SOUTH YORKSHIRE PENSIONS AUTHORITY

INVESTMENT BOARD

8 MARCH 2018

Report of the Fund Director

CARBON AUDIT

1) Purpose of the report

To advise Members of the outcome of the carbon footprint audit commissioned last year.

---

2) Recommendation

That Members note the results of the carbon audit for each of the individual portfolios.

---

3) Background information

3.1 In September 2015 the Investment Board made the decision to engage a specialist contractor, Trucost, to measure the carbon footprint of the Fund's four main equity portfolios. Subsequent carbon audits would then be undertaken on a biennial basis. Although discussions had been held in 2016 around broadening the scope of any future carbon audit, a decision was made by the Investment Board in September 2017 to carry out the work on the same four equity portfolios only. This decision was made by the Board following a review of the experience of other investors attempting to audit a wider range of asset classes, and after dialogue with Trucost. The decision was made to use the same provider for the subsequent footprint for comparative purposes. Trucost was engaged and the work was carried out on data as at the end of September 2017. The analysis and results were delayed due to benchmark issues, sector classification discrepancies and extended dialogue with Trucost.

3.2 Trucost produced a Key Findings Report and four individual reports covering each of the equity portfolios measured. It was a condition of the contract that the report remains confidential and is not for public disclosure.

3.3 The same provider was chosen in order that comparisons could easily be made between this carbon footprint and the one undertaken in 2015. However, Trucost's reporting format has changed along with the sector classification split used, making it difficult to make direct comparisons with the previous reports. This has resulted in officers having to undertake a large amount of analysis on the various reports delivered.

3.4 It is widely acknowledged that carbon footprinting still has limitations and weaknesses. Data cannot be used in isolation to measure risk to an investor's

portfolio. Although data is improving as companies provide better climate-related financial disclosures, investors still need to be aware that data is patchy; for example, emerging markets have the highest carbon intensity but the lowest levels of disclosure and lowest quality disclosure. As disclosure and data collection improves, this could lead to emissions levels and carbon intensity of investments and portfolios being subject to revision.

3.5 The Task Force for Climate-related Financial Disclosures (TCFD) published its final report last year and recommended that asset owners and managers report the weighted average carbon intensity associated with their investments. It does, however, acknowledge "the challenges and limitations of current carbon footprinting metrics" and that they should not necessarily be interpreted as risk metrics. Footprints are also backward looking and not all companies report their emissions so in these cases they need to be estimated. A carbon footprint is not a 'silver bullet'; it should be used in conjunction with other metrics whilst being aware of the limitations.

4) Trucost audit report

The key findings of the report are detailed below.

4.1 As stated previously, it has been challenging to make direct comparisons with the 2015 results due to changing reporting format and sector classification. Three of the portfolios are less carbon intense than their respective benchmarks with the European and Other Far Eastern portfolios improving on the last footprint. The UK portfolio has moved more in-line with its benchmark.

4.1.1 It should be noted that there are a number of technical issues which the footprint analysis does not take into account. For strategic reasons exchange traded funds (ETFs) were held within the US and European portfolios; these positions were not covered by the footprinting exercise. The Investment Trust sector within the UK portfolio is excluded; the Fund's investments in this sector contain a number of trusts held specifically for low carbon exposure. The Fund also holds some stock in renewable energy companies which are non-index stocks held within the UK which are also not covered by Trucost's research.

4.1.2 Each of the individual equity portfolios (UK, US, European, Other Far East) is more carbon efficient than in 2015.

Portfolio	2015 Portfolio Carbon Footprint (tCO2e/£m)	2017 Portfolio Carbon Footprint (tCO2e/£m)	
UK	412.72	357.73	-13%
US	445	324.12	-27%
EUROPE	497.71	404.21	-19%
OTHER FAR EAST	699.53	527.86	-24%
TOTAL	2054.96	1613.92	-21%

4.2 Three of the portfolios are more carbon efficient than their respective benchmark indices, with the UK tracking its benchmark very closely. The

sector allocation effects for all individual funds are positive, which means that the portfolio managers are underweighting the more carbon intensive sectors.

Portfolio	Benchmark	Portfolio Carbon Footprint (tCO2e/£m)	Carbon Efficiency Compared to the Relevant Benchmark (%)*
UK	FTSE All-Share	357.73	-0.27%
US	S&P 500	324.12	9.02%
EUROPE	FTSE Developed Europe ex UK	404.21	3.12%
OTHER FAR EAST	FTSE AW Asia Pac ex Japan	527.86	15.44%

* Positive values indicate the portfolio is more carbon efficient compared to its benchmark

4.2.1 The Other Far East (OFE) portfolio has the best benchmark-relative measurement, being 15.44% more efficient than the index. The majority of this efficiency is due to positive stock selection. The sectors that have the biggest positive effect on carbon efficiency are Energy and Utilities.

4.2.2 The US portfolio is 9.02% more carbon efficient than its benchmark, S&P500. This is principally down to positive sector allocation, with the main contributors being Utilities and Insurance.

4.2.3 The UK portfolio tracks its benchmark (FTSE All-Share) very closely. The portfolio has the largest carbon emissions in absolute terms and accounts for 39% of total emissions for all four portfolios analysed. The carbon efficiency is understated as investment trusts, where the Fund holds specialist vehicles such as IMPAX Environmental Markets (a low carbon fund) are not covered by Trucost. The Fund also holds some smaller alternative energy companies (Good Energy and Atlantis resources) which would reduce the rating further.

4.2.4 The European portfolio is more carbon efficient than its benchmark index by 3.12%. This is mostly attributable to sector allocation with the two biggest sector positives being Utilities and Capital goods.

4.3 The portfolios have holdings in 60 companies exposed to fossil fuel extraction activities.

% of Revenue From Fossil Fuel Extraction	Number of Companies
100	10
>25	19
>0.01	60

The list includes companies with revenues from fossil fuel extraction as low as 0.01%; just ten companies derive 100% of their revenue from oil & gas operations, and only 19 companies have revenues from fossil fuel extraction

over 25%. Adjusting for improvements in disclosure since the last audit this number has reduced from 62.

4.3.1 The amount invested in fossil fuel extraction companies has increased between 2015 and 2017. This is due to the total value of the Fund rising from £5.8 billion to £7.9 billion. The index weighting of oil and gas stocks has also increased over the period. As portfolios are managed to an index relative strategy this explains the monetary increase in fossil fuel holdings. A number of the largest contributors to the Authority's carbon footprint are, unsurprisingly the Oil & Gas companies.

4.3.2 Disclosure of carbon data by companies is improving. This should continue as companies increasingly follow TCFD recommendations. The US lags behind the UK and Europe with 22% of scope 2 emissions modelled by Trucost. The OFE portfolio had a greater degree of modelling, with 16% scope 1 and 32% of scope 2 emissions modelled due to the lack of transparent reporting on the greenhouse gas emissions.

4.4 In conclusion, Trucost state that three out of the four portfolios are more carbon efficient than their relative benchmarks with sector allocation for all four portfolios being positive. Therefore, the Authority's policy of positively tilting its equity portfolios is having the desired impact.

5) <u>Trucost recommendations</u>

5.1 Trucost recommends the following:-

- Engage with companies from the lists of top contributors across the various portfolios; requesting ambitious short and long term greenhouse gas reduction targets. This would mostly entail engagement with the major oil and gas, mining, utilities and materials companies. Other companies worthy of engagement include Tate & Lyle, Drax and Mondi in the UK, which are all highly carbon intensive companies; LafargeHolcim and ArcelorMittal in Europe; American Electric Power and Southern Company in the US; and China Resources Power Holdings and Anhui Conch Cement in China

- Monitor the carbon disclosure of a number of Asian energy and cement companies. Encouraging them to disclose carbon emissions data.

- Set targets for reducing coal mining and power exposure, and increase renewable energy exposure.

- Consider investing in alternative asset classes to increase exposure to a lower carbon economy.

- Monitor the top carbon intensive companies in each portfolio to track changes in performance

5.2 The Authority will where possible take on board Trucost's recommendations whilst acknowledging the constraints that pooling will bring. It will continue to engage with companies regarding climate change and carbon disclosure either directly, when possible, and also through its membership of LAPFF, and the CDP.

5.3 The Authority will encourage Border to Coast Pensions Partnership (BCPP) to reduce carbon exposure across portfolios; to consider reducing exposure to high-carbon intensity companies where engagement has not led to decreasing emissions; expect BCPP to measure and monitor portfolios' exposure to carbon-intensive companies, and to develop means of measuring the carbon footprint of all investments managed by the Pool.

5.4 The Authority, through its current investment strategy, has increased its allocation in alternative assets classes. It has made substantial new investments in private equity and infrastructure funds which are invested in renewable energy provision. It has also invested in a UK quoted investment trust which invests predominantly in UK wind farm projects.

6) Implications

6.1 Financial

There are no immediate implications arising out of the report.

6.2 Legal

There are no legal implications.

6.3 Diversity

There are no diversity implications.

6.4 Risk

This Board is the formal decision-making body for investment issues relating to the Fund. It has the responsibility to ensure that the Fund maintains an investment strategy that obtains the best financial return, commensurate with appropriate levels of risk, to ensure the Fund can meet both its immediate and long term liabilities. The employment of independent advisors to assist the Board strengthens the governance of decision-making.

George Graham
Fund Director
Contact telephone: 01226 772887

Officer responsible; Jane Firth

Background papers used in the preparation of this report are available for inspection at the offices of the Authority in Barnsley
Other sources and references: Trucost