

Item

ENFIELD
Council



**PENSION POLICY & INVESTMENT
COMMITTEE**

Wednesday, 18 January 2023 at 10.00 am
Conference Room, Civic Centre, Silver
Street, Enfield, EN1 3XA

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PENSION POLICY & INVESTMENT COMMITTEE

**Wednesday, 18th January, 2023 at 10.00 am in the Conference
Room, Civic Centre, Silver Street, Enfield, EN1 3XA**

Membership:

Councillors: Doug Taylor (Chair), Tim Leaver (Vice-Chair), Gina Needs,
Sabri Ozaydin, David Skelton and Edward Smith

AGENDA – PART 1

1. WELCOME AND APOLOGIES

2. DECLARATIONS OF INTEREST

Members of the Board are invited to identify any disclosable pecuniary, other pecuniary or non-pecuniary interests relevant to the items on the agenda.

3. MINUTES OF PREVIOUS MEETING (Pages 1 - 4)

To agree the minutes of the meeting held on 23 November 2022.

4. CHAIRS UPDATE

To receive an update from the Chair.

5. RESPONSIBLE INVESTMENT WORKSHOP - TO FOLLOW (Pages 5 - 68)

This one hour workshop will cover:

- (i) Key concepts and the direction taken by the Fund thus far
- (ii) Outline of the Fund's potential next steps and 'roadmap' of the way forward (for example, in light of the net-zero aspiration discussed with the Committee previously, what this implies in terms of actions and next steps to align with this). This will allow the Committee to identify the preferred direction and speed of travel, and inform what happens next
- (iii) Overview of activity within other LGPS, both within the London CIV pool and more broadly across England and Wales. This will contextualise where the Fund's priorities are shared with other peer group schemes, and allow the Committee to see the themes of activity taking place across the wider landscape. There has been a lot of activity in this area since the Committee last had this discussion, therefore this is a timely opportunity to revisit this with the Committee.

6. ECONOMIC, MARKET AND INVESTMENT UPDATE - TO FOLLOW

Members will receive a verbal update.

7. DRAFT PENSION FUND BUSINESS & PPIC WORK PLAN FOR 2023/24 - TO FOLLOW

Members will receive a verbal update.

8. REVIEW OF GOVERNANCE COMPLIANCE STATEMENT - TO FOLLOW

This item has been deferred to the next meeting.

9. ENFIELD PENSION FUND ADMINISTRATIVE KEY PERFORMANCE INDICATORS REPORT - TO FOLLOW

Members will receive a verbal update.

10. REVIEW OF REPORTING BREACHES POLICY AND CONFLICTS OF INTEREST POLICY - TO FOLLOW

This item has been deferred to the next meeting.

11. MINUTES OF PENSION BOARD MEETING OF 15TH DECEMBER 2022 - TO FOLLOW (Pages 69 - 72)

To note the minutes of the last pension board meeting held on 15 December 2022.

12. COMPLIANCE WITH CMA - INVESTMENT CONSULTANCY AND FIDUCIARY MANAGEMENT MARKET INVESTIGATION ORDER 2019 - TO FOLLOW

Members will receive a verbal update.

13. WORKING-GROUP TASKS - TO FOLLOW

Members will receive a verbal update.

14. AGM PLANNING - TO FOLLOW

Members will receive a verbal update.

15. DATES OF FUTURE MEETINGS

The date of the next meeting will be held on:

Wednesday 29 March

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PENSION POLICY & INVESTMENT COMMITTEE - 23.11.2022**MINUTES OF THE MEETING OF THE PENSION POLICY & INVESTMENT
COMMITTEE
HELD ON WEDNESDAY, 23 NOVEMBER 2022****COUNCILLORS**

- PRESENT** (Chair) Doug Taylor, Gina Needs, Sabri Ozaydin, David Skelton and Edward Smith
- ABSENT** Tim Leaver (Cabinet Member for Finance and Procurement)
- OFFICERS:** Olga Bennet (Director of Finance), Bola Tobun (Finance Manager – Pensions and Treasury) and Jane Creer (Secretary)
- Also Attending:** Daniel Carpenter (Associate Partner, Aon), and Kara Robinson (Senior Investment Consultant, Aon)

1**WELCOME AND APOLOGIES**

The Chair welcomed everyone to the meeting.

Apologies for absence were received from Cllr Tim Leaver (Vice Chair) and from Carolan Dobson (Independent Advisor).

2**DECLARATIONS OF INTEREST**

There were no declarations of interest in respect of any items on the agenda.

Cllr Sabri Ozaydin stated that he was a Director of Housing Gateway Ltd, Council Company.

3**MINUTES OF PREVIOUS MEETING**

The minutes of the meeting held on 5 October 2022 were agreed with amendments to correct typographical errors; that Cllr Tim Leaver was specifically Cabinet Member for Finance and Procurement; that the sub-group be correctly named a working group; and to note that the carbon risk audit was carried out on the Fund's equity portfolios.

Matters arising were noted, including progress on a performance report from LCIV to the Committee; confirmation that the Chair had met with the Local Pension Board Chair and that invitations to Committee meetings were also being sent to her; confirmation that Bola had written to the LCIV regarding the

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Baillie Gifford fund and would send a copy of the correspondence to Members; confirmation that the meeting had taken place with the LCIV on the renewables fund; and confirmation that the required procedural process was being followed in respect of the Independent Person specification.

**4
CHAIRS UPDATE**

Updates from the Chair were covered in the previous item.

**5
REPORTS AND RECOMMENDATIONS FROM PPIC SUB GROUP - PART 2**

AGREED in accordance with the principles of Section 100(A) of the Local Government Act 1972 to exclude the press and public from the meeting for the following items of business (item 5, 6, 7 and 8) on the grounds that they involve the likely disclosure of exempt information as defined in paragraph 3 of Part 1 of Schedule 12A to the Act (as amended by the Local Government (Access to Information) (Variation) Order 2006).

Following Part 2 discussion of the reports and recommendations received in the supplementary agenda pack, Members' questions were responded to by the Aon representatives and the Finance Director and Members' comments were noted.

AGREED

1. To note the contents of the report and Aon's report on Hedge Fund redemption and surplus cash, appended as confidential appendix 1.
1. To approve the Fund rebalancing proposal as prepared in appendix 1 of the report.
2. To note the meeting notes of the PPIC working group of 14 October 2022 and LCIV Renewable Infrastructure Fund presentation to the PPIC working group (appended as appendix 3b) at their meeting of 9 November 2022 (appended as appendix 3c).
3. That Aon to prepare further information in respect of allocation and investment to infrastructure funds.

**6
RISKS WITHIN THE ENFIELD PENSION FUND'S INVESTMENTS PLUS
AON'S VIEW ON THE STRATEGY AND ASSET ALLOCATION - PART 2**

Following a part 2 discussion the report was NOTED.

In response to Members' request, Bola would send a glossary of acronyms to all Committee Members.

**7
ECONOMIC, MARKET AND INVESTMENT OUTLOOK - PART 2**

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NOTED the report.

**8
ENFIELD PENSION FUND INVESTMENTS & ASSET MANAGERS
DASHBOARD FOR SEPTEMBER 2022 - PART 2**

Following a part 2 discussion, the report was NOTED.

**9
QUARTERLY INVESTMENT PERFORMANCE MONITORING REPORT**

Following a brief adjournment, the meeting resumed in part 1.

Exposure to emerging markets was highlighted.

Insight Absolute Return Fund and the recommendation from Bola, supported by Aon, had been discussed earlier in the meeting under item 8.

NOTED the report.

AGREED the Insight Absolute Return re-alignment as recommended.

**10
LONDON COLLECTIVE INVESTMENT VEHICLE (CIV) QUARTERLY
UPDATE AS OF SEPTEMBER 2022**

It was confirmed that 13 boroughs were investing in the LCIV Renewable Infrastructure Fund currently.

NOTED the report.

**11
ENFIELD PENSION FUND FOSSIL FUEL EXPOSURE REPORT AS OF 30
SEPTEMBER 2022**

Bola would send a link to Committee Members to Trucost analysis.

NOTED the report and the attached Appendix 1.

**12
MINUTES OF PENSION BOARD MEETING OF 15 SEPTEMBER 2022**

Bola would provide data to Committee Members in respect of number of members leaving or opting out of the pension scheme or taking the 50/50 option.

NOTED the minutes of the Local Pension Board meeting held on 15 September 2022.

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DLUHC'S CONSULTATION "LOCAL GOVERNMENT PENSION SCHEME (ENGLAND AND WALES): GOVERNANCE AND REPORTING OF CLIMATE CHANGE RISKS"

The proposed metrics set out in para 21 of the report were highlighted.

The DLUHC's consultation ended on 24 November 2022 and a response would be submitted to meet the deadline. Members were invited to comment on the proposed Enfield Pension Fund response.

Bola would submit a further report on climate-related financial disclosures to the next meeting of the committee.

AGREED

1. To note the contents of the report.
2. To note the response from London CIV attached as appendix 1, and Local Authority Pension Fund Forum as appendix 2.
3. To note the proposed Enfield Pension Fund response in appendix 3 and that the final version of the response would be submitted in consultation with the Chair.

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THANKS

As Daniel Carpenter was leaving Aon, and this was his last meeting in attendance, the committee expressed their thanks to him for all his work over the last 17 years.

London Borough of Enfield

Pensions Policy Investment Committee
Meeting date: 18 January 2023

Subject: Responsible Investment Workshop

Cabinet Member: Cllr Leaver
Executive Director: Fay Hammond, Executive Director Resources

Purpose of Report

1. To provide background information to the Pensions Policy Investment Committee prior to the Responsible Investment Workshop

Relevance to the Council Plan

2. Good homes in well-connected neighbourhoods
3. Build our Economy to create a thriving place
4. Sustain Strong and healthy Communities

Background

5. Background papers are attached as appendices:
 - a. Appendix A - Enfield Pension Fund Responsible Investment Policy and Carbon Intensity Audit Report from 5 Oct 2022 PPIC meeting
 - b. Appendix 1 - Enfield PF Responsible Investment Policy March 2022
 - c. Appendix 2 – Trucost Carbon Audit Report for Enfield Pension Fund for 31 March 2022 Fund Valuation

Main Considerations for the Panel

6. This one hour workshop will cover
 - (i) Key concepts and the direction taken by the Fund thus far
 - (ii) Outline of the Fund's potential next steps and 'roadmap' of the way forward (for example, in light of the net-zero aspiration discussed with the Committee previously, what this implies in terms of actions and next steps to align with this). This will allow the Committee to identify the preferred direction and speed of travel, and inform what happens next
 - (iii) Overview of activity within other LGPS, both within the London CIV pool and more broadly across England and Wales. This will contextualise where the Fund's priorities are shared with other peer

group schemes, and allow the Committee to see the themes of activity taking place across the wider landscape. There has been a lot of activity in this area since the Committee last had this discussion, therefore this is a timely opportunity to revisit this with the Committee.

Report Author: Olga Bennet

Date of report 10 January 2023

Appendices

Appendix A - Enfield Pension Fund Responsible Investment Policy and Carbon Intensity Audit Report from 5 Oct 2022 PPIC meeting

Appendix 1 - Enfield PF Responsible Investment Policy March 2022

Appendix 2 – Trucost Carbon Audit Report for Enfield Pension Fund for 31 March 2022 Fund Valuation

Background Papers

The following documents have been relied on in the preparation of this report:

London Borough of Enfield**PENSION POLICY AND INVESTMENT COMMITTEE****Meeting Date: 5 October 2022**

Subject: Enfield Pension Fund Responsible Investment Policy and Carbon Intensity Audit Report**Cabinet Member: Cllr Leaver****Executive Director: Fay Hammond****Key Decision: []**

Purpose of Report

1. This report presents Enfield Pension Fund Responsible Investment Policy to remind and introduce to the new members of the Committee of decisions made and the work done in establishing the Fund's ESG approach to date.
2. This report also presents the results of a carbon risk audit carried out on the Fund's equity portfolios. The audit has been carried out by Trucost to measure the Fund's carbon footprint and exposure to future CO2 emissions, and to assess progress made against the Fund's target to reduce exposure to future CO2 emissions by 50% by 2025.
3. The outcome of the carbon risk audit reveals that the Fund public equity holdings has reduced its exposure to carbon reserves by 83.3% between September 2019 and March 2022. This places the Fund well over halfway to its target of 50% over 5 years, with over 80% of the target reduction already achieved by public equities which represent 43% of the total Fund assets. The Fund is therefore on track to achieve its target ahead of time and could even outperform it.
4. The Committee must maintain its focus on the achievement of the investment returns required to meet its liabilities when they fall due. And to create an investment strategy which delivers the best financial return, commensurate with appropriate levels of risk, to ensure that the Fund can meet both its immediate and long term liabilities.

Proposal(s)

5. Pension Policy and Investments Committee are recommended to:
 - i) Note, review and comment on the Responsible Investment Policy attached as Appendix 1 and Trucost Carbon Audit Report for Enfield Pension Fund using 31 March 2022 Fund Valuation attached as Appendix 2.

- ii) Note the reduction in exposure to future CO2 emissions by 83.3% over 2 years, which places the Fund well over halfway to its target of 50% over 5 years.
- iii) Agree that the strategy setting process will consider how the Fund can make a positive contribution to the transition to a low carbon economy, through investment in renewable infrastructure and other suitable asset classes.

Reason for Proposal(s)

- 6. The Pension Policy and Investments Committee act in the role of quasi trustees for the Pension Fund and are therefore responsible for the management of £1.5 billion worth of assets and for ensuring the effective and efficient running of the Pension Fund. The management of the Fund's investment portfolio and the investment returns that the Fund is able to deliver have significant financial implications, not just for the Fund itself but also on the Fund's employers in terms of the level of contributions they are required to make to meet the Fund's statutory pension obligations.
- 7. The Fund recognises that investment in fossil fuels and the associated exposure to potential 'stranded assets' scenarios may pose material financial risks. These risks apply not only to the Fund's investment portfolio but also long term global economic growth.
- 8. The costs involved will very much depend on investment strategy decisions. Climate change risk will be integrated into the forthcoming new Investment Strategy Statement to ensure that it is considered as part of the Committee's asset allocation decisions, rather than in isolation.

Relevance to the Council's Corporate Plan

- 9. Good homes in well-connected neighbourhoods.
- 10. Build our Economy to create a thriving place.
- 11. Sustain Strong and healthy Communities.

Background

- 12. Responsible Investment (RI) is an approach that takes into account ESG factors and considers how the risks posed by the non-sustainability of companies invested in can impact the financial wellbeing of the Fund. Therefore, responsible investment is driven more by how sustainable factors can have financial consequences rather than ethical or moral implications which can be very subjective.
- 13. The Fund has a longstanding policy of supporting good corporate governance in the companies in which it invests. The Fund will also challenge companies who do not meet either the standards set by their peers or reasonable expectations as measured by best practice. The Fund's approach is part of its overall investment management arrangements and its active responsible

investment framework. There are three main pillars to the framework: selection (of assets), stewardship (of assets), and transparency & disclosure.

14. The Committee committed and set a goal of making its investment portfolios net zero in terms of carbon emissions by 2030. This is a very aggressive time scale for action of this sort. The BT Pension Scheme which is considerably larger than Enfield Pension Fund has committed to a 2030 goal and other schemes are looking at or have committed to 2040 or 2050, in line with the Paris agreement.
15. Thus, Enfield Pension Fund is looking to move further and faster than its peers to net zero and must do so within the context of the pooling process which to some extent, particularly when looked at together with key elements of our investment beliefs, limits our flexibility.
16. Achieving Net Zero is a journey and the Committee's view in setting the 2030 goal was clearly that the journey needed to begin and be undertaken at pace. Accordingly, we will need to do a number of things at the same time rather than wait for the completion of one piece of work before beginning the next. This will be reflected in the Action Plan that will be brought to the next Committee meeting of September 2021.
17. The road to Net Zero is not going to be a straight line, and while more precise targets will be developed when better data is available it is clear that progress is likely to be lumpy, with key strategic changes having a significant impact while the actions of investee companies contribute a steadier underlying positive trend in emissions. Therefore, it will be important to maintain focus on the end goal and the direction of travel rather than individual way points.

ESG obligations of LGPS administering authorities and Fiduciary Responsibility

18. LGPS regulations issued by DCLG in September 2016, requires Investment Strategies of LGPS funds to outline their policy on how ESG considerations are taken into account within investment decision making. This marked a shift in the LGPS as a whole.
 - **Regulation 7(2)(e)** requires funds to follow pertinent advice and act prudently when making investment decisions, *"...a prudent approach to investment can be described as a duty to discharge statutory responsibilities with care, skill, prudence and diligence"*. They must consider any factors that are financially material to the performance of their investments, including **ESG factors** contemplating the time horizon of the liabilities along with their approach to social investments.
 - **Regulation 7(2)(f)** emphasises that *"administering authorities are encouraged to consider the best way to engage with companies to promote their long-term success, either directly, in partnership with other investors or through their investment managers, and explain their **policy on stewardship** with reference to the Stewardship Code."*

- *Administering authorities are strongly encouraged to either vote their shares directly or ask their fund managers to vote in line with their policy under the Regulation 7(2)(f) and to publish a report of **voting activities** as part of their pension fund annual report under Regulation 57 of the 2013 Regulations.*
19. The role of the Council as administering authority for the LBE is to maintain, administer and invest the funds and to this end powers have been delegated to the to the Pension Policy and Investment Committee (PPIC). The regulations do not impose any legal obligation on the Committee to take ESG considerations into account. The PPIC acting in a quasi-trustee capacity have to act in a fiduciary manner meaning that they have to act in the best financial interest of the und.
 20. According to legal advice obtained by the LGPS Scheme Advisory Board (SAB) and summarised on the SAB website, funds can take ESG factors into consideration provided that pension fund members do not suffer significant financial loss.
 21. London Borough of Enfield (LBE) Pension Fund (the Pension Fund) is committed to be a responsible investor and a long-term steward of the assets in which it invests. The Fund has a fiduciary duty to act in the best interests of its beneficiaries and this extends to making a positive contribution to the long-term sustainability of the global environment.
 22. The Fund maintains a policy of non-interference with the day-to-day decision making of the investment managers. The Committee believes that this is the most efficient approach whilst ensuring the implementation of policy by each manager is consistent with current best practice and the appropriate disclosure and reporting of actions.
 23. There are a wide range of ESG issues, with none greater currently than climate change and carbon reduction. The Pension Fund recognises climate change as the biggest threat to global sustainability alongside its administering authority employer, Enfield Council, which has committed itself to achieving carbon neutrality by 2030.
 24. Members of the Pension Fund place their trust in the Pension Policy and Investment Committee who hold a fiduciary duty to act in the members' best interests and ensure that their pension benefits are fully honoured in retirement. For this reason, as well as targeting investment returns that match the pension liabilities, the Committee is committed to managing the investment risks: the risks that pose a substantial threat to LGPS members' long-term future.

Engagement

25. The Fund's strategy is to engage with its investee companies and other key stakeholders through partnerships and on its own. The Fund aims to protect

and increase shareholder value by engaging on a range of financially material ESG investment factors.

26. A significant part of the Fund's engagement programme is implemented through partnerships including the Principles for Responsible Investment (PRI), the Local Authority Pension Fund Forum (LAPFF), the Institutional Investors Group on Climate Change (IIGCC) and through working with the Fund's investment pool operator (London CIV).

Voting

27. Equity share ownership in the majority of companies gives investors the right to vote and the LBEPPF can use their vote to influence company behaviour. LBEPPF has delegated voting to asset managers. The managers the Fund has appointed engage with companies on ESG issues and have detailed voting policies which set out how they will vote. The Fund can also override this by issuing voting direction on advice from the LAPFF.
28. Some funds appoint stewardship firms who assist in formulating a voting policy for the Fund and vote the shares on behalf of the Fund in accordance with the policy. These additional services are likely to be a cost to the fund.

Data

29. Reliable ESG data is important to investors if they are to measure risk and reward of best practice in ESG by investee companies. The key to reliable data is that it should be independent, objective and publicly sourced.
30. The Companies the Fund invested in usually have ESG scores which is an expression of all its ESG stance and other key factors. These scores can then be aggregated to establish a portfolio score. Numerous underlying factors are obtained from a range of data points. Data vendors are able to acquire and validate underlying ESG company data. ESG scores are one of the metrics used by fund managers to assess the sustainability of investee companies.
31. Data Vendors who provide this information for asset managers can also provide information for underlying Investors who want to acquire and ESG score across their whole portfolio. Obtaining an ESG score across all investments from all asset managers can allow investor to better understand their ESG risk by comparing the Fund's portfolio score to standard market ESG benchmarks.

Climate Change and Fossil Fuel Divestment

32. Some of LAPFF's engagement includes meeting with Rio Tinto to discuss their climate change report in response to a shareholder issued resolutions they were involved in filing. They have also engaged with Shell and welcomed Shell's move to divest oil sands assets and continue to put pressure on Shell and other oil companies to migrate towards the lower carbon future that is fast approaching.

33. LGPS funds have continued to come under criticism for investing in controversial stocks such as oil, tobacco, alcohol producers, gambling firms, and payday lenders. Some local authority including Enfield Pension Fund, the London Boroughs of Islington, Haringey, Southwark and the Environment Agency have committed to reducing their exposure to carbon and some have gone on to state when they expect to be fully divested.
34. The LAPFF working with a group of other investors successfully lobbied Shell to concede to a number of demands on climate change by lodging a shareholder resolution. The cost of immediate divestment will be substantial based on the returns on some of the companies alleged to be ESG offenders.
35. The Pensions Regulator specifically references climate risk in its Defined Benefit investment guidance, stating that 'Most investments in pension schemes are long term and are therefore exposed to long-term financial risks. These potentially include risks relating to factors such as climate change, unsustainable business practices, and unsound corporate governance. Despite the long-term nature of investments, these risks could be financially significant, both over the short and longer term'

Moving Towards Low Carbon Investments and a Reduced Exposure Fossil Fuels

36. Members of the Pension Policy and Investment Committee began its in depth consideration of carbon exposure towards the end of 2019. Between October 2019 and February 2020, the Committee members held several strategy meetings to consider in detail the Fund's approach to investment in fossil fuels and management of the financial risks posed by climate change.
37. The recommendations approved at its September 2019 and February 2020 meetings are set out below:
 - a) *Consider and approve moving all the Fund's passive equity exposure to track a Low Carbon Index Strategy;*
 - b) *Consider options for an initial active investment of approximately 5% of the Fund total assets in a sustainable or fossil fuel free global equity mandate and another 5% of the Fund total assets to be consider for a renewable energy/clean energy fund(s), given the right risk/return profile. Investment in such a fund would demonstrate the Fund's commitment to transition into low carbon economy;*
 - c) *Maintain the Fund's current engagement activities which the Local Authority Pension Fund Forum (LAPFF) carry out on behalf of the Fund;*
 - d) *Consider initiating a programme where the Fund could engage with investee companies (through its managers, the London CIV or possibly directly) on ESG issues;*

- e) *Following the result of the carbon risk audit carried out by Trucost using the Fund valuation position as at 30th September 2019, to consider setting 2 year and 5 year targets to reduce the carbon footprint of the Fund; and*
 - f) *Agree to monitor carbon risk annually by using a specialist contractor to conduct and assess the progress being made against the Fund's target to reduce the exposure to future CO2 emissions.*
38. The Committee invested 15% passive equity portfolios into a Morgan Stanley Composite Index (MSCI) Low Carbon index-tracking target strategy which aims to reduce the carbon exposure of the allocation by some 70%, relative to the broad market index, whilst still expecting to perform broadly in line with the wider market over the long term. This work was completed March 2021.
39. The Fund undertook its first carbon risk audit towards the end of 2019, following the recommendation made at the November 2019 meeting to commission a carbon footprint report for the Fund. This audit work was carried out by Trucost, using the end of September 2019 assets data and this audit assessed not only the carbon footprint of the Fund's equity portfolio, but also its exposure to future emissions through fossil fuel reserves.
40. After careful consideration of how carbon risk could best be reduced within the investment management framework in which LGPS funds operate, and after taking proper advice, the Committee considered it appropriate to propose a quantifiable, time-bound target for a reduction in the Fund's exposure to future fossil fuel emissions. The Committee agreed that the Fund should:
- i) Reduce its relative exposure to future emissions from fossil fuel reserves (measured in MtCO₂e – million tonnes of CO₂ emissions) by 50% over 2 valuation cycles (6 years)
 - ii) Measure the reduction relative to the Fund's position as at July 2016 and adjusted for Assets Under Management (£AUM)
41. At Committee meeting in March 2021 the Committee were asked to include within the Fund's Responsible Investment Policy Framework a commitment to making its investment portfolios net zero in terms of carbon emissions by 2030. In doing this the Committee agreed to work on a plan (Net Zero Action Plan) for achieving this goal, this plan will be presented for their consideration at their November meeting.
42. Aon the Fund Investment Consultant has been asked to develop an action plan and a high level Net Zero framework using the Institutional Investors' Group on Climate Change (IIGCC) Net Zero Investment Framework. As this recognises that there can be no "one size fits all" route to net zero, investors like LBEPF need to focus on maximising efforts that achieve decarbonisation in the real economy. This requires a comprehensive investment strategy led approach supported by concrete targets (at portfolio and asset class level) combined with smart capital allocation and engagement and advocacy

activity. Such a strategy led approach must not just deliver emissions reductions, but also increase investment in the climate solutions which we need to achieve net zero. This approach will reduce the exposure of Enfield Pension Fund's investment portfolios to climate risk while increasing their exposure to climate opportunity, thus providing greater long term protection for our scheme members' savings.

43. All of this does, of course, need to be seen in the context of the Fund participation as one of 32 funds within the London CIV pool that will need to work with and gain the co-operation of the other partners and the operating company in order to achieve our goal.
44. The Fund will embrace and report in line with the requirements of the Task Force on Climate Related Financial Disclosure. The Fund will also consider presenting, the progress in achieving net zero in the Annual report.
45. The Net Zero Action Plan will start with the Fund's beliefs, it will provide the framework within which the Fund will develop objectives which will lead to us taking actions, which will lead to outcomes and consequently which we will then review to see whether we have achieved the Fund's objectives, and so the cycle goes on.
46. In making any decisions in relation to any of the stages of this cycle it is important to remember that the Committee is required by the LGPS Investment Regulations to ensure that it has taken proper advice. In most cases this will be provided by a combination of officers, Investment Consultant and the independent investment adviser, but in this area, there is likely to be a requirement at various points for additional specialist advice. Given the requirement to pool which is placed on LGPS funds there is also a need to ensure that London CIV are engaged with the Committee on this journey.
47. Before putting in place a strategy to achieve the goal of net zero it is important to understand what the Committee meant by it and importantly how it will be measured. For example, what the Committee/Fund is seeking to achieve, is that the net level of carbon emissions from the holdings in the Fund's investment portfolio equals zero. This seems simple. However, there are several ways of defining carbon emissions and it is important that the Committee do have a clear understanding and which of the known elements/definitions we are using so that we can pull the right levers in order to achieve our goal.
48. The accepted standard for defining (and measuring) carbon emissions has "3 scopes" as follows:
 - i. **Scope 1** - Emissions are direct emissions from company-owned and controlled resources. In other words, emissions released to the atmosphere as a direct result of a set of activities, at a firm level.
 - ii. **Scope 2** - Emissions are indirect emissions from the generation of purchased energy, from a utility provider. In other words, all GHG

emissions released in the atmosphere, from the consumption of purchased electricity, steam, heat and cooling.

- iii. **Scope 3** - Emissions are all indirect emissions – not included in scope 2 – that occur in the value chain of the reporting company, including both upstream and downstream emissions. In other words, emissions that are linked to the company’s operations.
49. Companies reporting in line with the requirements of the Task Force on Climate Related Financial Disclosure Standard (TCFD) must report on Scope 1 and 2 whereas reporting on Scope 3 is voluntary and as will be clear from the definition incredibly hard to measure with the significant risk of double counting as between direct producer and indirect consumer organisations.
50. The Financial Stability Board established the TCFD to develop recommendations for more effective climate-related disclosures that could promote more informed investment, credit, and insurance underwriting decisions and, in turn, enable stakeholders to understand better the concentrations of carbon-related assets in the financial sector and the financial system’s exposures to climate-related risks.
51. The data being reported by fund managers to Funds makes no distinction as to these different types of emission, and while a restricted definition might make a 2030 goal easier this is not practical and would leave the Enfield Pension Fund open to the accusation of avoiding the key issues in emissions reduction.
52. For the purpose of delivering the Authority’s Net Zero Goal the following definition will be used:

“The Enfield Pension Fund’s goal is for the net carbon emissions from the totality of its investment portfolio to be zero by 2030.”
53. While concentrating on scope 1 and 2 emissions allows the Fund to set targets which are comprehensible and where data is likely to be available, this position will need to be kept under review as more data becomes available and the investment impacts of using specific measures becomes clear. Measurement and regulation are continually developing in this area and to a significant degree we are going to be trying to hit a moving target, particularly in the next few years when the pace of change in these areas is likely to be greatest.
54. It is also the case that the measures identified within these definitions are of necessity backward looking and so thought will need to be given to adding a more forward looking element to the definition to ensure that investment opportunity is not lost in too great a focus on backward looking data.

Setting Targets Objectives and Reporting

55. Measurement and reporting will be central to how we drive forward the changes that are required in order to achieve the net zero commitment. The

detail of these will flow from some of the strategic work that Aon is currently being carried out and will be set out in the Net Zero Action Plan. Whereby a comprehensive baseline position will be established which enables us to understand how far we have to travel to achieve net zero.

56. In simple terms what we are seeking to do is to establish a set of steps to reduce carbon in each element of the portfolio over a given time. How this will be achieved for individual asset class is difficult. However, we need to be in a place to do that so that they can feed into the reviews of individual mandates and investment products as well as the overall review of the investment strategy.
57. The other key consideration here is that we are not the only investor in the products in which we are invested and while in terms of the London CIV we can seek to influence we cannot dictate. Nor are we able to simply switch into a carbon neutral fund because the pool does not offer one, and to do so would require a fundamental change in the Fund's longstanding investment approach (either in terms of active v passive management).
58. Setting targets alone is not enough. We need to be held accountable for our progress towards those targets, which means we need to report publicly on our progress towards the net zero goal and also on the specific steps we have taken towards that objective.

Asset Class Implementation

59. The products in which the Fund invests are all made up of very different sorts of asset which have different characteristics, therefore it is highly unlikely that one approach to implementing net zero will be applicable across such a wide range of assets ranging from infrastructure to private equity investments in tech start-ups, through traditional instruments such as shares and bonds.
60. The Net Zero Action Plan will look at each major asset class in turn and identifies an initial approach which will reflect the need to focus on the real economy and the practical issues associated with operating within the context of pooling, where the Fund is not wholly in charge of its own destiny. All of this also needs to be set within the context of the Fund's broader beliefs about how to do investment.
61. Specifically, the Fund believes in:
 - Being an active investor – This means picking the best stocks to invest in using the skill of individual managers. However, our moderate risk appetite means that while we believe in active investment, we invest in active products that maintain broad portfolios within a particular asset class and select the best companies in particular sectors as opposed to highly active products which would select both companies and sectors, and thus generate much more concentrated portfolios.
 - Being a global investor – This means that we will be exposed to investment in emerging economies such as China and India where the

stage of development means that economic growth is sometimes being driven by companies in industries such as cement which are high emitters.

- Engagement over divestment or exclusion – The Fund has long operated on the basis that it seeks to influence companies through engagement, this is part of being rooted in the real economy. However, this is a position that is likely to be challenged in some areas by the setting of such an aggressive timescale for achieving net zero.
62. As we progress along the road to net zero (and further along the pooling journey more generally) these beliefs about how to do investment are all likely to be challenged in different ways and the Fund will need to at some point to consider whether it continues to support each of these propositions or whether it needs to take a different approach. However, in doing so it will need to consider not just the achievement of the net zero objective but its primary responsibility which is to ensure that the pension fund is able to meet its liabilities.
 63. The other contextual factor to be considered before looking at the approach in each asset class is the fact that the Fund (like all other LGPS Administering Authorities) is part of a pool and needs to secure the co-operation of the other shareholder funds within the London CIV in order to make progress where changes are required to investment products. While there is a broad consensus within the shareholder funds about the significance of climate risk there is, as yet, not a consensus over the means of addressing it, although there does appear to be movement towards the idea of targets. Clearly this will significantly influence the pace at which the Enfield Fund can move.
 64. **Listed equities** are the single largest asset class in which the Pension Fund is invested and in order to achieve LBEPF's proposed goal, on a straight line basis it will be necessary to reduce the contribution to aggregate emissions from these portfolios by at least 50% by 2025. This could be achieved in a number of ways depending on the outcomes of the review of the investment strategy, and on the views of other investors in the funds. For example, investing in Paris Aligned Funds with London CIV.
 65. An important feature of investment in listed equities is the voting rights which are conferred on asset owners. The way in which the Fund, through the external managers and London CIV, chooses to exercise these voting rights has the potential to accelerate progress by companies towards net zero. For example, if the Fund worked with external managers and London CIV to adopt a voting guideline that says votes will be cast against the reappointment of board members where companies are not making progress towards net zero as assessed by the Transition Pathway Initiative (TPI). Once this position is established, it will be appropriate to review its impact and consider whether a further strengthening of the voting position would be helpful in achieving the net zero goal.
 66. **Fixed Income** portfolio are managed by a mixture of external managers and London CIV just like equity portfolio, using a variety of performance targets against a benchmark index. The favoured investment styles within these

products tend towards relatively low turnover approaches which seek the best credits to buy with little reference to the composition of the index.

67. Emissions data is less available within fixed income than in equity investment, although for corporate credits there is the ability to use the same underlying data for both types of investment. However, many of the credits included in these portfolios are from sovereigns or multi-lateral institutions (such as the European Investment Bank) where the calculation of emissions data is much more difficult. While it is possible to engage with corporate bond issuers in the same way as for equities this is not possible for sovereigns and multi-lateral institutions so the ability to influence behaviour is not present in the same way.
68. So the proposition for Fund managers in this space do seek to engage with corporates in order to have an increasing issuance of “green bonds” both by corporates and governments which will begin to form part of portfolios where they meet the wider investment criteria, although currently the scale of issuance means that the supply of such bonds is currently not always great enough to be investable while yields are slightly lower than the market as a whole making them less attractive as an investment. These are issues which will be resolved through market forces over time.
69. However, at this stage until data is available, we are to a great degree “flying blind” therefore the immediate actions alongside encouraging managers to both engage more actively and consider “green bonds” where they are genuinely investable, are to gather relevant data so the baseline can be established which will allow a move to setting of targets although this will require the agreement of the other investors in the Blackrock and London CIV products.
70. Alternatives - While there are three asset classes within alternatives (Private Equity, Inflation protection and Infrastructure) these will, at this stage, be considered together.
71. The key initial issue here is the lack of data, which will need to address, to some extent. However, we cannot manufacture data where it does not exist and to some extent, we will be dependent on movement in market expectations driving fund managers to provide the data needed, including the implementation of some new legislation during 2021.
72. Regardless of the data issue, this asset class are the area where Net Zero provides the greatest opportunity. The Fund is currently considering allocations of 5% - 10% investments in renewables and other investments which support the transition (such as electric trains replacing more polluting diesels), and the low carbon transition is a clear investment theme within these portfolios. This will over time result in a build-up of assets with positive characteristics.
73. **The property portfolio** provides a number of opportunities in terms of the movement to Net Zero. Again, there is a lack of comprehensive data, and there are some challenges in undertaking alterations such as the addition of

solar panels where the cost needs to be recovered through service charges, particularly in the current economic climate.

74. We can review options for switching some of the existing property mandate into a low carbon property fund.

Accurate Assessment of Exposure to Fossil Fuels

75. Divest Enfield did a press release using inaccurate data from a third party and their estimate of Enfield Pensions Fund's exposure to fossil fuels was overstated.
76. Divest's estimation of the Enfield Pension Fund's exposure to fossil fuels is incorrect and overstated and also ignores significant action taken by the Fund over the past year to reduce the exposure.
77. The value of exposure to fossil fuels used by Divest Enfield in their press release of 15 July originates from a third party (Carbon Underground 200) which was based on their own analysis of the world's largest 100 coal and oil and gas producers in the public global benchmark equity and bond indices, and assumed that Enfield Pension Fund has an identical exposure to these companies as the public benchmark (e.g. MSCI ACWI at 3.9%; Bloomberg Barclays Sterling Corporate Bond Index at 2.8%).
78. In other words, each of the Fund's mandates/portfolio has been assumed to have identical allocation to coal, oil and gas, based on public equity or bond market index exposure.
79. The true picture of the Fund's exposure is significantly lower and varies considerably at a mandate/portfolio level.
80. An investigation was performed by the Fund Investment consultant as at 31 December 2020, asking each of the managers to provide:
 - ❖ A full breakdown of the Fund's exposure to oil, gas and coal, as the Enfield Pension Policy and Investment Committee was looking to establish the extent to which the Fund is invested in debt or equity of firms which produces, extracts or explores for oil, gas or coal as a material part of its business model;
 - ❖ The weights to specific companies making up this aggregate exposure, along with the names of the companies themselves; and
 - ❖ The geographic breakdown of this exposure.
81. Notably, each of the Fund's managers showed awareness of the importance of these issues to the Fund, and to UK pension funds in general. Each manager was open and transparent in their data provision.
82. As expected, a number of mandates/portfolios hold zero exposure (three of the Fund's equity mandates; and a number of illiquid mandates). Within the equity space, notably, all of the Fund's active managers with exposure to fossil fuels hold lower than MSCI ACWI weightings.

83. The Fund's exposure to fossil fuels, as measured by investment in physical or synthetic debt or equity of a firm which produces, extracts, or explores for oil, gas, or coal as a material part of its business model was 1.1% of Fund value, or £15.1m as at 31 December 2021. This compares to the Divest Enfield press release figure as at 31 December 2020 of 2.6%, or £30.0m.
84. The same exercise was therefore repeated as at 31 March 2021, the Fund's exposure to Fossil fuels is lower than the exposure as at 31 December 2020. 0.9%, or £13.1m in sterling terms. The reduction is largely driven by the Fund's transition of £220m to a passive low-carbon equity approach with BlackRock in early 2021, which successfully reduced the Fund's fossil fuel exposure by £4.2m. The Fund has put a quarterly reporting regime in place.

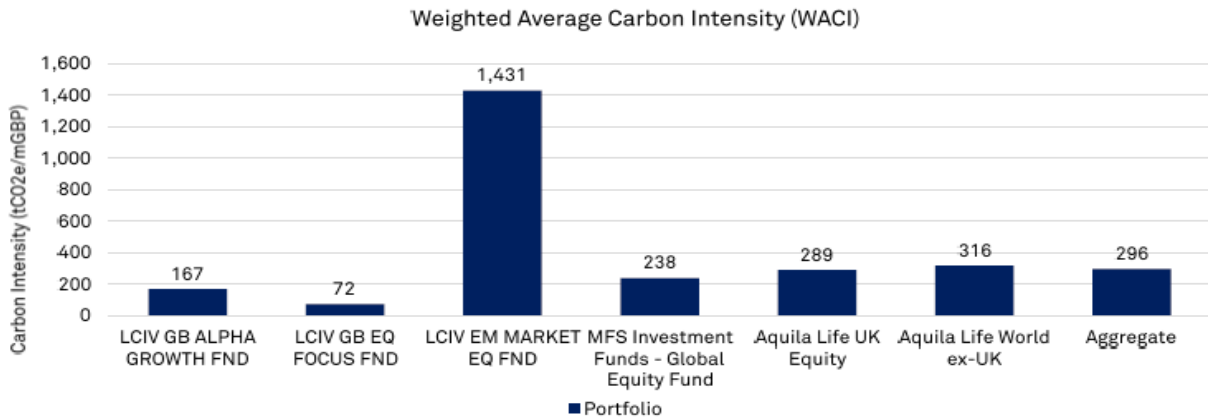
Trucost Carbon Risk Audit

85. The Fund undertook its first carbon risk audit towards the end of 2019, following the recommendation made at the November 2019 meeting to commission a carbon footprint report for the Fund. This analysis was carried out by Trucost, using the end of September 2019 assets data and this audit assessed not only the carbon footprint of the Fund's equity portfolio, but also its exposure to future emissions through fossil fuel reserves.
86. The Fund's view is that exposure to future emissions must accurately represents the risk to the Fund from investing in fossil fuel companies. Assessing exposure to emissions from reserves in this way helps the Fund to take a view on its exposure to potentially stranded assets that may become unusable as a result of the transition to a low carbon economy.
87. The carbon footprint audit was carried out on the Fund equity holdings with the following portfolios: Blackrock Aquila UK Equity (FTSE), Blackrock Aquila Global Equity (MSCI), MFS (GE) (MSCI), LCIV (EM) (MSCI), LCIV Longview (GE) (MSCI) and LCIV BG (GE) (MSCI).
88. The table below summarises the carbon exposure of each equity portfolio as at 30th September 2019. And the aggregate portfolio had 296 tCO₂e/mGBP of weighted average carbon intensity (WACI). This was the Fund aggregate equity portfolio's exposure to carbon intensive companies as at 30th September 2019.

Portfolio	Total CO ₂ Footprint per holding (tCo ₂ e/£m revenue)	Benchmark CO ₂ Footprint per £m holding (tCo ₂ e/£m revenue)	Variance (- = less than & + = more than BM exposure)	Comment in relation to the benchmark – MSCI ACWI
LCIV GB ALPHA	167	229	-62 or 27%	Efficient
LCIV GB FOCUS	72	229	-157 or 69%	Highly efficient
LCIV EM FUND	1,431	229	+1,202 or -525%	Significantly inefficient
MFS	238	229	+9 or -4%	Inefficient

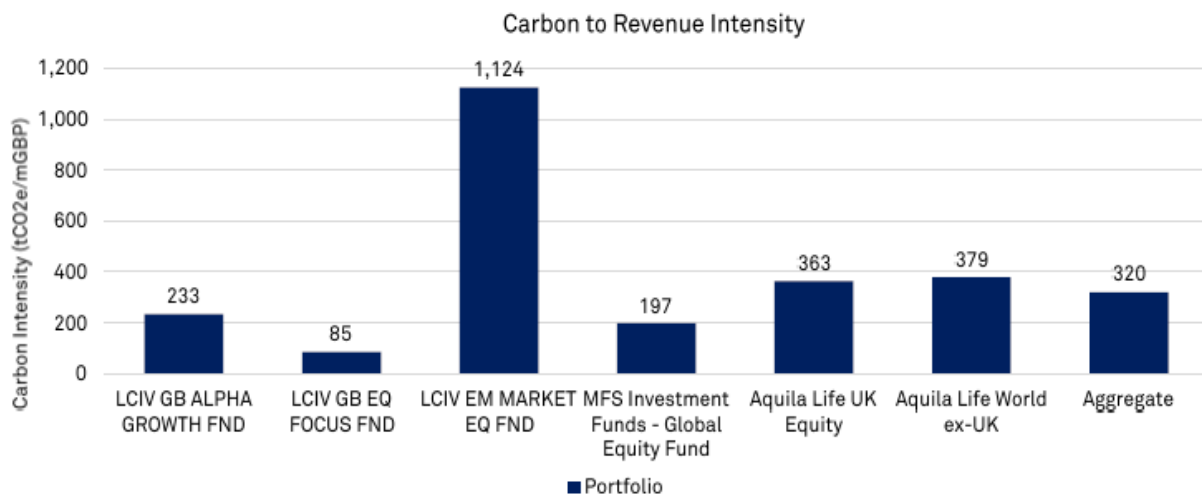
AQUILA UK	289	229	+60 or -26%	Very inefficient
AQUILA WORLD	316	229	+87 or -38%	Highly inefficient
AGGREGATE	296	229	+67 or -29%	Very inefficient

89. The graphical outcomes produced by Trucost are shown below:



The Weighted Average Carbon Intensity shows a portfolio's exposure to carbon intensive companies.

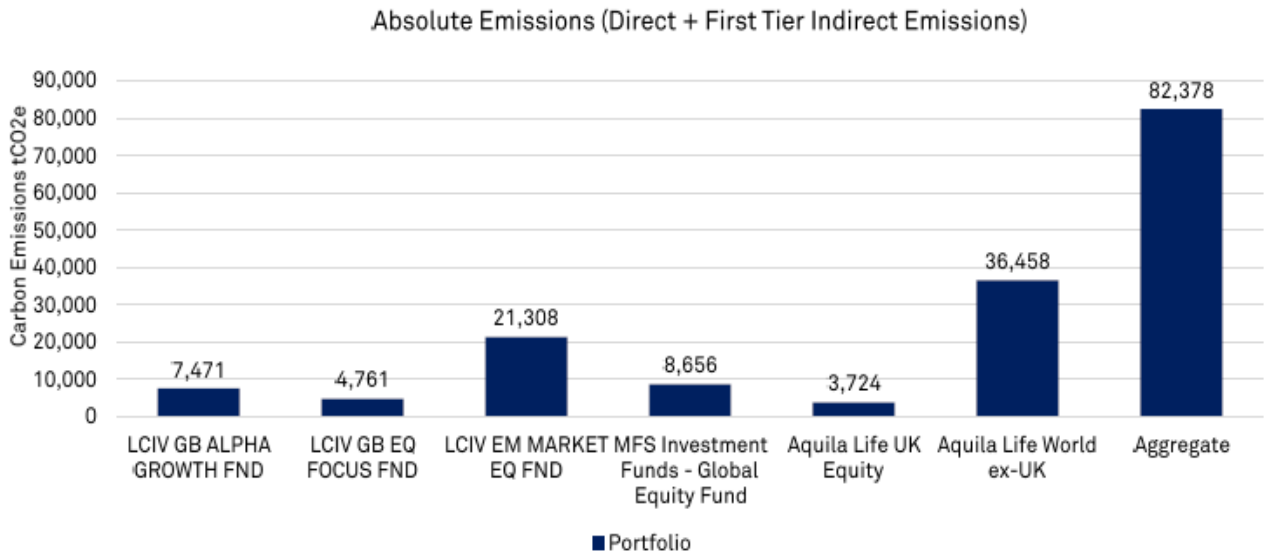
90. The carbon to revenue intensity outcome is shown in the below graph and the aggregate portfolio for the Fund exhibits 320 tCO2e/mGBP, this indicates how operationally efficient the companies are in terms of carbon emitted per unit of "output".



The revenue method indicates how operationally efficient the portfolio companies are in terms of carbon emitted per unit of "output"

91. Trucost has analysed the carbon emissions embedded within the fossil fuel reserves that are disclosed by the underlying companies within the Fund's equity portfolio. The emissions measured are the potential future amounts of CO2 that could be released if the fuel reserves disclosed were to be burnt.

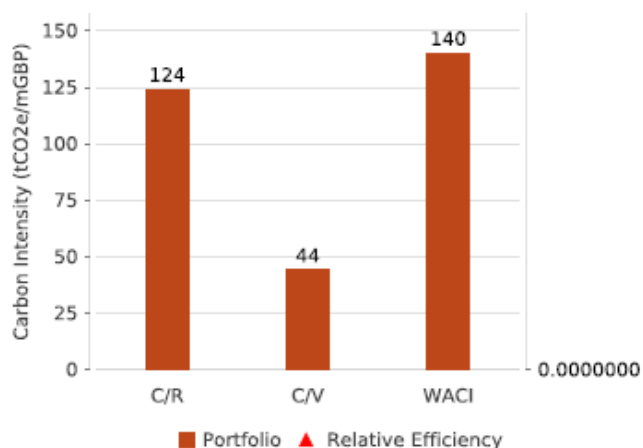
92. Although proposition is to measure performance against our target using emissions intensity, Trucost have also measured the absolute exposure to future CO2 emissions as shown in the below chart. The total exposure within the Fund’s equity portfolio as at 30th September 2019 was 82,378 tonnes CO2e.



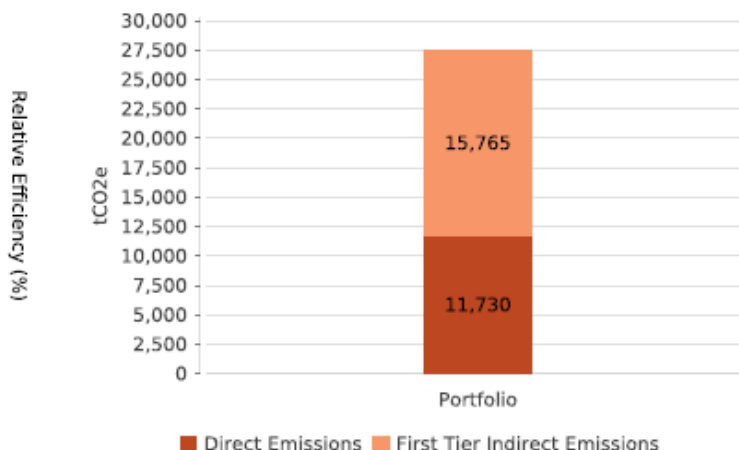
Total Carbon Emissions allocated to the portfolio in absolute terms.

93. The carbon footprint audit was carried out in summer 2022 using the Fund’s equity holdings as at 31st March 2022 of the following portfolios: Blackrock Low Carbon Equity Fund, MFS (GE), LCIV JPMorgan (EM), LCIV Longview (GE) and LCIV BG (GE).
94. Carbon exposure analysis offers a systematic assessment of the carbon risks and opportunities within a portfolio or index at a point in time. The analysis quantifies greenhouse gas emissions (GHG) embedded within a portfolio presenting these as tonnes of carbon dioxide equivalents (tCO2e). Comparing the total GHG emissions of each holding relative to either revenues generated, or capital invested, gives a measure of carbon exposure that enables comparison between companies, irrespective of size or geography.
95. The **Total Carbon Emissions**, **Carbon to Value Invested (C/V)**, **Carbon to Revenue (C/R)**, and **Weighted Average Carbon Intensity (WACI)** are all presented below.

Carbon Intensity by Method



Carbon Apportioned by Scope



96. The 'WACI Contribution' is the percentage change in the portfolio's intensity that would be caused by excluding the holding referenced. In other words, it is a measurement of how much a specific holding effects the carbon performance of the portfolio

97. The table below summarises the total carbon emissions allocated to each portfolio of the Fund's equity holdings as at 31st March 2022 comparing it with the outcome of September 2019. The Fund aggregate equity portfolio's exposure to carbon intensive companies as at 31st March 2022 was 124 tCO₂e/mGBP of weighted average carbon intensity (WACI).

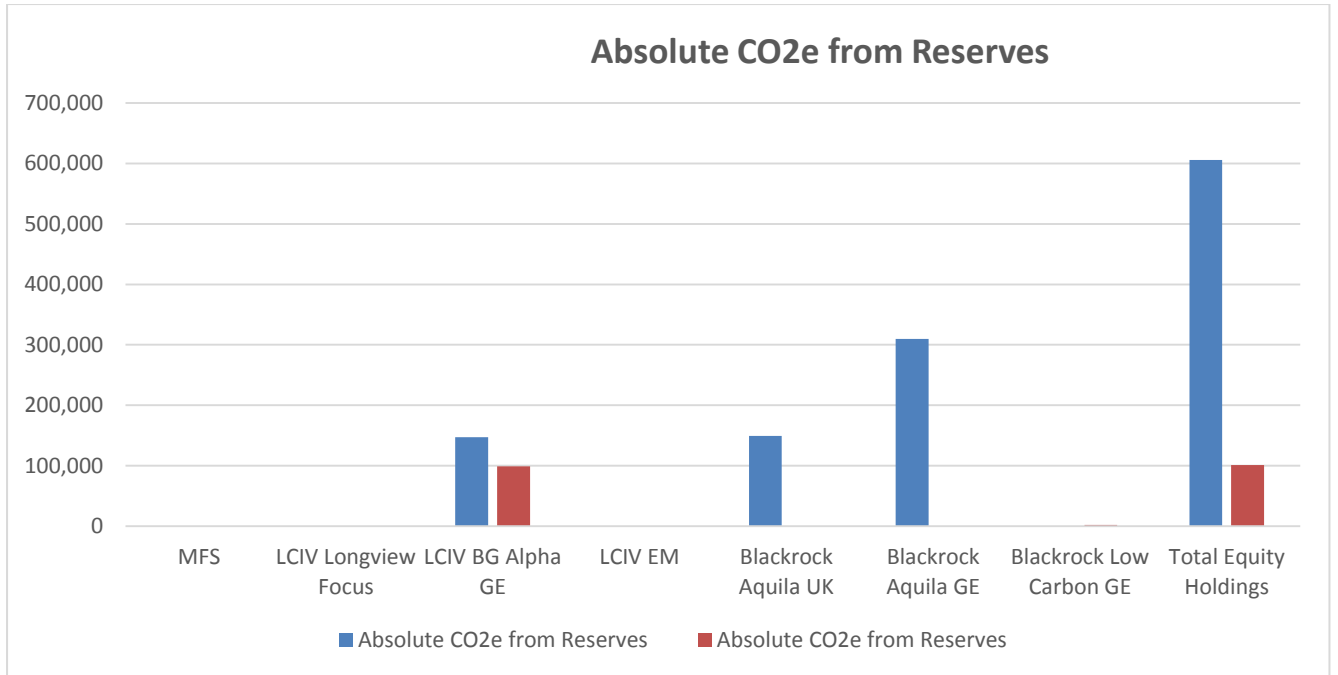
Portfolio	Total CO ₂ Footprint per £m holding (tCo ₂ e/£m revenue) as at Sept. 2019	Total CO ₂ Footprint per £m holding (tCo ₂ e/£m revenue) as at Mar. 2022	Differences	Comments
LCIV GB ALPHA	167	245	+78 or 47%	Carbon intensity has increased generously over the period by 47%
LCIV GB FOCUS	72	48	-24 or 33%	Carbon intensity decreased strongly over the period by 33%
LCIV EM FUND	1,431	116	-1,315 or 92%	Carbon intensity decreased significantly over the period by 92%
AQUILA UK	289	-	-	-
AQUILA WORLD	316	-	-	-
BLACKROCK LOW CARBON	-	83	-	-
MFS	238	233	-5 or 2%	Carbon intensity decreased slightly over

				the period by 2%
AGGREGATE	296	124	-172 or 58%	Carbon intensity decreased generously over the period by 58%

98. The table below summarises the total carbon embedded emissions intensity of each portfolio of Enfield Pension Fund's equity holdings as at 31st March 2022 comparing it with the outcome of September 2019.

Portfolio	Absolute Emissions in tonnes as at Sept. 2019	Absolute Emissions in tonnes as at Mar. 2022	Comments
LCIV GB ALPHA	7,471	9,425	Carbon intensity has increased over the period by 26%
LCIV GB FOCUS	4,761	2,414	Carbon intensity decreased generously over the period by 49%
LCIV EM FUND	21,308	916	Carbon intensity decreased significantly over the period by 96%
MFS	8,656	8,656	Carbon intensity remain the same over the period
AQUILA UK	3,724	-	-
AQUILA WORLD	34,458	-	-
BLACKROCK LOW CARBON	-	6,084	-
AGGREGATE	82,378	27,495	Carbon intensity decreased generously over the period by 67%

99. The below graph demonstrates the total embedded CO2 emissions from reserves for the Enfield Pension Fund Equity holdings from 30th September 2019 valuation audit to be 0.606 m tonnes and for 31st March 2022 the total embedded CO2 emissions from reserves was 0.101 m tonnes.



Safeguarding Implications

100. The report provides clear evidence of sound financial management, efficient use of resources, promotion of income generation and adherence to Best Value and good performance management.

Public Health Implications

101. The Enfield Pension Fund indirectly contributes to the delivery of Public Health priorities in the Borough.

Equalities Impact of the Proposal

102. The Council is committed to Fairness for All to apply throughout all work and decisions made. The Council serves the whole borough fairly, tackling inequality through the provision of excellent services for all, targeted to meet the needs of each area. The Council will listen to and understand the needs of all its communities.

Environmental and Climate Change Considerations

103. Environmental and climate change considerations are all over this report.

Risks that may arise if the proposed decision and related work is not taken

104. Climate change is a key financially material environmental risk. The Committee believe that, over the expected lifetime of Enfield Pension Fund, climate-related risks and opportunities will be financially material to the performance of the investment portfolio. As such, the Committee will consider

climate change issues across Enfield Pension Fund and specifically in areas such as Strategic Asset Allocation, Investment Strategy and Risk Management with the aim of minimising adverse financial impacts and maximising the opportunities for long-term economic returns on Enfield Pension Fund's assets.

Risks that may arise if the proposed decision is taken and actions that will be taken to manage these risks

105. Not considering and approving the report recommendations and not adhering to the overriding legal requirements could impact on meeting the ongoing objectives of the Enfield Pension Fund.

Financial Implications

106. Spending time developing the responsible investment policy helps to ensure that the Committee are fulfilling their responsibilities as quasi Trustees of the Fund and that the Fund's investment objectives and policies are clearly set out in line with the Local Government Pensions Scheme (Management and Investment of Funds) Regulations 2016.
107. The Pension Policy and Investment Committee acts as Scheme Manager for the Pension Fund and is therefore responsible for the management of £1.5 billion worth of assets and for ensuring the effective and efficient running of the Pension Fund. The investment returns that the Fund is able to deliver have significant financial implications, not just for the Fund itself but also on the Fund's employers in terms of the level of contributions they are required to make to meet the Fund's pension promises, which are underwritten by statute.
108. The Fund recognises that investment in fossil fuels and the associated exposure to potential stranded assets scenarios pose material financial risks. These risks apply not only to the Fund's investment portfolio but also, when considered on a wider scale, to long term global economic growth.
109. In recognising the risks that climate change and stranded assets scenarios could pose to the Fund, the Committee needs to understand where these risks might apply and how they can best be mitigated within the investment management framework within which LGPS funds operate.
110. This report provides the Committee with a greater understanding of where climate risks are concentrated within its investment portfolio, which can then be used to help mitigate those risks within its investment strategy.
111. The Executive Director is very pleased to report the reduction in exposure to future CO2 emissions in the Fund public equity holdings by 83% over 2 years, which places the Fund well over halfway to its target of 50% over 5 years. The Fund is therefore on track to achieve its target ahead of time and might even outperform it.

Legal Implications

112. The Committee has legal responsibilities for the prudent and effective stewardship of the Pension Fund and a clear fiduciary duty in the performance of its functions. The LGPS (Management and Investment of Funds) Regulations 2016 require Administering Authorities to state the extent to which they comply with the Guidance given by the Secretary of State. In accordance with regulation 7(2)(e) the authority must set out in its Investment Strategy Statement, its policy on how social, environmental and corporate governance considerations are taken into account in the selection, non-selection, retention and realisation of investments.
113. As indicated in the body of the report, the Committee must ensure that it continues to demonstrate a focus on its duty to meet the obligation to pay pensions when due while at the same time positively addressing climate change. The two need not be incompatible, but there is a tension of which the Committee must remain aware and stay on the right side of.

Workforce Implications

114. The employer's contribution is a significant element of the Council's budget and consequently any improvement in investment performance will allow the Council to meet this obligation easily and could also make resources available for other corporate priorities.

Property Implications

115. None

Other Implications

116. None

Options Considered

117. The Committee could decide not to monitor the progress of achieving the target set for the Fund. Having this target in place as a long-term investor, will assist at all stages of the investment decision-making process and also to gain the trust and pride of members in the governance process and the way in which in the Fund is invested on their behalf. It is therefore important for the Pension Fund to be completely transparent and accountable to members and stakeholders.

Conclusions

118. The Pension Fund set a goal of making its investment portfolios to be net zero carbon emissions by 2030. The initial stage in this approach was twofold:
- i. Firstly, an increase in exposure to investments which support the low carbon transition, by allocating and investing 10% of total funds into renewable energy.

- ii. Secondly a restructuring of the various equity mandates. This restructuring has resulted in a reduction in the carbon emissions and intensity of these portfolios, through changing the universe of shares that can be invested in.
119. The Pension Fund will continue to assess investment opportunities that have a positive impact on society as whole. These include but are not limited to, investments in fixed income (green bonds), property, low carbon assets, renewables and social impact opportunities.
120. The Pension Fund views engagement with companies as an essential activity and encourages companies to take position action towards reversing climate change. The Enfield Pension Fund is a responsible owner of companies and cannot exert that positive influence if it has completely divested from carbon intensive producing companies. The Pension Fund will continue to encourage positive change whilst officers will continue to engage with the investment managers on an ongoing basis to monitor overall investment performance, including carbon and other ESG considerations.
121. The Fund expects the pool and the asset managers to integrate ESG factors into investment analysis and decision making. Monitoring these effectively can assist with resolving issues at early stages through effective engagement with companies and board members. The Fund expects asset managers where possible to engage and collaborate with other institutional investors, as permitted by relevant legal codes to ensure the greatest impact.
122. The Pension Fund will continue to work closely with its investment managers to measure the carbon impact of its investments. This will involve developing internal metrics and agreed targets which will be reviewed on a regular basis.
123. There is increasingly, growing interest in the investment community to develop investment strategies that focus on sustainable investments in different asset class. Enfield Pension Fund will encourage, support and contribute to the work being carried out by the London CIV in the development of sustainable investments in the private markets and other asset class.
124. The Committee set a quantifiable, time-bound target for a reduction in the Fund's exposure to future fossil fuel emissions as stated below:
- i) the Fund to reduce its relative exposure to future emissions from fossil fuel reserves (measured in MtCO₂e – million tonnes of CO₂ emissions) by 50% over 5 years (by 30th September 2025)
 - ii) measure the reduction relative to the Fund's position as at September 2019 and adjusted for Assets Under Management (£AUM)
125. The audit carried out by Trucost as at 31st March 2022, reveals a significant reduction in exposure to future CO₂ emissions in the Fund public equity holdings by 83% over 2 years, which places the Fund well over halfway to its target of 50% over 5 years. The Fund is therefore on track to achieve its target ahead of time and might even outperform it. The reduction is fully compatible with the Fund's wider investment strategy and has been achieved

with no negative impact on performance; the Fund's performance has improved relative to its peer group (other local authority pension funds) over the 2 year period since the introduction of the target.

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Date of report 14th September 2022

Appendices

Appendix 1 – Responsible Investment Policy

Appendix 2 – Trucost Carbon Audit Report for Enfield Pension Fund for 31 March 2022 Fund Valuation

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Appendix 1

London Borough of Enfield Pension Fund Responsible Investment Policy

July 2021

The London Borough of Enfield is the Administering Authority of the London Borough of Enfield Pension Fund and administers the Local Government Pension Scheme on behalf of

Pension Policy and Investment Committee

Resources Department
Enfield Council
Civic Centre, Silver Street
Enfield EN1 3XY
www.enfield.gov.uk

participating employers

RESPONSIBLE INVESTMENT POLICY

1. Introduction
 - 1.1 Responsible Investment is defined by the United Nation's 'Principles for Responsible Investment' document as an approach to investing that aims to incorporate environmental, social and governance (ESG) factors into investment decisions, to better manage risk and to generate sustainable, long term returns. The Pension Fund's approach to responsible investment is aligned with the Fund's investment beliefs and recognises ESG factors as central themes in measuring the sustainability and impact of its investments.
 - 1.2 Failure to appropriately manage ESG factors is considered to be a key risk for the Pension Fund as this can have an adverse impact on the Fund's overall investment performance, which ultimately affects the scheme members, employers and local council taxpayers.
 - 1.3 The United Nations has established 17 Sustainable Development Goals (SDGs) as a blueprint to achieving a better and more sustainable future for all. These goals aim to address the challenges of tackling climate change, supporting industry, innovation and infrastructure, and investing in companies that are focused on playing a key role in building that sustainable future.
 - 1.4 The Pension Fund acknowledges that these goals form a vital part of acting as a responsible investor alongside its administering authority, Enfield Council, with the Council having recently committed itself to achieving carbon neutrality by the year 2030.
 - 1.5 The Pension Fund maintains a policy of engagement with all its stakeholders, including those operating in the investment industry. It is broadly recognised that, in the foreseeable future, the global economy will transition from its reliance on fossil fuels to the widespread adoption of renewable energy as its main source. The impact of this transition on the sustainability of investment returns will be continually assessed by officers, advisors and investment managers.
 - 1.6 The Pension Policy & Investments Committee is committed to playing an active role in the transition to a sustainable economic and societal environment. To that extent, the Pension Fund will continue to seek investments that match its pensions liability profile, whilst having a positive impact on overall society. Greater impact can be achieved through active ownership and lobbying for global companies to change and utilise their resources sustainably.
 - 1.7 With these noble objectives at the forefront, it is important to note that the Pension Policy & Investments Committee has a vital, fiduciary duty to act in the best interests of the LGPS beneficiaries to ensure that their pension benefits are honoured in retirement.

Policy Implementation: Selection Process

- 1.8 The Pension Policy & Investments Committee delegates the individual investment selection decisions to its investment managers. To that extent, the Pension Fund maintains a policy of non-interference with the day-to-day decision-making processes of the investment managers. However, as part of its investment manager appointment process, the Pension Policy & Investments Committee assesses the investment managers' abilities to integrate ESG factors into their investment selection processes.
- 1.9 This includes, but is not limited to:
- a) evidence of the existence of a Responsible Investment policy;
 - b) evidence of ESG integration in the investment process;
 - c) evidence of sign-up to the relevant responsible investment frameworks such as the United Nations Principles for Responsible Investment (PRI);
 - d) evidence of compliance with the Stewardship Code as published by the Financial Reporting Council (FRC);
 - e) a track record of actively engaging with global companies and stakeholders to influence best practice;
 - f) an ability to appropriately disclose, measure and report on the overall impact of ESG decisions made.
- 1.10 As part of its investment selection process, the Pension Policy & Investments Committee will obtain proper advice from the Fund's internal and external advisors with the requisite knowledge and skills. The investment advisor will assess ESG considerations as part of its due diligence process and assess investment managers against the following criteria:
- a) for active managers, the advisor will assess how ESG issues are integrated into investment selection, divestment and retention decisions;
 - b) for passive managers, the investment advisor is aware of the nature of the index construction in the investment selection process places and the proximity of ESG issues in comparison with an active portfolio, but still hold ESG issues in its responsible investment policy as the passive manager actively engages with global companies and stakeholders where appropriate;
 - c) consideration of whether managers are making most effective use of voting rights and if votes are exercised in a manner consistent with ESG considerations specified by the manager;
 - d) how significantly managers value ESG issues and whether any specialist teams and resources are dedicated to this area; and
 - e) how ESG risk assessment is integrated into the portfolio investment selection process and the value and effectiveness of these assessments.

- 1.11 Investment managers are expected to follow best practice and use their influence as major institutional investors and long-term stewards of capital to promote best practice in the companies/projects in which they invest. Investee companies will be expected to comply with all applicable laws and regulations in their respective markets as a minimum.

Policy Implementation: Ongoing Engagement and Voting

- 1.12 Whilst it is still quite difficult to quantify the impact of the less tangible nonfinancial factors on the economic performance of an organisation, this is an area that continues to see significant improvement in the measurement of benchmarking and organisational progress. Several benchmarks and disclosure frameworks exist to measure the different aspects of available ESG data which include carbon emissions, diversity on company boards and social impact. It is apparent that poor scoring on these ESG factors can have an adverse impact on an organisation's financial performance. It is therefore important for the appointed investment managers to effectively assess the impact such factors may have on the underlying investment performance.
- 1.13 The Pension Fund views active engagement as an essential activity in ensuring long-term value and encourages investment managers to consider assessing a range of factors, such as the company's historical financial performance, governance structures, risk management approach, the degree to which strategic objectives have been met and environmental, governance and social issues.
- 1.14 Pension Fund officers will continue to engage with the investment managers on an ongoing basis to monitor overall investment performance, including ESG considerations. This can be implemented in several forms which include, but are not limited to:
- a) Regular meetings with investment managers to assess investment performance and the progress made towards achieving ESG targets;
 - b) reviewing reports issued by investment managers and challenging performance where appropriate;
 - c) working with investment managers to establish appropriate ESG reporting and disclosures in line with the Pension Fund's objectives;
 - d) contributing to various working groups that seek to positively influence the reporting of industry standards on ESG metrics;
 - e) actively contributing to the efforts of engagement groups such as the Local Authority Pension Fund Forum (LAPFF), of which the fund is a member (currently 83 LGPS member funds).

- 1.15 The Pension Fund holds units in pooled equity funds, where our asset managers will have the opportunity to vote at company meetings on our behalf. Engagement with companies can have a direct impact on voting choices and fund manager voting and engagement reports are reviewed on a regular basis.
- 1.16 The Fund will continue to collaborate with the London CIV on maintaining a shared voting policy for the equity managers on the London CIV platform and actively seek to align these policies with manager insights. Lobbying with other London CIV clients will give the Pension Fund greater control and impact over our voting choices and a centralised process will ensure our voting remains consistent and has the greatest impact.
- 1.17 The Pension Fund's officers will work closely with the London CIV pool, through which the Pension Fund will increasingly invest, in developing and monitoring its internal frameworks and policies on all ESG issues which could present a material financial risk to the long-term performance of the fund. This will include the London CIV's ESG frameworks and policies for investment analysis, decision making and responsible investment.
- 1.18 In preparing and reviewing its Investment Strategy Statement, the Pension Fund will consult with interested stakeholders including, but not limited to:
- a) Pension Fund employers;
 - b) Local Pension Board;
 - c) advisors/consultants to the fund;
 - d) investment managers.

Policy Implementation: Training

- 1.19 The Pension Policy & Investments Committee and the Fund's officers will receive regular training on ESG issues and responsible investment. A review of training requirements and needs will be carried out at least once on annual basis. Training is intended to cover the latest updates in legislation and regulations, as well as best practice with regards to ESG integration into the pension fund's investment process.

FOSSIL FUEL DIVESTMENT PRINCIPLES

- 1.20 This section will specifically address the Fund's principles for the divestment over time of fossil fuel investments: The four key principles for divestment are set out below:
- a) Fossil fuel risk will be incorporated into the overall asset allocation strategy
 - b) The commitment to reduction in fossil fuel investment is more than a long term risk mitigation strategy.

- c) Divestment is not risk free.
- d) Engagement and LCIV

1.21 **Principle 1: Incorporation into asset allocation strategy**

- i) The primary purpose of the Fund is to meet the pension benefits for the members of the Fund. Every three years the Fund undergoes an actuarial valuation, which estimates the value of pensions due to be paid to members. The result of which allows the Fund to review the asset and investment strategy in order to establish the most appropriate mix of assets to best achieve the required level of net of fees investment return on an appropriate risk adjusted basis, whilst ensuring diversity of assets, sufficient liquidity and appropriate governance of the investments.
- ii) The Fund will seek to fully integrate fossil fuel risk into the investment strategy review process, from overarching asset allocation to individual investment choices. All investments will be considered through the lens of fossil fuel risk, but that any investment cannot be separated from the overall investment objectives for the Fund and must be subject to a full business case in consideration of the overall portfolio as well as fees and transition costs.

1.22 **Principle 2: More than a long-term risk mitigation strategy**

- i) The Fund has a fiduciary duty to all the employers within the Fund and for the scheme members and as such must manage the investments assets effectively with an investment time horizon in line with the liabilities for the Fund and have due regard to the investment risk inherent within the portfolio
- ii) The Fund recognises the risk that fossil fuel investment places upon the Fund for future investment and as such, this document largely involves the desire to mitigate risk.
- iii) However, purely focussing upon those investments that are negatively exposed to the decline in profitability and viability of fossil fuel extraction and usage excludes a key consideration for the Fund; identifying those investments that are positioned to gain from such a transition.
- iv) The Fund therefore will proactively seek to identify suitable investments that fit within the overall asset allocation strategy and will be the beneficiaries from a low carbon regulatory and investment environment. The Fund will target both a downside risk mitigation strategy and a desire to invest in positive 'green' focussed assets.

1.23 **Principle 3: Divestment is not risk free – Potential for negative implications**

- i) The Fund has sought to operate an uncomplicated and stable investment structure, resisting short term investment decision making. This approach has proved successful for the Fund with strong investment performance over the previous long term. The implementation of a fossil fuel risk mitigation commitment has the potential to complicate investment decision making.
- ii) It is therefore imperative that, as set out in Principle 2, the Fund must seek to incorporate fossil fuel implications into the overarching investment strategy rather than seeking to separately implement fossil fuel risk mitigation approaches.
- iii) The Fund has long held a large portion of equity investments as passive (investments that are held in the same proportion as that of the market as a whole) with a current target allocation of 40%. (15% out of this 40% have been invested in Reduced Fossil Fuel Passive Global Equity mandate). This approach acknowledges the challenges and typically higher costs involved in seeking to predict future investment winners and losers. The inclusion of a fossil fuel risk mitigation strategy within this leads to a risk that in the short term the Fund may be negatively exposed to overall market returns if fossil fuel based investments outperform the wider market. Global usage of fossil fuels is still predicted to comprise a significant portion of global energy usage in years to come and as such the Fund must be cognisant of the potential investment returns forgone should fossil fuel usage decline at a rate slower than the market has priced in.
- iv) There are likely to be additional management expenses within equity investment mandates that have some element of fossil fuel exclusion. As such the Fund must be confident that the additional risk from holding a portion of the Fund that is exposed to fossil fuels must be considered to be greater than the additional burden of higher management fees and any associated costs of transitioning assets from one mandate to another. It is therefore important for the Fund to collaborate with other local authority partners to work to reduce the costs for such reduced fossil fuel investments.
- v) The measurement and assessment of which investments are most exposed to fossil fuels is not straightforward. Some companies may hold fossil fuel reserves or operations which are more damaging to the environment as a result of greater CO₂ output but that might be paradoxically less exposed to changing regulatory environment due to lower extraction costs. Companies not directly involved in the production or extraction of fossil fuel may derive significant portions of their revenue from fossil fuel companies. The Fund must ensure that

any assessment of exposure to fossil fuels risk is sophisticated and investments are not distorted by inaccurate data.

1.24 **Principle 4: Engagement and Local Authority partnerships – LCIV**

- i) There is growing appreciation of the growing risks and opportunities that Pension Funds face from the transition away from traditional fossil fuel usage, including among Local Government Pension Funds. It is important that the Fund works with other Local Authority partners to share knowledge and best practice as well as utilising collective assets to push for the most effective and efficient implementation of reduced fossil fuel strategies.
- ii) The Fund will work with local authority partners, such as the London Borough of Hackney, Islington, Haringey as well as the LCIV, the pooled investment vehicle of which the Fund is a shareholder and active supporter, in the application of this commitment. The Fund will also seek to be an active voice in the investment community for the advancement of investment outside of fossil fuels.
- iii) The carbon footprint assessment of a portfolio is most commonly applied to listed equities as significant numbers of listed companies publicly report their estimated greenhouse gas emissions using the greenhouse gas protocol standard template for measurement. This allows for greater consistency in comparison between companies and sectors and allows an investor to better understand which elements of the portfolio are the most exposed to fossil fuel risk.
- iv) A key element for this document is to not just focus upon the risk to the Fund from fossil fuels but also to invest in assets that are best positioned to benefit from a low fossil fuel environment. Two companies involved in electricity generation may have a very similar current carbon output; but one has focussed capital spend and research on renewable energy and other 'green' activities. As part of a portfolio assessment, a data provider can analyse the extent to which income for the portfolio is derived from low fossil fuel sources.
- v) This assessment is easier to perform for listed equities, due to the wider availability of company specific data, but can be extended to analyse other assets classes within the portfolio. The Fund commissioned a full assessment of the greenhouse gas exposure within the Fund equity portfolios on a current output and potential output basis. The results of which will allow the Fund to monitor progress in the reduction of exposure as well as to set meaningful targets for this reduction.

1.25 **Timeline:**

- 1.26 The Fund's implementation period for fossil fuel reduction is split into three main time horizons, encompassing short medium and long-term objectives.

- i) The short term: one-five years (2020-2024)
- ii) The medium term: five-ten years (2024–2030)
- iii) The long term: beyond ten years (2030+)

1.27 Given the difficulty in predicting the global investment and technological environment in addition to Fund specific liability and investment requirements, longer term periods will likely be subject to significant variability and uncertainty.

Short Term – From 2020 to 2024

1.28 Triennial Actuarial Valuation and Investment Strategy Review

The Fund published the most recent actuarial valuation in March 2020, the results are the foundation of the current asset strategy review to be completed June 2021. The asset allocation review aims to ensure that the current investment allocation is appropriate to meet the required investment return to fund future pensions within a suitable risk profile. Where investment underperformance is identified or risk profile changes, either across an asset class or manager specific, any subsequent reallocation will be considered with regard to overall fossil fuel exposure.

1.29 Local Authority Collaboration and Pooling

- i) It is important that the Fund works together with other likeminded local authority partners, e.g. London Borough of Hackney, in order to develop suitable fossil fuel reduction opportunities. Collaboration will also seek to mitigate some of the fee and transition cost implications of changing investment allocation.
- ii) The Fund will engage with the LCIV through representation by officers and members on key LCIV governance panels to push for the availability of reduced fossil fuel investment and Paris Aligned mandates within the LCIV.

1.30 Fund Managers

- i) Committee to appoint a Paris Aligned Active Equity manager/mandate (to further reduce fossil fuels exposure of the two active Global Equity portfolios with LCIV which currently stood just about 15% of the total fund.
- ii) Committee to appoint a Renewable Infrastructure manager/mandate or longterm investments in sustainable technology and alternative energy sources with 10% of total fund assets allocated to this strategy.
- iii) All Hedge Funds to be redeemed.

- iv) The Fund will continue dialogue with MFS Investment Management to ensure that fossil fuel risk is considered as part of stock decision making and that those with significant CO2 output be treated with caution.

1.31 General

- i) The Fund commissioned a carbon footprint assessment for the equity portfolios to analyse the overall exposure across each asset classes to identify the most effective methods to reduce the risk from fossil fuels. This analysis demonstrated the proportion of the Fund, which is positively exposed to low carbon or 'green' revenue. Quantifying exposure will allow the Fund to develop meaningful targets for the reduction in fossil fuel exposure over the long term, whilst also identifying the areas of greatest risk within the portfolio.
- ii) The Fund will continue to support the work of the Local Authority Pension Fund Forum (LAPFF) as representing 90 local authority pension funds in their engagement with companies to promote best practice climate aware business activities.
- iii) Any changes to investment allocations will need to be communicated with key advisors, such as the Fund actuary, as well as the Fund's external auditors.
- iv) Committee is monitoring PIRC Engagements with Companies on their ESG considerations and Responsible Investment Policies to ensure the engagement is adequate and in line with the Fund's Investment beliefs.
- v) Committee continue to review quarterly reports provided by managers to understand their approaches and actions taken in areas such as engagement and voting and how managers are reporting on relevant RI metrics to their investors.
- vi) Committee members are meeting with Asset Managers every month for clarification and better understanding of each fund manager Responsible Investment (RI) Policy and how to work effectively with the Fund going forward.
- vii) Work to be carried out stating Fund Managers RI Policy and alignment with Enfield PF.
- viii) Committee to review current investment beliefs, climate policy and SDG aspirations.
- ix) Committee to consider Fund approach to Stewardship and TCFD reporting.

Medium Term – From 2024 to 2030

1.32 Triennial Actuarial Valuation and Investment Strategy Review

- i) The medium term will incorporate the results of the triennial valuation in 2025 and 2028 and will constitute key points for major review of assets and investments to ensure that these are best placed to meet the payment of benefits to members of the scheme. Fossil fuel risks and opportunities incorporated in the consideration for any amendments to the asset allocation strategy.
- ii) The carbon footprint and risk analysis will be re-calculated at each triennial asset allocation review and incorporated into the overall portfolio risk assessment.

1.33 Local Authority Collaboration and Pooling

The Fund is committed to working with the LCIV and will seek to comply with the Government requirements for pooled investments. Over the course of this period the proportion of assets under the control of the LCIV will increase significantly, which may limit the availability of reduced fossil fuel investment mandates. Therefore, the Fund will continue to seek to exert influence over the strategic direction of the available investments within the LCIV, alongside other local authority partners, to ensure that these are appropriate for the sustainable strategy that the Fund wishes to implement. The opportunity for reduced fossil fuel or sustainable investment in multi asset mandates will likely develop as part of continued engagement between the Fund and other likeminded members of the LCIV.

1.34 Fund Managers

Continued engagement with fund managers to ensure that fossil fuel risks and opportunities are consistently and appropriately taken into consideration throughout the decision making process.

1.35 General

- i) The Fund will continue a policy of engaging with companies through membership of the LAPFF and the LCIV to encourage companies to adopt the highest of standards with regard to fossil fuels and energy efficiency.
- ii) The Fund will be able to measure progress made against targets for the proportion of investments exposed to low carbon or green revenues and the overall carbon exposure of the Fund. In the event that elements of the portfolio should be changed then subject to business case and appropriate due diligence, any change in portfolio must be considered in light of the overall investment strategy with regard to fossil fuels.

Long Term: 2030 onwards

1.36 Triennial Actuarial Valuation and Investment Strategy Review

The Fund will continue to assess the overall investment strategy as required to meet the pension benefits for members based upon the calculations within the triennial actuarial valuations. As and when asset and manager allocations require amending, the risk of fossil fuel exposure will be incorporated into any due diligence regarding risk and reward decision making.

1.37 Local Authority Collaboration and Pooling

In the long term, the vast majority of assets will be invested through the LCIV so ensuring the availability of suitable opportunities within the LCIV will be key for the continued reduction in fossil fuel investments as well as positioning the Fund to benefit from clean technology and low carbon industries. This will allow the Fund to invest across a variety of disparate asset classes without compromising the ambition to be a long-term sustainable investor.

1.38 Fund Managers

Most of this engagement will be exercised through the LCIV pooled investment vehicle

1.39 General

The Fund will fully incorporated fossil fuel risk, through regular and sophisticated monitoring and portfolio analysis into the investment decision making process. Carbon reduction targets as part of the overall portfolio will play a key role in the increasing percentage of investment assets within sustainable or low carbon income sources.

London Borough of Enfield – Investment Beliefs (Final - Approved 27/02/2020)

The Pension Policy and Investment Committee of London Borough of Enfield believes that: -

1. Responsible investment is supportive of long-term risk-adjusted returns, across all asset classes. As a long-term investor, the Fund should invest in assets with sustainable business models in fulfilling its fiduciary duty to the scheme members.
2. Investee companies and asset managers with robust governance structures are better positioned to handle shocks and stresses. They capture opportunities by investing in companies which have weak but improving governance of financially material Environmental, Social and Governance (ESG) issues. [An opportunity is defined by its potential and intention to become aligned with the Fund's objectives and strategy].
3. The Fund Investment managers should include the Fund ESG considerations in their investment processes.
4. It is important to consider a range of ESG risks and opportunities. Investible priorities should be based on the United Nations Sustainable Development Goals (UN SDGs).
5. Climate change (SDG 13, Climate Action) represents a long term material financial risk for the Fund, and will impact our members, employers and our portfolio holdings, and is therefore one of these priorities.
6. It must prioritise the following SDGs in its investment strategy:
 - a. SDG 7 – Affordable and Clean Energy
 - b. SDG 9 – Industry, Innovation and Infrastructure
 - c. SDG 11 - Sustainable Cities and Communities
 - d. SDG 12 – Responsible Consumption and Production
 - e. SDG 13 - Climate Action
7. The Fund's appointed Investment Managers are accountable for implementing appropriate responsible Investment policies, tailored to these priorities. The Investment managers should report back on these priorities.
8. Divestment mitigates ESG-related risk, when collaborative engagement with companies by investors and investment managers

fails to produce positive responses, which meet its ESG-related priorities.

9. The exercise of voting rights is consistent with an asset owner's fiduciary duty: The Committee expects its managers to exercise this right fully and reserves the right to direct votes.

Supporting evidence

Investment Theses behind the chosen SDGs (G applies to all)

- SDG7 - Affordable and Clean Energy. Governmental pressure to meet carbon emission goals presents a serious risk to the profitability and assets of traditional energy companies. At the same time, climate-related investment opportunities are available in areas such as energy efficiency and renewable energy sources. (E)
- SDG9 - Industry, Innovation and Infrastructure. Industrial and Infrastructure development represent a long term source of investment and social opportunity as well as a risk of increased emissions / social stress. It also supports goals of social inclusion and gender equality. (E, S)
- SDG11 - Sustainable Cities and Communities. Increasing urbanisation represents a long term source of investment and social opportunity as well as a risk of increased emissions / social stress (E, S)
- SDG12 - Responsible Consumption and Production. Companies running energy efficient and socially responsible operations and supply chains are less exposed to risk and are likely to be favoured by customers and regulators. (E, S)
- SDG13 - Climate change. Climate change and the response of policy makers has the potential to have a serious impact on financial markets. (E)

Trucost Portfolio Analytics

Trucost
ESG Analysis

S&P Global

Enfield Pension Fund : 2022

Enfield Aggregate Portfolio

July 19, 2022



About Trucost

Trucost is part of S&P Global. A leader in carbon and environmental data and risk analysis, Trucost assesses risks relating to climate change, natural resource constraints, and broader environmental, social, and governance factors. Companies and financial institutions use Trucost intelligence to understand their ESG exposure to these factors, inform resilience and identify transformative solutions for a more sustainable global economy. S&P Global's commitment to environmental analysis and product innovation allows us to deliver essential ESG investment-related information to the global marketplace. For more information, visit www.trucost.com.

About S&P Global

S&P Global (NYSE: SPGI) is a leading provider of transparent and independent ratings, benchmarks, analytics and data to the capital and commodity markets worldwide. For more information, visit www.spglobal.com.

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Benefits of Trucost Portfolio Analysis

It is well-documented that overuse of environmental resources and emission of pollutant gases is not only unsustainable for the planet but could also have widespread economic and social consequences. As governments, capital markets and consumers start to challenge the status quo, those companies that use resources less efficiently than peers, or are more carbon intensive, could lose their market share, licences to operate and ability to source from suppliers. This has possible operational and financial implications for revenues, profit, cost of capital and valuations.

Trucost's portfolio analysis provides investors with essential intelligence to appraise large numbers of holdings or investments for potential exposure to carbon and other environmental impacts, regardless of asset class, geography or investment style. This report provides an invaluable tool for investors to understand:

- Exposure to rising carbon costs
- Carbon performance of holdings within a sector
- Materiality of different environmental impacts
- Engagement opportunities
- Exposure to possible stranded assets
- The baseline against which to measure improvement over time

Summary of Coverage

Portfolio: Enfield Aggregate Portfolio

Benchmark:

Analysis Date: July 19, 2022

Holdings Date: March 31, 2022

Asset Classes: Mixed

Apportioning Factor: Market capitalization

Largest Contributor Level: Companies

	VoH Covered GBPm	Coverage Rate (% of Starting VOH)	Number of Instruments Analysed	Number of Companies Analysed
Portfolio	631.029	98.02	3227/3294	3214

Summary of Results

		Unit	Portfolio
Carbon	Carbon to Revenue	tCO2e/mGBP	123.58
	Carbon to Value Invested	tCO2e/mGBP	43.57
	Weighted Average Carbon Intensity	tCO2e/mGBP	139.73
	Absolute CO2e	tonnes	27,495
Fossil Fuels & Stranded Assets	Extractive Industries Revenue Exposure (apportioned)	%	0.40
	Extractive Industries Revenue Exposure (weighted average)	%	0.37
	Extractive Industries Revenue Exposure (VOH)	%	0.67
	Reserves Exposure (VOH)	%	0.83
	Absolute CO2e from Reserves	tonnes	100,772
	Absolute Fossil Fuel CAPEX	GBP	47,658
	Coal Revenue Exposure (apportioned)	%	0.04
	Coal Revenue Exposure (weighted average)	%	0.06
	Coal Revenue Exposure (VOH)	%	0.39
	Energy Transition	Absolute Fossil Fuel Power Generation	GWh
Absolute Renewable Power Generation		GWh	1.269
Absolute Other Power Generation		GWh	0.033
Fossil Fuel Power Revenue Exposure (apportioned)		%	+0.00
Fossil Fuel Power Revenue Exposure (weighted average)		%	+0.00
Fossil Fuel Power Revenue Exposure (VOH)		%	+0.00
Renewable Power Revenue Exposure (apportioned)		%	0.05
Renewable Power Revenue Exposure (weighted average)		%	0.09
Renewable Power Revenue Exposure (VOH)		%	0.15
Other Power Revenue Exposure (apportioned)		%	+0.00
Other Power Revenue Exposure (weighted average)		%	+0.00
Other Power Revenue Exposure (VOH)		%	+0.00

Carbon

Introduction

Carbon exposure analysis offers a systematic assessment of the carbon risks and opportunities within a portfolio or index at a point in time. The analysis quantifies greenhouse gas emissions (GHG) embedded within a portfolio presenting these as tonnes of carbon dioxide equivalents (tCO₂e). Comparing the total GHG emissions of each holding relative to either revenues generated or capital invested, gives a measure of carbon exposure that enables comparison between companies, irrespective of size or geography.

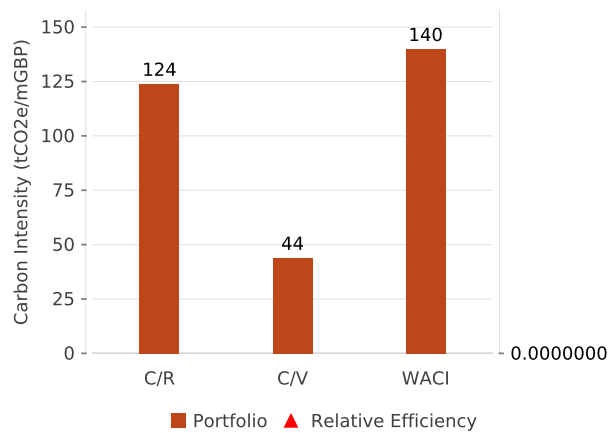
The **Total Carbon Emissions**, **Carbon to Value Invested (C/V)**, **Carbon to Revenue (C/R)**, and **Weighted Average Carbon Intensity (WACI)** are all presented below. For more information on methodological approaches please refer to Appendix 2 and 3.

The scope used in this analysis was Direct Emissions, First Tier Indirect Emissions. For more information on scopes please refer to Appendix 1.

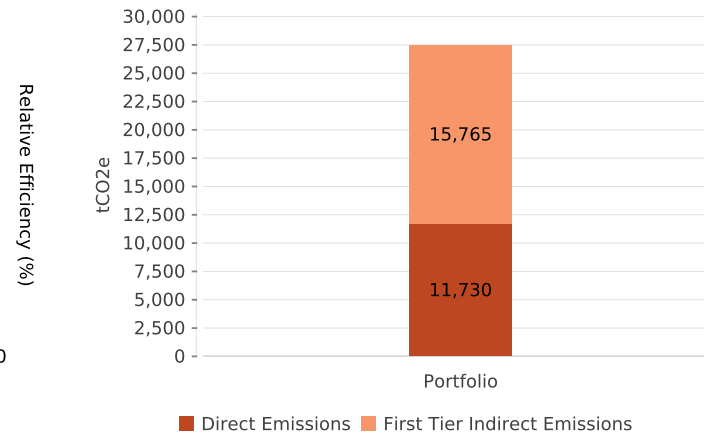
The disclosure rate is measured against the value of holdings (VOH), the share of apportioned GHGs, and number of companies. For details, please refer to Carbon Appendix 4.

Key Findings

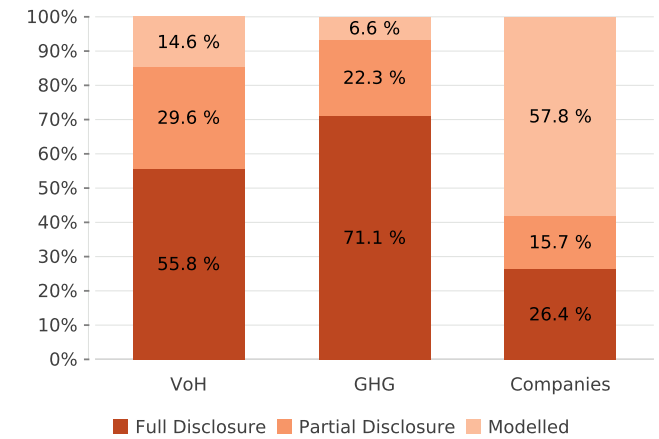
Carbon Intensity by Method



Carbon Apportioned by Scope



Portfolio Disclosure



Carbon

Largest Contributors - Carbon to Revenue

The largest contributors to the portfolio's carbon intensity are shown below. Note that a company may appear due to the proportion owned/financed, rather than because it is the most carbon intensive held. The 'C/R Intensity Contribution' is the percentage change in the portfolio's intensity that would be caused by excluding the holding referenced. In other words, it is a measurement of how much a specific holding effects the carbon performance of the portfolio.

Company Name	Holding (mGBP)	Sector	Carbon AppORTioned (% of total)	Company C/R Intensity (tCO2e/mGBP)	Rank in Benchmark Sector	C/R Intensity Contribution (%)	Data Source (Scope 1)
CRH Plc	1.755	Materials	11.45	1,965.07	N/A	-10.81	Full Disclosure
Ryanair Holdings Plc	1.902	Industrials	7.14	1,809.11	N/A	-6.68	Partial Disclosure
Danone S.A.	2.146	Consumer Staples	5.44	896.14	N/A	-4.73	Full Disclosure
Linde plc	3.790	Materials	4.44	1,857.11	N/A	-4.16	Full Disclosure
Martin Marietta Materials, Inc.	2.920	Materials	3.79	1,887.21	N/A	-3.55	Full Disclosure
Reliance Industries Limited	2.714	Energy	2.84	773.91	N/A	-2.39	Partial Disclosure
L'Air Liquide S.A.	1.458	Materials	2.45	1,614.51	N/A	-2.26	Full Disclosure
Nestle SA	5.361	Consumer Staples	2.77	554.00	N/A	-2.17	Partial Disclosure
Rio Tinto Group	1.840	Materials	2.18	944.86	N/A	-1.90	Full Disclosure
Wizz Air Holdings Plc	0.409	Industrials	1.94	1,611.27	N/A	-1.80	Full Disclosure

Largest Modelled Contributors - Carbon to Revenue

In order to highlight for engagement purposes, we have identified the largest contributors for which up-to-date disclosures were not available. These are ranked according to the size of their impact on your carbon intensity as estimated by Trucost, using our proprietary environmental profiling model.

Company Name	Holding (mGBP)	Sector	Carbon AppORTioned (% of total)	Company C/R Intensity (tCO2e/mGBP)	Rank in Benchmark Sector	C/R Intensity Contribution (%)	Data Source (Scope 1)
Yakult Honsha Co.,Ltd.	0.124	Consumer Staples	0.18	913.06	N/A	-0.16	Modelled
Brookfield Renewable	0.334	Utilities	0.13	522.42	N/A	-0.10	Modelled
Avantor, Inc.	0.135	Health Care	0.11	704.36	N/A	-0.09	Modelled
SMC Corporation	1.224	Industrials	0.14	238.23	N/A	-0.07	Modelled
Hoshizaki Corporation	0.408	Industrials	0.12	179.57	N/A	-0.04	Modelled
Koito Manufacturing Co., Ltd.	0.058	Consumer Discretionary	0.05	214.21	N/A	-0.02	Modelled
Kweichow Moutai Co., Ltd.	0.524	Consumer Staples	0.03	364.38	N/A	-0.02	Modelled
Old Dominion Freight Line, Inc.	0.296	Industrials	0.03	255.72	N/A	-0.02	Modelled
Broadcom Inc.	1.545	Information Technology	0.08	144.47	N/A	-0.01	Modelled
Newell Brands Inc.	0.034	Consumer Discretionary	0.03	200.89	N/A	-0.01	Modelled

Carbon

Largest Contributors - Carbon to Value Invested

The largest contributors to the portfolio's carbon intensity are shown below. Note that a company may appear due to the proportion owned/financed, rather than because it is the most carbon intensive held. The 'C/V Intensity Contribution' is the percentage change in the portfolio's intensity that would be caused by excluding the holding referenced. In other words, it is a measurement of how much a specific holding effects the carbon performance of the portfolio.

Company Name	Holding (mGBP)	Sector	Carbon Apportioned (% of total)	Company C/V Intensity (tCO2e/mGBP)	Rank in Benchmark Sector	C/V Intensity Contribution (%)	Data Source (Scope 1)
CRH Plc	1.755	Materials	11.45	1,794.37	N/A	-11.20	Full Disclosure
Ryanair Holdings Plc	1.902	Industrials	7.14	1,031.35	N/A	-6.86	Partial Disclosure
Danone S.A.	2.146	Consumer Staples	5.44	697.22	N/A	-5.12	Full Disclosure
Linde plc	3.790	Materials	4.44	322.44	N/A	-3.87	Full Disclosure
Martin Marietta Materials, Inc.	2.920	Materials	3.79	356.97	N/A	-3.34	Full Disclosure
Reliance Industries Limited	2.714	Energy	2.84	287.31	N/A	-2.42	Partial Disclosure
L'Air Liquide S.A.	1.458	Materials	2.45	461.59	N/A	-2.22	Full Disclosure
Nestle SA	5.361	Consumer Staples	2.77	142.17	N/A	-1.94	Partial Disclosure
Rio Tinto Group	1.840	Materials	2.18	325.03	N/A	-1.89	Full Disclosure
Wizz Air Holdings Plc	0.409	Industrials	1.94	1,305.09	N/A	-1.88	Full Disclosure

Largest Modelled Contributors - Carbon to Value Invested

In order to highlight for engagement purposes, we have identified the largest contributors for which up-to-date disclosures were not available. These are ranked according to the size of their impact on your carbon intensity as estimated by Trucost, using our proprietary environmental profiling model.

Company Name	Holding (mGBP)	Sector	Carbon Apportioned (% of total)	Company C/V Intensity (tCO2e/mGBP)	Rank in Benchmark Sector	C/V Intensity Contribution (%)	Data Source (Scope 1)
Arrow Electronics, Inc.	1.277	Information Technology	0.91	196.17	N/A	-0.71	Modelled
HCA Healthcare, Inc.	4.346	Health Care	0.96	60.43	N/A	-0.27	Modelled
MediPal Holdings Corporation	0.140	Health Care	0.26	516.46	N/A	-0.24	Modelled
Yakult Honsha Co.,Ltd.	0.124	Consumer Staples	0.18	409.38	N/A	-0.16	Modelled
Wayfair Inc.	0.494	Consumer Discretionary	0.18	99.68	N/A	-0.10	Modelled
Iida Group Holdings Co., Ltd.	0.108	Consumer Discretionary	0.12	296.81	N/A	-0.10	Modelled
Walmart Inc.	0.676	Consumer Staples	0.20	80.54	N/A	-0.09	Modelled
Avantor, Inc.	0.135	Health Care	0.11	223.74	N/A	-0.09	Modelled
Brookfield Renewable	0.334	Utilities	0.13	107.80	N/A	-0.08	Modelled
Costco Wholesale Corporation	1.437	Consumer Staples	0.29	56.28	N/A	-0.07	Modelled

Carbon

Largest Contributors - Weighted Average Carbon Intensity

The largest contributors to the portfolio's carbon intensity are shown below. The 'WACI Contribution' is the percentage change in the portfolio's intensity that would be caused by excluding the holding referenced. In other words, it is a measurement of how much a specific holding effects the carbon performance of the portfolio

Company Name	Holding (mGBP)	Sector	Carbon AppORTioned (% of total)	Company C/R Intensity (tCO2e/mGBP)	Rank in Benchmark Sector	WACI Contribution (%)	Data Source (Scope 1)
Linde plc	3.790	Materials	4.44	1,857.11	N/A	-7.43	Full Disclosure
Martin Marietta Materials, Inc.	2.920	Materials	3.79	1,887.21	N/A	-5.81	Full Disclosure
CRH Plc	1.755	Materials	11.45	1,965.07	N/A	-3.64	Full Disclosure
Marriott International, Inc.	1.066	Consumer Discretionary	0.46	3,124.86	N/A	-3.62	Full Disclosure
Ryanair Holdings Plc	1.902	Industrials	7.14	1,809.11	N/A	-3.61	Partial Disclosure
Nestle SA	5.361	Consumer Staples	2.77	554.00	N/A	-2.54	Partial Disclosure
L'Air Liquide S.A.	1.458	Materials	2.45	1,614.51	N/A	-2.44	Full Disclosure
Canadian Pacific Railway	3.405	Industrials	0.69	721.54	N/A	-2.26	Full Disclosure
Reliance Industries Limited	2.714	Energy	2.84	773.91	N/A	-1.96	Partial Disclosure
Canadian National Railway	2.904	Industrials	0.86	724.83	N/A	-1.94	Full Disclosure

Largest Modelled Contributors - Weighted Average Carbon Intensity

In order to highlight for engagement purposes, we have identified the largest contributors for which up-to-date disclosures were not available. These are ranked according to the size of their impact on your carbon intensity as estimated by Trucost, using our proprietary environmental profiling model.

Company Name	Holding (mGBP)	Sector	Carbon AppORTioned (% of total)	Company C/R Intensity (tCO2e/mGBP)	Rank in Benchmark Sector	WACI Contribution (%)	Data Source (Scope 1)
Brookfield Renewable	0.334	Utilities	0.13	522.42	N/A	-0.14	Modelled
SMC Corporation	1.224	Industrials	0.14	238.23	N/A	-0.14	Modelled
Kweichow Moutai Co., Ltd.	0.524	Consumer Staples	0.03	364.38	N/A	-0.13	Modelled
Yakult Honsha Co.,Ltd.	0.124	Consumer Staples	0.18	913.06	N/A	-0.11	Modelled
Avantor, Inc.	0.135	Health Care	0.11	704.36	N/A	-0.09	Modelled
Old Dominion Freight Line, Inc.	0.296	Industrials	0.03	255.72	N/A	-0.04	Modelled
Hoshizaki Corporation	0.408	Industrials	0.12	179.57	N/A	-0.02	Modelled
Generac Holdings Inc.	0.106	Industrials	0.01	273.65	N/A	-0.02	Modelled
Broadcom Inc.	1.545	Information Technology	0.08	144.47	N/A	-0.00	Modelled
Snap-on Incorporated	0.043	Industrials	0.02	278.07	N/A	-0.00	Modelled

Fossil Fuels & Stranded Assets

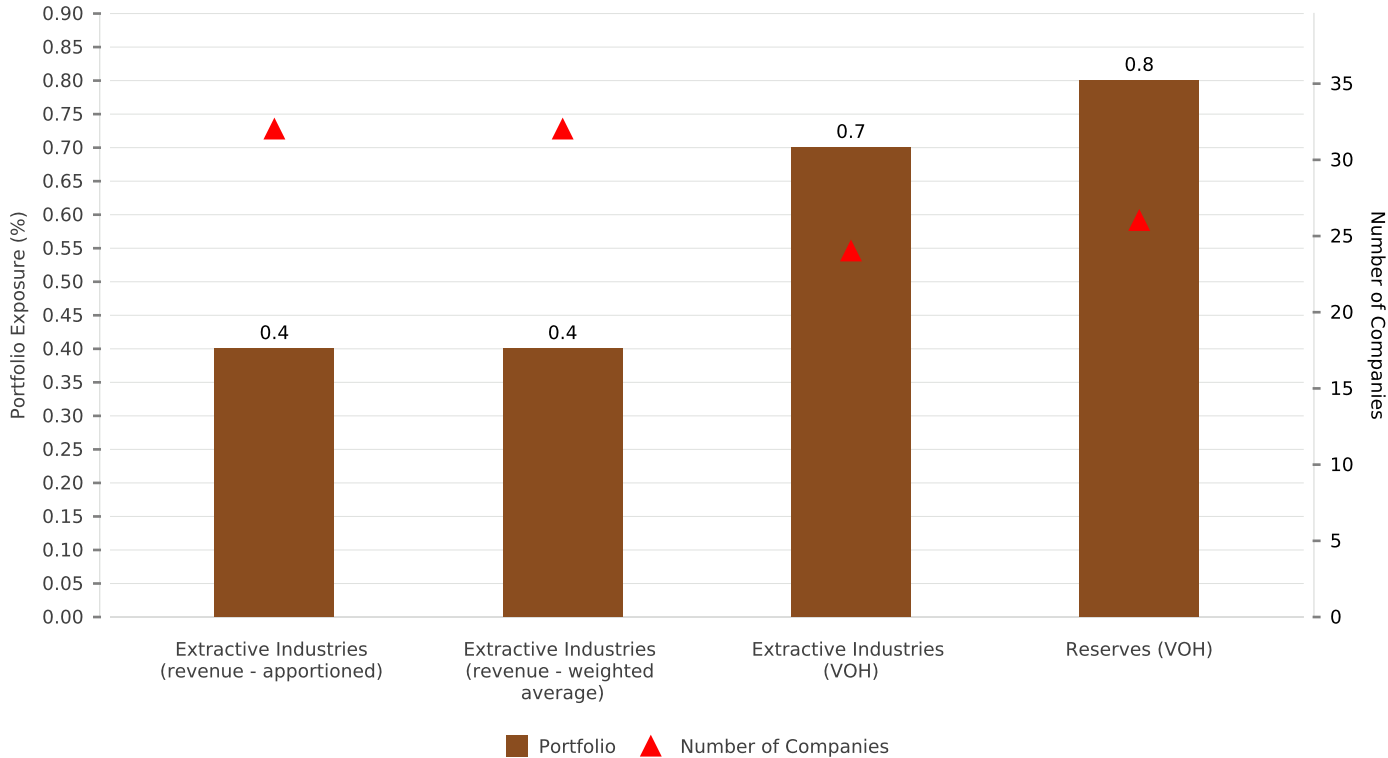
Introduction

Future emissions from fossil fuel reserves far outweigh the allowable carbon budget that will limit global warming to 2 degrees Celsius above pre-industrial levels. Industry experts refer to assets that may suffer from unanticipated or premature write-downs, devaluations or conversion to liabilities as 'stranded assets'. Trucost assesses exposure to such assets by highlighting holdings with business activities in extractive industries, as well as holdings in companies that have disclosed proven and probable fossil fuel reserves in the portfolio. This helps to identify potentially stranded assets that would become apparent as economies move towards a 2 degree alignment.

The portfolio's exposure to potentially stranded assets has been assessed on both a value of holdings (VOH) basis and a revenue basis. For the revenue exposure metric, both the apportioning and weighted average approach are presented. For the VOH exposure metric, the revenue threshold for inclusion was 5%. For more details on the methodology please refer to Appendix 5.

Key Findings

Exposure to Extractive Industries and Reserves



Extraction-related activities include the following sectors

- Crude petroleum and natural gas extraction
- Tar sands extraction
- Natural gas liquid extraction
- Bituminous coal underground mining
- Bituminous coal and lignite surface mining
- Drilling oil and gas wells
- Support activities for oil and gas operations

Fossil fuel reserves may include the following types:

- Coal (metallurgical, thermal or other)
- Oil (conventional or unconventional)
- Gas (natural and shale)
- Oil and/or gas (where no specification has been provided)

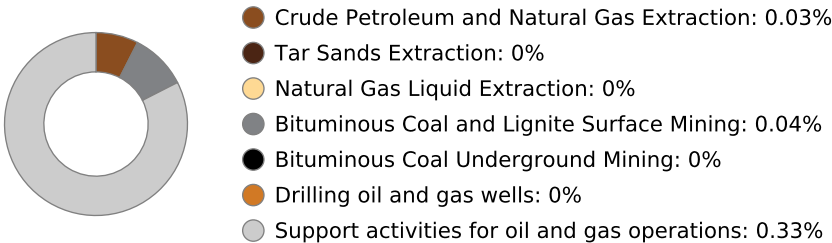
Fossil Fuels & Stranded Assets

Extractives Revenue Exposure by Sector

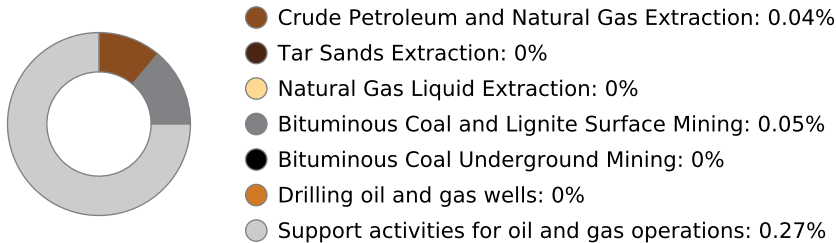
Below is a breakdown of the portfolio's extractive revenue exposure by sector, as a share of total revenue. Both the apportioning and the weighted average methods are displayed.

	Bituminous Coal and Lignite Surface Mining	Bituminous Coal Underground Mining	Crude Petroleum and Natural Gas Extraction	Natural Gas Liquid Extraction	Drilling oil and gas wells	Tar Sands Extraction	Support activities for oil and gas operations	Total Extractives Exposure
Portfolio - apportioned	0.04	+0.00	0.03	+0.00	+0.00	+0.00	0.33	0.40
Portfolio - weighted	0.05	+0.00	0.04	+0.00	+0.00	+0.00	0.27	0.37

Portfolio - Apportioning Method



Portfolio - Weighted Average Method



Fossil Fuels & Stranded Assets

Embedded Emissions

Trucost is able to analyse the carbon emissions embedded within the fossil fuel reserves which have been disclosed by companies in the portfolio or benchmark. Companies may disclose both 1P and 2P reserves (1P refers to those held with 90% confidence, 2P are those held with 50% confidence). Both 1P and 2P are used when assigning embedded emissions to a company.

The chart below shows the total tonnes of apportioned CO2 from reserves, broken down by reserve type. It also shows the reserves 'intensity' by normalizing the apportioned embedded emissions by the VOH.

The total embedded CO2 emissions from reserves is 0.101 m tonnes.

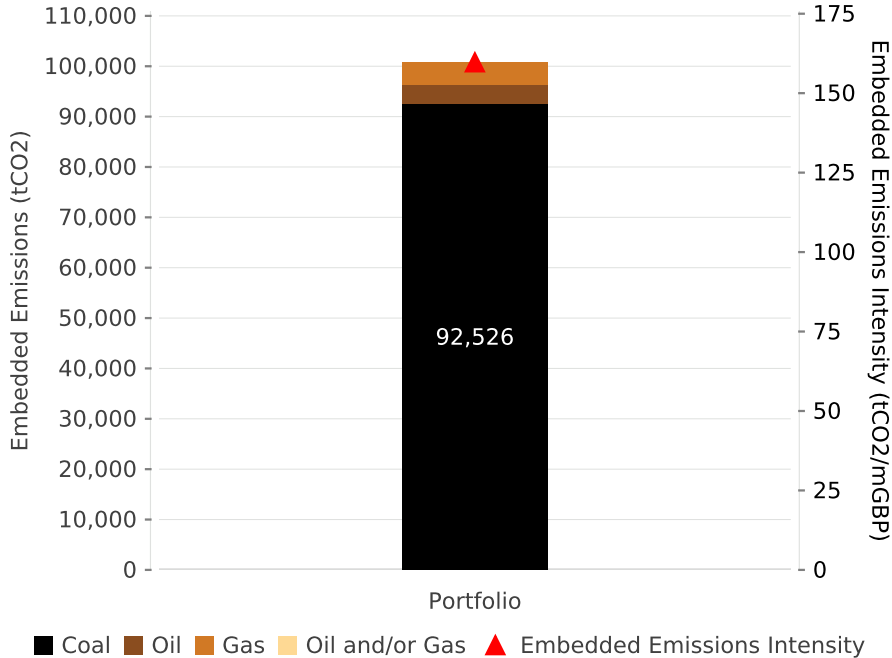
Fossil Fuel CAPEX

In addition to reserves, Trucost collects data on the capital expenditure set aside for fossil fuel related activities such as further exploration and extraction in order to provide additional quantitative insights on stranded asset risk.

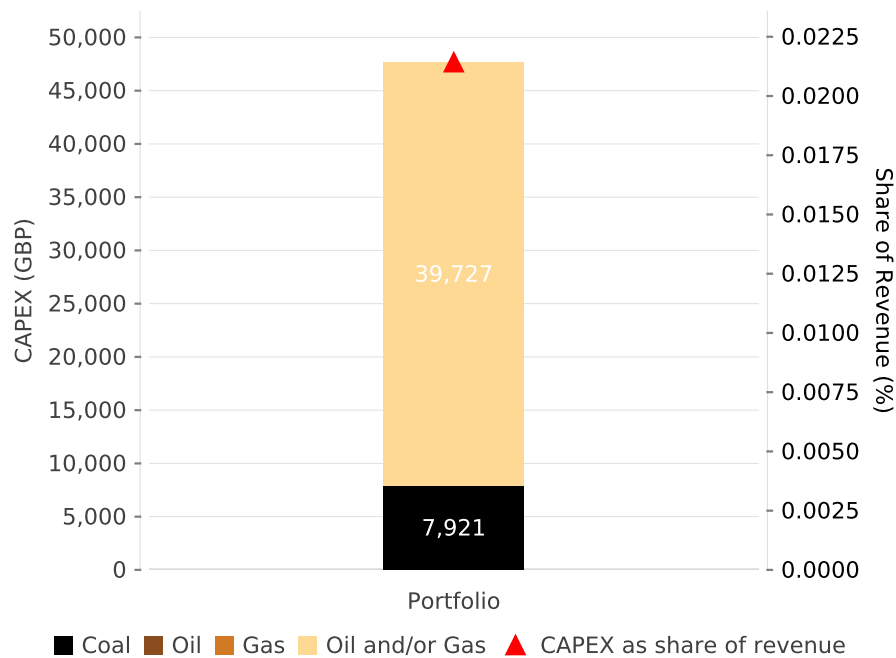
The chart below shows the total apportioned capital expenditure on fossil fuel related activities by reserve type. It also normalizes the CAPEX by showing it as a share of apportioned revenue.

The total apportioned fossil fuel CAPEX is 0.048 mGBP.

Apportioned Future Emissions by Reserve Type



Apportioned CAPEX by Reserve Type



Fossil Fuels & Stranded Assets

Largest Contributors - Extractives Revenue & Embedded Emissions

The table below shows the largest contributors towards the portfolio's apportioned **extractives** revenue. It is displayed as a percentage of the portfolio's total apportioned revenue. The degree to which the company's own revenues are derived from extractive activities is also shown in the adjacent column.

Company Name	Holding (mGBP)	Sector	Portfolio level extractives revenue exposure (% of total)	Company level extractives revenue exposure (% of total)	Portfolio Level Future Emissions From Reserves (MtCO2)	Company Level Future Emissions From Reserves (MtCO2)
Halliburton Company	1.704	Energy	0.33%	100.00%		
BHP Group Limited	2.467	Materials	0.06%	23.68%	0.097	5,870.540
Reliance Industries Limited	2.714	Energy	+0.00%	0.40%	0.002	128.100
Chevron Corporation	0.011	Energy	+0.00%	27.85%	+0.000	4,176.630
ConocoPhillips	0.005	Energy	+0.00%	100.00%	+0.000	1,694.670
Exxon Mobil Corporation	0.012	Energy	+0.00%	8.15%	+0.000	5,717.010
Occidental Petroleum	0.002	Energy	+0.00%	79.89%	+0.000	1,077.120
BP p.l.c.	0.002	Energy	+0.00%	8.94%	+0.000	6,820.290
Eni S.p.A.	0.002	Energy	+0.00%	14.46%	+0.000	2,501.220
TotalEnergies SE	0.009	Energy	+0.00%	3.53%	+0.000	4,444.280

The table below shows the largest contributors towards the portfolio's apportioned **embedded emissions**. The absolute contributions are shown in the second to last column, while final column shows the company's total level of emissions from reserves.

Company Name	Holding (mGBP)	Sector	Portfolio level extractives revenue exposure (% of total)	Company level extractives revenue exposure (% of total)	Portfolio Level Future Emissions From Reserves (MtCO2)	Company Level Future Emissions From Reserves (MtCO2)
BHP Group Limited	2.467	Materials	0.06%	23.68%	0.097	5,870.540
Reliance Industries Limited	2.714	Energy	+0.00%	0.40%	0.002	128.100
TotalEnergies SE	0.009	Energy	+0.00%	3.53%	+0.000	4,444.280
Exxon Mobil Corporation	0.012	Energy	+0.00%	8.15%	+0.000	5,717.010
BP p.l.c.	0.002	Energy	+0.00%	8.94%	+0.000	6,820.290
Chevron Corporation	0.011	Energy	+0.00%	27.85%	+0.000	4,176.630
Glencore Plc	0.002	Materials	+0.00%	4.01%	+0.000	6,179.570
Eni S.p.A.	0.002	Energy	+0.00%	14.46%	+0.000	2,501.220
Shell plc	0.005	Energy	+0.00%	3.75%	+0.000	3,373.980
ConocoPhillips	0.005	Energy	+0.00%	100.00%	+0.000	1,694.670

Fossil Fuels & Stranded Assets

Coal Exposure

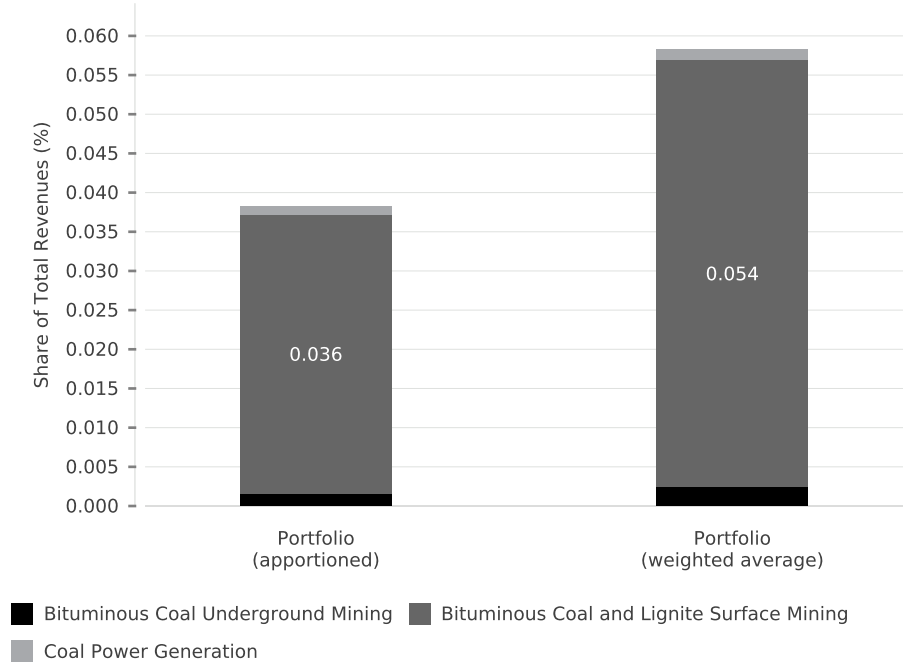
Coal related activities are widely understood to be among the largest contributors to anthropogenic carbon emissions. As such, an increasing number of investors are strategizing around coal exposure and positioning for a transition to a low carbon economy. This may include strategies such as implementing reduction targets for exposure to the embedded emissions, or adopting an assess-engage-monitor-divest approach to individual holdings involved in coal mining or coal power activities.

Trucost has assessed both the VOH and revenue exposure at the portfolio level to the following activities:

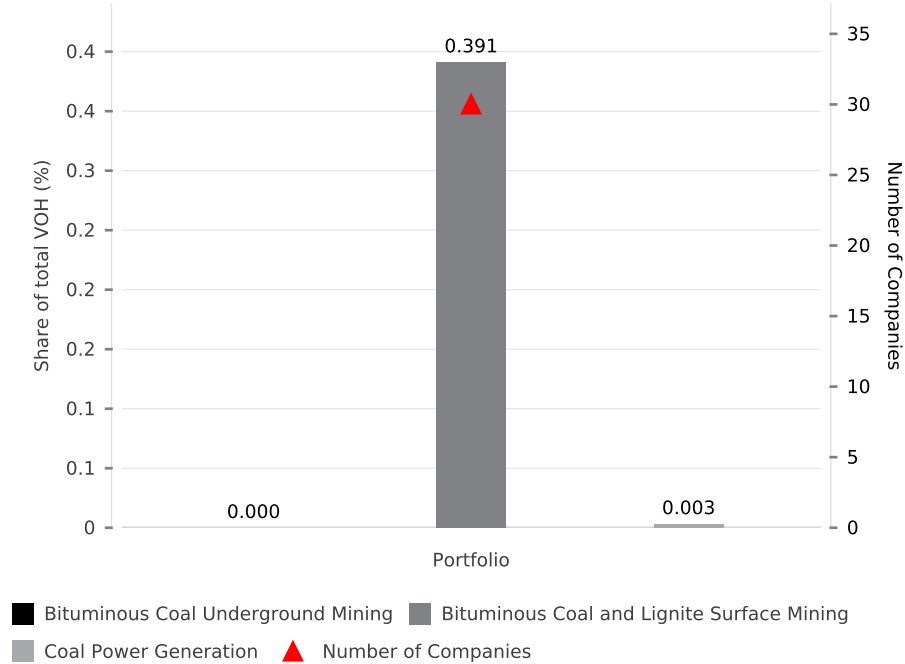
- Bituminous coal underground mining
- Bituminous coal and lignite surface mining
- Coal power generation

For the revenue exposure metric, both the apportioning and weighted average approach are presented. For the VOH exposure metric, the revenue threshold for inclusion was 5%. For more details on the methodology please refer to Appendix 5.

Coal Revenue Exposure by Sector



Coal VOH Exposure by Sector



Fossil Fuels & Stranded Assets

Largest Contributors - Coal Revenue

The table below shows the largest contributors towards the portfolio's apportioned coal revenue. The absolute contributions are shown in the final column, while the second to last column shows the degree to which the company's own revenues are derived from coal mining and/or power generation.

Company Name	Holding (mGBP)	Company Level Coal Extracted (m tonnes)	Company Level Coal Surface Mining Exposure (% of revenues)	Company Level Coal Underground Mining (% of revenues)	Company Level Coal Power Generation Exposure (% of revenues)	Company Level Total Coal Exposure (% of revenues)	Portfolio Level Apportioned Revenues From Coal (GBPm)
BHP Group Limited	2.467	82.961	13.93%	0.61%		14.54%	0.082
Orsted	0.189				2.15%	2.15%	+0.000
Duke Energy Corporation	0.003				17.34%	17.34%	+0.000
Glencore Plc	0.002	106.200	3.55%	0.39%		3.95%	+0.000
Tohoku Electric Power	+0.000				25.06%	25.06%	+0.000
Electric Power Development	+0.000				59.49%	59.49%	+0.000
VERBUND AG	0.238				0.42%	0.42%	+0.000
Berkshire Hathaway Inc.	0.023				1.39%	1.39%	+0.000
Enel SpA	0.003				2.62%	2.62%	+0.000
Kyushu Electric Power	+0.000				21.29%	21.29%	+0.000

Energy Transition

Introduction

While carbon footprints can help to identify the most carbon efficient companies within a portfolio, they do not recognise those companies that are contributing positively to the low carbon economy by offering climate-mitigation or adaptation solutions. As the energy generating sectors are critical to this transition, Trucost has analysed physical units of power production embedded within the portfolio to highlight aggravators (fossil fuels) vs. mitigators (renewables). The generation types within each category are as follows:

- **Renewable Energy Generation:** solar, wind, wave & tidal, geothermal, hydroelectric, biomass
- **Fossil Fuel Energy Generation:** coal, petroleum, natural gas
- **Other Energy Generation:** nuclear, landfill gas, any other unclassified power generation

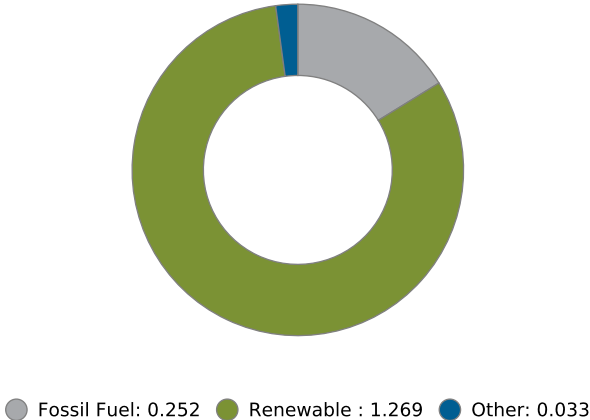
For more details on the apportioning methodology please refer to Appendix 2.

Generation Mix

The table below breaks out the apportioned Gigawatt hours (GWh) by generation type. Hydroelectric and biomass have been separated from the 'Other renewables' due to their potential for controversy relating to implementation or sourcing, which can bring in to question their 'sustainability' credentials.

	Fossil Fuels			Renewable			Other	
	Coal (GWh)	Petroleum (GWh)	Natural Gas (GWh)	Hydroelectric (GWh)	BioMass (GWh)	Other Renewables (GWh)	Nuclear (GWh)	Other Sources (GWh)
Portfolio	0.037	0.002	0.213	1.005	0.048	0.217	0.030	0.003

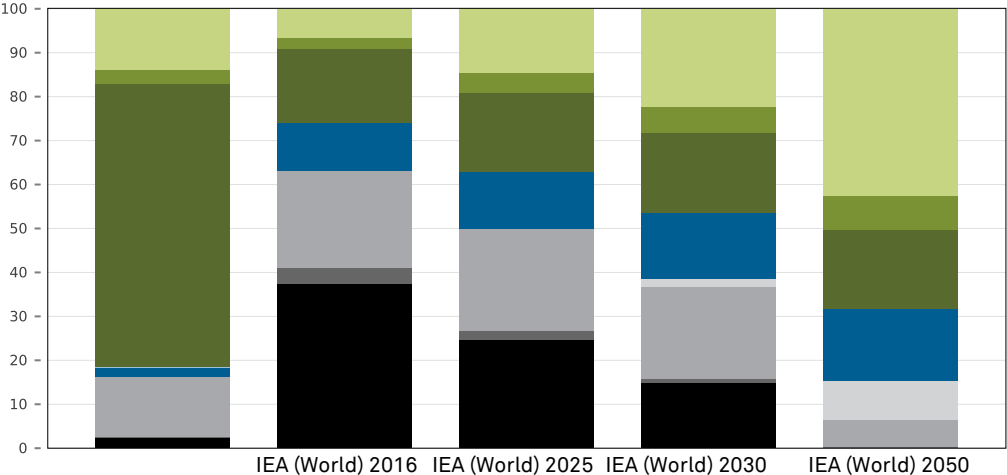
Portfolio - Apportioned GWh



Energy Transition

2 Degree Alignment

Investors are increasingly asking how they can align their portfolio with globally agreed forward-looking targets to mitigate climate change - so called two degree targets. Historically, portfolios have been measured against traditional financial benchmarks which generally reflect the economy today rather than the low carbon economy - as suggested by the International Energy Agency (IEA) - we need for tomorrow. This over-represents traditional fossil fuel energy sectors and under-represents greener energy providers. To overcome this issue, Trucost compares the current energy mix of a portfolio to the IEA's two degree scenarios, showing investors how to work toward an energy transition goal. This allows them to redirect capital to have the highest "transition" impact and help to finance the low carbon economy.



	Portfolio	IEA (World) 2016 2 Degree Scenario	IEA (World) 2025 2 Degree Scenario *	IEA (World) 2030 2 Degree Scenario *	IEA (World) 2050 2 Degree Scenario *
Other renewables	13.93%	6.39%	14.60%	22.31%	42.52%
Biomass	3.08%	2.63%	4.65%	5.92%	7.91%
Hydroelectric	64.63%	16.67%	17.84%	18.16%	17.91%
Other sources (incl. landfill gas)	0.20%	0.05%			
Nuclear	1.94%	11.14%	12.97%	15.06%	16.29%
Fossil energy with CCS		0.04%	0.19%	1.62%	8.98%
Natural Gas	13.69%	21.94%	23.07%	21.04%	6.04%
Petroleum	0.16%	3.84%	2.00%	0.96%	0.27%
Coal	2.36%	37.31%	24.68%	14.94%	0.08%

* The content within table above was prepared by S&P Trucost Limited, with data derived from the 2 Degree Scenarios developed by the International Energy Agency. ©OECD/IEA 2017. The content within the table above does not necessarily reflect the views of the International Energy Agency.

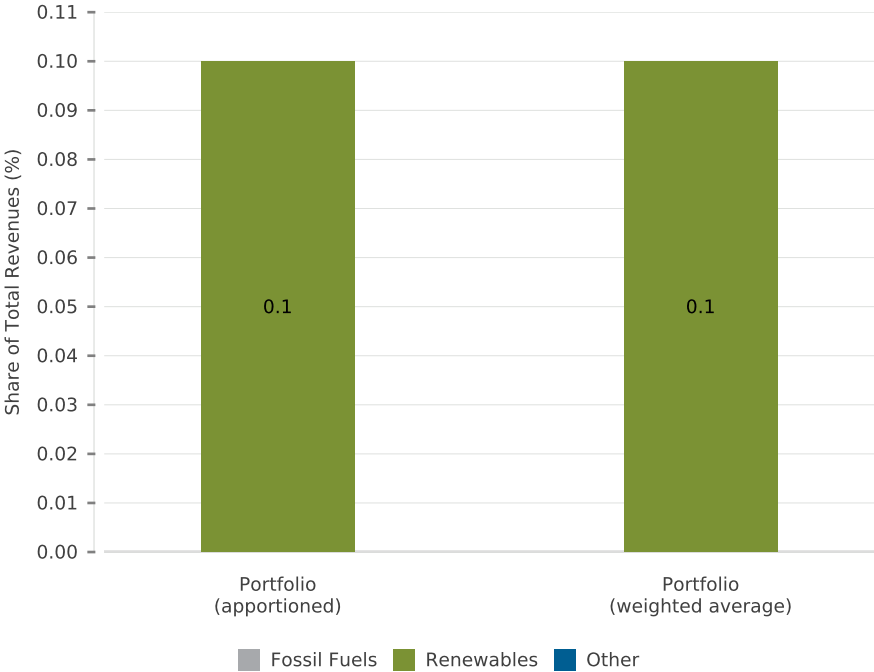
Energy Transition

Energy Generation Revenue Exposure

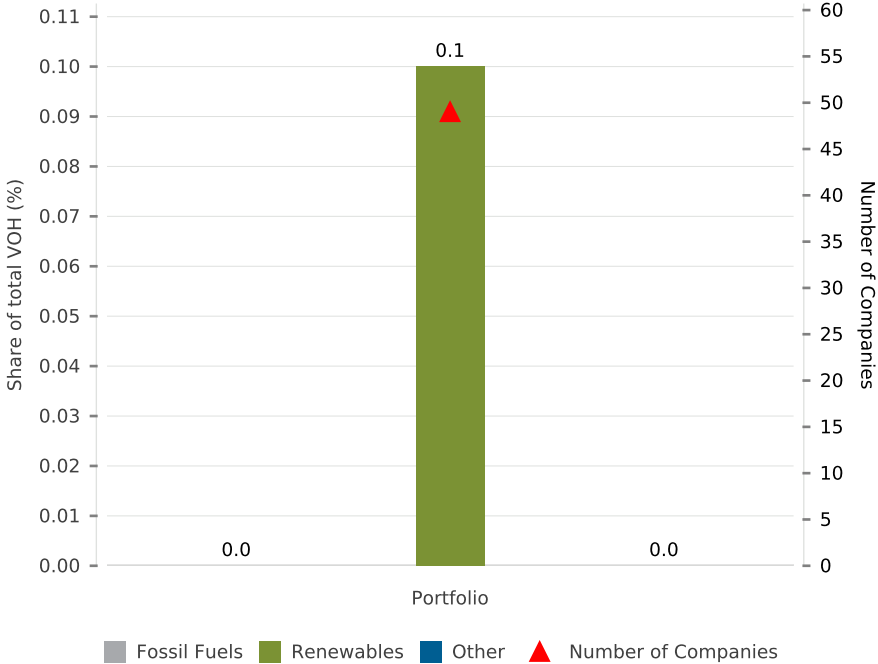
The analysis above has focused on the physical units of power generated by companies within the portfolio. As not all energy companies disclose this information, it is also useful to determine exposure to 'aggravators' and 'mitigators' based on sources of revenue. Trucost has assessed both the value of holding (VOH) and revenue exposure to fossil fuel, renewable, other power generation for the portfolio and benchmark.

For the revenue exposure metric, both the apportioning and weighted average approach are presented. For the VOH exposure metric, the revenue threshold for inclusion was 5%. For more details on the methodology please refer to Appendix 5.

Revenue Exposure to Energy Generation



VOH Exposure to Energy Generation



Energy Transition

Largest Contributors - Renewable & Fossil Fuel Energy Revenue

The table below shows the largest contributors towards the portfolio's apportioned renewable energy revenue. The absolute contributions are shown in the final column, while the second to last column shows the degree to which the company's own energy revenues are derived from renewable generation.

Company Name	Holding (mGBP)	Company Level Renewables Revenue (% of total)	Company Level Fossil Fuels Revenue (% of total)	Company Level Other Revenue (% of total)	Company Level Total Energy Revenue (% of total)	Renewables Share (% of total energy revenue)	Portfolio Level Total Apportioned Renewables Revenue (GBPm)
Brookfield Renewable	0.334	100.00%			100.00%	100.00%	0.069
Meridian Energy Limited	0.148	64.31%			64.31%	100.00%	0.024
VERBUND AG	0.238	39.21%	1.25%		40.46%	96.91%	0.010
Orsted	0.189	19.99%	3.37%		23.36%	85.56%	0.006
Enel SpA	0.003	43.49%	9.82%	2.17%	55.48%	78.38%	0.002
Orkla ASA	0.181	1.08%			1.08%	100.00%	0.001
TotalEnergies SE	0.009	5.38%	4.00%		9.38%	57.38%	+0.000
United Utilities Group Plc	0.172	0.79%		1.96%	2.75%	28.77%	+0.000
Iberdrola, S.A.	0.004	11.05%	6.20%	5.63%	22.88%	48.32%	+0.000
NextEra Energy, Inc.	0.006	26.40%	48.45%	22.45%	97.30%	27.13%	+0.000

The table below shows the largest contributors towards the portfolio's apportioned fossil fuel energy revenue. The absolute contributions are shown in the final column, while the second to last column shows the degree to which the company's own energy revenues are derived from fossil fuel generation.

Company Name	Holding (mGBP)	Company Level Renewables Revenue (% of total)	Company Level Fossil Fuels Revenue (% of total)	Company Level Other Revenue (% of total)	Company Level Total Energy Revenue (% of total)	Fossil Fuel Share (% of total energy revenue)	Portfolio Level Total Apportioned Fossil Fuel Revenue (GBPm)
L'Air Liquide S.A.	1.458		2.16%		2.16%	100.00%	0.009
Orsted	0.189	19.99%	3.37%		23.36%	14.44%	+0.000
Duke Energy Corporation	0.003	5.87%	48.09%	29.10%	83.06%	57.90%	+0.000
Enel SpA	0.003	43.49%	9.82%	2.17%	55.48%	17.71%	+0.000
NextEra Energy, Inc.	0.006	26.40%	48.45%	22.45%	97.30%	49.79%	+0.000
VERBUND AG	0.238	39.21%	1.25%		40.46%	3.09%	+0.000
TotalEnergies SE	0.009	5.38%	4.00%		9.38%	42.62%	+0.000
The Southern Company	0.003	6.24%	36.54%	8.97%	51.75%	70.61%	+0.000
The Kansai Electric Power	+0.000	7.27%	38.57%	17.79%	63.63%	60.62%	+0.000
Tohoku Electric Power	+0.000	7.85%	48.24%		56.09%	86.00%	+0.000

APPENDIX

1. Scopes

Before beginning a carbon or environmental audit, an investor must decide on what scopes to include in their analysis. Some believe that only operational impacts/emissions should be considered when calculating a company's exposure, i.e. the resources/pollutants owned or controlled by the reporting entity. This casts the net around impacts that the investee (and, to a lesser extent, the investor) has a direct sphere of influence over. It also avoids the possibility of double counting. However, as risks may be passed on through the supply chain in the form of higher prices, it may sometimes be more pragmatic to include emissions originating from suppliers.

CARBON: Trucost collects greenhouse gas data covering Scopes 1, 2 and 3 upstream emissions, as well as additional data relating to non-Kyoto Protocol greenhouse gases. Definitions of the available scopes are shown below:

- **Scope 1** = CO₂e emissions based on the Kyoto Protocol greenhouse gases generated by direct company operations.
- **Scope 2** = CO₂e emissions generated by purchased electricity, heat or steam.
- **Scope 3 (upstream)** = CO₂e emissions generated by a company's non-electricity supply chain.
- **Direct** = Scope 1 plus CO₂e emissions from four additional sources, CCl₄, C₂H₃Cl₃, CBrF₃, and CO₂ from Biomass.
- **First Tier Indirect** = Scope 2 plus emissions from direct (or "Tier 1") upstream Scope 3 emissions.
- **Remaining Indirect** = Tier 2 and onward upstream Scope 3 emissions.

ENVIRONMENT: As with carbon analysis, the scopes available for an environmental audit are Direct, First Tier Indirect, and Remaining Indirect impacts. Direct impacts result from a company's own operations and include emissions from fuel combustion (boilers and company owned vehicles), pollution from water abstracted, natural resource use, and waste generated from industrial production. Indirect impacts from supply chains occur because of the goods or services a company procures. Indirect impacts are broken down between those in the first tier of the supply chain and those in the remaining tiers.

2. Apportioning

Many of the exposure metrics calculated by Trucost rely on the apportioning of company owned resources/pollutants to the portfolio or benchmark. Apportioning, as an approach, is built on the principle of ownership. That is, if an investor owns - or in the case of debt holdings, finances - 1% of a company, then they also 'own' 1% of the company's resources/pollutants.

For equity only portfolios the apportioning factor is usually obtained by dividing the value of holding by the company's market capitalisation on the date of analysis. For debt only, or mixed portfolios, enterprise value usually replaces market capitalization as the denominator. The company level resources/pollutants are then multiplied by the apportioning factor to arrive at resource/pollutant quantities specific to each holding. The portfolio level resources/pollutants is the sum of all of these quantities.

APPENDIX

3. Carbon & Environmental Intensity Calculation

Portfolios with larger assets under management will typically have a higher amount of total apportioned resources/pollutants than smaller portfolios because of their size. As most portfolios have a remit to grow assets under management, it is important to normalise these absolute quantities to allow for fair comparison year on year against other portfolios or benchmarks. The three most common approaches to normalizing emissions/impacts are:

1. Dividing the apportioned emissions/impacts by the amount invested.
2. Dividing the apportioned emissions/impacts by the apportioned annual revenues.
3. Summing the product of each holding's weight in the portfolio with the company level carbon/environmental revenue intensity.

For ease of reference, Trucost has defined these as **Carbon to Value Invested**, **Carbon to Revenue**, and **Weighted Average Carbon Intensity** respectively.

The first gives an indication of carbon or environmental 'efficiency' with respect to shareholder value creation. The second gives an indication of 'efficiency' with respect to output (as revenues are closely linked to productivity). The third approach circumvents the need for apportioning ownership of carbon, revenue or environmental impacts to individual holdings. Whilst the first two methods act as indicators of an investor's contribution to climate change or ecosystem damage, the weighted average method seeks to show an investor's exposure to carbon/environmentally intensive companies, i.e. is not an additive in terms of carbon budgets.

4. Carbon Disclosure

The level of carbon disclosure is based on each company's Scope 1 emissions, and can be classified as fully disclosed, partially disclosed, or modelled.

- **Full Disclosure** refers to when exact figures have been extracted from annual reports, 10Ks, financial account disclosures, CDP disclosures, environmental/CSR reports, or from personal communication with a company.
- **Partial Disclosure** refers to when Trucost has needed to derive, adjust, or scale any of the data acquired from the sources described above.
- **Modelled** refers to when Trucost has calculated estimates using its proprietary environmentally enhanced input-output model, due to the unavailability or unreliability of up-to-date disclosures.

The overall level of disclosure in the portfolio is assessed using the following three approaches:

- **Value of Holdings:** This is the sum of the weights of each holding within each of the three disclosure categories.
- **GHG:** This is the sum of the portfolio's apportioned Scope 1 CO₂e within each of the three disclosure categories.
- **Number of companies/instruments:** This is the number of companies/instruments within each of the three disclosure categories.

APPENDIX

5. Revenue & Reserves Exposure

When assessing exposure to extractive industries, coal, or energy generation revenues, three approaches are used.

1. Apportioned Revenue Exposure
2. Weighted Average Revenue Exposure
3. VOH Exposure

The first represents the share of apportioned revenues from the sectors in question as a percentage of the total apportioned revenues from any sector (for more information on apportioning please refer to Appendix 2). The second is calculated by summing the product of each holding's weight in the portfolio with the company level revenue dependency on the sector in question. The third is calculated by summing the weights of any holdings in companies that have a revenue dependency on the sectors in question above a predefined threshold. The reason for the threshold is to allow users to exclude companies whose revenue dependency on the sectors in question may not be considered material.

In the case of reserves, holdings in any company disclosing any amount of reserves is included in the VOH exposure metric. Companies that have reserves, but do not disclose them, will not be captured by the analysis.

6. CO2 Equivalent (CO2e)

Each greenhouse gas differs in its ability to absorb heat in the atmosphere. HFCs and PFCs are the most heat-absorbent. Calculations of greenhouse gas emissions are presented in units of millions of metric tons of carbon equivalents (MMTCE), which weights each gas by its GWP value, or Global Warming Potential. The Global Warming Potentials used in Trucost analysis are:

Carbon Dioxide - 1
Methane - 21
Nitrous Oxide - 310
Sulphur Hexafluoride - 23,900
Per Fluoro Carbons - 7,850
Hydro Fluoro Carbons - 5,920

These conversion figures are taken from the publically available 2006 Intergovernmental Panel on Climate Change's (IPCC) 'Guidelines for National Greenhouse Gas Inventories'.

APPENDIX

7. Environmental Valuation

Why apply valuations to environmental impacts? Traditional approaches to environmental impact measurement provide a variety of different metrics. For example, carbon and other pollutants are measured in tonnes, for water it is cubic meters. This makes it difficult to compare the relative contribution of each impact and therefore prioritise risks. Trucost addresses this problem by applying monetary valuations to each impact, thereby providing an overarching common metric to assess risk and opportunity across companies and portfolios.

The analysis applies the chosen valuations to the impacts associated with a company's own business activities and those of its upstream suppliers, all the way back to raw material extraction. Environmental impacts are often concealed within global supply chains, therefore we use environmentally extended input output (EEIO) modelling to reveal liabilities at each tier of the value chain for holistic risk and opportunity analysis.

ENVIRONMENTAL KPIs:

Greenhouse Gases:

The categories included in the environmental footprint are carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, per fluoro carbons as well as hydro fluoro carbons and nitrogen trifluoride.

Water Abstraction:

The categories included in the environmental footprint are direct cooling and direct process water, as well as purchased water (i.e. the water acquired from utility companies).

Waste Generation:

The categories included in the environmental footprint are waste incineration, landfill waste, nuclear waste (e.g. from the manufacture of products, the combustion of nuclear fuel or other industrial and medical processes) and recycled waste.

Air Pollutants:

The categories included in the environmental footprint are all emissions released to air by the consumption of fossil fuels and production processes which are owned or controlled by the company. This includes acid rain precursors (e.g. nitrogen oxide, sulphur dioxide, sulphuric acid, ammonia), ozone depleting substances (HFCs and CFCs), dust and particles, metal emissions, smog precursors and VOCs. Each has a set of impacts on human health, buildings and/or crop and forest yields.

Land & Water Pollutants:

The categories included in the environmental footprint are pollutants from fertiliser and pesticides, metal emissions to land and water, acid emissions to water, and nutrient and acids pollutant.

Natural Resource Use:

The categories included in the environmental footprint are extraction of minerals, metals, natural gas, oil, coal, forestry, agriculture and aggregates.

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LOCAL PENSION BOARD - 15.12.2022

MINUTES OF THE MEETING OF THE LOCAL PENSION BOARD HELD ON THURSDAY, 15TH DECEMBER, 2022

MEMBERS: Pauline Kettless - Unison (Chair), Councillor Chris Joannides (Vice-Chair), Councillor Nawshad Ali, Councillor Guney Dogan, Paul Bishop (Unison), Tracy Adnan (Unison),

Officers: Bola Tobun Finance Manager (Pensions and Treasury), Tim O'Connor (Exchequer Manager Pension), Robyn McIntock (Governance Officer)

Also Attending: Joel Duckham (Aon)

1. WELCOME AND APOLOGIES

The Chair welcomed everyone to the meeting.

There were no apologies.

2. DECLARATION OF INTERESTS

Pauline Kettless declared a non-pecuniary interest as she is in receipt of a LGPS Pension from Enfield.

3. MINUTES OF THE PREVIOUS MEETING

The minutes were agreed.

ACTION: Report to come to the Pension Board on the Independent Chair and costs related to this.

4. ENFIELD PENSION FUND QUARTERLY BUDGET OUTTURN REPORT FOR SEPTEMBER 2022

Bola Tobun presented this item highlighting the key points from the report.

From September quarter end the account is in surplus. A transfer was received for almost £6.7 million which was slightly above what was budgeted for.

The report was noted.

5. EMPLOYER CONTRIBUTIONS REPORT

Bola Tobun presented this item.

Employers have occasionally missed payments but are generally on time. There are a total of 60 employers.

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One employer missed the deadline for paying their pension contribution on 3 occasions but only by one or two days. There have only been 9 late payments across all 60 employers.

The report was noted.

6. DRAFT ENFIELD PENSION FUND ANNUAL REPORT AND ACCOUNTS 21/22

Bola Tobun presented this item explaining that the auditors have been delayed in signing off the reports since Covid-19. This is a national issue rather than a problem just for Enfield.

Bola suggested that the national audit office need to investigate the delays.

The investments between April 21- March 22 have gone up by £170million. By the end of March our investments were £1.52billion.

The annual report compares the investment returns with our funds to see if we are getting good returns.

The report was noted.

7. PENSION TEAM UPDATE REPORT

Tim O'Connor presented this item highlighting the key points from the report.

A meeting has been set up in January to discuss Prudential's performance and are looking at the option of other AVC providers. AVC wise is doing well and get attendance on their online seminars.

There has not been a huge increase in opt-outs. The pensions team have been pressing the 50/50 option and visiting sites with staff who don't have access to online information. Members suggested the 50/50 option be advertised better.

FCA have given advice on pensions scams, following this the 'zpensions' email address is being looked at and hopefully will change.

In September 2024 we are looking to onboard pension members to the pensions dashboard. The first focus is getting the data as clear as possible.

Members expressed concern that the cut off at 75 for survivor benefits is discriminatory at a national level.

The new pensions regulator is starting in January 2023.

There is a Governance Conference taking place in January 2023 and an LGA employer training also coming up.

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ACTION: Bola to send details for training to members.

The Pensions Team are doing a restructure on their projects. This is taking into account the national difficulties in recruitment to local government pension teams and in house training will be taking place to upkeep staff.

Members had questions on flexible retirement for teachers and the need for an understanding on Enfield's policy on this and suggested the team coming out to talk to teachers.

8. AN UPDATE ON THE EFFECT OF SOARING UK INFLATION ON LGPS

The Board received a verbal update from Bola Tobun.

Concerns were expressed by the Board concerning the effects of soaring inflation and cost of living increase may affect employee's ability to continue to pay pension contributions. So far this has not had an adverse effect, but it will be monitored and more likely to see effects next year.

The Pension, Policy and Investment Committee are also looking into this.

ACTION: Include this item on the next Pension Board Meeting Agenda.

9. PENSION POLICY & INVESTMENT COMMITTEE MINUTES

The Board noted the minutes.

The Chair advised she had been meeting with the Chair of the Pension, Policy and Investment Committee virtually.

10. DATES OF FUTURE MEETINGS

NOTED.

11. EXCLUSION OF THE PRESS AND PUBLIC

12. PART TWO ITEMS - CONTAINING EXEMPT INFORMATION

13. LCIV QUARTERLY UPDATE

Following the Part 2 discussion the confidential report was NOTED.

ACTION: Bola to send the board LCIV report from the investment consultant which assesses how risky the investments are.

14. TRIENNIAL VALUATION RESULTS 2022 AND REVIEW OF FUNDING STRATEGY STATEMENT FOR ENFIELD PENSION FUND

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As part of the part 2 discussion Members received an update from Aon on the Triennial Valuation results for 2022.

15. DLUHC'S CONSULTATION

Following the Part 2 discussion the confidential report was NOTED.

Members raised the question as to whether councillors on the Pension, Policy & Investment Committee are subject to a DBS check given their financial responsibility.

ACTION: Robyn to advise on DBS checks of Councillors.