmark.
Non-matching	Climate Change	Effect of possible asset underperformance as a result of climate change
Contribution	Contribution rates	Effect of possible increase in employer's contribution rate on service delivery and admission/scheduled bodies
Contribution	Orphaned employers	Orphaned employers give rise to added costs for the Fund

Demographic risks		
Liability profile	Longevity	Pensioners living longer, thus increasing cost to Fund.
Liability profile	Maturing Fund	Maturing Fund – i.e. proportion of actively contributing employees declines relative to retired employees.
Liability profile	Early retirements	Deteriorating patterns of early retirements
Liability profile	Active members	Reductions in payroll causing insufficient deficit recovery payments

Regulatory risks		
Regulatory	Altered requirements	Changes to national pension requirements and/or HMRC rules e.g. changes arising from public sector pensions reform.
Regulatory	Intervention	Time, cost and/or reputational risks associated with any MHCLG intervention triggered by the Section 13 analysis
Regulatory	Employer participation	Changes by Government to particular employer participation in LGPS Funds, leading to impacts on funding and/or investment strategies

Governance		
Data	Membership structure	Administering Authority unaware of structural changes in an employer's membership (e.g. large fall in employee members, large number of retirements) or not advised of an employer closing to new entrants.
Process	Advice	Actuarial or investment advice is not sought, or is not heeded, or proves to be insufficient in some way
Contribution	Terminations	Administering Authority failing to commission the Fund Actuary to carry out a termination valuation for a departing Admission Body.
Contribution	Cessation	An employer ceasing to exist with insufficient funding or adequacy of a bond.
Contribution	Exit	An employer ceasing to exist resulting in an exit credit being payable

Warwickshire Pension Fund

Investment Strategy Statement



June 2023

Warwickshire Pension Fund

Investment Strategy Statement

May 2023

Introduction and background

This is the Investment Strategy Statement (“ISS”) of the Warwickshire Pension Fund (“the Fund”), which is administered by Warwickshire County Council, (“the Administering Authority”). The ISS is made in accordance with Regulation 7 of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 (“the Regulations”).

The ISS has been prepared by the Fund’s Investment Sub Committee (“the Committee”) having taken advice from the Fund’s investment adviser, Hymans Robertson LLP. The Committee acts on the delegated authority of the Administering Authority.

The ISS, which was approved by the Committee on 12 March 2021, is subject to periodic review at least every three years and without delay after any significant change in investment policy. The Committee has consulted on the contents of the Fund’s investment strategy with such persons it considers appropriate.

The Committee seeks to invest in accordance with the ISS any Fund money that is not immediately required to make payments from the Fund. The ISS should be read in conjunction with the Fund’s Funding Strategy Statement, Responsible Investment and Climate Risk policies.

The Fund has adopted a set of guiding principles when considering investments and investment strategy. These are outlined in appendix 2 of the statement.

The suitability of particular investments and types of investments

The primary objective of the Fund is to provide pension and lump sum benefits for members on their retirement and/or benefits on death for their dependants, on a defined benefits basis. The funding position will be reviewed at each triennial actuarial valuation, or more frequently as required.

The Committee aims to fund the Fund in such a manner that, in normal market conditions, all accrued benefits are fully covered by the value of the Fund's assets and that an appropriate level of contributions is agreed by the employers to meet the cost of future benefits accruing. For employee members, benefits will be based on service completed but will take account of future salary and/or inflation increases.

The Committee has translated its objectives into a suitable strategic asset allocation benchmark for the Fund. This benchmark is consistent with the Committee's views on the appropriate balance between generating a satisfactory long-term return on investments whilst taking account of market volatility and other risks and the nature of the Fund's liabilities.

The broad approach that the Fund has taken to setting an appropriate investment strategy is as follows:

- In order to generate attractive long term returns on the portfolio, a proportion of the investments will be in growth assets such as equities.
- To help diversify equity risk and assist with cash flow, a proportion of the investments will also be in income assets, such as property and infrastructure, which are structured to deliver both capital growth and a regular income stream.
- To reduce the volatility of investment returns, and to help protect its capital value, the remaining portfolio will be invested in protection assets which are lower risk and have a low correlation with equity and other growth markets.
- The Fund will maintain a sufficient level of liquidity in the investment portfolio, such that it can facilitate the normal cash flow requirements of the scheme, such as paying pensions, without becoming a forced seller of assets.

It is intended that the Fund's investment strategy will be reviewed at least every three years following actuarial valuations of the Fund.

In 2022, the Fund carried out an asset liability modelling exercise in conjunction with the 2022 actuarial valuation. The Fund's liability data from the valuation was used in the modelling, and the implications of adopting a range of alternative contribution and investment strategies were assessed. The implications for the future evolution of the Fund was considered under a wide range of different scenarios.

The Committee assessed the likelihood of achieving their long-term funding target – which was defined at that time as achieving a fully funded position within the next 19 years. They also considered the level of downside risk associated with different strategies by identifying the impact on funding levels of a range of adverse economic/market scenarios.

A summary of the expected returns and volatility for each asset class included in the modelling is included in Appendix 1.

This approach helps to ensure that the investment strategy takes due account of the maturity profile of the Fund (in terms of the relative proportions of liabilities in respect of pensioners, deferred and active members), together with the level of disclosed surplus or deficit (relative to the funding bases used).

It is anticipated that a further detailed review of the investment strategy will be carried out during 2025/26 in conjunction with the then proximate actuarial valuation.

In addition, the Committee monitors the investment strategy on an ongoing basis, focusing on factors including, but not limited to:

- Suitability given the Fund's level of funding and liability profile
- The level of expected risk
- Outlook for asset returns
- Environmental, Social and Governance (ESG) factors.

The Committee also monitors the Fund's actual allocation on a regular basis to ensure it does not deviate inappropriately from the target allocations set for each asset class. The Committee has set ranges around the strategic asset allocation and will seek advice on re-balancing the portfolio if any individual asset class moves outside its agreed range.

Investment of money in a wide variety of asset classes

The Fund may invest in quoted and unquoted securities of UK and overseas markets including equities, fixed interest and index linked bonds, loans, property, infrastructure, alternative credit and cash either directly or through pooled funds.

The Fund may also make use of contracts for differences and other derivatives either directly or in pooled funds, investing in these products for the purpose of efficient portfolio management or to hedge specific risks.

The Committee reviews the nature of Fund investments on a regular basis, with particular reference to suitability and diversification. The Committee seeks and considers written advice from a suitably qualified person in undertaking such a review. If, at any time, investment in a security or product not previously known to the Committee is proposed, appropriate advice is sought and considered to ensure its suitability and diversification.

The Fund's current investment strategy is set out below. The table also includes the control ranges agreed for re-balancing purposes and therefore the maximum percentage of total Fund assets that it will invest in these asset classes. In addition, the Committee have agreed a new long term strategic target asset allocation, reflecting the likely 'direction of travel' between now and the next actuarial valuation. The Fund will take incremental steps in implementing this strategy as suitable investment opportunities become available.

In line with the Regulations, the authority's investment strategy does not permit more than 5% of the total value of all investments of fund money to be invested in entities which are connected with that authority within the meaning of section 212 of the Local Government and Public Involvement in Health Act 2007.

Asset class %	Current Target	Control range	Long term target
UK equities	16.0	+/-2.5	8.0
Developed markets (ex UK) equities	30.0	+/-2.5	28.0
Emerging markets equities	3.0	+/-2.5	6.0
Private equity	4.0	-	6.0
Total Growth	53.0	-	48.0
Property	10.0	-	10.0
Infrastructure	7.0	-	10.0
Private debt	5.0	-	7.0
Multi-asset credit	10.0	-	10.0
Total Income	32.0	-	37.0
UK corporate bonds	10.0	+/-1.5	10.0
UK index linked bonds	5.0	+/-0.5	5.0
Total Protection	15.0	-	15.0
Total	100.0	-	100.0

Restrictions on investment

The Regulations have removed the previous restrictions that applied under the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2009. The Committee's approach to setting its investment strategy and assessing the suitability of different types of investment takes account of the various risks involved and a rebalancing policy is applied to maintain the asset split close to the agreed asset allocation target. Therefore it is not felt necessary to set additional restrictions on investments.

Managers

The Committee has appointed a number of investment managers all of whom are authorised under the Financial Services and Markets Act 2000 to undertake investment business.

The Committee, after seeking appropriate investment advice, has agreed specific benchmarks with each manager so that, in aggregate, they are consistent with the overall asset allocation for the Fund. The Fund's investment managers will hold a mix of investments which reflects their views relative to their respective benchmarks. Within each major market and asset class, the managers will maintain diversified portfolios through direct investment or pooled vehicles. The manager of the passive funds in which the Fund invests holds a mix of investments within each pooled fund that reflects that of their respective benchmark indices.

The individual investment manager mandates in which the Fund assets are currently invested are as follows:-

Investment Manager	Asset Class	Fund type	Style
Legal and General Investment Manger	Regional Equities, Investment Grade Credit, Index-Linked Bonds	Pooled fund	Passive
Legal and General Investment Manager	Fundamental Global Equity	Pooled fund	Quasi-active
Border to Coast Pensions Partnership (BTC)	UK Equities, Global Equities, Multi-Asset Credit, Investment Grade Credit	Pooled fund	Active
Border to Coast Pensions Partnership (BTC)	Private Equity, Private Debt, Infrastructure	Fund of Funds	Active
Schroders	UK Property	Fund of Funds	Active
Threadneedle	UK Property	Pooled Fund	Active
Alcentra	Private Debt	Pooled Fund	Active
Partners Group	Private Debt	Pooled Fund	Active
Harbourvest	Private Equity	Fund of Funds	Active
Aberdeen Standard	Infrastructure	Pooled Fund	Active
Partners Group	Infrastructure, Private Debt	Pooled fund	Active
Barings	Private Debt	Pooled fund	Active
ICG	Private Debt	Pooled fund	Active
IFM	Infrastructure	Pooled fund	Active

The approach to risk, including the ways in which risks are to be measured and managed

The Committee is aware that the Fund has a need to take investment risk to help it achieve its funding objectives. It has an active risk management programme in place that aims to help it identify the risks being taken and put in place processes to manage, measure, monitor and (where possible) mitigate the risks being taken. One of the Committee's overarching beliefs is to only take as much investment risk as is necessary to achieve its objectives.

The principal risks affecting the Fund are set out below. We also discuss the Fund's approach to managing these risks and the contingency plans that are in place:

Funding risks

Key funding risks considered include:

- Financial mismatch – The risk that Fund assets fail to grow in line with the developing cost of meeting the liabilities.
- Changing demographics – The risk that longevity improves and other demographic factors change, increasing the cost of Fund benefits.
- Systemic risk - The possibility of an interlinked and simultaneous failure of several asset classes and/or investment managers, possibly compounded by financial 'contagion', resulting in an increase in the cost of meeting the Fund's liabilities.

The Committee measures and manages financial mismatch in two ways.

- As indicated above, the Committee has set a strategic asset allocation benchmark for the Fund. This benchmark was set taking into account asset liability modelling which focused on probability of success and level of downside risk. The Committee assesses risk relative to the strategic benchmark by monitoring the Fund's asset allocation and investment returns relative to the benchmark.
- The Committee also assesses risk relative to liabilities by monitoring the delivery of benchmark returns relative to liabilities.

The Committee also seeks to understand the assumptions used in any analysis and modelling so they can be compared to their own views and the level of risks associated with these assumptions to be assessed.

The Committee seeks to mitigate systemic risk through a diversified portfolio but it is not possible to make specific provision for all possible eventualities that may arise under this heading.

Asset risks

- Market risk – The risk that the market value of the Fund’s assets falls.
- Concentration - The risk that a significant allocation to any single asset category and its underperformance relative to expectation would result in difficulties in achieving funding objectives.
- Illiquidity - The risk that the Fund cannot meet its immediate liabilities because it has insufficient liquid assets.
- Currency risk – The risk that assets denominated in foreign currencies are devalued relative to Sterling (i.e. the currency of the liabilities).
- Environmental, Social and Governance (“ESG”) risks – The risk that ESG related factors reduce the Fund’s ability to generate long-term returns.
- Climate risk - The extent to which climate change causes a material deterioration in asset values as a consequence of factors including but not limited to policy change, physical impacts and the expected transition to a low-carbon economy.
- Geopolitical risk – The risk of underperformance driven by unexpected changes or events involving political, military or trade factors.
- Manager underperformance - The failure by the fund managers to achieve the rate of investment return assumed in setting their mandates.

The Committee measures and manages asset risks as follows.

The Fund’s strategic asset allocation benchmark invests in a diversified range of asset classes. The Committee has put in place re-balancing arrangements to ensure the Fund’s actual allocation does not deviate substantially from its target. The Fund invests in a range of investment mandates each of which has a defined objective, performance benchmark and manager process which, taken in aggregate, help reduce the Fund’s asset concentration risk. By investing across a range of assets, including liquid quoted equities and bonds, as well as property and other income assets, the Committee has recognised the need for access to liquidity in the short term.

The Fund invests in a range of overseas markets which provides a diversified approach to currency markets; the Committee also assess the Fund’s currency risk during their risk analysis.

Details of the Fund’s approach to managing climate and other ESG risks is set out later in this document.

The Committee has considered the risk of underperformance by any single investment manager and has attempted to reduce this risk by appointing more than one manager and having a proportion of the Fund’s assets managed on a passive basis, and will

take steps, including potentially replacing one or more of their managers, if underperformance persists.

Other provider risk

- Transition risk - The risk of incurring unexpected costs in relation to the transition of assets among managers. When carrying out significant transitions, the Committee seeks suitable professional advice.
- Custody risk - The risk of losing economic rights to Fund assets, when held in custody or when being traded.
- Credit default - The possibility of default of a counterparty in meeting its obligations.
- Stock-lending – The possibility of default and loss of economic rights to Fund assets.

The Committee monitors and manages risks in these areas through a process of regular scrutiny of its providers, and audit of the operations it conducts for the Fund, or has delegated such monitoring and management of risk to the appointed investment managers as appropriate (e.g. custody risk in relation to pooled funds). The Committee has the power to replace a provider should serious concerns exist.

A separate schedule of risks that the Fund monitors is set out in the Fund's Funding Strategy Statement.

The approach to pooling investments, including the use of collective investment vehicles and shared services

The Fund is a participating scheme in the Border to Coast Pensions Partnership (BTC). The proposed structure and basis on which the BTC pool will operate was set out in the July 2016 submission to Government.

Assets to be invested in the Pool

The Fund's intention is to invest its assets through the BTC pool as and when suitable investment solutions become available. An indicative timetable for investing through the Pool was set out in the July 2016 submission to Government. The key criteria for assessment of Pool solutions will be as follows:

- 1 That the Pool enables access to an appropriate solution that meets the objectives and benchmark criteria set by the Fund.
- 2 That there is financial benefit to the Fund in investing in the solution offered by the Pool.

BTC launched their first sub-funds in 2018 and there is a timetable in place covering the proposed fund launches over the coming years. The Fund has invested assets in the UK Equity Alpha fund, Global Equity Alpha fund, Investment Grade Credit fund, Multi-Asset Credit fund and Alternatives sub-funds (private equity, infrastructure and private debt).

The Fund retains the following assets outside of the BTC pool:

- Passive investments with Legal and General are currently held through life policies and these will continue to be directly held by the Fund. However, the Fund benefits from fee savings through joint fee negotiations with other partner funds within BTC.
- The Fund has investments in a number of closed end funds as part of its private markets programme. These funds invest in underlying private equity, private debt and infrastructure investments. Each of the individual funds has a fixed life with all assets being returned to investors within a specified period. There is no liquid secondary market for these types of investment – and there is a risk that sales would only be possible at material discounts to net asset value. Therefore, the Committee believes that it is in the best interests of the Fund to retain these investments.

The Fund also retains the option to undertake local impact investing either outside of the pool or inside the pool as best meets Fund objectives.

Any assets which are not invested in the BTC pool will be reviewed at least every three years to determine whether the rationale remains appropriate, and whether it continues to demonstrate value for money. The next such review will take place no later than 2026.

Structure and governance of the BTC Pool

The July 2016 submission to Government of the BTC Pool provided a statement addressing the structure and governance of the Pool, the mechanisms by which the Fund can hold the Pool to account and the services that will be shared or jointly procured. Government approved this approach on 12 December 2016.

A Financial Conduct Authority (FCA) regulated company has been established to manage the assets of BTC Funds. The Board of Directors for the new company has been appointed and a senior management team put in place. Based on legal advice describing the options on holding shares in this company, BTC Limited, the Fund holds all voting and non-voting shares rather than the Council. This is because the purpose of the company is to meet the needs of the BTC Funds in complying with the regulations on pooling, rather than for a Council specific purpose.

As the Pool develops, the Fund will include further information in future iterations of the ISS.

ESG Policy

This policy addresses how social, environmental or corporate governance (“ESG”) considerations are taken into account in the selection, non-selection, retention and realisation of investments

It is recognised that ESG factors, including climate change, are financially material to the Fund’s investments at all stages of the investment process as they have the potential to significantly affect long term investment performance and the ability to achieve long term sustainable returns. The Committee considers the Fund’s approach to responsible investment in two key areas:

- Sustainable investment / ESG factors – considering the financial impact of environmental, social and governance (ESG) factors into account in investment decision making.
- Stewardship and governance – acting as responsible and active investors/owners, through considered voting of shares, and engaging with investee company management as part of the investment process.

The Committee takes ESG matters, including climate change, seriously and regularly reviews its policies in this area and its investment managers’ approach to ESG.

The Fund believes in collective engagement and is a member of the Local Authority Pension Fund Forum (LAPFF), through which it collectively exercises a voice across a range of corporate governance issues. The Fund will also engage collectively with partner funds through its relationship with BTC.

The Fund has developed a separate more in-depth Responsible Investment Policy and Climate Risk Policy. These policies can both be found on the Fund’s website. They outline how the Fund implements, monitors and discloses its approach to ESG related risks.

In Q1 2021, the Committee and officers undertook a dedicated training session on the risks climate change poses to the Fund. This included climate change scenario modelling which aimed to illustrate how the Fund’s funding position could be impacted in the future by climate and ESG risks under a variety of scenarios. The Fund aims to take further action with regards to ESG governance and oversight, in conjunction with BTC. Work is expected to include; ESG reporting, carbon footprinting, and setting measureable metrics and targets for driving change.

Investments made via BTC are subject to its responsible investment policies that can be found here:

https://www.bordertocoast.org.uk/?dln_download_category=download-responsibleinvestment-policy

The Committee has reviewed BTC’s responsible investment policies and is satisfied they are consistent with the Fund’s own policies. The Fund will regularly monitor BTC’s

responsible investment policies and actively engage with the pool to facilitate change as required.

Historically the Fund's approach to social investments has largely been to delegate this to their underlying investment managers as part of their overall ESG duties. The Fund's managers reported on this matter as part of the Fund's annual ESG review.

The Fund does not currently hold any assets which it deems to be social investments.

The exercise of rights (including voting rights) attaching to investments

Voting rights

The Committee have approved its own voting policy with the objective of preserving and enhancing long term shareholder value.

Historically the Fund actively voted on the Fund's segregated equity holdings through a voting platform. The Funds segregated equities have now been transitioned into BTC equity pooled funds. As a result, BTC vote on behalf of the Fund in line with the BTC voting and engagement policy. The BTC voting and engagement policy has been reviewed by the Committee.

The funds past voting record can be found here:

<https://www.warwickshirepensionfund.org.uk/home/investments/1>

The voting record of assets invested via BTC can be found on its website here:

<https://www.bordertocoast.org.uk/sustainability/>

Both the Fund and BTC's voting policies are reviewed on a regular basis.

Stewardship

An enhanced UK Stewardship Code 2020 took effect on 1 January 2020. The Committee expects both BTC and any directly appointed fund managers to comply with the Stewardship Code and is monitored on an annual basis.

At the FRC's most recent review, BTC were rated as tier 1 signatories.

Appendices

Appendix 1 – Expected returns

Appendix 2 – Investment Guiding Principles

Appendix 1 - Expected returns and volatilities

The table below shows the absolute expected returns (20 year geometric averages), net of fees, and the absolute volatilities (first year's standard deviations) as of 31 March 2023. .

As at 31 March 2023	Expected return % p.a.	Volatility % p.a.
UK equity	7.5	18
Developed markets ex UK equity	7.4	19
Emerging markets equity	7.6	26
Private equity	11.4	34
Property	6.4	15
Private debt	7.8	12
Infrastructure equity	7.9	17
Multi-Asset Credit	6.3	8
Corporate Bonds (A-rated average)	4.7	8
Index Linked Gilts (long)	2.4	9
Cash	3.7	0

Appendix 2 – Investment Guiding Principles

The Fund adopts the following principles when considering investments and investment strategy.

Purpose

1. The Fund's primary purpose is to pay pension benefits to its members.
2. The Committee should focus on ensuring the Fund has sufficient financial resources to meet its obligations, including efficient management of the Fund's cash position.
3. The Committee should ensure that accrued benefits are fully funded (on a 20-year view).
4. The Fund should set a stable and affordable level of contributions for each employer to fund future service benefits. Long-term stability and affordability are more important than the short-term level of contribution rates.
5. The Fund is a long-term investment vehicle which should be managed to generate sustainable investment returns over the long-term. This will be achieved by Responsible Investment ("RI"), which is the practice of integrating consideration of Environmental, Social and Governance ("ESG") factors, including climate change, into the investment process (as further defined by the UN Principles for Responsible Investment – www.unpri.org).

Strategy

6. The Fund should take a long-term view when setting investment strategy although the impact of short-term volatility should also be considered.
7. Strategic asset allocation is the most important determinant of investment outcomes and it is here that the optimum balance of risk and return is set.
8. The Fund's investment strategy and risk appetite should be set with due consideration for its liabilities and funding strategy which is reviewed at each actuarial valuation.
9. The Fund should consider as broad a range of investment opportunities as possible, subject to these being compatible with its risk appetite and RI considerations
10. Investment risk should only be taken where the Committee believes it will be rewarded over the longer term.
11. Appropriate diversification of asset and manager risks reduces overall risk but may lower returns; excessive diversification creates complexity and may increase risk.
12. The Fund invests for the long-term, so ESG factors are expected to have a material impact on investment outcomes.

13. The Committee believes that climate change and the expected transition to a low carbon economy will have a significant long-term impact on the Fund and considers managing the associated financial risks to be part of its fiduciary duty.
14. The Committee believes that the transition to a low carbon economy will create investment opportunities and will mandate the Fund's investment managers to seek out these opportunities.
15. The Committee believes that an RI approach will enhance long-term investment outcomes as well as benefiting the economies and societies in which the Fund invests, and is therefore consistent with the Fund's primary purpose.
16. The Committee believes that, in relation to the management of ESG factors, ongoing engagement with portfolio companies is preferable to divestment. Divestment should remain an option if engagement proves unsuccessful.

Implementation

17. Pooling presents an opportunity to access best in class investments at a low cost. The Fund has a bias to using pool products but will only invest if they are aligned with its investment strategy and offer comparable outcomes to best-in-class external solutions.
18. Both active and passive management strategies, where available, will be considered as implementation options. Active managers will be expected to demonstrate a strong track record of delivering expected returns, with performance assessed over a suitably long period.
19. Foreign currency exposure is inherent to a global portfolio of investments. The Committee believes the strategic hedging of currency exposure from volatile asset classes such as equities has limited benefit to long-term investment returns.
20. Fees and costs incurred within investment manager mandates are important though the primary focus should be on achieving the best risk-adjusted returns net of fees.
21. Systematic rebalancing, subject to appropriate tolerances, can add value over the longer term.

Governance

22. Effective governance not only ensures appropriate levels of control over the Fund but can add value through improved decision making and resource allocation.
23. Staff and members of the Fund's Investment Sub-Committee must have, or have access to, the correct level of skills and investment knowledge to take investment decisions and manage risk effectively.
24. The Fund should retain responsibility for setting RI policy but will delegate much of the implementation to BCPP and its other investment managers. The Committee regularly monitors and evaluates its investment managers' approach to RI.

25. The Fund should only invest with managers who comply with relevant regulations and codes of practice (eg UK Stewardship Code) and have committed to provide full disclosure on ESG issues.
26. The Fund expects its investment managers to invest responsibly and to engage proactively with the management of portfolio companies on key ESG issues, including climate change, wherever it is cost effective to do so. The aim of such engagement should be to enhance investment returns and risk profile by positively influencing portfolio companies on such matters.
27. The Committee believes engagement is more effective when carried out in collaboration with other investors (eg via BCPP or LAPFF).
28. Full disclosure of the Fund's RI policy and activity strengthens accountability and should be embraced.

Appendix 7

	A	B	C	D	E
1	Training Plan for Warwickshire Pension Fund und 2022-2024				
2	Month of Delivery	Title of Training & Date of Delivery	Delivered to:	Deliveted by:	Reason for Training
3	Apr-22				
4					
5	May-22	Pension Administration - 6th May (Completed)	Committee / Board / Officers	Vicky Jenks / Martin Griffiths	Identified by Knowledge and Skills Assessment
6					
7	Jun-22	Equities and carbon Workshop - 6th June (Completed)	Committee / Board / Officers	Hymans Robertson	Proposed changes to the Fund's equity portfolio
8					
9	Jul-22	Valuation and Section 13 - 18 July (Completed)	Committee / Board/ Officers	Hymans Robertson	Outcome of valuation
10					
11	Aug-22	Property Workshop - 9th August (Completed)	Committee / Board/ Officers	Hymans Robertson	Proposed changes to property portfolio
12					
13	Sep-22				
14					
15	Oct-22				
16					
17	Nov-22	Annual Meeting - 4th November (Completed)	Committee / Board / Officers	Hymans Robertson / Border to Coast / Officers	General Update
18		BCPP Fixed Income Products (Completed)	Committee/ Board/ Officers	Border to Coast	Pre Meeting - Update
19	Dec-22	Protection Portfolio Workshop- 1st December (Completed)	Committee/ Board/ Officers	Hymans Robertson	General Update
20					
21	Jan-23	General LGPS Overview (In person) - 31st January	Committee / Board / Officers	Anthony & Bob (Fund Advisers)	Identified in Knowledge and Skills Assessment
22		This will include a specific Investment Overview			
23	Feb-23				
24					
25	Mar-23				
26					
27	Apr-23	Good Governance and Regulators Code of Practice (TBC)	Committee / Board/ Officers	Hymans Robertson/ Officers	Identified in Knowledge and Skills Assessment
28		This will include the Role of the Committee			
29	May-23				
30					
31	Jun-23				
32					

	A	B	C	E
1	Month of Delivery	Title of Training & Date of Delivery	Delivered to:	Reason for Training
2	Apr-23			
3				
4	May-23			
5				
6	Jun-23			
7				
8	Jul-23			
9				
10	Aug-23	The role of Border to Coast and an update on Pooling (TBC)	Committee / Officers	General Update
11				
12	Sep-23	Role of the Committee and Board	Committee / Board / Officers	Knowledge and Skills Training
13		Good Governance Review and General Code of Practice		
14	Oct-23	Pensions Accounting and Audit Standards / Annual Report (TBC)	Committee / Board / Officers	Knowledge and Skills Assessment
15				
16	Nov-23	Annual Meeting (24 November - Warwick Racecourse)	Committee / Board / Officers	General Update
17				
18	Dec-23			
19				
20	Jan-24			
21				
22	Feb-24			
23				
24	Mar-24			
25				
26				
27	We are currently arranging dates for the August, September and October training with our advisors.			
28				
29	We are happy to deliver training on any other areas that members feel would be of assistance.			
30				

Pension Fund Investment Sub-Committee

12 June 2023

Climate Risk Report

Recommendation

That the Pension Fund Investment Sub-Committee notes and comments on this report.

1. Executive Summary

- 1.1 The purpose of this paper is to inform the Pension Fund Investment Sub-Committee (PFISC) about the Fund's climate risk exposure.
- 1.2 Appendix 1 is a report by the Fund's investment consultant, Hymans Robertson, looking at the key metrics agreed by the PFISC in June 2022.
- 1.3 The glossary on page 2 of Appendix 1 sets out the meanings of the metrics used in the report.
- 1.4 Some of the key findings are that:
 - i.) Climate data is only available for 52% of the Fund's assets.
 - ii.) The year-on-year movement shows a broadly net neutral position in Tonnes of CO₂ per \$m Carbon (a total emissions metric).
 - iii.) Based on the available data, the underlying funds are generally positioned well against their benchmarks on each of the carbon metrics.
 - iv.) There are several underlying companies whose contribution to their individual fund's carbon footprint significantly outweighs their allocation. The intention is for the Fund's officers to engage with its investment managers in relation to these companies, with the objective of managing and mitigating climate risk via proactive and effective engagement.
 - v.) The Fund may wish to consider engaging with the managers of its funds that are not included in this report to provide support for more climate risk reporting.

2. Financial Implications

- 2.1 Climate risk, as set out in the Fund's [Investment Beliefs](#) and its [Climate Risk Policy](#), is expected to have a material impact on the Fund's investment outcomes. The Committee believes that a [Responsible Investment approach](#)

will enhance long-term investment outcomes as well as benefiting the economies and societies in which the Fund invests, and is therefore consistent with the Fund's primary purpose.

3. Environmental Implications

- 3.1 The purpose of this report is to continue discussion about future reporting around carbon metrics and priorities with an awareness that data collection remains a limiting factor.

4. Supporting Information

- 4.1 Appendix 1 – Climate Risk Report (Hymans Robertson)

Background Papers

13 June 2022 PFISC, [Agenda Item 4: Carbon Footprint Report](#)

	Name	Contact Information
Report Authors	Paul Higginbotham Victoria Moffett	paulhigginbotham@warwickshire.gov.uk victoriamoffett@warwickshire.gov.uk,
Assistant Director – Finance	Andrew Felton	andrewfelton@warwickshire.gov.uk
Strategic Director for Resources	Rob Powell	robpowell@warwickshire.gov.uk
Deputy Leader and Portfolio Holder for Finance and Property	Peter Butlin	peterbutlin@warwickshire.gov.uk

The report was circulated to the following members prior to publication:

Local Members: Cllrs Kettle and Gifford

Other members: n/a

Warwickshire Pension Fund

Climate Risk Report
Q2 2023

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Philip Pearson, Senior Investment Consultant
James Glasgow, Investment Consultant
Chipo Hove, Investment Analyst
Priyam Jain, Investment Analyst

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Understanding Climate Risk Metrics

Metric	Description/ Methodology
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.
Total Carbon 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.
Tonnes CO2e per \$m Carbon Footprint (EVIC)	This shows the portfolio's carbon footprint. This is calculated by adding up the total carbon emissions and dividing by the portfolio's total EVIC (enterprise value including cash).
Green Revenues %	The weighted average % of revenue for portfolio companies derived from any of the six environmental impact themes including alternative energy, energy efficiency, green building, pollution prevention, sustainable water, or sustainable agriculture.
Low Carbon Transition Score	A company level score that measures a company's level of alignment to the Low Carbon Transition. Companies with higher Low Carbon Transition score are more aligned with the Low Carbon Transition compared to the companies with lower scores. (Score: 0-10)
Portfolio owning clean technology solutions	Companies involved in clean technology solutions earn more than 0% of their revenues in the following categories: Alternative Energy, Energy Efficiency, Green Building, Pollution Prevention, and Sustainable Water.
Portfolio With Ties to Fossil Fuels	The percentage of the portfolio invested in companies with an industry tie to fossil fuels (thermal coal, oil and gas), in particular reserve ownership, related revenues and power generation. It does not flag companies providing evidence of owning metallurgical coal reserves.

Executive Summary

This paper sets out some key metrics for the Fund’s carbon exposure as at the latest available date. This being December 2022, where available or March 2022 for some metrics that are only reported annually.

This paper only focuses on the Fund’s listed or public assets, and does not cover the private assets that the Fund invests in. We expect that the private asset funds reporting will improve over time.

There are several companies whose contribution to the Fund’s carbon footprint significantly outweighs their allocation. We recommend that the Fund engages with its investment managers in relation to these companies, with the objective of managing and mitigating climate risk via proactive and effective engagement.

We note that in this report all data has been provided by the managers, and we have carried out high level sense checks rather than a detailed review of the data. We would be happy to provide a more detailed report should the Committee wish to take this approach.

Key Takeaways

Subject	Comments	Action																											
Climate Risk	<ul style="list-style-type: none"> The Fund’s managers are broadly exposed to lower levels of Climate Risk than their market benchmarks, this is based on numerous climate risk metrics. 	<ul style="list-style-type: none"> The Fund should engage with their managers to understand what steps they take to ensure climate risk is integrated in the investment process and any recent manager engagements they have had. 																											
Top emitters for each LGIM mandate	<table border="1"> <thead> <tr> <th>LGIM Fund</th> <th>Top 3 emitters contribution to Fund WACI</th> <th>% of Total LGIM Fund assets represented by the top 3 emitters</th> </tr> </thead> <tbody> <tr> <td>UK Equity Fund</td> <td>38%</td> <td>10%</td> </tr> <tr> <td>Emerging Markets Equity Fund</td> <td>14%</td> <td>7%</td> </tr> <tr> <td>Asia Pac (ex Jap) Equity Fund</td> <td>53%</td> <td>6%</td> </tr> <tr> <td>European (ex UK) Equity Fund</td> <td>36%</td> <td>2%</td> </tr> <tr> <td>Japan Equity Fund</td> <td>19%</td> <td>2%</td> </tr> <tr> <td>North American Equity Fund</td> <td>17%</td> <td>1%</td> </tr> <tr> <td>IG Corporate Bond All Stocks Index</td> <td>9%</td> <td>1%</td> </tr> <tr> <td>RAFI All World 3000 Equity Fund</td> <td>8%</td> <td>1%</td> </tr> </tbody> </table>	LGIM Fund	Top 3 emitters contribution to Fund WACI	% of Total LGIM Fund assets represented by the top 3 emitters	UK Equity Fund	38%	10%	Emerging Markets Equity Fund	14%	7%	Asia Pac (ex Jap) Equity Fund	53%	6%	European (ex UK) Equity Fund	36%	2%	Japan Equity Fund	19%	2%	North American Equity Fund	17%	1%	IG Corporate Bond All Stocks Index	9%	1%	RAFI All World 3000 Equity Fund	8%	1%	<ul style="list-style-type: none"> The Fund should engage with LGIM to understand any recent engagement activity with the business on low carbon management strategies that they plan to put in place.
LGIM Fund	Top 3 emitters contribution to Fund WACI	% of Total LGIM Fund assets represented by the top 3 emitters																											
UK Equity Fund	38%	10%																											
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IG Corporate Bond All Stocks Index	9%	1%																											
RAFI All World 3000 Equity Fund	8%	1%																											
Data	<ul style="list-style-type: none"> This report only covers c.52% of the Fund’s total assets. This lack of coverage is expected to improve over time. We expect scope 3 emissions to be included in next year’s reporting and more consistency in metrics used across managers. 	<ul style="list-style-type: none"> The Fund may wish to consider engaging with the managers not included in this paper to provide support for more carbon reporting. 																											

Funds reviewed

We have received data from the following managers:

- BTC – UK Listed Equity Alpha fund, Global Equity Alpha fund and Sterling Investment Grade Credit Fund
- LGIM – regional equity funds, RAFI Equity fund and Investment Grade Corporate Bond All Stocks Index fund

It is important to note that these managers have provided their reporting data in different formats, which makes a clear comparison between funds difficult to carry out. We expect that next year’s reporting will be improved and there will be more consistency across manager reporting.

Executive Summary

The chart plots emissions intensity vs proportion of AUM (covering those assets for which reporting was available).

For LGIM this is represented by carbon footprint (tCO2e per \$m EVIC) while BTC is Carbon Emissions/\$m invested (per \$m of equity).

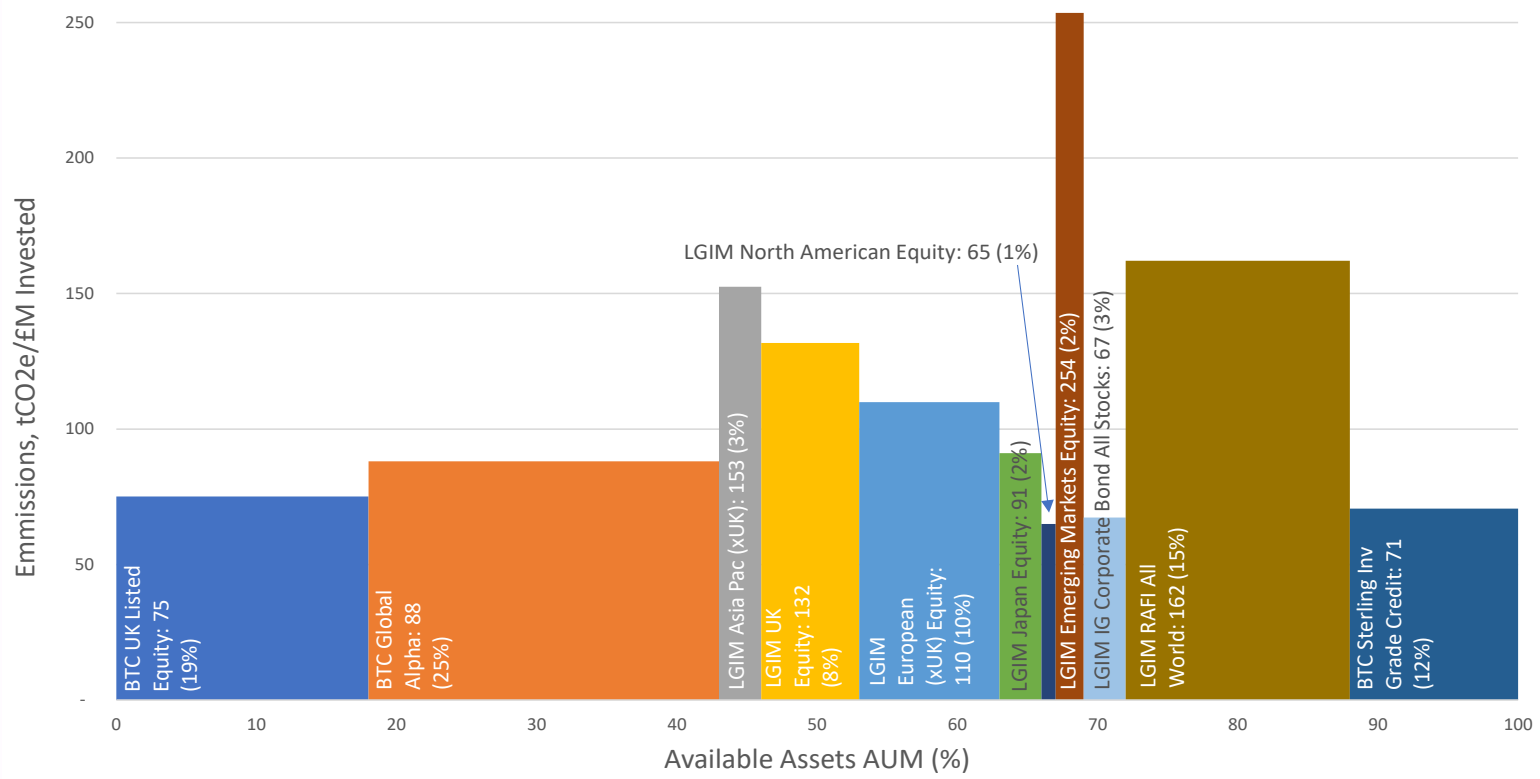
Due to the differences in metrics provided the chart should be used for illustrative purposes only.

The area of each block represents the absolute volume of emissions financed by each mandate. The larger the area the more emissions.

The largest contributor is LGIM RAFI mainly because of its high emissions intensity. Decarbonising this mandate should be a priority for the fund.

The second largest is BTC GEA, although we note the manager has already made good progress in reducing emissions intensity.

Contribution to Fund Emissions



Notes :

The above chart based on the available data provided by the managers and doesn't represent the full AUM of the Fund. As such the AUM allocations (%) shown are based on the available assets only.

BTC Funds

The BTC UK Listed Equity Fund experienced a decrease in WACI and Carbon Intensity while the Global Equity Alpha Fund had an increase in both metrics.

The percentage of the portfolio owning clean energy increased for both funds but the percentage of the portfolio with ties to fossil fuels increased for the UK Listed Equity Fund and decreased slightly for the Global Equity Alpha Fund.

UK Listed Equity Alpha metrics	Mar-22	Mar 21	Year on Year Change
Weighted Average Carbon Intensity (tCO2/\$m Sales)	61	81	-20
Carbon Emissions (tCO2)/\$m Invested (per \$m of equity)	75	122	-47
% Of Portfolio owning clean technology solutions	23%	22%	1%
% Of Portfolio With Ties to Fossil Fuels	16%	12%	4%

Global Equity Alpha metrics	Mar-22	Mar-21	Year on Year Change
Weighted Average Carbon Intensity (tCO2/\$m Sales)	95	67	28
Carbon Emissions (tCO2)/\$m Invested (per \$m of equity)	88	51	37
% Of Portfolio owning clean technology solutions	29%	28%	1%
% Of Portfolio With Ties to Fossil Fuels	2%	3%	-1%

*All BTC comparison metrics are shown as at 31 March 2022 as only partial data (WACI and Carbon Emissions) was available as at 31 December 2022

LGIM Funds

Climate Risk Analysis

There was no significant change year on year on the LGIM Fund's Green Revenues, however, WACI for the Emerging markets Fund saw the greatest increase with the IG Corporate Bond Fund seeing decrease in it WACI.

	WACI (tCO2/\$m sales)		
	Dec-22	Mar-21	Change
UK	202	138	64
North America	212	138	74
European (ex UK)	177	143	35
Asia Pacific (ex Japan)	345	358	-13
Japan	117	92	24
Emerging Markets	591	325	266
RAFI	289	247	43
IG Corporate Bonds	126	168	-42

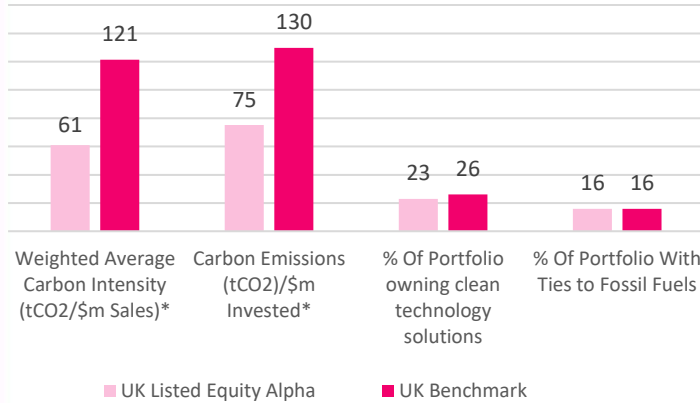
	Green Revenues (%)		
	Dec-22	Mar-21	Change
UK	2%	2%	0%
North America	3%	3%	0%
European (ex UK)	6%	6%	0%
Asia Pacific (ex Japan)	3%	2%	1%
Japan	4%	3%	1%
Emerging Markets	6%	7%	0%
RAFI	3%	3%	0%
IG Corporate Bonds	3%	4%	-1%

	Tonnes CO2e per \$m Carbon		
	Mar-22	Mar-21	Change
UK	85	85	0
North America	46	42	4
European (ex UK)	90	98	-8
Asia Pacific (ex Japan)	115	100	15
Japan	80	77	3
Emerging Markets	187	178	9
RAFI	130	148	-17
IG Corporate Bonds	67	78	-11

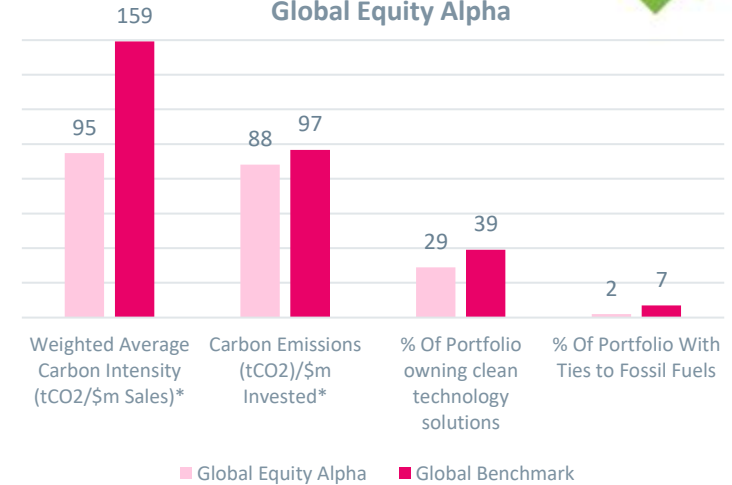
	% Of Portfolio With Ties to Fossil Fuels		
	Mar-22	Mar-21	Change
UK	10%	6%	4%
North America	4%	3%	1%
European (ex UK)	4%	3%	0%
Asia Pacific (ex Japan)	3%	3%	0%
Japan	1%	1%	0%
Emerging Markets	6%	6%	0%
RAFI	9%	9%	0%
IG Corporate Bonds	3%	3%	0%

BTC funds

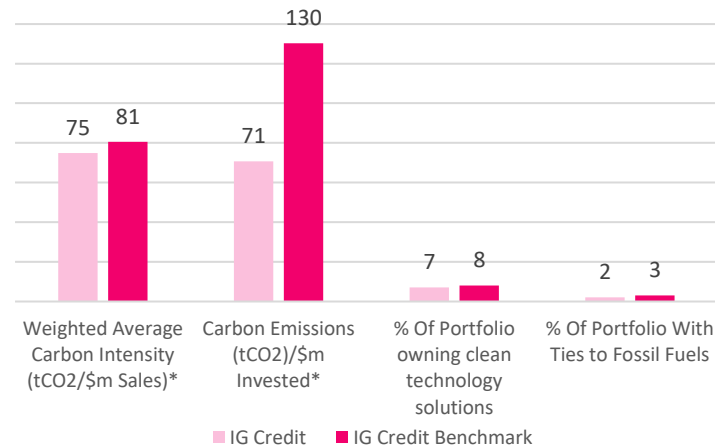
UK Listed Equity Alpha



Global Equity Alpha



Investment Grade Credit



Source: *BTC. WACI and Carbon emissions data is as at 31 December 2022 and Clean technology and Ties to fossil fuels is as at 31 March 2022
Fund benchmark for UK Listed Equity Alpha is FTSE ALL Share Index and for Global Equity Alpha is MSCI ACWI

We have compared the two BTC equity funds that the Fund invests in against their respective benchmarks using selected carbon metrics.

The funds outperform their respective benchmarks in three of the four metrics. However, both funds have a lower proportion of the assets in clean technology solutions. This is because BTC categorisation is more stringent than MSCI ACWI index.

In terms of the Fund's private market investments, BTC have stated that their portfolios are relatively immature and therefore BTC expect carbon data coverage to develop over time.

Key Takeaways/ Actions

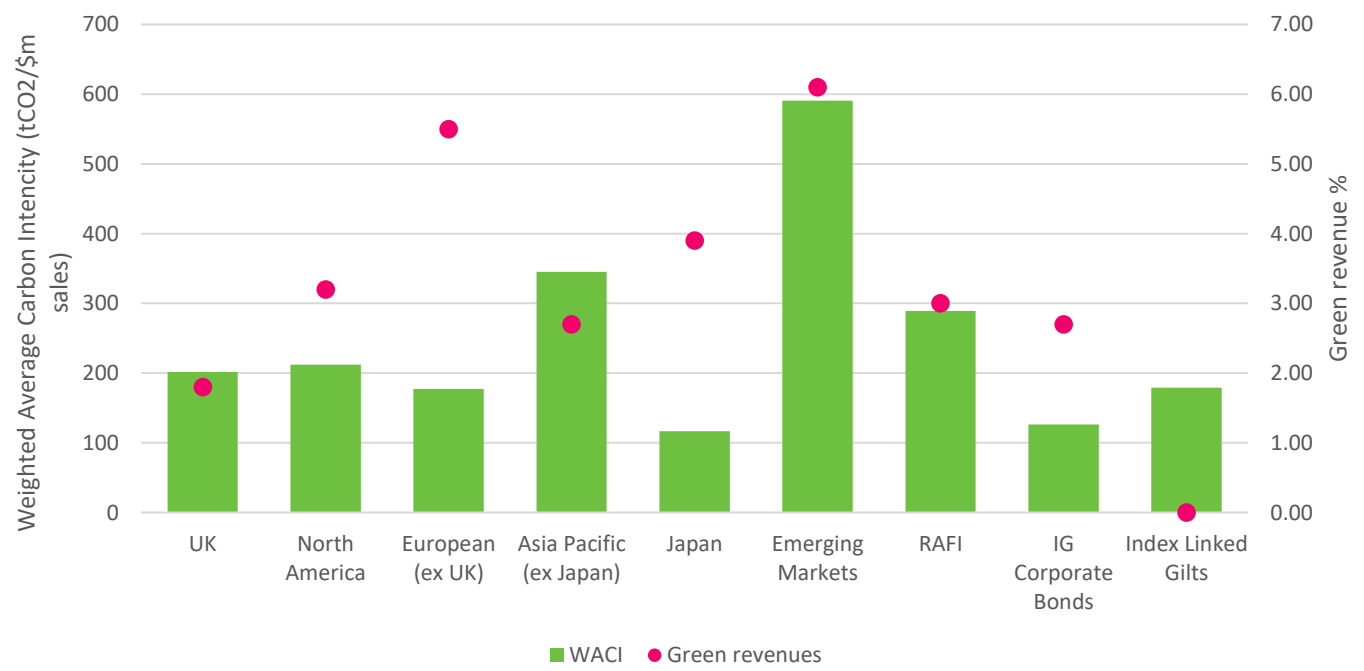
- The two funds perform well from a climate perspective, although they underperform benchmarks in terms of proportion of the portfolio owning clean technology solutions.
- It would be good to understand the manager's integration of carbon risk into the investment strategy.

Climate Risk Analysis

LGIM have shared details on the underlying fund exposures as at 31 December 2022. The Fund holds 9 funds with LGIM, which span regional/global equity, corporate bonds and gilts funds.

LGIM exposures

- The Asia Pacific (ex Japan) and Emerging Markets funds have the greatest WACI exposure. These regions tend to have more exposure to companies with a higher carbon footprint.
- The Emerging Markets and European (ex UK) funds have the highest proportion of assets with green revenue.
- We note that the LGIM RAFI fund, which invests based on a non-price weighted index strategy, has a higher WACI than most of the regional funds. This is due to the fund being heavily weighted towards value stocks, which tend to be in the oil/gas and utilities sectors.



Key Takeaways/ Actions

- We suggest that the Fund engages with LGIM with regard to some or all of these companies.

Source: LGIM data, as at 31 December 2022. LGIM use ISS for carbon data and Refinitiv for enterprise value and HSBC for green revenue data. 0% Green revenues for Index Linked Gilts

Climate Risk Analysis

The RAFI Equity fund shows a mixed performance against the carbon metrics, with a higher WACI and lower ties to green revenues and a lower proportion of ties to fossil fuels.

The RAFI Equity Fund also represent the Funds largest allocation to LGIM assets and is therefore the largest listed LGIM contributor to Emission as per the chart on slide 4

The European Equity fund has a higher carbon impact than the FTSE Europe ex UK Index but is relatively more favourable across all illustrative metrics.

Please note that the benchmark shown on this page is for illustration only and some of the differences between the fund and the benchmark shown may be due to differences in the underlying assets rather than a drift away from the benchmark. However we are investigating the anomalies with LGIM.

RAFI All World 3000 Equity Fund

	Weighted Average Carbon Intensity (tCO2/£m Sales)	Carbon Footprint (tCO2e per \$m EVIC)	Green Revenues	Ties to Fossil Fuels
Fund	231.7	130.2	2.5%	8.9%
FTSE RAFI AW	244.6	n/a	3.6%	16.5%
Relative	-12.9	n/a	-1.1%	-7.7%

Top 5 Carbon Emitters	Weighted Average Carbon Intensity (tCO2/£m Sales)	Contribution to WACI	% of total Fund assets
Duke Energy Corp	6.1	2.6%	0.2%
Exxon Mobil Corp	6.0	2.6%	1.2%
Southern Co/The	5.8	2.5%	0.1%
American Electric Power Co Inc	4.7	2.0%	0.1%
Vistra Corp	3.9	1.7%	0.0%

European (ex UK) Equity Fund

	Weighted Average Carbon Intensity (tCO2/£m revenue)	Carbon Footprint (tCO2e per \$m EVIC)	Green Revenues	Ties to Fossil Fuels
Fund	136.2	90.3	5.1%	3.6%
FTSE Europe ex UK	129.4	n/a	4.8%	10.2%
Relative	6.8	n/a	0.3%	-6.6%

Top 5 Carbon Emitters	Weighted Average Carbon Intensity (tCO2/£m Sales)	Contribution to WACI	% of total Fund assets
RWE AG	22.8	16.8%	0.4%
Holcim Ltd	15.1	11.1%	0.3%
Air Liquide SA	11.7	8.6%	1.0%
ArcelorMittal SA	6.2	4.6%	0.2%
EnelSpA	5.5	4.0%	0.2%

Source: *LGIM data is as at 31 March 2022. LGIM use ISS for carbon data and Refinitiv for enterprise value and HSBC for green revenue data.

Fund benchmark for LGIM RAFI All World 3000 Equity Fund is L&G FTSE RAFI AW 3000 QSR and LGIM Investment Grade Corporate Bond All Stocks Index is Markit iBoxx GBP Non-Gilts Total Return

Climate Risk Analysis

The UK Equity fund has a higher carbon impact than its comparable benchmark.

Based on the top 5 emitters, we note that the UK fund has a number of stocks which contribute significantly more to emissions than their capital weight such as CRH PLC.

The Investment Grade Credit allocation represents a mixed performance against the metrics with a higher WACI but much lower tie to fossil fuels.

The top 5 carbon emitters also represent a minor allocation within the fund.

Please note that the benchmark shown on this page is for illustration only and some of the differences between the fund and the benchmark shown may be due to differences in the underlying assets rather than a drift away from the benchmark. However we are investigating the anomalies with LGIM.

UK Equity Fund

	Weighted Average Carbon Intensity (tCO2/£m revenue)	Carbon Footprint (tCO2e per \$m EVIC)	Green Revenues	Ties to Fossil Fuels
Fund	125.5	85.2	1.6%	10.2%
FTSE All-Share	143.6	n/a	2.5%	4.9%
Relative	-18.1	n/a	-0.9%	5.3%

Top 5 Carbon Emitters	Weighted Average Carbon Intensity (tCO2/£m Sales)	Contribution to WACI	% of total Fund assets
Rio Tinto PLC	18.1	14.4%	2.8%
Shell PLC	16.0	12.7%	6.3%
CRH PLC	13.5	10.7%	1.0%
Anglo American PLC	12.7	10.2%	2.0%
SSE PLC	8.5	6.8%	0.8%

Investment Grade Corporate Bond All Stocks Index

	Weighted Average Carbon Intensity (tCO2/£m Sales)	Carbon Footprint (tCO2e per \$m EVIC)	Green Revenues	Ties to Fossil Fuels
Fund	124.3	67.03	3.3%	2.7%
Markit iBoxx Non-Gilts	102.8	n/a	5.9%	10.8%
Relative	21.5	n/a	-2.6%	-8.1%

Top 5 Carbon Emitters	Weighted Average Carbon Intensity (tCO2/£m Sales)	Contribution to WACI	% of total Fund assets
Enel Finance International NV	4.4	3.5%	0.3%
Engie SA	3.7	3.0%	0.3%
Holcim Sterling Finance Netherlands (May2032)	3.4	2.7%	0.0%
Holcim Sterling Finance Netherlands (Apr2034)	3.2	2.6%	0.0%
VeoliaEnvironnementSA	2.7	2.2%	0.2%

Source: LGIM data is as at 31 March 2022. LGIM use ISS for carbon data and Refinitiv for enterprise value and HSBC for green revenue data.

Fund benchmark for LGIM UK Equity Fund is FTSE All Share and LGIM North American Equity Fund is FTSE World North America.

Climate Risk Analysis

The Asia Pacific fund also does not compare as favourably across the majority of the metrics with the exception being Ties to Fossil fuels.

The Asia Pacific fund's largest contributor to emissions (Power Assets Holdings) contributes 42% of the fund's WACI but makes up less than 1% of total fund assets.

The Emerging Markets Equity funds shows a mixed performance against the carbon metrics. With a higher WACI and lower ties to fossil fuels.

Please note that the benchmark shown on this page is for illustration only and some of the differences between the fund and the benchmark shown may be due to differences in the underlying assets rather than a drift away from the benchmark. However we are investigating the anomalies with LGIM.

Asia Pac (ex Japan) Equity Fund

	Weighted Average Carbon Intensity (tCO2/£m revenue)	Carbon Footprint (tCO2e per \$m EVIC)	Green Revenues	Ties to Fossil Fuels
Fund	422.9	114.6	1.9%	2.7%
FTSE Asia ex Japan	209.7	n/a	4.8%	13.9%
Relative	213.2	n/a	-2.8%	-11.2%

Top 5 Carbon Emitters	Weighted Average Carbon Intensity (tCO2/£m Sales)	Contribution to WACI	% of total Fund assets
Power Assets Holdings Ltd	178.9	42.3%	0.3%
CLP Holdings Ltd	23.3	5.5%	0.5%
BHP Group Ltd	21.1	5.0%	5.5%
Woodside Petroleum Ltd	18.1	4.3%	0.7%
CKInfrastructure Holdings Ltd	14.0	3.3%	0.1%

Emerging Markets Equity Fund

	Weighted Average Carbon Intensity (tCO2/£m revenue)	Carbon Footprint (tCO2e per \$m EVIC)	Green Revenues	Ties to Fossil Fuels
Fund	380.2	186.9	6.7%	6.1%
FTSE Emerging Markets	334.2	n/a	4.5%	11.3%
Relative	46.0	n/a	2.3%	-5.1%

Top 5 Carbon Emitters	Weighted Average Carbon Intensity (tCO2/£m Sales)	Contribution to WACI	% of total Fund assets
NTPC Ltd	20.2	5.3%	0.1%
Taiwan Semiconductor Manufacturing Company	18.9	5.0%	7.2%
UltraTech Cement Ltd	12.7	3.3%	0.2%
Sasol Ltd	11.1	2.9%	0.2%
China Resources Power Holdings Co	8.5	2.2%	0.1%

Source: *LGIM data is as at 31 March 2022. LGIM use ISS for carbon data and Refinitiv for enterprise value and HSBC for green revenue data. Fund benchmark for LGIM European (ex UK) Equity Fund is FTSE Developed Europe ex UK and LGIM Asia Pac (ex Japan) Equity Fund is FTSE Developed Asia Pacific ex Japan.

Climate Risk Analysis

The Japan fund shows a mixed performance against the carbon metrics. With a higher WACI and lower ties to fossil fuels. Green revenues are also unfavourable at -1.8% relative to the benchmark.

The North America fund has a higher carbon impact but lower ties to fossil fuels compared to its benchmark.

Japan Equity Fund

	Weighted Average Carbon Intensity (tCO2/£m revenue)	Carbon Footprint (tCO2e per \$m EVIC)	Green Revenues	Ties to Fossil Fuels
Fund	94.2	79.6	3.6%	1.1%
FTSE Japan Index	85.5	n/a	5.3%	4.5%
Relative	+8.6	n/a	-1.8%	-3.4%

Top 5 Carbon Emitters	Weighted Average Carbon Intensity (tCO2/\$m Sales)	Contribution to WACI	% of total Fund assets
Shin-Etsu Chemical Co Ltd	6.6	7.0%	1.5%
NipponSteel Corp	6.1	6.5%	0.4%
Chubu Electric PowerCoInc	5.1	5.4%	0.2%
Electric Power Development Co Ltd	3.7	3.9%	0.1%
MitsuiOSK LinesLtd	3.3	3.5%	0.2%

North American Equity Fund

	Weighted Average Carbon Intensity (tCO2/£m revenue)	Carbon Footprint (tCO2e per \$m EVIC)	Green Revenues	Ties to Fossil Fuels
Fund	146.2	45.8	3.8%	3.6%
FTSE North America	140.1	n/a	5.2%	13.1%
Relative	+6.1	n/a	-1.3%	-10.5%

Top 5 Carbon Emitters	Weighted Average Carbon Intensity (tCO2/£m Sales)	Contribution to WACI	% of total Fund assets
NextEra Energy Inc	10.4	7.1%	0.4%
Southern Co/The	7.6	5.2%	0.2%
Duke Energy Corp	7.0	4.8%	0.2%
American Electric Power Co Inc	6.0	4.1%	0.1%
Linde PLC	5.2	3.6%	0.4%

Source: LGIM data is as at 31 March 2022. LGIM use ISS for carbon data and Refinitiv for enterprise value and HSBC for green revenue data.

Fund benchmark for LGIM Japan Equity Fund is FTSE Japan and LGIM Emerging Markets Equity Fund is FTSE Emerging.

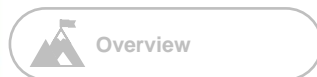
Please note that the benchmark shown on this page is for illustration only and some of the differences between the fund and the benchmark shown may be due to differences in the underlying assets rather than a drift away from the benchmark. However we are investigating the anomalies with LGIM.

**BTC funds versus benchmark – tabular form.**

	Weighted Average Carbon Intensity (tCO ₂ /\$m Sales)*	Carbon Emissions (tCO ₂)/£m Invested*	% Of Portfolio owning clean technology solutions	% Of Portfolio With Ties to Fossil Fuels
UK Listed Equity Alpha	61	75	23	16
UK Benchmark	121	130	26	16
Relative	-61	-55	-3	0
Global Equity Alpha	95	88	29	2
Global Benchmark	159	97	39	7
Relative	-64	-9	-10	-5
IG Credit	75	71	7	2
IG Credit Benchmark	81	130	8	3
Relative	-6	-60	-1	-1

Source: *BTC. WACI and Carbon emissions data as at 31 December 2022 and Clean technology and Ties to fossil fuels is as at 31 March 2022.

Fund benchmark for UK Listed Equity Alpha is FTSE All Share Index and for Global Equity Alpha is MSCI ACWI



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