



Clwyd Pension Fund

# Analytics for Climate Transition (ACT) Appendix 1

October 2021

welcome to brighter

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# Executive Summary

# Purpose of this Analysis

- This report is addressed to the Committee of the Clwyd Pension Fund (the “Fund”).
- This report provides the Fund with an understanding of the listed equity portfolio’s transition capacity using the Mercer Analytics for Climate Transition (ACT) tool.
- The aim of the Mercer ACT tool is to:
  - Set Total Fund net zero targets.
  - Understand the transition capacity of the Fund’s listed equity portfolio. Use this to:
    - Set decarbonisation targets with net zero emissions by 2050 or earlier (2045 is a realistic ambition that we highlight later in the document), and interim targets to 2025 and 2030 based on **absolute** emissions reduction.
    - Develop an implementation plan for the listed equity portfolio.
  - Set a timetable for incorporating further asset classes over time.
  - Help Wales Pension Partnership (WPP), Robeco as the pool’s voting and engagement provider and managers to deliver on the Fund’s ambition. Work with managers to instil a long-term decarbonisation focus, and explore green opportunities.
  - Report the Fund’s position to members and wider stakeholders. The analysis is consistent with TCFD reporting requirements.
- We focus primarily on detailed targets for listed equity in this report which represent c20% of assets, with the aim to incorporate further asset classes in future years.

**The aim of this analysis is to understand the listed portfolio low carbon transition alignment, set decarbonisation targets consistent with net zero by 2050 or earlier, and provide analysis to form the basis of engaging with WPP and reporting.**

# Summary of Fund proposals for consideration

Scope	Proposal	Rationale	Comments
<b>1 Total Fund</b>	<b>The Fund targets net zero by 2045. Adopt a total Fund target of 50% carbon reduction by 2030.</b>	<ul style="list-style-type: none"> <li>Setting a net zero target is consistent with fiduciary duty as climate change represents a material, systemic financial risk.</li> </ul>	<ul style="list-style-type: none"> <li>The Fund will need to work with, and engage, WPP and partner funds as well as other investment managers across asset classes and strategies to help achieve objectives.</li> </ul>
<b>2 Total Fund</b>	<b>Set total Fund low carbon and sustainable allocation target of 30% by 2030.</b>	<ul style="list-style-type: none"> <li>Supports overall proposed objective to be net-zero by 2045 and sustainability ambitions of the Fund.</li> </ul>	<ul style="list-style-type: none"> <li>Green taxonomies are currently being developed so this target would be high level in nature to begin with.</li> <li>Commitments already being made to sustainable allocations in private markets, with a 4% allocation to local / impact opportunities.</li> </ul>
<b>3 Total Fund</b>	<b>Expand net zero target setting to incorporate synthetic equity, multi asset credit, TAA, property, private markets and hedge funds over 2022/23</b>	<ul style="list-style-type: none"> <li>Consistent with IIGCC Net Zero Framework and other investors targeting a 'Total Fund' approach.</li> </ul>	<ul style="list-style-type: none"> <li>Different asset classes will require different methodologies and approaches. IIGCC working groups are currently focusing on developing frameworks for expanding set of asset classes.</li> </ul>
<b>4 Listed Equity Portfolio</b>	<b>Net zero transition trajectory: consider adopting listed equity portfolio carbon reduction targets of 36% by 2025 and 68% by 2030, versus 2021 baseline position</b>	<ul style="list-style-type: none"> <li>Overall proposed objective is to be net-zero by 2045.</li> <li>Intermediate targets needed to achieve and monitor ongoing progress.</li> </ul>	<ul style="list-style-type: none"> <li>The Fund will need to work with, and engage, WPP, to help achieve objectives.</li> </ul>

# Summary of Equity portfolio proposals for consideration

Scope	Proposal	Rationale	Comments
5 Listed Equity Portfolio	<b>Consider setting equity Fund target of at least 30% green and sustainable assets by 2030</b>	<ul style="list-style-type: none"> <li>Provides practical milestones and granular targets against which to measure progress.</li> </ul>	<ul style="list-style-type: none"> <li>Collaborate with other Partner funds on this implementation plan in order to feed into WPP discussions.</li> <li>Fund currently has a c.3.2% allocation to green companies within the equity portfolio.</li> </ul>
6 Listed Equity Portfolio	<b>Fossil Fuel targets: within the equity portfolio the Fund should target a reduction in potential emissions. These should be 70% by 2025 and 90% by 2030 for Oil &amp; Gas. For coal the targets should be 90% reduction by 2025 and 95% by 2030.</b>	<ul style="list-style-type: none"> <li>Supports sustainability ambitions of the Fund.</li> </ul>	<ul style="list-style-type: none"> <li>Collaborate with other Partner funds on this implementation plan in order to feed into WPP discussions.</li> </ul>
7 Listed Equity Portfolio	<b>Stewardship target:</b> <ul style="list-style-type: none"> <li><b>70% of financed emissions in key sectors* aligned to net zero or subject to engagement by 2025.</b></li> <li><b>90% of financed emissions in key sectors* aligned to net zero or subject to engagement by 2030.</b></li> </ul>	<ul style="list-style-type: none"> <li>Focusing stewardship on most carbon intensive emitters will have biggest potential impact.</li> <li>Lays the groundwork for any potential selective divestment, as appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Collaborate with other Partner funds on this implementation plan in order to feed into WPP discussions.</li> <li>This approach should be developed with Robeco to ensure active, collaborative engagement.</li> </ul>

\*Utilities, energy, materials

# Clwyd Pension Fund

## Summary – Decarbonisation of the Listed Equity Portfolio

### 2045 Target Setting

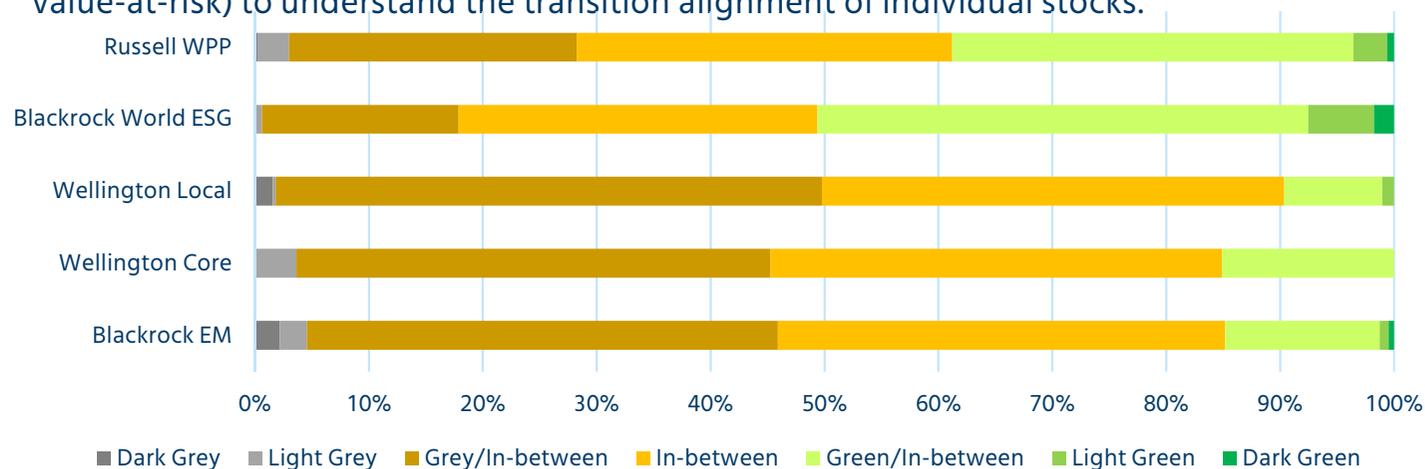
- This report provides the Clwyd Pension Fund with a baseline of emissions, in order to help plan the decarbonisation journey for the post-2021 period.
- **The baseline of Scope 1+2 absolute emissions for the listed equity portfolio is currently 46,126 tCO<sub>2</sub>e, as at 31 March 2021.**
- **In line with a 2045 net zero target, we recommend the Fund considers:**
  - **By 2025: further c.36% reduction from the 2021 baseline**
  - **By 2030: further c.68% reduction from the 2021 baseline**
- The focus on absolute emissions for decarbonisation target setting enables a focus on real world emissions reductions, needed for the world to reach net zero and stop global warming.
- We do however also provide the Fund with an understanding of its emissions intensity (Weighted Average Carbon Intensity “WACI”, and Carbon Footprint). The listed equity portfolio’s WACI and Carbon Footprint is **175.1** tCO<sub>2</sub>e/\$million sales and **77.4** tCO<sub>2</sub>e/\$million invested, respectively. Compared to MSCI ACWI this is c.-**9.2%** and c.-**31.6%**, below the benchmark metrics.

# Clwyd Pension Fund

## Summary – Transition Alignment of the Listed Equity Portfolio

- **Transition Alignment**

- **We also present the transition alignment of the listed equity portfolio**, to understand exposure to assets that are well aligned (“green”) or not well aligned (“grey”) with the low carbon transition.
- We analysed 14 metrics in total, including backward looking metrics (e.g. carbon intensity and exposure to green revenues) as well as forward-looking metrics (e.g. transition strategy and future value-at-risk) to understand the transition alignment of individual stocks.



- The chart shows currently, **94.2% of the listed equity portfolio’s assets are invested in in-between assets** (“yellow”, including “grey/in-between” and “green/in-between”), **as compared with 3.2% invested in light and dark “green” assets. Only 2.6% are invested in light and dark grey assets.\***
- Following on the transition results **we recommend a target of 30% of the listed equity portfolio in sustainable and green assets by 2030.**

\*Numbers pro rated up to 100% based on 95.5% coverage

# Introduction

# Why the Focus on the Transition? A Summary



A “well below 2°C” scenario is in long-term investors’ best interests



Risk management for short, medium and long term



Regulation



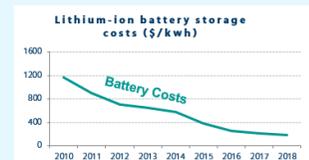
Employees are asking and employers need to answer

## Transition to a low-carbon economy is already happening

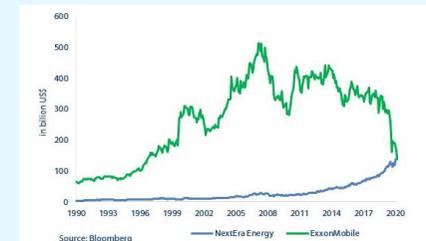
Climate policies and targets set by governments, companies and investors are growing in quantity and quality.

**RACE TO ZERO**  
25% of global CO2 emissions  
50% of global GDP

Technology development and price disruption in the energy sector is already evident; costs have meaningfully fallen.



Markets are recognising climate in pricing already and investors want to be on ahead of the curve.



(1) Climate Action Tracker (<http://climateactiontracker.org/>) - last updated September 2020; (2) United Nations Framework Convention on Climate Change Race to Zero Campaign; (3) Lazard; (4) Bloomberg New Energy Finance. (5) Bloomberg, 2020

# Methodology

# Analytics for Climate Transition

## A Framework

Investing for <2°C recognises the risks, opportunities and fiduciary duty in changes happening now and in the future. A low carbon transition plan answers key questions: How to reduce emissions and meet investment objectives? How to deliver emission reductions without just divesting high intensity companies? How to set a target that can be implemented and monitored?



### 1. Current emissions baseline

Calculations complete, dashboard drafted – total portfolio

Mercer Single Sector Funds	Coverage	Weighted Average Carbon Intensity	Metric By Asset Class	Dark Grey %	Light Grey %	Grey/In-between %	In-between %	Green/In-between %	Light Green %	Dark Green %
Australian Shares	189.7	T CO2e/Share	0.4	0.5	30.8	40.0	22.6	1.6	0.2	
Australian Shares Mid	183.9	T CO2e/Share	0.4	0.3	33.3	41.8	21.7	1.6	0.2	
Australian SR Share	148.3	T CO2e/Share	0.1	0.8	30.4	36.3	25.2	3.2	0.8	
Australian Tax Equal	197.1	T CO2e/Share	0.4	0.6	34.3	37.3	24.7	0.8	0.4	
Passive Australian Shares	258.3	T CO2e/Share	0.7	0.8	32.7	41.0	23.6	1.5	0.3	
Australian Small Cap	140.1	T CO2e/Share	0.0	0.6	30.7	39.7	11.6	0.6	0.8	
Global Shares	86.0	T CO2e/Share	0.3	0.3	9.7	42.1	36.4	4.9	1.5	
Global SR Shares	73.6	T CO2e/Share	0.0	0.0	4.1	31.8	39.6	5.2	9.8	
Global Enhanced Low Volatility	239.0	T CO2e/Share	0.4	0.7	37.6	32.8	35.5	8.3	0.4	

### 2. Portfolio possibilities

Analysis complete on 'grey, green and in-between' transition capacity



### 3. Target and timing

Setting decarbonisation targets:

- 2030 and interim targets e.g. to 2025
- Net zero targets to 2050, or earlier/later

### 4. Transition plan for implementation



Integration

- Climate change scenario analysis
- Monitor developments and prices



Stewardship

- Engage with companies
- Utilise voting rights



Investment

- Allocate to innovation and solutions
- Monitor developments and prices



Screening

- Restrict high carbon solutions where needed

# Low Carbon Transition Portfolio Metrics Summary

## Measures of 'current' emissions intensity

Weighted Average Carbon Intensity (WACI)	Carbon Footprint
<ul style="list-style-type: none"> <li>Operational carbon emissions</li> <li><b>Carbon emissions (Metric tons) / \$ Million sales * portfolio weights</b></li> <li>Measures the portfolio's exposure to emissions-intensive companies</li> </ul>	<ul style="list-style-type: none"> <li>Operational carbon emissions</li> <li><b>Carbon emissions (Metric tons) / \$ Million investment * portfolio weights</b></li> <li>Measures carbon intensity of the portfolio per \$ million invested</li> </ul>

← Used for listed equity decarbonisation target setting

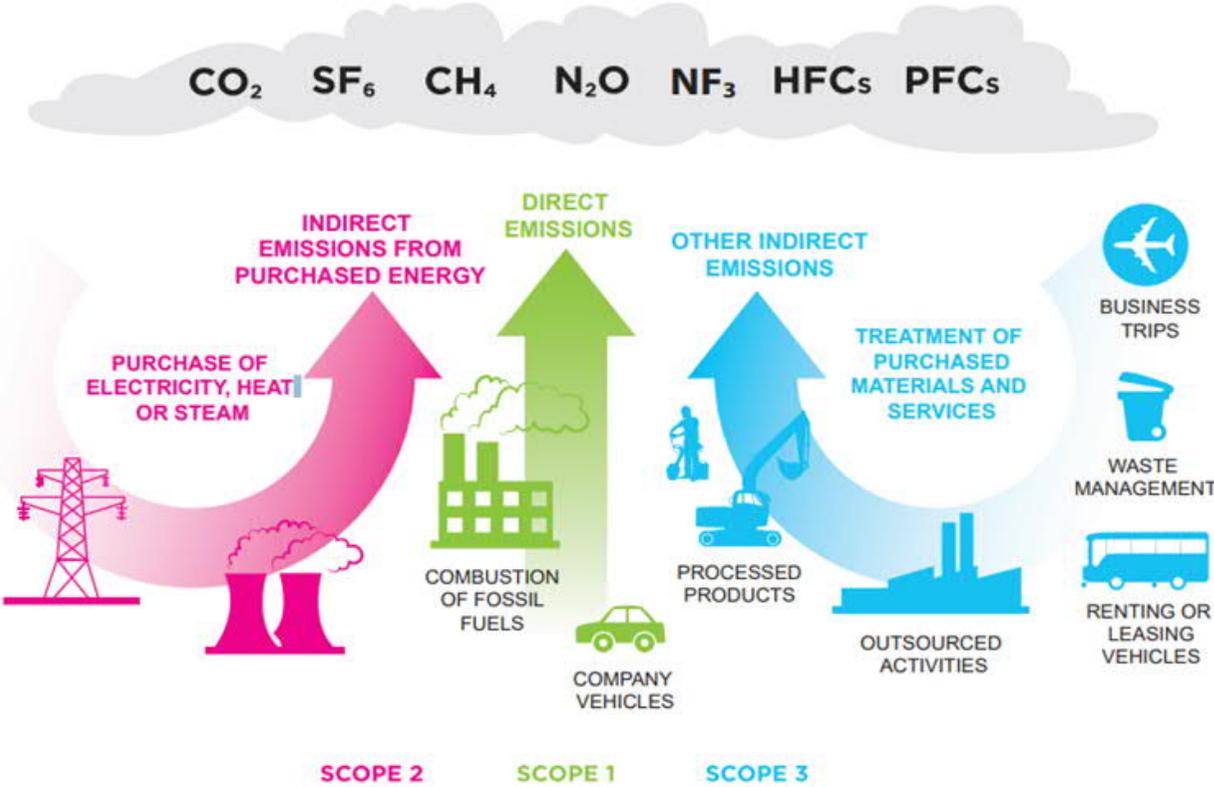
## Measure of 'current' absolute emissions

Absolute Emissions
<ul style="list-style-type: none"> <li>Absolute emissions attributed based on the value of investments</li> <li><b>Carbon emissions (Metric tons) * (investment value/company enterprise value)</b></li> <li>Real world impact in terms of emissions</li> </ul>

# Emissions Data

## Understanding the Scopes

- **Carbon footprinting** is an analysis that shows the **amount of greenhouse gas emissions an entity produces** directly through its day-to-day operations and indirectly through its utility usage and wider supply chains.
- The analysis focuses currently on carbon dioxide equivalent emissions, **Scope 1 and Scope 2 emissions**



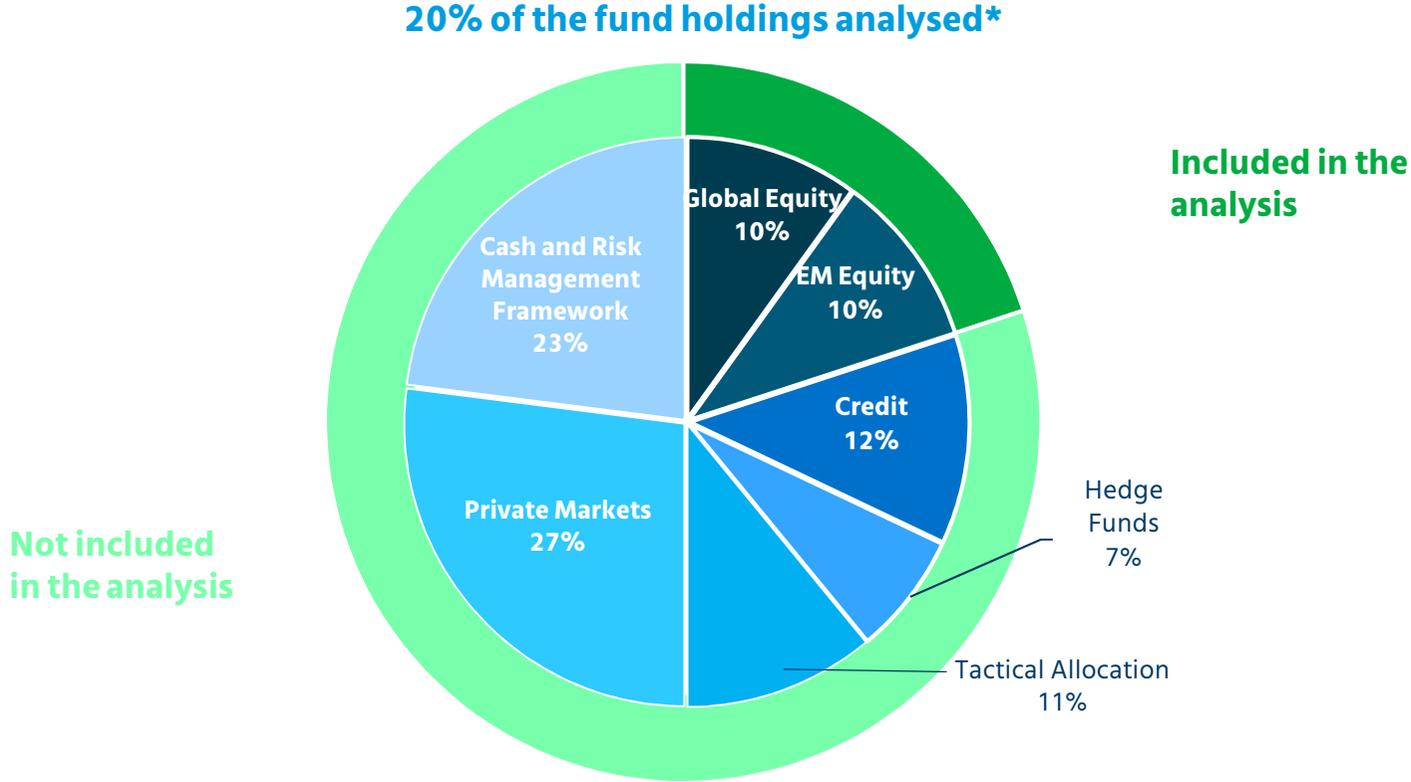
# Results

**Calculate the Baseline  
And Understand  
Portfolio Possibilities**



# Clwyd Pension Fund

## Proportion of Holdings Analysed

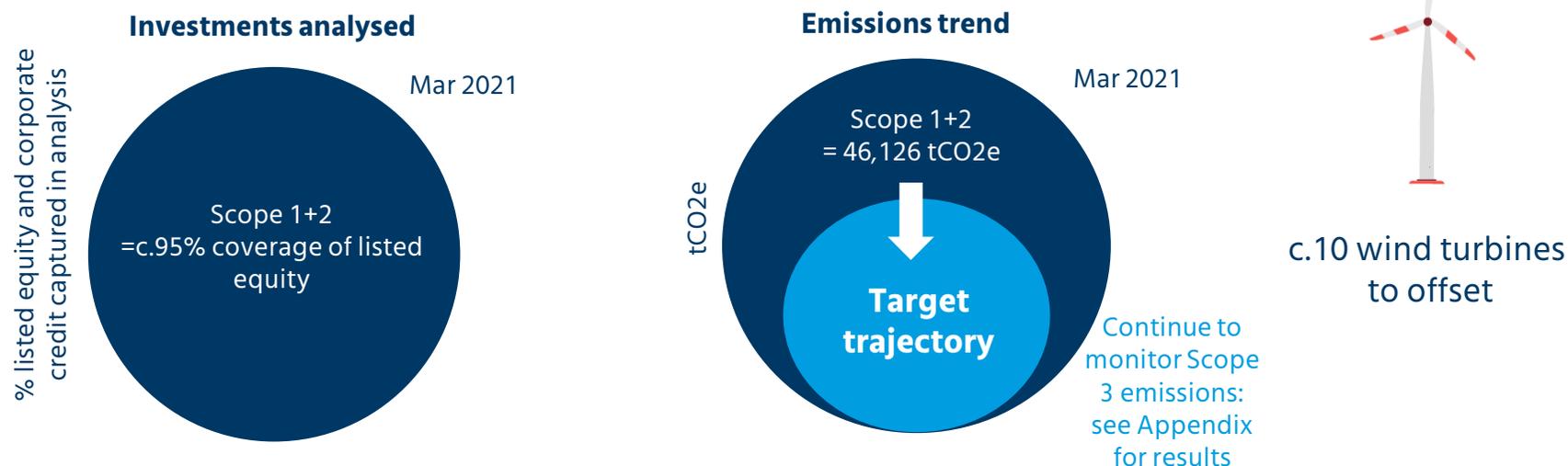


Fund Asset allocation as at 31 March 2021

Notes: \*The data analysed excludes e.g. cash and derivative allocations within the funds analysed.

# Setting the Baseline

## Absolute Emissions – Listed Equity

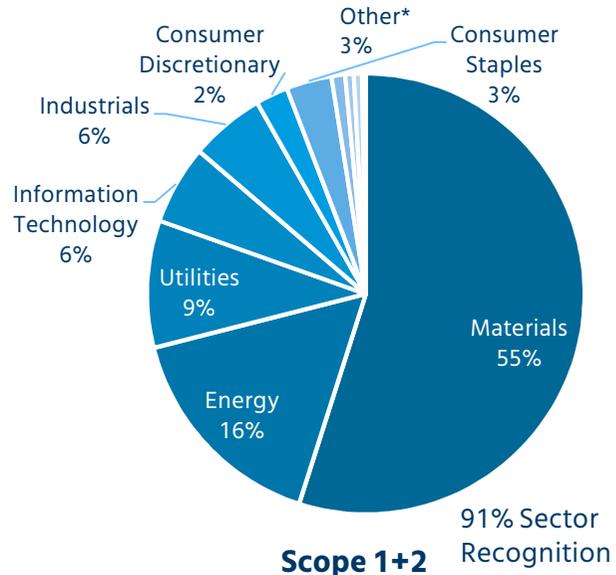


- We analysed listed equity allocations. Whilst Scope 1, 2 and 3 data has been analysed, Scope 3 data quality concerns and current consensus (IIGCC) suggests total portfolio target setting based on Scopes 1 & 2 only (see right hand chart). Scope 3 details can be found in the appendix.
- **Whilst emissions intensity give very valuable carbon risk and decarbonisation information, in order to create “real world” impact the Fund should reduce absolute emissions. Current Scope 1+2 emissions are 46,126 tCO<sub>2</sub>e, which would require 10 average sized wind turbines to offset.\***
- Data coverage for this analysis is c.95%, we assume companies not covered are represented *within* the range of companies that have been covered in the analysis.

Source: US EPA GHG Equivalencies Calculator. \* $2.32_{MW\text{average capacity}} \times 0.34 \times 8,760 \text{ hours/year} \times 1,000 \text{ kWh/MWh} \times 6.6204 \times 10^{-4} \text{ metric tons CO}_2/\text{kWh reduced} = 4,632 \text{ metric tons CO}_2/\text{year/wind turbine installed}.$

# Decarbonisation – Absolute Emissions

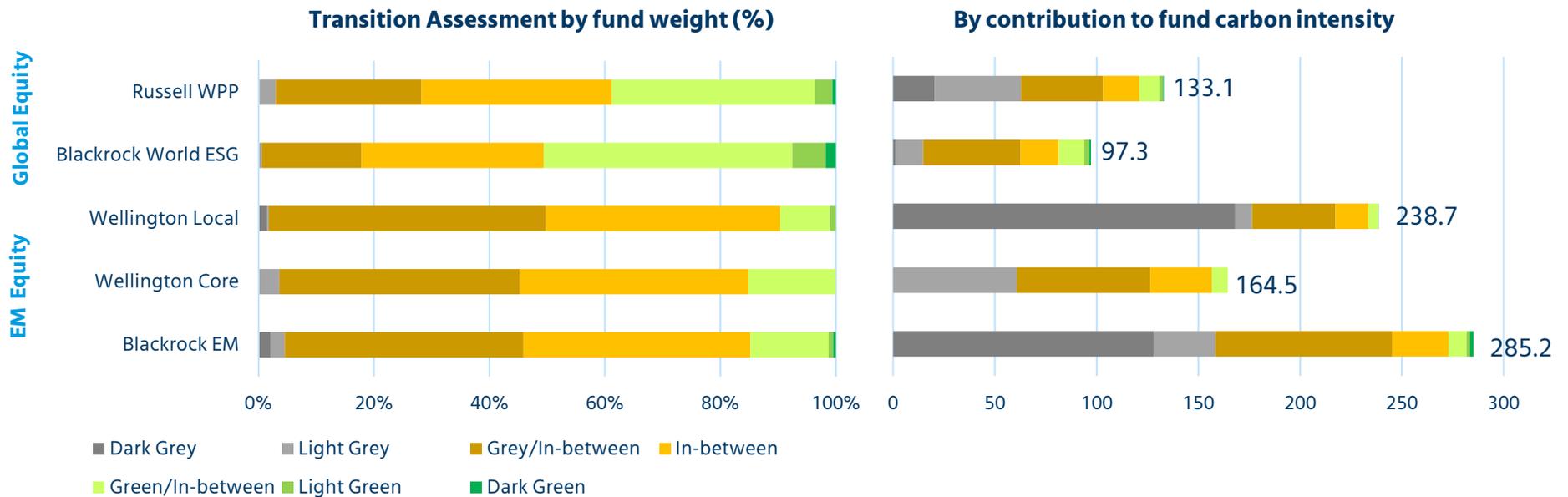
## Sector Assessment (Listed Equity Portfolio)



- Materials, Energy, and Utilities contribute the highest proportion across Scope 1+2 emissions.
- With a focus on Scope 1+2 absolute emissions, Materials, Energy, and Utilities account for c.80% of total absolute emissions.

Notes: Figures may not sum due to rounding. Analysis of listed equity allocations only. Analysis captures carbon dioxide equivalent emissions (see Appendix on limitations). Data coverage of c.95%. \*includes Financials, Healthcare, Real Estate and Communication Services sectors.

# Clwyd Transition Alignment Fund Assessment (Listed Equity Portfolio)



- The listed equity portfolio is composed primarily of **in-between assets**, including **green/in-between** and **grey/in-between** assets.
- The highest proportion of **grey assets** are found within the **BlackRock EM** fund. This is mostly due to allocations to **Materials** (i.e. **China Resources Cement**) and **Energy** (i.e. **Coal India**) sectors.
- The fund with the highest proportion of **green assets** is **BlackRock World ESG**, in part due to allocations to electric Automobile Manufacturers (i.e. **TESLA INC.**) industry classified as **dark green**.
- The fund with the highest carbon intensity is the **BlackRock EM**, largely driven by exposure to utilities (main driver **Saudi Basic Industries Corporation SJSC**) and materials (main driver **ULTRATECH CEMENT LIMITED**) sector.
- The **BlackRock World ESG** and **Russell WPP** are the least carbon intensive funds.

# Setting targets



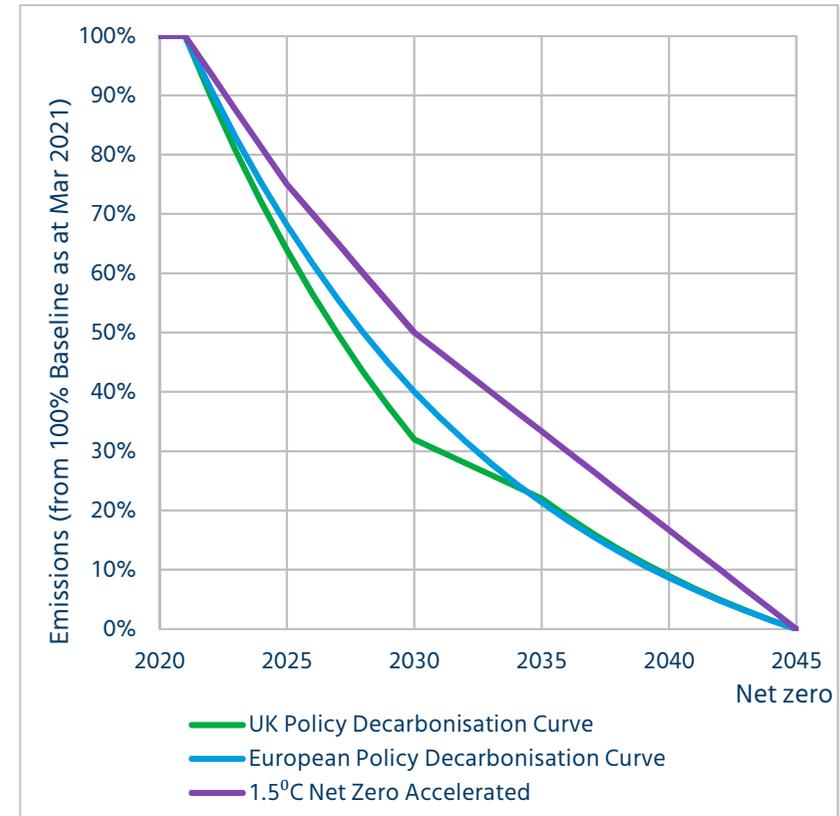
# Clwyd Pension Fund

## Decarbonisation Methodology (Scope 1+2)

Three different “decarbonisation curves” to set targets to 2025, 2030, **with net zero by 2050 or earlier:**

- **1.5<sup>0</sup>C Net Zero Accelerated:** This targets a 50% reduction by 2030 and is more ambitious than the Intergovernmental Panel on Climate Change’s (IPCC) 1.5<sup>0</sup>C scenario that requires emissions to fall by 45% by 2030.
- **European Policy Curve:** aligning with the EU objective of a 60% emissions reduction to 2030, and objective to achieve climate neutrality in 2050. The EU Policy curve is not necessarily aligned with a specific scientific target, but does set out to align with the Paris Agreement of “well below 2<sup>0</sup>C” scenario.
- **UK Policy Curve:** aligning with the UK Objective of a 68% emissions reduction to 2030, and achieve climate neutrality in 2050. The UK Policy curve is not necessarily aligned with a specific scientific target, but does set out to align with the Paris Agreement of “well below 2<sup>0</sup>C” scenario.

Note: 2050 is the average net zero target year cited to achieve a 1.5<sup>0</sup>C scenario, according to the 90x 1.5<sup>0</sup>C scenarios analysed by the IPCC.



Notes: Analysis captures carbon dioxide equivalent emissions (see Appendix on limitations).

# Implement a Transition Plan

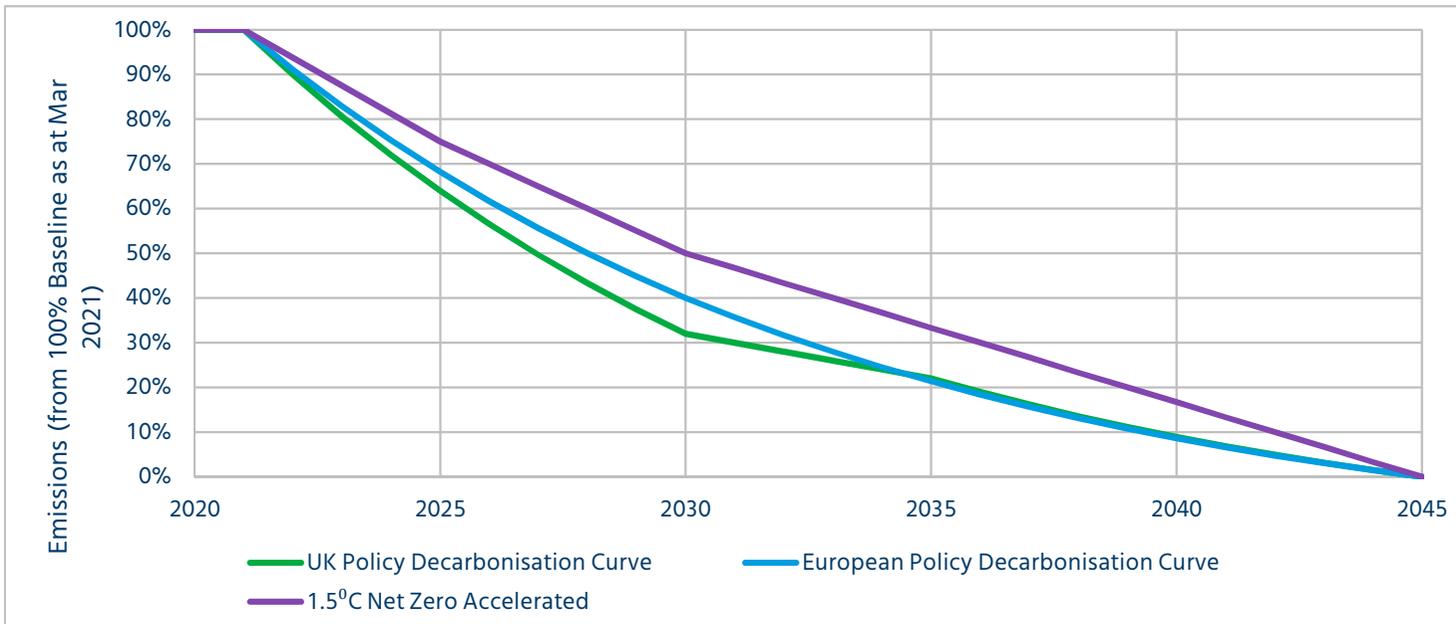


# Target Setting - Listed Equity

## Recommended Targets

- Set a long-term total portfolio target: we recommend adopting the UK Policy Targets as the route to net zero by 2045.

Emissions Reduction (%) needed to 2045 Net Zero	UK Policy Targets	European Policy Targets	1.5°C Net Zero Accelerated
2025	36%	32%	25%
2030	68%	60%	50%



# Listed Equity Portfolio

## Summary Recommendations

	Integration (Risk Reduction)	Stewardship (Transition Support)	Investment (Solutions)
2030 + 2025	<p><b>Decarbonise the portfolio</b></p> <ul style="list-style-type: none"> <li><b>Emissions Reduction Target:</b> 36% reduction by 2025 and 68.0% reduction by 2030 (vs 2021 baseline).</li> </ul> <p><b>Decrease allocation to high carbon portfolio exposures.</b></p> <p><b>Fossil Fuel Reduction Targets:</b></p> <ul style="list-style-type: none"> <li>70% by 2025 and 90% by 2030 for oil &amp; gas.</li> <li>90% reduction by 2025 and 95% by 2030 for coal.</li> </ul>	<p><b>Continual improvement in asset alignment with the low carbon transition.</b></p> <p><b>Focused Engagement:</b> A targeted focus on the top holdings identified across the material sectors of energy, utilities, materials, industrials sectors and emerging market allocations identified in this analysis - in proactive voting and engagement. Working in conjunction with WPP and Robeco target:</p> <ul style="list-style-type: none"> <li>70%* of financed emissions in material sectors aligned to net zero or subject to engagement by 2025.</li> <li>90%* of financed emissions in material sectors aligned to net zero or subject to engagement by 2030.</li> <li><b>Transition Improvement Target:</b> Shift all grey exposures into other transition categories by 2030.</li> </ul>	<p><b>Increase allocation to low-carbon / sustainability-themed exposures, including transformative solutions.</b> For example, introduce an allocation to sustainable global equities.</p> <ul style="list-style-type: none"> <li><b>Green Solutions Target:</b> Target 30% of the listed equity portfolio in green and sustainable companies by 2030.</li> </ul> <p>Refine this to include a target allocation to climate solutions.</p> <p>Other asset classes: The Fund already has a 4% target asset allocation to local / impact investments which are likely to include low carbon sustainability themed investments.</p>

\*in terms of financed emissions. These are GHG emissions that result from activities in the real economy financed by an investor's lending and investment portfolios.

# Listed Equity Portfolio

## Summary Recommendations

	Integration (Risk Reduction)	Stewardship (Transition Support)	Investment (Solutions)
2022 – 2023	<ul style="list-style-type: none"> <li>For the listed equity portfolio, achieve c.27.6% of emissions reduction by 2023 (vs 2021 baseline).</li> <li>Monitor fossil fuel exposures and ensure they are reducing.</li> <li>Incorporate Scope 3 within emissions reduction efforts.</li> </ul> <p>Other asset classes: Develop emissions baseline for private market assets, in order to build total portfolio baseline/targets.</p>	<ul style="list-style-type: none"> <li>Conduct annual stewardship monitoring, going forward.</li> <li>Consider an initial focus on the Emerging market mandates, as well as top grey companies identified, for engagement within the listed equity portfolio.</li> <li>Identify the top 10-20 key climate change holdings and work with managers, WPP and Robeco to understand actions and outcomes from engagement.</li> </ul>	<ul style="list-style-type: none"> <li>Within the listed equity portfolio, achieve c.12% of the shift to green and sustainable companies by 2023.</li> </ul> <p>Other asset classes: Continue to identify and allocate to climate mitigation/ adaptation opportunities within private market mandates, as a priority, followed by understanding what is possible in other asset classes.</p>
2021/ 22	<ul style="list-style-type: none"> <li>Communicate decarbonisation targets to WPP and listed equity managers, and consider setting individual manager targets.</li> <li>Review reporting metrics for each of the components above and prepare a TCFD report for stakeholders.</li> </ul>		

Notes: Further analysis will be required to understand what is feasible within private markets.

# Incorporating other asset classes

## Taking a whole of portfolio approach

- We set out a suggested timeline below for when asset classes will be covered by the ACT analysis.
- For a number of the asset classes the initial focus may be on disclosure over measurement, or the use of proxies to estimate emissions.

Asset class	Year
Listed Equity	2021
TAA	2022
Synthetic Equity	2022
Multi Asset Credit	2022
Property	2022
Infrastructure	2022/23
Private Equity	2022/23
Private Debt	2022/23
Hedge Funds	2022/23

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