



# Clwyd Pension Fund Analytics for Climate Transition (ACT)

Private & Confidential

November 2023

welcome to brighter

# Progress to date

## How ACT Analysis has been used to date

### 2021

#### Set targets:

- Total Fund 2045 Net Zero Target
- Total Fund decarbonisation target of 50% reduction by 2030, versus 2021 baseline position
- Adopted Listed Equities portfolio carbon reduction targets of 36% by 2025 and 68% by 2030, versus 2021 baseline position
- Committed to increasing the total Fund's sustainable/low carbon allocation target to 30% by 2030

### 2022

#### Monitor Progress

- Monitor progress vs. 2025 and 2030 decarbonisation targets

#### Investment Manager decisions

- Helped inform decision to introduce WPP Sustainable Active Equity fund

#### Stewardship & Engagement

- Identified most strategically important companies to engage with from a climate perspective
- Targeted 70% of companies, as measured by value invested and emissions, in carbon-intensive sectors either aligned/under engagement in Listed Equities.

### 2023

#### Monitor Progress

- Monitor progress vs. 2025 and 2030 decarbonisation targets.
- Key development / progress made in switching to WPP Sustainable Active Equity fund in June 2023

#### Strengthening Targets

- All Listed Equity portfolio in sustainable mandates by 2030

#### Adoption of Exclusions Policy

- Exclusions policy framework adopted to implement exclusions across coal, oil and gas revenue thresholds.



### Next 12-18 Months

#### Enhance Net Zero Plan

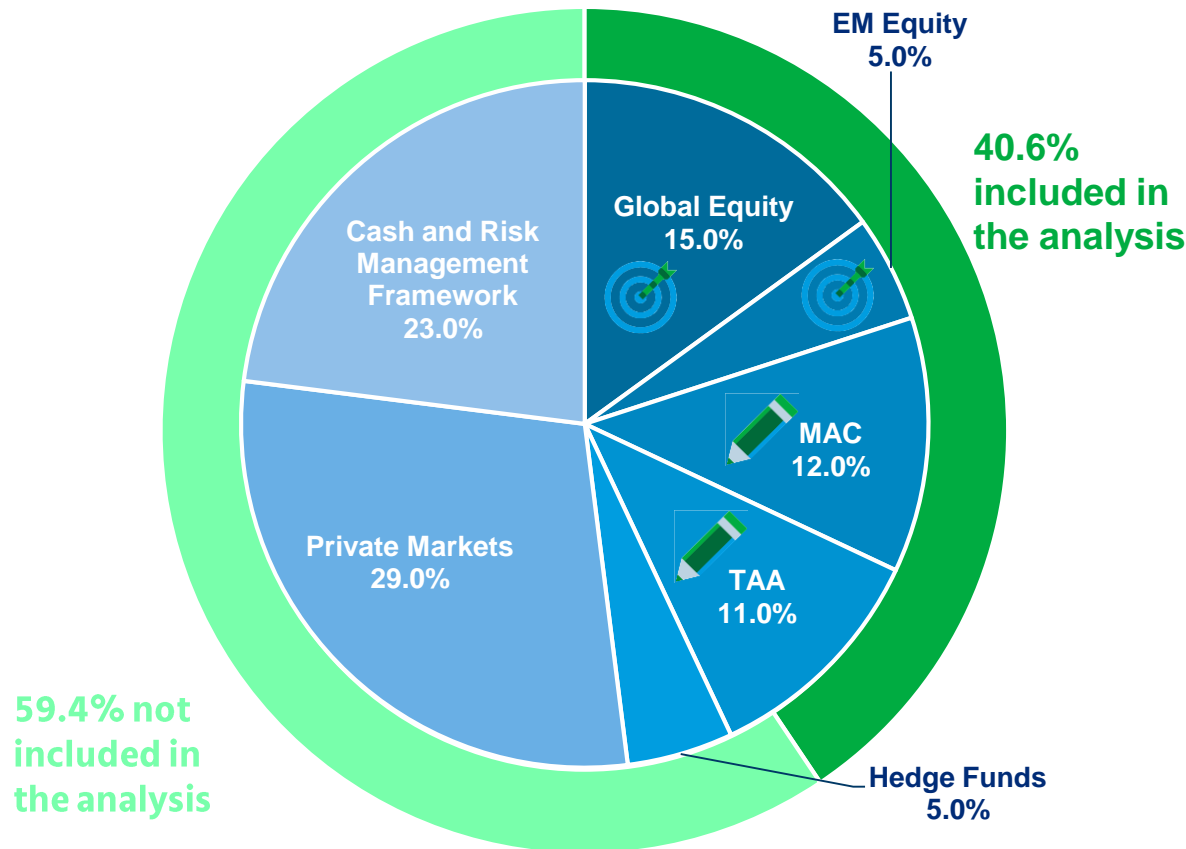
- Monitor suitability of Listed Equities decarbonisation target
- Looking at sustainability options for Emerging Market equities is a key area of interest
- Set and refine granular plans/targets across:
  - Transition alignment
  - Stewardship
  - Sustainable / climate solutions
- Expand net zero approach beyond Listed Equities portfolio to property, infrastructure, private markets. Improvements in data capture.
- Potential connections to biodiversity / natural capital

Support the Responsible Investment strategy and policy approach / provide insight into transition capacity and monitor progress against climate policy

# Proportion of holdings analysed

	Analysis only
	Targets and Analysis

Fund strategic asset allocation as at 31 March 2023



59.4% not included in the analysis

40.6% included in the analysis

Notes: The data analysed excludes e.g. cash and derivative allocations within the funds analysed. Where there is partial coverage of a portfolio we scale up the Absolute Emissions to estimate coverage for 100% of the mandate. Please note within the Cash and Risk Management Framework there is exposure to synthetic global developed equity.

- Carbon metrics have been provided on 40.6% (broadly the same as 2022) of the Fund's Strategic Asset Allocation (SAA).
- Consistent with the previous year's analysis, the baseline consists of the Fund's Global and Emerging Market Equity mandates, with decarbonisation targets for this asset class..
- As the Tactical Asset Allocation portion of the SAA is tactical and short term by its very nature, this portion of the portfolio has been excluded from the **original baseline** analysis (as at 31 March 2021) and is not yet included in target setting. 78% of TAA portfolio (or c.9% of total assets) has been included in this analysis, with the exception the Commodity and the Sterling Liquidity Funds. These have not been analysed owing to data availability in the case of the former, and lack of decision usefulness in respect of the cash fund due to the very short term lending in the portfolio.
- There is an active ongoing exercise to gather carbon metrics data on the property and selected private market holdings. We will discuss this with Officers in the near future.
- Over time as consensus around methodology for non-public market asset classes grows and data becomes available, this analysis, including target setting, is intended to cover a greater proportion of the Fund over time.
- Since 31 March 2023, the Fund's allocation to the WPP Global Opportunities Fund has been replaced in its entirety by the WPP Sustainable Active Equity Fund.

# Summary: Current Targets and Progress



On Track



Progress Required

Scope	Current Target	Update on targets	Progress to Date
Total Fund	The Fund targets net zero by 2045. Interim target of carbon reduction of 50% by 2030.	Target setting is currently focused on Listed Equities with other asset classes and strategies being incorporated over time based on evolving methodologies, data availability and quality.	Progress Required
Total Fund	To have at least 30% of the Fund's assets allocated to sustainable investments by 2030.	<p>The Fund has a target allocation of 15% on a total asset basis to Sustainable Mandates in the listed equity portfolio (further work being done to finalise plan to get to this target in 2024). Recent allocation to WPP Sustainable Active Equity Fund will help the Fund move toward its target allocation (c.9% of actual assets as at 30 September 2023).</p> <p>In addition, commitments are already being made to sustainable allocations in private markets, with a 6% allocation to local / impact opportunities.</p>	On Track
Total Fund	Expand net zero target setting to incorporate synthetic equity, multi asset credit, TAA, property, private markets and hedge funds over 2024/25 (data permitting).	<p>Analysis for this year covers the Equity, Synthetic Equity, Multi-Asset Credit and TAA portfolio.</p> <p>Equities have had analysis carried out and targets set. The remaining asset classes noted above are analysis only.</p> <p>The Fund's property managers have been contacted to assess the level of data they can provide versus the best practice Carbon Risk Real Estate Emissions Monitor (CCREEM) framework. Further work is required to set formal targets on these assets.</p> <p>Guidance is now available for private equity and infrastructure, but data availability will be a key determinant of target setting timings. There is an updated ESG/climate/SDG data template being developed to better capture data.</p> <p>Need to consider practicalities and governance costs, of potentially setting targets within private markets given the high number of underlying funds.</p>	Progress Required

# Summary: Current Targets and Progress



On Track

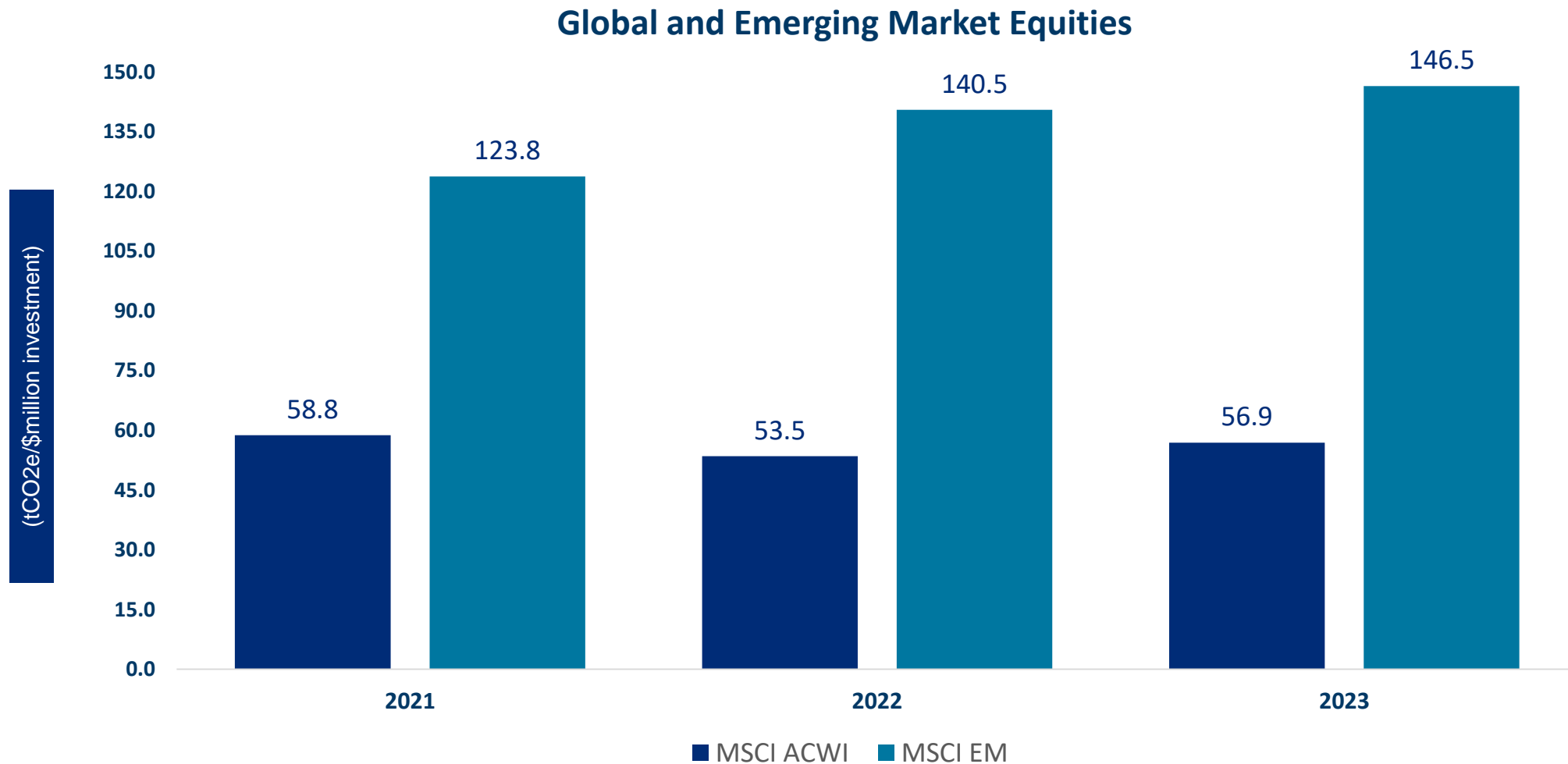


Progress Required

Scope	Current Target	Update on targets	Progress to Date
Listed Equities	Net zero transition trajectory: listed equity portfolio carbon reduction targets of 36% by 2025 and 68% by 2030, versus 2021 baseline position.	<ul style="list-style-type: none"> <li>As at 31 March 2023 (primary date of the analysis), the listed equities portfolio was behind the target net zero transition trajectory, due to the increase in carbon footprint over the period under analysis. This increase is principally due to the transition out of the BlackRock World ESG mandate and the increase in Carbon Footprint for the WPP EM mandate* (this is in-line with expectations). Importantly, with the switch into the WPP Sustainable Active Equity Fund in June 2023, the position has improved and now only modestly behind target.</li> </ul>	
Listed Equity Portfolio	Target to have all listed equities invested in sustainable mandates by 2030.	<ul style="list-style-type: none"> <li>The Fund has now switched all physical global equities into the WPP Sustainable Active Equity Fund following the date of this analysis. Paris Aligned synthetic equities have also been introduced and plans are in place to increase further in 2024. Expect to consider options for Emerging Market equities in 2024, including discussions with WPP.</li> </ul>	
Listed Equity Portfolio	<p>Stewardship target: to engage with the biggest polluters within the Fund's Listed Equity portfolio as part of an overarching stewardship and engagement strategy, to achieve:</p> <ul style="list-style-type: none"> <li>by 2025, at least 70% of companies, as measured by value invested and emissions exposure, in carbon-intensive sectors have clearly articulated and credible strategies to attain net zero or are subject to engagement to achieve this objective.</li> <li>by 2030, at least 90% of companies, as measured by value invested and emissions exposure, in carbon-intensive sectors have clearly articulated and credible strategies to attain net zero or are subject to engagement to achieve this objective.</li> </ul>	<ul style="list-style-type: none"> <li>65% of financed emissions within Listed Equities in key sectors* demonstrate evidence of aligning or being under active engagement. Work with Robeco and WPP to increase this over time.</li> </ul>	

\*This impact was factored into advice at the time, and it was agreed at the time that this was the best solution for the Fund's liquidity requirements. It was also agreed given the pooling agenda.

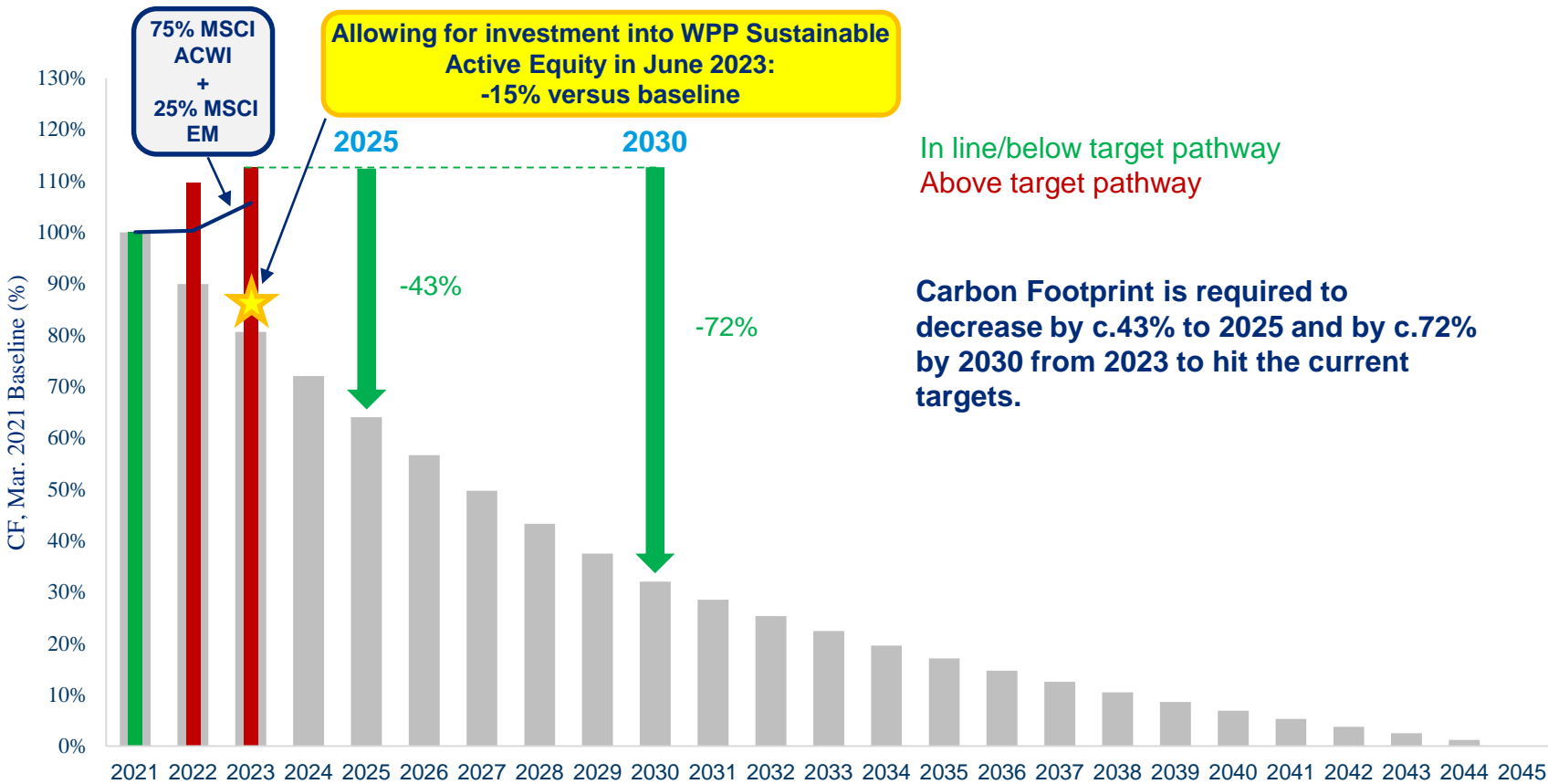
# Understanding Market Background



Over the year to 31 March 2023, the carbon footprint of the benchmarks increased due to strong relative investment performance of high carbon sectors  
MSCI ACWI (+6.4%) : MSCI EM (+4.3%)

# Decarbonisation Path – 2021 Baseline (Scope 1 & 2)

## Listed Equities (ex. Synthetic Equity & TAA) – Carbon Footprint



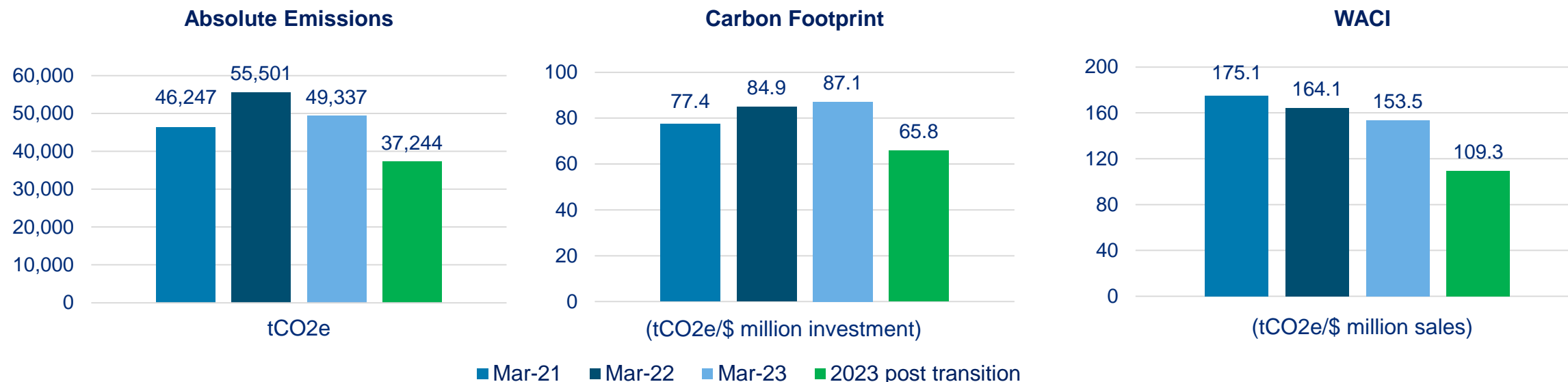
### Key takeaways:

- Listed Equities portfolio has **seen an increase in Carbon Footprint** since the baseline year (2021).
- 2022:** carbon footprint increased as a result of pooling Emerging Market equities.
- 2023:** carbon footprint increased by c.2.7%, mostly as a result of the WPP Emerging Market Fund intensity increasing by 16% over the year.
- This is in the context of the wider market seeing carbon footprint increase due to the energy sector contribution.
- Allocation to WPP Sustainable Equity Fund following 31 March 2023 analysis has reduced the carbon footprint of listed equities by an estimated c.24%. This change brings the decarbonisation progress made to being modestly behind target.

**Continue to monitor decarbonisation targets next year in light of the level of ambition and wider targets that are being proposed. Need to ensure that transition risks are managed holistically rather than on a narrow emissions-only basis**

# Transition from WPP Global Opportunities to Sustainable Active Equities

## Progress versus baseline – Listed Equities (ex. Synthetic Equity & TAA)



Listed Equities (carbon metrics pre and post transition)			
Transition Basis	Absolute Emissions	Carbon Footprint	WACI
	2022 to 2023	2022 to 2023	2022 to 2023
Pre Transition	-11.1%	+2.7%	-6.4%
Post Transition	-32.9%	-22.5%	-33.4%

Notes: Analysis captures carbon dioxide equivalent emissions. Where there is partial coverage of a portfolio we scale up the Absolute Emissions to estimate coverage for 100% of the mandate.

**Investment was made into the WPP Sustainable Active Equity Fund in June 2023**



# Engagement Targets (Illustrative) – Physical Equity Portfolio

## Top 10 Contributors to Carbon Footprint

Company Number	Sector	Country	Weight within Equity portfolio	Absolute Value of Investment <sup>1</sup>	Cont. to Carbon Footprint (Scope 1,2) <sup>2</sup>	Transition category	Emissions intensity (Carbon Footprint)	SBTi target in place?	TPI Management Quality Score	TPI Carbon Performance <sup>3</sup>	CA+100	Mandates held in
1	Materials	China	0.28%	£1.3m	11.9%	Light Grey	3,608	No	-	-	No	WPP EM / WPP Global Opportunities
2	Materials	China	0.09%	£0.4m	6.1%	Dark Grey	5,569	No	1	No or unsuitable disclosure	Yes	WPP EM / WPP Global Opportunities
3	Materials	Japan	0.12%	£0.5m	5.4%	Grey / In-Between	3,988	No	3	1.5 Degrees	No	WPP Global Opportunities
4	Industrials	Hong Kong	0.26%	£1.2m	4.2%	Grey / In-between	1,372	No	-	-	No	WPP EM / WPP Global Opportunities
5	Materials	Republic of Korea	0.13%	£0.6m	3.2%	Grey / In-between	2,143	No	4	1.5 Degrees	Yes	WPP EM / WPP Global Opportunities
6	Energy	Brazil	0.35%	£1.6m	2.3%	Light Grey	542	No	4	Not Aligned	Yes	WPP EM / WPP Global Opportunities
7	Materials	Hong Kong	0.12%	£0.6m	2.1%	Dark Grey	1,449	No	3	Not Aligned	No	WPP EM / WPP Global Opportunities
8	Materials	Argentina	0.01%	£0.04m	1.8%	Dark Grey	18,001	No	-	-	No	WPP EM
9	Information Technology	China	0.18%	£0.8m	1.8%	In-Between	821	No	-	-	No	WPP EM / WPP Global Opportunities
10	Materials	India	0.06%	£0.3m	1.8%	Light Grey	2,339	Yes	3	National Pledges	Yes	WPP EM / WPP Global Opportunities
<b>Total</b>			<b>1.61%</b>	<b>£7.4m</b> (c. 0.3% Total Fund)	<b>40.4%</b>							

**Implementing targets with regards to the % of emissions from high emitting sectors under engagement or aligning is a next step. Suggest analysis is updated to allow for switch to Sustainable Active Equity**

Note: Total may not sum due to rounding.<sup>1</sup>The total value of investment in equity being analysed is c. £460m as at 31 March 2023. <sup>2</sup>Figures are shown as a percentage of Equity. These figures are not scaled and reflect data coverage. <sup>3</sup>Long-term alignment in 2050, sourced from TPI <https://www.transitionpathwayinitiative.org/>

# Exclusion Policy – Thresholds Recap

The policy is to exclude companies which breach the following thresholds:	Minimum Objective	Fund's Ambition
The % of or more of revenues from exploration, mining, extraction, distribution and / or refining of hard coal and lignite.	1%	Same
The % of or more of revenues from Oil: companies involved in exploration, extraction, refining and / or distribution of oil fuels.	10%	1%
The % of or more of revenues from Gas: companies involved in exploration, extraction, manufacturing or distribution of hydrocarbons, hydrogen and carbon monoxide mixtures present in gaseous state.	50%	1%

# Fossil Fuels

## Revenue Exposure – Listed Equities

Minimum Objective

In line with target

Outside of target

The policy is to exclude companies which breach the following thresholds:	Minimum Objective	WPP Emerging Markets as at 31 March 2023	WPP Global Opportunities as at 31 March 2023	WPP Sustainable Active Equity as at 31 July 2023
<b>SAA Weight</b>	-	5%	15%	
The % of or more of revenues from exploration, mining, extraction, distribution and / or refining of hard coal and lignite.	1%	1.1% (i.e. 1.1% of the value of the mandate is invested in companies that exceed the objective).	1.1%	0.0%
The % of or more of revenues from Oil: companies involved in exploration, extraction, refining and / or distribution of oil fuels.	10%	3.2%	3.7%	1.1%
The % of or more of revenues from Gas: companies involved in exploration, extraction, manufacturing or distribution of hydrocarbons, hydrogen and carbon monoxide mixtures present in gaseous state.	50%	1.1%	0.5%	0.0%

**WPP Sustainable Active Equity Fund has an improved position vs WPP Global Opportunities Fund**

# Fund Commitments

## Current and proposed commitments



On Track



Progress Required

Scope	Current Target	Progress	Progress to date
Total Fund	<ul style="list-style-type: none"> <li>Allocating 30% of the Fund to sustainable investments by 2030</li> </ul>	<ul style="list-style-type: none"> <li>Supports overall objective of helping the climate transition and sustainability ambitions of the Fund.</li> <li>The Fund has made allocations to the WPP Sustainable Active Equity Fund. The Fund has also made investments in and commitments to renewable infrastructure and impact investments.</li> <li>As at 30 September 2023, the Fund has a strategic allocation of 21% to sustainable investments (sustainable listed equity and local/impact allocations). The Fund's actual position within these mandates was 13.3% at this date. As the Fund continues to increase its allocation to the new WPP Sustainable Active Equity Fund, this weight will move further towards the strategic target. In addition, the sustainable private market allocations will increase further as managers drawdown capital for existing allocations within private market impact / local mandates.</li> <li>Within the Fund's Private Market assets, there are also examples of assets with sustainable solution exposure. Further work would need to be undertaken to map the overall allocations, but we have provided examples below:               <ul style="list-style-type: none"> <li>Capital Dynamics – Clean Energy Wales (£50m)</li> <li>Copenhagen Infrastructure – Energy Transition I (£17m)</li> <li>Activate Partners – Activate Capital II (£11m)</li> <li>Sandbrook Capital – Climate Infrastructure Fund I (£17m)</li> </ul> </li> </ul>	
Listed Equities	<ul style="list-style-type: none"> <li>Target all of the Listed Equity portfolio being invested in sustainable mandates by 2030</li> </ul>	<ul style="list-style-type: none"> <li>To date the Fund has allocated all of its physical listed equities to the WPP Sustainable Active Equity Fund.</li> <li>The remaining 5% invested in the WPP EM Fund is not in a dedicated sustainable mandate. The Fund should consider requesting WPP to consider viability for a sustainable version of the EM fund.</li> </ul>	

**Sustainable Emerging Market Equity Fund is a key area of interest**

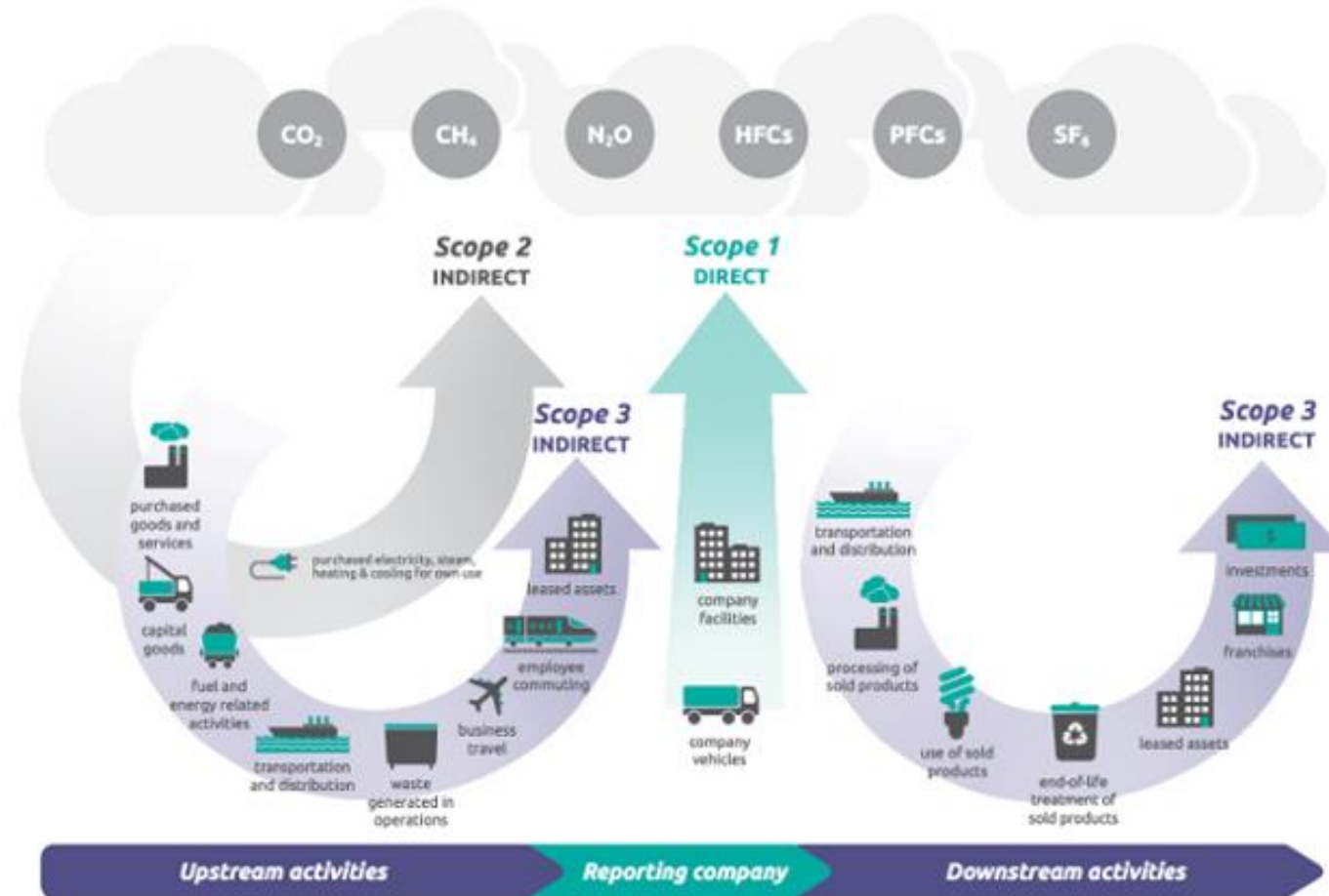
# Enhancements & Next Steps

Item	Next steps
Fund's ambition	<b>Decarbonisation:</b> Listed equity targets should be kept under review and in light of the wider set of targets proposed this year and the need to take a holistic approach to a whole economy transition.
Listed equity targets	<p><b>Stewardship:</b> Use information on financed emissions in material sectors to inform discussions with WPP and Russell and align approaches and meet targets.</p> <p><b>Listed equity targets:</b> Continue to develop <b>alignment</b> and <b>solutions targets</b>. Understand WPP and Russell's thinking in these areas, particularly in light of ongoing IIGCC work in this area.</p>
TAA	The TAA guidelines have been reviewed to embed sustainable investment considerations more formally into the mandate. The options on Mobius are being reviewed and where available, allocations will be switched to more <b>ESG focused</b> underlying funds. There will need to be a careful balance between the short term tactical views and expressing these through funds that may have different underlying characteristics.
MAC	Use the findings from this analysis as a starting point to discuss setting <b>net zero targets</b> on the MAC portfolio with WPP.
Private markets and Infrastructure	<b>Target setting in private markets:</b> Target setting <b>remains challenging</b> based on current data. Use findings from the updated ESG/climate/SDG data template to continue to <b>engage with managers</b> . <b>Start requesting data in line with IIGCC net zero frameworks for Private Equity and Infrastructure, and reporting on data</b> where it is available.
Real Estate	<b>Further engagement and prioritisation</b> will be needed on property, given the limited responses received to date.
Fossil Fuel	The Fund will <b>engage with WPP on its exclusion policy</b> and monitor holdings within WPP mandates that that fail the Fund's exclusion criteria.

# Appendix

# Emissions Data

## Understanding the Scopes



# Climate Metrics

Listed assets (Equities and Corporate Bonds)		
Emissions Metrics	Overview	Description
Absolute GHG emissions	Total greenhouse gas (GHG) emissions: metric tons of CO2 and equivalents (tCO2e)	Calculates an investor's share of the total emissions for each company/holding. It seeks to answer what emissions the investor is responsible for.
Carbon footprint	tCO2e / \$million invested	Total GHG Emissions figure normalised to take account of the size of the investment made. It seeks to answer how carbon intensive the portfolio is.
Weighted Average Carbon Intensity (WACI)	tCO2e / \$million revenue	Average exposure (weighted by portfolio allocation) to GHG emissions normalised by revenue. It seeks to answer how carbon intensive the companies in the portfolio are.
Implied Temperature Rise	Expressed as °C	Prediction of temperature rise scenario over the rest of the century, given a company's emissions, commitments, and momentum.
Non-Emissions Metrics	Overview	Description
% of portfolio with SBTi targets	Alignment metric	A measure of how many companies in a portfolio have submitted climate transition plans that have been approved by the Science Based Targets Initiative (SBTi). There is more detail on SBTi in the appendix.
Data Quality	Non-emissions metric	Classifies each mandate's company/holding data as one of the following three categories: Reported, Estimated, and Not Reported. A fourth category accounts for the remainder of the fund that is not included in the asset class being analysed. There is more detail on data quality in the appendix.
Sovereign Bonds		
Emissions Metrics	Overview	Description
Sovereign PCAF Methodology	Metric tons of CO2 and equivalents (tCO2e) & tCO2e/\$million PPP-Adjusted GDP	<p><b>Absolute emissions</b> are calculated as follows: Market Value of exposure / PPP-Adjusted GDP * Sovereign Production Emissions.</p> <p><b>Intensity numbers</b> are calculated as follows: Country Production Emissions / PPP-Adjusted GDP (\$Million). Data for Production Emissions (GHG) for 2021 sourced from <a href="#">EDGARv7.0 website</a>, Crippa et al. (2021, 2022). Data for PPP-Adjusted GDP for the latest available data (2020-2021) sourced from <a href="#">The World Bank</a>.</p>



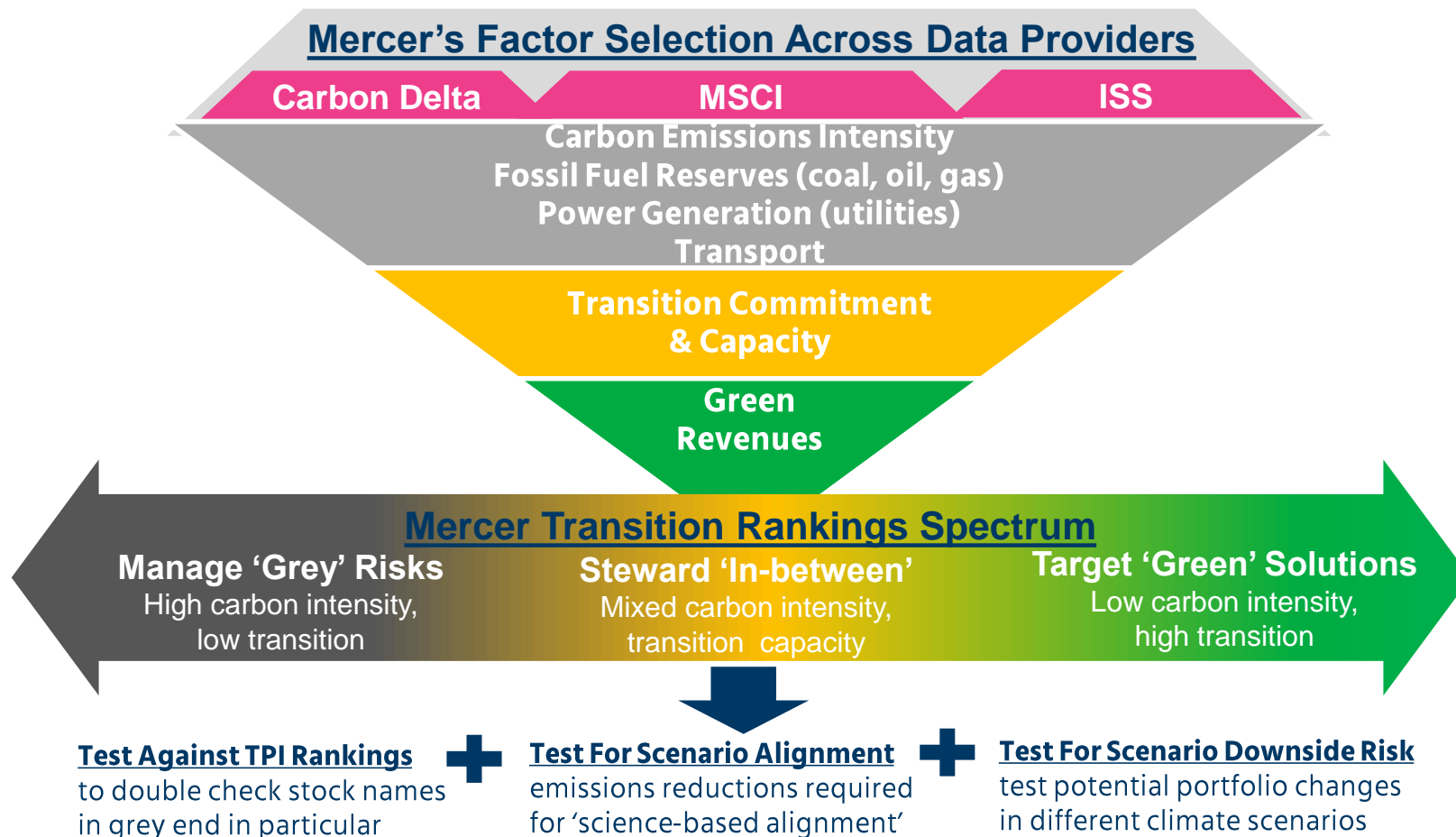
# Additional Fossil Fuel Metrics

Listed assets (Equities and Corporate Bonds)		
Emissions Metrics	Overview	Description
At least 1% revenue from Coal	Expressed as percentage	This factor identifies companies with revenue from exploration, mining, extraction or distribution of hard coal and lignite totaling at least 1% or more of annual revenues.
At least 10% revenue from Oil		This factor identifies companies with revenue from exploration, extraction, distribution and refining of oil fuels totaling at least 10% or more of annual revenues.
At least 50% revenue from Gas		This factor identifies companies with revenue from exploration, extraction, manufacturing or distribution of gaseous fuels totaling at least 50% of annual revenue.
At least 1% revenue from Oil and 1% Gas related activities		This factor identifies the maximum percentage of revenue (either reported or estimated) that a company derives from oil and gas related activities, including distribution / retail, equipment and services, extraction and production, petrochemicals, pipelines and transportation and refining but excluding biofuel production and sales and trading activities.

# Emissions Data

## Understanding the Scopes

The objective is to identify the 'grey', the 'green' and the 'in-between' i.e. from the likely 'losers' to the potential 'winners' in a low carbon transition, with the company names evolving each year.



# Science Based Targets Initiative (SBTi)

The Science Based Targets initiative (SBTi) drives ambitious climate action in the private sector by enabling organizations to set science-based emissions reduction targets. Offering a range of target-setting resources and guidance, the SBTi independently assesses and approves companies' targets in line with its strict criteria.

## SBTi Targets

Science-based targets provide a clearly-defined pathway for companies to reduce greenhouse gas (GHG) emissions.

Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the **Paris Agreement**.

→ All **scope 1 and 2** targets are classified under one of three categories: **2°C, well-below 2°C and 1.5°C**.

**As of July 15th 2022, the SBTi will only accept target submissions of scope 1 and 2 targets that are in line with a 1.5°C trajectory.**

**Scope 3** targets are also evaluated during the target validation process. However, SBTi is carrying out a comprehensive review of their scope 3 target setting methods and criteria to ensure they are fully aligned with the Net-Zero Standard (work to be finalized by the end of 2022).

- Launched in 2015, the SBTi is part of WRI's Center for Sustainable Business and a collaboration of WRI, CDP, WWF and the UN Global Compact.

<b>1082</b>	<b>29%</b>	<b>1/3</b>	<b>1.5bn</b>	<b>53 million</b>	<b>68%</b>
<b>Approved Targets</b>	<b>Reduction in Scope 1 and 2 emissions between 2015 &amp; 2020</b>	<b>of global market capitalisation covered by SBTi companies</b>	<b>tonnes of CO2e covered by SBTi (scope 1 &amp; 2)</b>	<b>tonnes of CO2 emissions reductions across all targets</b>	<b>targets are 1.5°C aligned</b>

In 2021, the SBTi entered a period of exponential growth and increasing corporate ambition - **doubling the number of new companies** setting and committing to set targets, and **tripling the rate** at which new targets were validated.

At the end of 2021, more than **2,200 companies covering over a third of the global economy's market capitalisation**, were working with the SBTi - a rate of more than **110 new companies** per month.

→ **Mercer integrates SBTi targets in its Analytics for Climate Transition (ACT) tool. The companies' ratings take into account if the company has one or more active carbon emissions reduction target/s approved by the SBTi.**



**SBTi provides a useful 3rd party indication as to whether companies decarbonisation targets are credible or not.**

# Decarbonisation – Emissions Metrics

## Notes on the Analysis

- The analysis focuses on the Listed Equities portfolio, showing contributions to Fund emission metrics. We assess carbon dioxide “equivalent” metrics.
- Caution should be exercised in interpreting individual data points, as in reality, emissions may differ, given the data coverage in the analysis is less than 100%. Where companies do not have data points, companies are assumed to have the same carbon metrics as the average of companies that we do have data points for, therefore we do not assume that companies have zero emissions because we do not have data for them.
- Emissions are likely underestimated as Scope 3 emissions are not included in the metrics presented within. Although we do present an overview of the attribution of Scope 3 emissions by fund and sector as part of our detailed analysis.

## Understanding the Limitations

- Many of the IPCC’s scenarios are reliant on net zero (or net negative) assumptions later this century. This can include the deployment of mitigation technologies, such as carbon capture and storage, as well as ecosystem approaches, such as land and forest conservation and restoration. There has been some scepticism as to whether such technologies and approaches are viable, at the required scale. Mercer will look to integrate further assumptions around net zero emissions in due course, as science and technology evolves.
- The focus of these decarbonisation curves is currently on Scope 1 and Scope 2 emissions. Mercer will however seek to integrate Scope 3 emissions as methodologies improve.
- Given the limitations to all of the Metrics, Mercer advocates for monitoring decarbonisation progress on Absolute Emissions, WACI and carbon intensity basis.

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