Tyne & Wear Pension Fund

Climate Risk Report as at 31 March 2023

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Background

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

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

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

Background

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

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

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

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

Whole Fund

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Whole Fund

The Fund's Weighted Average Carbon Intensity (WACI Revenue) has fallen by 39% vs baseline due to decarbonisation of portfolio companies and the reallocation of capital to LGIM Future World solutions and private market assets which have lower WACI than prior investments.

Fund WACI is 16% lower than benchmark for the same reasons plus 5 of 7 actively managed public market mandates report below benchmark emissions.

The Fund has decarbonised faster than the benchmark.

Reallocating capital to lower carbon strategies (more Future World, low carbon factor equities, low carbon credit), allocating it to funds such as the Border to Coast Climate Opportunities Fund, and engaging with managers should drive further reductions in the future as well.

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

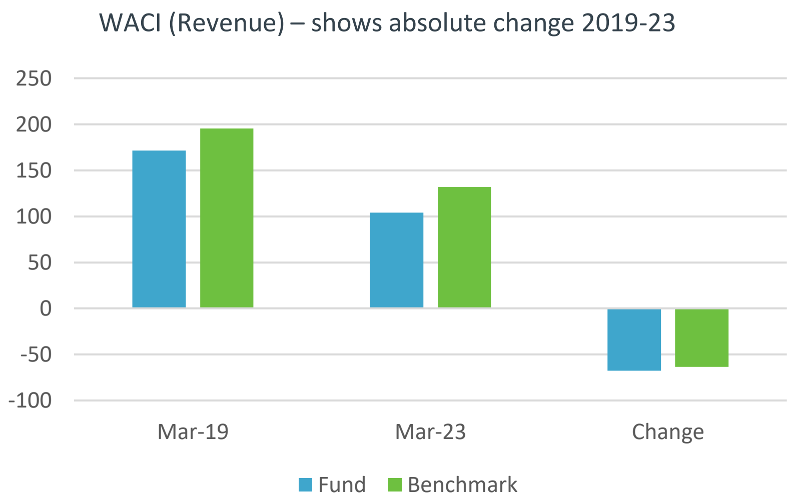
Data coverage has improved but remains limited for private markets. Further work is required to cover scope 3 emissions and private markets.

Emissions Intensity Metrics

Mandate	WACI (Revenue) ($tCO_2e/\$m$)[1]				Data Coverage (%AUM)[2]			
	Mar-19	Mar-22	Mar-23	Change 2019-23	Mar-19	Mar-22	Mar-23	Change 2019-23
Fund	171.6	134.6	104.0	-39.4%	34.1%	63.0%	70.8%	+107.6%
Benchmark[3]	195.5	158.1	132.0	-32.5%	-	68.0%	70.9%	-
Difference	-12.2%	-14.9%	-21.2%		-	-7.4%	-0.1%	

Notes:

1. Weighted Average Carbon Intensity per $m Revenue (WACI Revenue) is the Fund's primary climate risk metric, and is calculated across all asset classes except Property and Index Linked Gilts where data is available, and covers scope 1 and 2 emissions only.
2. Assets covered by metrics reported or estimated by MSCI as a percentage of total assets. Metrics for other asset classes not reported by MSCI were estimated by Hymans Robertson; the methodology for each mandate is described in Appendix II.
3. Composite benchmark based on mandate benchmarks (public markets), listed market equivalent benchmarks (private equity, private debt, multi-asset credit), or mandate return (infrastructure, no suitable listed equivalent)



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WA Emissions/£m Equity has fallen in line with WACI but at a faster rate; this figure now also takes into account more of the private market assets held by the Fund.

The metric should strictly be applied only to equity investments, however for information with respect to non equity assets, where this metric has been provided it is representative of the weighted carbon emissions were the amount invested an equivalent amount of equity.

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

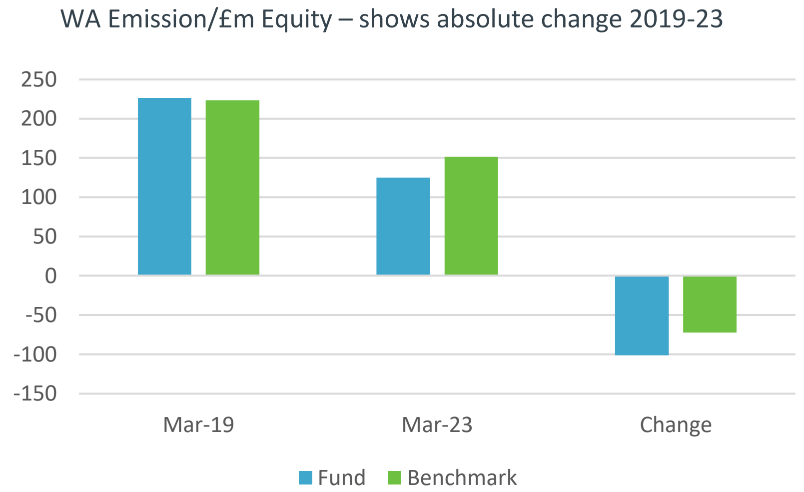
The actions the Fund can take to reduce WACI (Revenue) will also drive down WA Emissions/ EVIC over time.

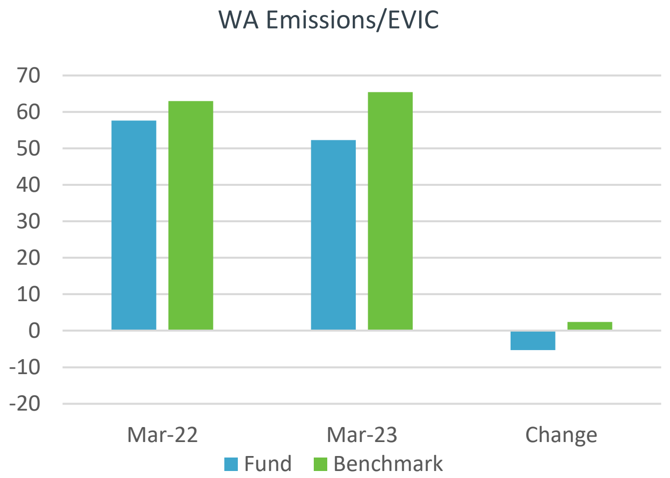
Absolute Emissions Metrics

Mandate	Weighted Average Emissions/£m Equity (tCO2e/£m)				Weighted Average Emissions/$m EVIC (tCO2e/$m)[1]			
	Mar-19	Mar-22	Mar-23	Change 2019-23	Mar-19	Mar-22	Mar-23	Change 2022-23
Fund	226.4	119.4	124.9	-44.8%	-	57.6	52.3	-9.3%
Benchmark	223.5	165.1	151.3	-32.3%	-	63.0	65.4	3.8%
Difference	1.3%	-36.2%	-17.4%		-	-8.6%	-20.1%	

Notes:

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





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

Fund FF Reserves are below benchmark which is to be expected as strategies which reduce WACI typically also have lower FF Reserves. This is not always the case.

Green Revenues have increased by 55% and have increased to above the benchmark. There is often a trade-off between reducing emissions and increasing green revenues, and in the past the low carbon strategies the Fund has invested in (e.g. LGIM Future World) have prioritised emissions reduction.

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

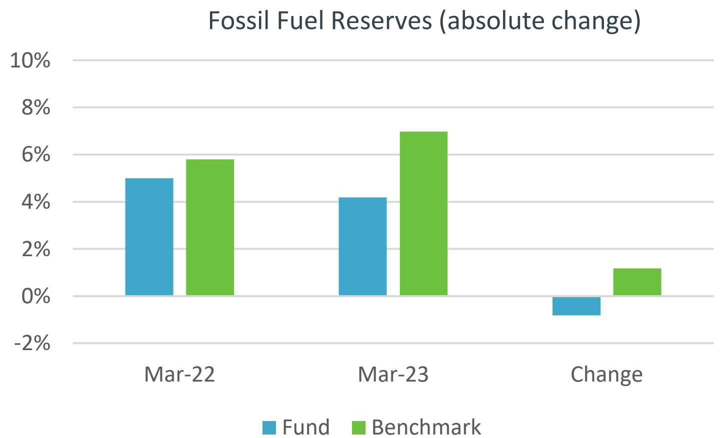
Given the above, it is vital that manager selection and engagement activity considers the full range of climate metrics.

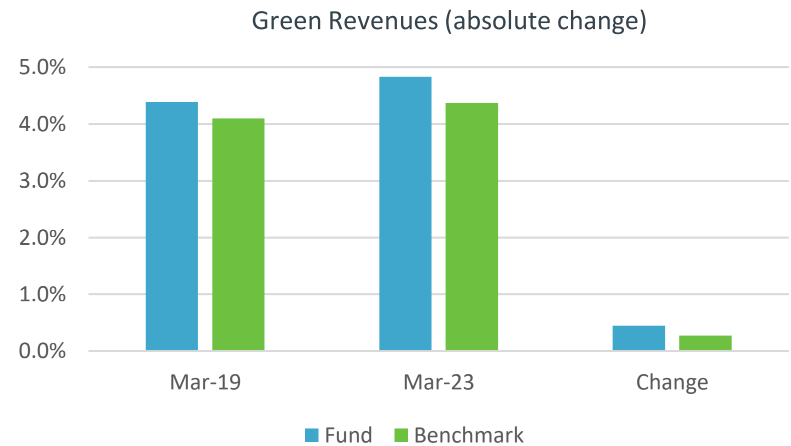
Fossil Fuel Reserves and Green Revenues

Mandate	Fossil Fuel Reserves (%AUM)[1]				WA Green Revenues (%Revenues)[3]			
	Mar-19	Mar-22	Mar-23	Change 2022-23	Mar-19	Mar-22	Mar-23	Change 2019-23
Fund	-	5.0%	4.2%	-16.4%	3.1%	4.9%	4.8%	54.5%
Benchmark	-	5.8%	7.0%	20.3%	3.2%	5.4%	4.4%	36.5%
Difference	-	-13.8%	-40.0%		-2.2%	-10.1%	10.6%	

Notes:

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





Whole Fund

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

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

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

Alignment with recognised decarbonisation pathways is a key measure of prospective emissions. Some managers provided alternative measures of alignment.

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

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

Climate Engagement Metric

Percentage of AUM subject to engagement, 12m to 31 March 2022 (%) [1]	Percentage of AUM subject to engagement, 12m to 31 March 2023 (%) [1]
22.1%	16.2%

Notes:
1. Metric not available for prior years due to lack of data
2. As reported by managers where available.

Transition Pathway Alignment

Mandate	By % of Emissions (2023)				By % of AUM (2023)			
	Not aligned	Committed	Aligning	Aligned	Not aligned	Committed	Aligning	Aligned
Border to Coast UK Equity Alpha	29%	19%	52%	0%	3%	59%	38%	0%
Border to Coast Global Equities	26%	7%	67%	0%	8%	28%	64%	0%
Border to Coast Corporate Bonds	8%	13%	78%	1%	62%	9%	8%	22%
Mandate	**By % of Emissions (2023)**				**By % of AUM (2023)**			
	Not aligned	**Committed**	**Aligning**	**Aligned**	**Not aligned**	**Committed**	**Aligning**	**Aligned**
Lazard Japanese Equity	3%	68%	26%	3%	11%	54%	8%	27%
TT Asia Pacific Equities	-	-	-	-	46%	23%	22%	1%
Pantheon Private Equity	-	-	-	-	45%	8%	23%	0%
Pantheon Private Debt	-	-	-	-	53%	9%	15%	0%
Pantheon Infrastructure	-	-	-	-	36%	40%	21%	0%

New metrics for 2023

Mandate	% Thermal Coal Reserves	Scope 3 Emissions per £m invested	
	Mar-23	Mar-23	Data coverage
Fund	1.1%	810.8	43.4%
Benchmark	1.7%	1,046.3	44.3%
Difference	-37.8%	-22.5%	-1.9%

Asset Class Comparison

Asset class comparison

WACI (Revenue)

- Listed UK equities and credit remain lower than global equivalents, likely reflecting the sector mix and UK progress in decarbonisation.
- Private equity and debt also continue to be lower than listed equity due to higher exposure to low carbon sectors – tech, healthcare, business services, albeit this may be skewed by data availability.
- Infrastructure WACI is still highly dependent on specific asset mix. More recent data has not been made available for the Partners Infrastructure mandate.

Exposure to fossil fuel reserves

- Listed UK equities higher than global equivalents due to importance of oil & gas sector
- Private equities assessed to be lower than listed equity due to higher exposure to low carbon sectors.
- Infrastructure and property have zero direct exposure, but indirect exposure via tenants is possible in the property funds.

Green revenues

- Remains relatively low, reflecting manager focus and the ongoing evolution of the availability of many green technologies.
- Specialist funds (e.g. BCPP COF) will likely be required to increase exposure.

Metrics by asset class

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

Equity metrics by geographic region

WACI (Revenue)

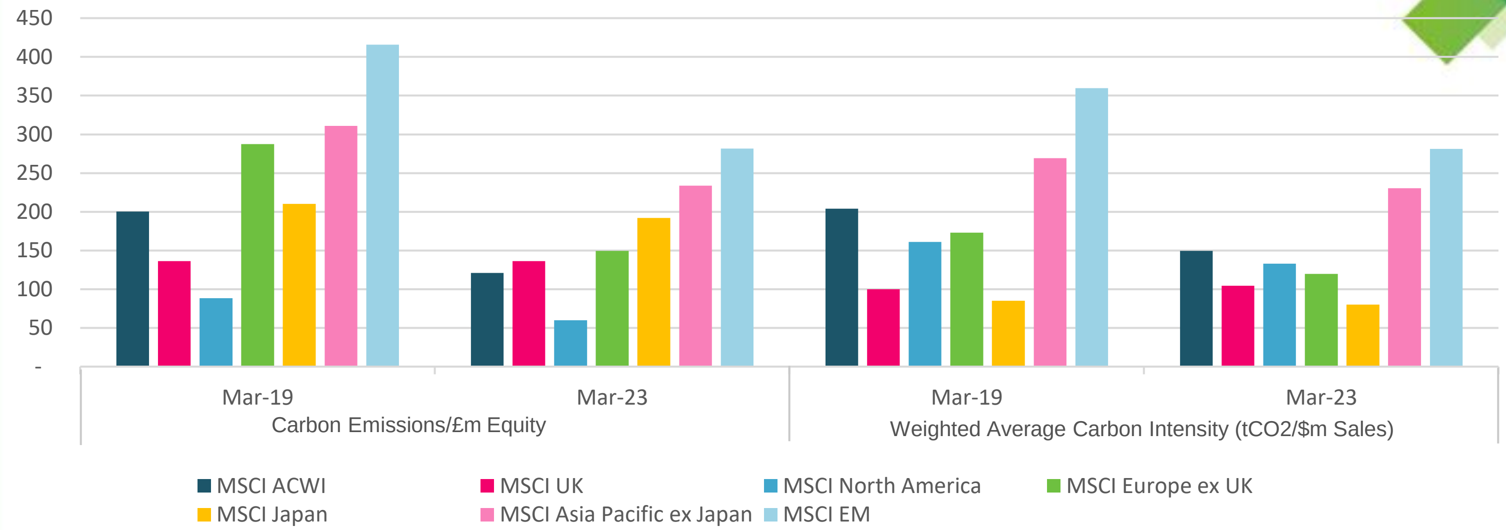
- The UK and US have lower emissions intensity, likely reflecting higher exposure to tech. and services sectors.
- Higher emissions intensity in Asia and EM likely reflects increased exposure to manufacturing and natural resources sectors; however this excludes Japan.

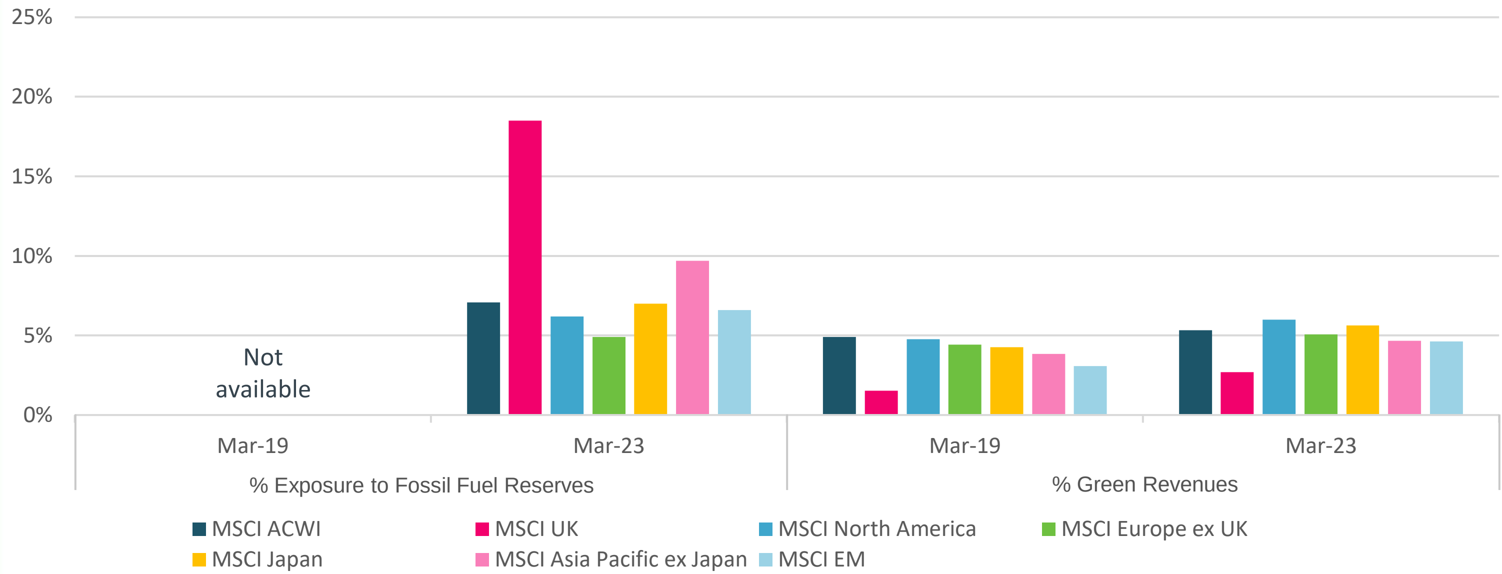
Fossil Fuel Reserves

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

Green Revenues

- The UK's low green revenues likely reflects low exposure to manufacturing generally and to alternative energy and energy efficiency solutions in particular.





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

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- We have undertaken a number of calculations based on analysis from different data sources.
- For public market assets, this is primarily from MSCI analysis of underlying holdings. The public market figures have been supplemented by data provided by asset managers where appropriate (i.e. missing data, metrics that cannot be provided by managers).
- For private market assets, we have taken the approach to data as follows:
  - Where managers have provided metrics (or estimates), we have used these figures; and
  - Where direct data per above is unavailable, figures have been estimated based on listed proxies and manager-supplied sector allocations.
  - With some private market assets, metrics are only measured on an annual basis; in these instances we have used the most recently available data although it may not be as at exactly 31 March 2023 (e.g. instead may be reported on as at 31 December 2022).
- We have tried to ensured consistency in approach for all metrics, however the approach may vary based on the applicability of the metrics to each asset class and underlying holdings.