Mercer

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Net Zero Monitoring 2023 Update

Avon Pension Fund

Analysis at 31 December 2023

July 2024

Hill Gaston
Steve Turner

A business of Marsh McLennan

Progress to Date

How ACT Analysis has been used to date

2021

Set targets:

- Total Fund 2050 net zero target
- Adopted listed equity portfolio carbon reduction targets of 43% by 2025 and 69% by 2030, versus 2020 baseline position
- Total Fund sustainable and transition aligned investments target of 30% by 2025

2022-23

Revised target:

- Total Fund 2045 net zero target

Monitor Progress

- Monitor progress vs. 2025 and 2030 decarbonisation targets

Investment Manager decisions

- Helped inform decision to switch from Brunel Emerging Market Fund to Brunel Global High Alpha Equity and Global Sustainable Equity Funds
- Increased investment in Paris Aligned equities and disinvestment from most carbon intensive BlackRock Passive Global Developed mandate from 2023-2024

Stewardship & Engagement

- Identified most strategically important companies to engage with from a climate perspective
- Engagement and divestment targets adopted for listed equity.

Today

Monitor Progress

- Monitor progress vs. 2025 and 2030 decarbonisation targets: **On track**

Strengthening targets

- Recommendation to:
  - Engage with Brunel on most intensive companies not already under engagement by CA100+ or Brunel.
  - Engage with Brunel on initial private market metrics and timeline for fuller disclosures. Explore adopting Brunel private market targets following this exercise.

2024 and beyond

Listed Equity / Corporate Bonds

- Evolve approach to engagement and alignment targets.

Scope 3

- Introduce targets when data quality / availability allows

Private markets

- Continue monitoring and consider net zero targets (where feasible)

New investments

- Implement allocations to biodiversity / natural capital

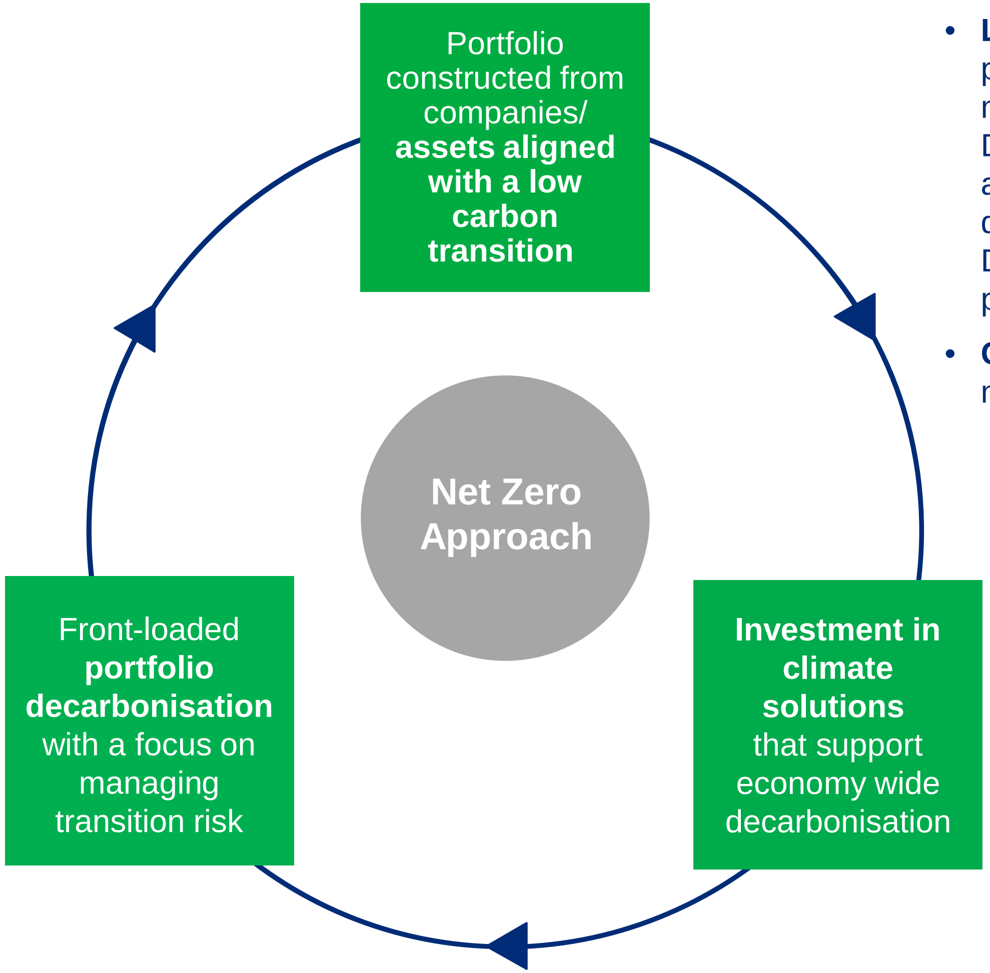
Support the Responsible Investment strategy and policy approach / Provide insight into transition capacity and monitor progress / Understand consistency with Brunel climate policy

Three Elements of Net Zero

Summary of progress

On Track   Progress Required

- **Listed equity carbon footprint has fallen 60.0%** over 2020-2024 and **is ahead of the targeted** decarbonisation pathway.** Decarbonisation has largely been driven by strategic changes during the period (e.g. reducing Emerging Market equities), as opposed to underlying company decarbonisation.
- **Corporate Bonds carbon footprint has fallen by 47.7%** over 2020-2024 and **is ahead of the targeted** decarbonisation pathway.**
- **Further work required** to bring other asset classes into target setting.



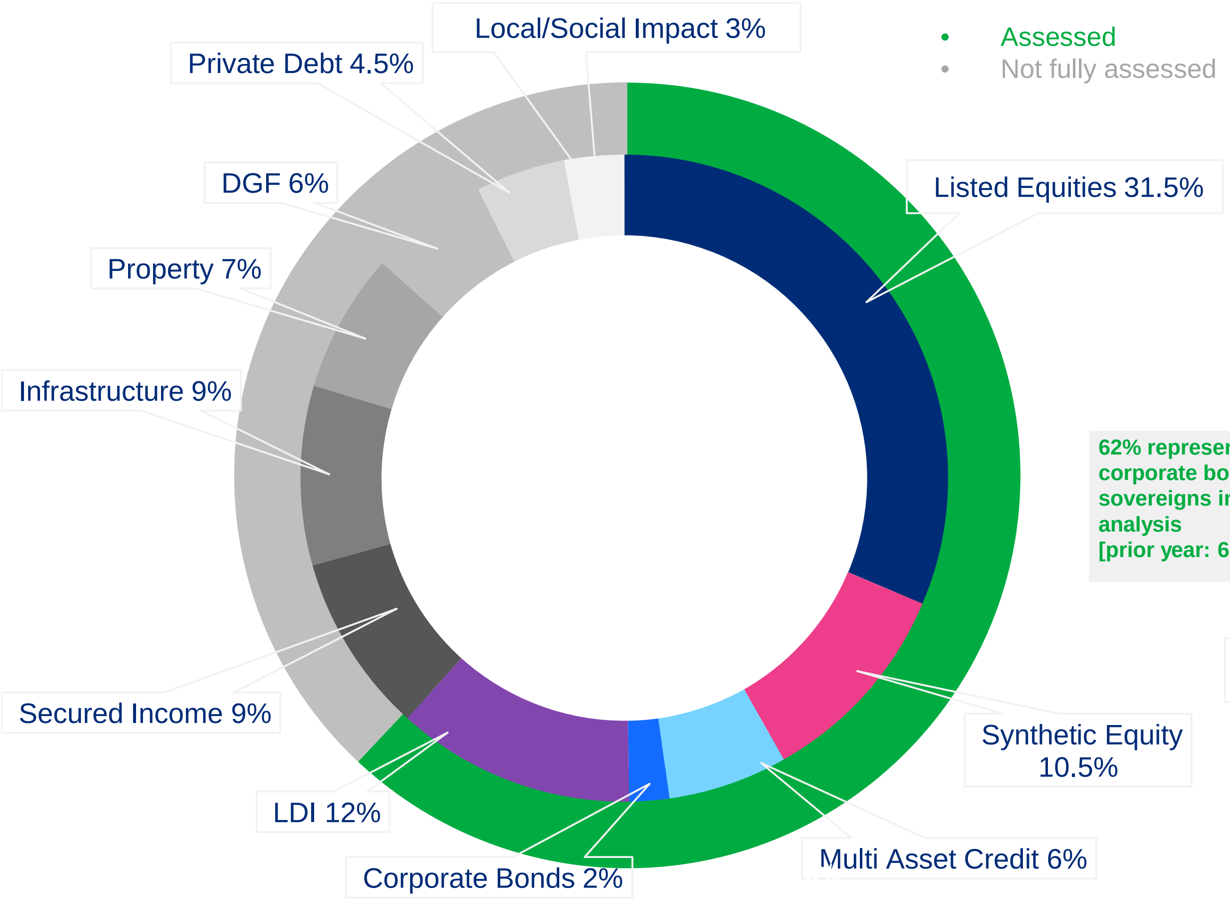
- **Low allocations to grey assets***, concentrated primarily in the Brunel MAC and Global High Alpha mandates. Positive progress in the Brunel Developed Paris Aligned mandate, which has almost eliminated exposure to grey assets. The disinvestment from the BlackRock Passive Global Developed mandate over the year also contributed positively, given its high allocation to grey assets.
- **Good progress against stewardship targets** for material (high impact) sectors.

- **Listed portfolio:** The Fund has made allocations to the **Brunel Global Sustainable** and **Developed Paris Aligned** mandates.
- Private markets: the Fund has made commitments to Schroders Greencoat, Brunel Renewable Infrastructure and Secured Income Funds. We note the Octopus Affordable Housing Fund has a strong net zero focus and the Fund is exploring natural capital allocations.

*Grey assets are not well aligned from a climate transition perspective, with high carbon emissions intensity. **These targets are ambitious and should be kept under review. In light of the wider set of targets proposed this year, there's a need to take a holistic approach to a whole economy transition.

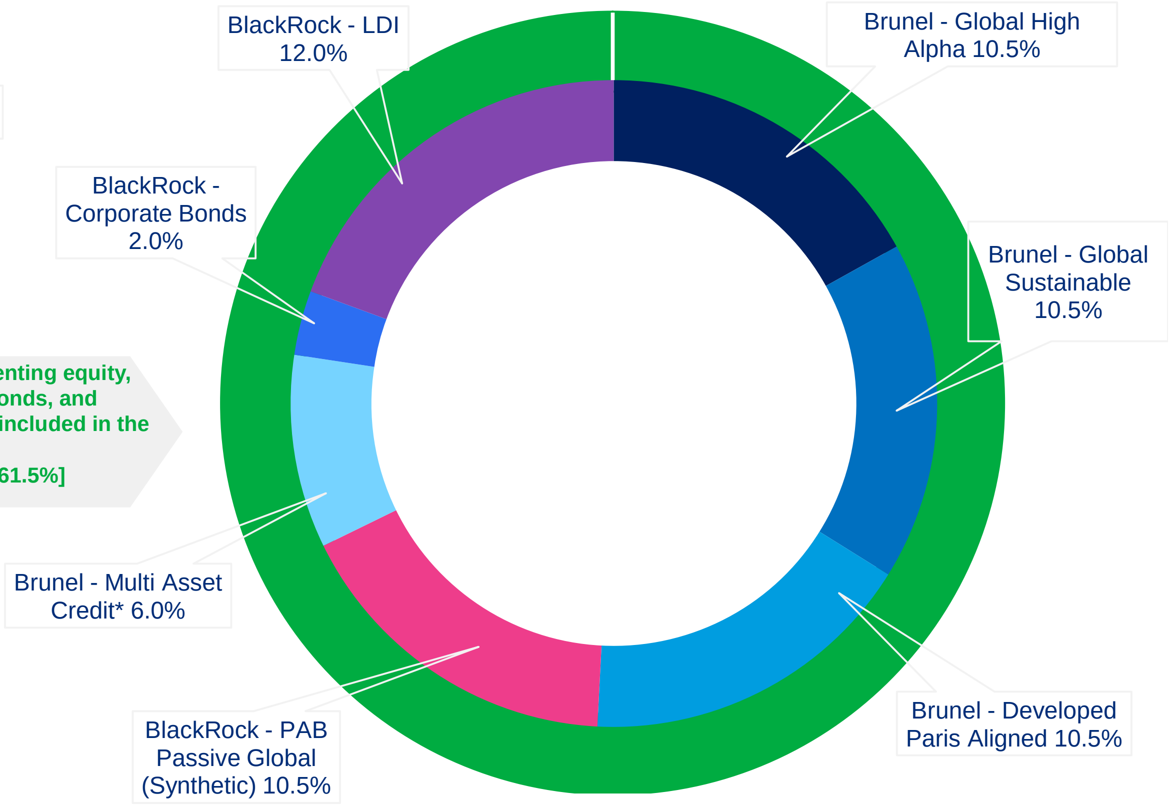
Proportion of holdings analysed

Fund strategic asset allocation as at 31 December 2023



62% representing equity, corporate bonds, and sovereigns included in the analysis
[prior year: 61.5%]

Allocation by manager as at 31 December 2023



Source: Mercer.

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.
*The total SAA for the Brunel Multi-Asset Credit fund is 6.0%. However, only the Corporate Bonds portion is being included in the analysis (c.43.5% of the total Fund's SAA).

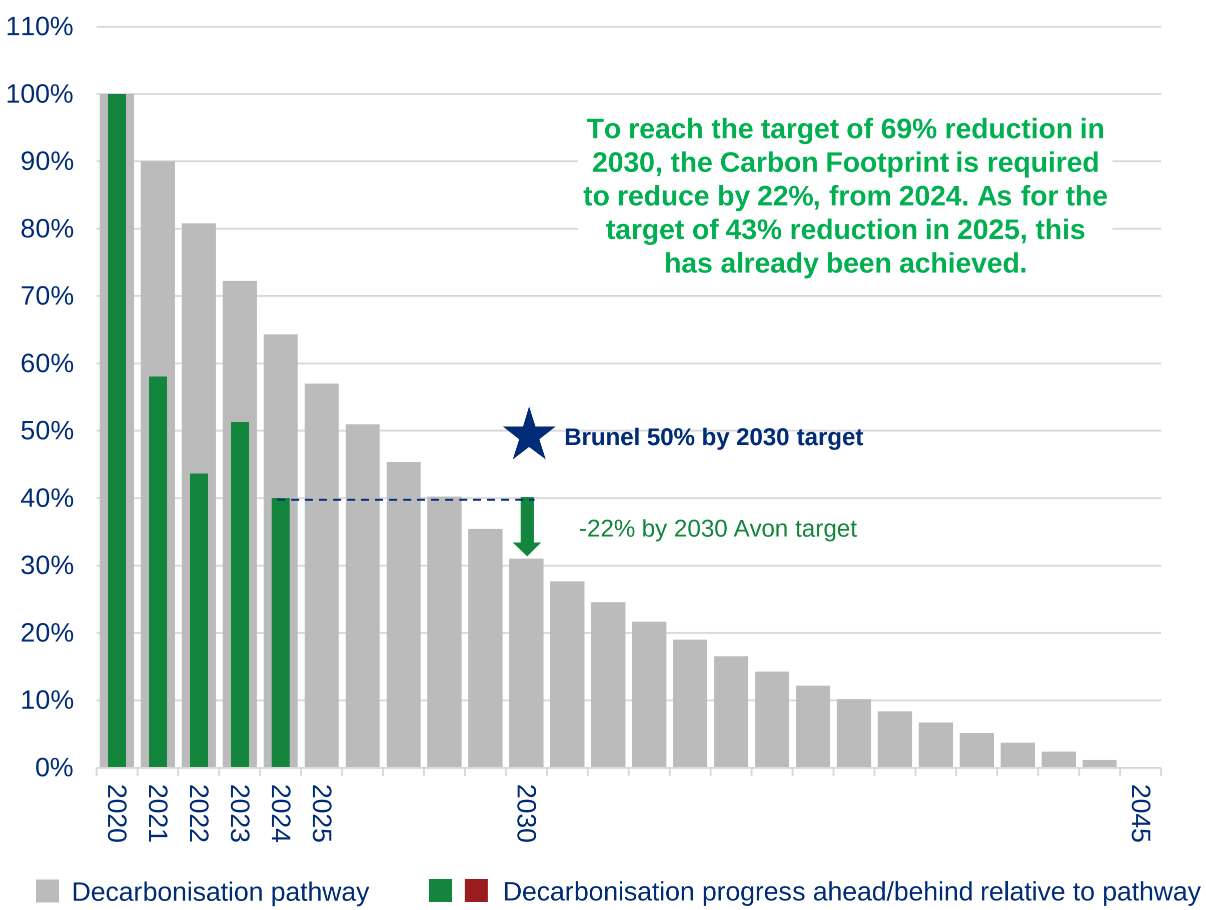
Current Fund Targets

	Scope	Current Target	Comment
Front-loaded portfolio **decarbonisation** with a focus on managing transition risk	**Total Fund**	• **Target 2045 net zero target**	• Unchanged.
	Listed Equities	• **Target 43% emissions reduction by 2025 and a 69% emissions reduction by 2030 (2020 baseline)**	• Interim targets remain unchanged from previous years (based on the initial 2050 target), with greater decarbonisation now required from 2030 under the new curve.
	Corporate bonds	• **Target 2045 net zero target with 60% reduction by 2030 (2020 baseline)**	• Unchanged.
	Private Markets	N/A	• Continue to explore feasibility of target setting: Mercer recommends continuing to engage with managers on this point, noting Brunel expect data to be available in 2024. • Consider aligning with Brunel targets • Work with Schroders Greencoat and any new managers for the Local/Social Impact portfolio to develop climate metrics reporting for these allocations
Portfolio constructed from companies/ assets **aligned with a low carbon transition**	**Total Fund**	• **Stewardship / Engagement targets:** Ensure 70% of financed emissions in material sectors are subject to direct or collective engagement and stewardship actions for all listed equity by end 2024, increasing to 90% by June 2027. • **Divestment:** Divest from developed market equity holdings in high impact sectors that are not achieving net zero or aligning to achieve net zero by 2050 (by 2030)	• Unchanged. • Stewardship / engagement target is broadly consistent with Brunel. Officers to work with Brunel to assess engagement with top emitters in the Fund's portfolio.
Investment in **climate solutions** that support economy wide decarbonisation	**Total Fund**	**N/A**	• Allocations to Brunel Paris Aligned and Global Sustainable equity, BlackRock (synthetic) Paris Aligned Equity and commitments to Renewable Infrastructure via Brunel and Schroders Greencoat equate to c.41% of total Fund assets. • Work with Schroders Greencoat and any new managers for the Local/Social Impact portfolio to develop solutions and impact metrics reporting for these allocations.

Decarbonisation progress

Progress relative to the Target Curve – Listed Equities

Carbon Footprint (tCO2e / $million invested) **for listed equities, relative to 2020 Baseline** - Scope 1 and 2



Notes: In line with the terminology used by the IIGCC, we refer to 31 December 2019 as 2020, and 31 December 2022 as 2023 etc.

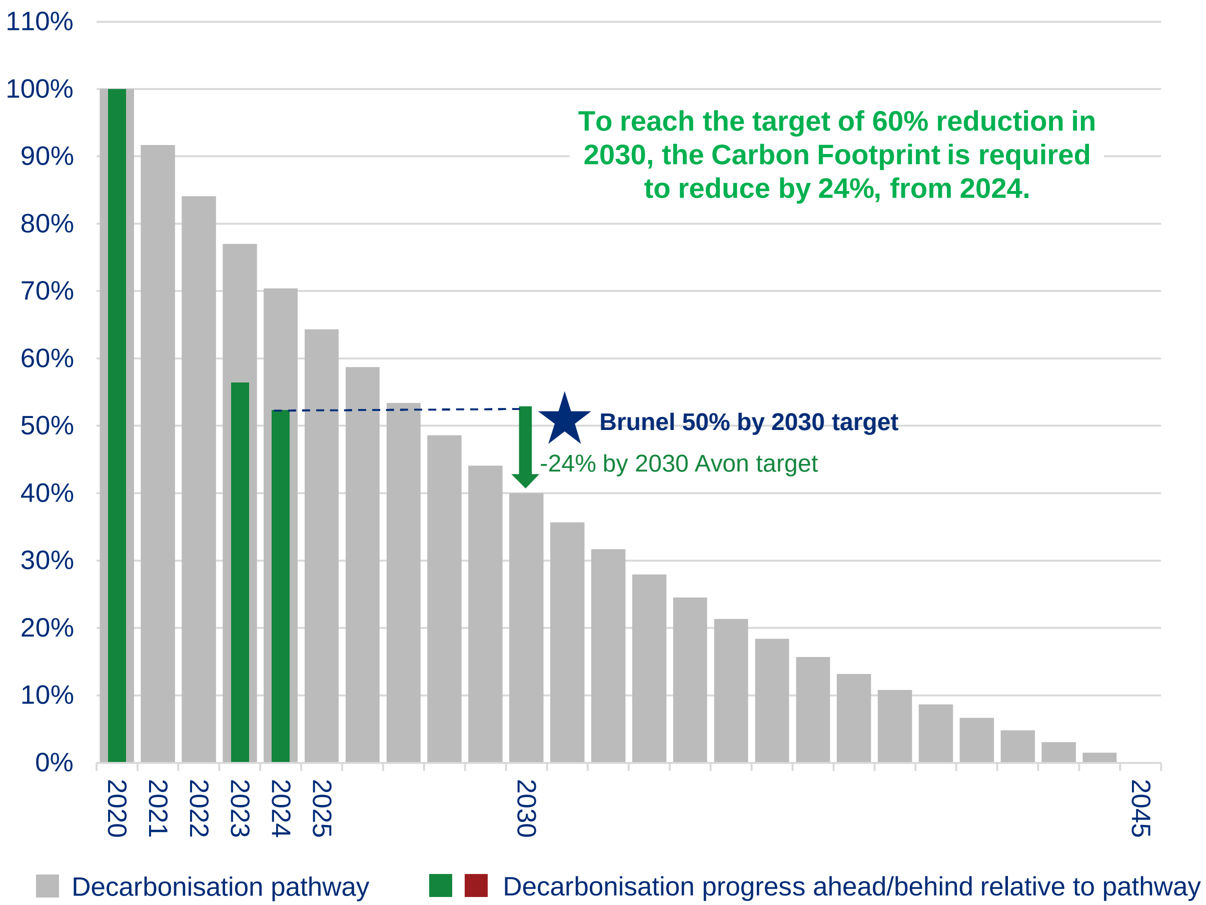
- Over the last 4 years, the Carbon Footprint (scope 1 + 2) has decreased by **60.0%** relative to the **2020 baseline**. Hence, the **Fund** is currently **ahead** of the proposed decarbonisation pathway to achieve the interim reduction targets of 43% by 2025 and 69% by 2030 as well as to reach net-zero emissions by 2045.
- Note the 2030 target has been retained whilst the net zero date has been brought forward from 2050 to 2045 following the climate review in 2023. As such, the rate of carbon reduction required from 2030 is greater under the new target trajectory.
- The listed equities portfolio is much **more carbon efficient when compared to the wider market** (57% below MSCI ACWI as at 31 December 2023).
- In order to reach the above-mentioned targets, the listed equities' carbon footprint is required to reduce by 22% by 2030. The 2025 target has already been achieved.
- On a forward looking basis progress is likely to rely more heavily on underlying company decarbonisation, including through engagement (i.e. more aligned with real world decarbonisation), than strategic changes to manager line-up. Therefore, decarbonisation progress is expected to be more difficult and slower to 2030.

Need to ensure that transition risks are managed holistically rather than on a narrow emissions-only basis

Decarbonisation progress

Progress relative to the Target Curve – BlackRock Corporate Bonds

Carbon Footprint (tCO2e / $million invested) **for BlackRock - Corporate Bonds, relative to 2020 Baseline**



Notes: In line with the terminology used by the IIGCC, we refer to 31 December 2019 as 2020, and 31 December 2022 as 2023 etc.

- Over the last 4 years, the Carbon Footprint (scope 1 + 2) has decreased by **47.7% r**elative to the **2020 baseline**. Hence, the **Fund** is currently **ahead** of the proposed decarbonisation pathway to achieve the interim reduction target of 60% by 2030 .
- In order to reach the above-mentioned targets, the corporate bonds' carbon footprint is required to reduce by 24% until 2030.

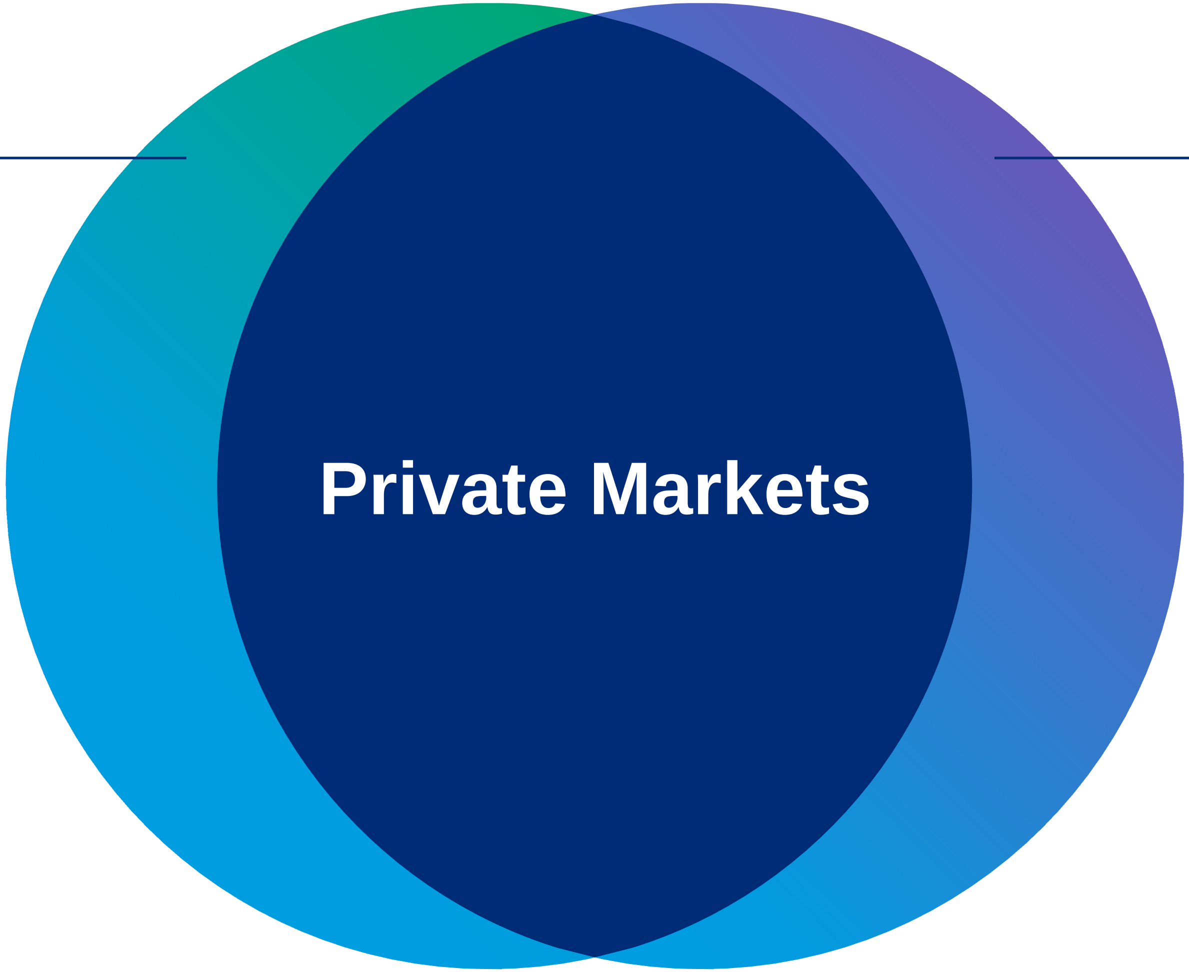
Need to ensure that transition risks are managed holistically rather than on a narrow emissions-only basis

Portfolio Decarbonisation

Private Markets

Transparency and data remains a key challenge

But we are seeing improvements in data availability across various private asset classes.



Net Zero guidance

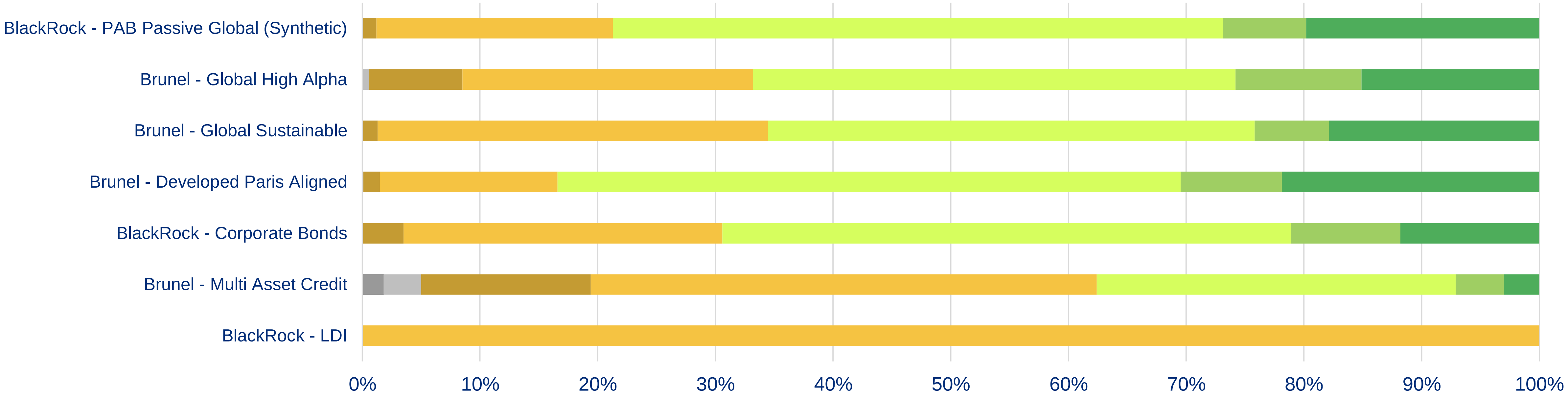
IIGCC has produced much needed guidance for asset owners looking to set net zero targets for Real Estate, Infrastructure and Private Equity. Venture Capital and Private Debt guidance being developed.

While methodologies for private markets data have recently been developed, the timing of when data will be widely available remains unclear
Further information on the status of disclosures for the Fund’s private markets portfolios is provided in the appendix

Transition Alignment

By weight (%)

We present the transition alignment of the portfolio, to understand exposure to assets that are well aligned (“green”), a mix of intensities and transition capacity (“in between”) or not well aligned (“grey”) with the low carbon transition.



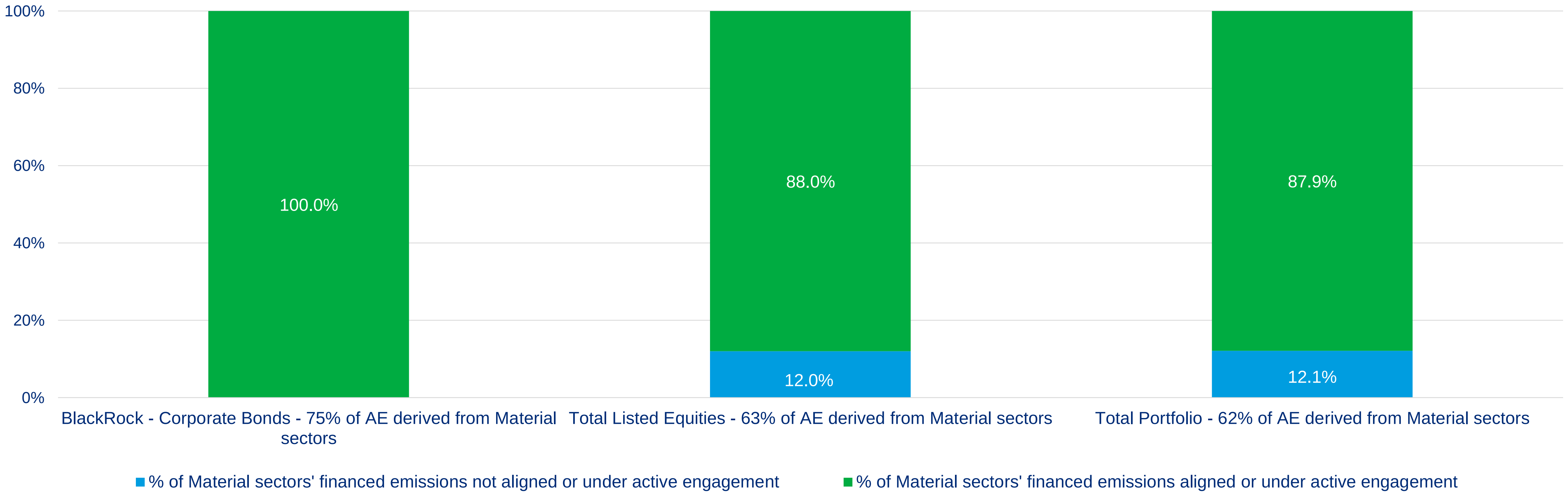
Highlights & Questions

- ✓ Low allocations to Grey assets, concentrated primarily in Brunel – MAC.
- ✓ High allocations to Green across the listed equity mandates
- How are Brunel engaging with the most carbon intensive and Grey companies?

Notes: Figures may not sum due to rounding. Analysis captures carbon dioxide equivalent metrics. Where there is partial coverage of a portfolio we scale up to estimate coverage for 100% of the mandate. (see Appendix on limitations).

Transition Alignment: engagement priorities

Material Sectors’ Financed Emissions not aligned or not subject to active engagement



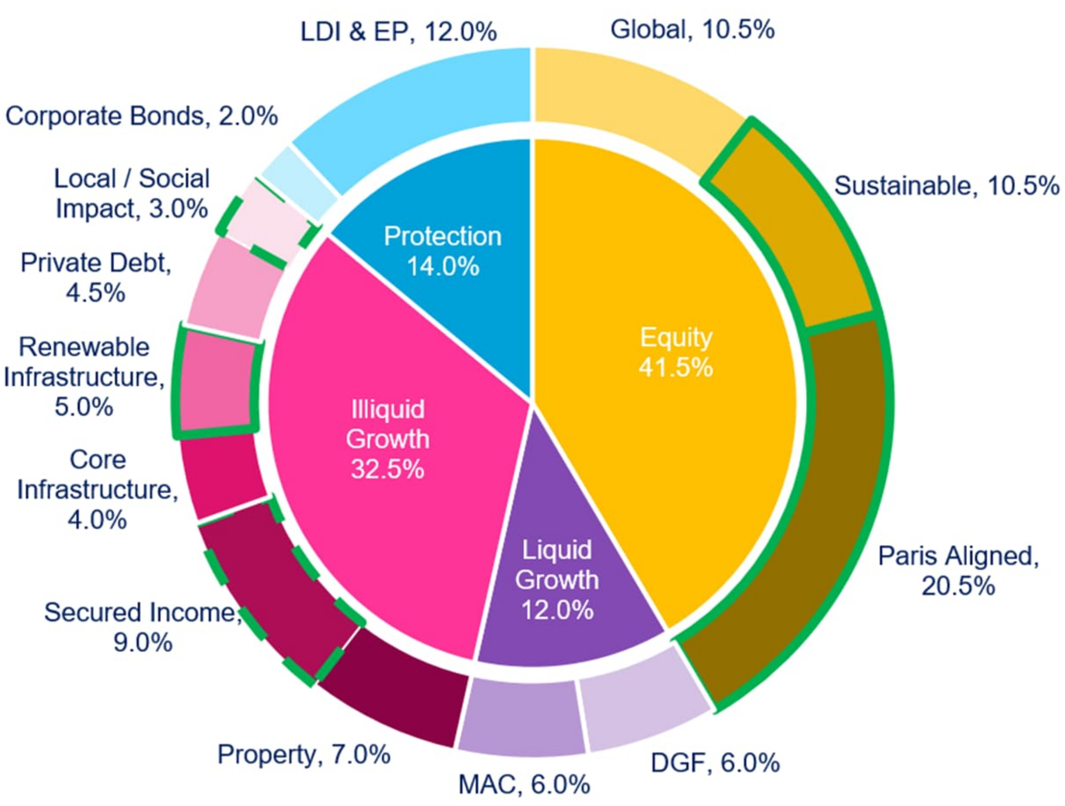
- Companies have been assessed as **under active engagement** if they are within the list of companies captured within the Climate Action 100+ engagement list or are currently being engaged by Brunel. In respect of **alignment,** companies have been deemed to demonstrate evidence of alignment if they have approved SBTi targets or categorized as aligned by the Transition Pathway Initiative (“TPI”).

✓ **87.9% of Material Sectors’ Financed Emissions at total portfolio level are aligned or subject to active engagement. Companies not aligned or under active engagement will be captured under 2030 divestment commitment**

Notes: Please note that owing to the different coverage levels across investment funds, it is difficult to compare the investment funds side by side, however comparing an investment fund’s progress on these metrics year on year will provide useful progress indicators to engage with investment managers.
Sectors are defined as material in line with IIGCC’s classification, that sets out the most material sectors from an owned-carbon emissions standpoint.

Climate Solutions

Fund strategic asset allocation as at 31 December 2023



- The Fund has allocations to climate solutions across its portfolio including:
  - Within the listed equity portfolio (e.g. Paris Aligned Equities, Sustainable Equity).
  - Exposure to renewable infrastructure, including the Schroders Greencoat Wessex Gardens commitment and the Brunel Renewable Infrastructure and Secured Income Funds. This exposure constitutes 9-10% of total Fund assets.
  - Octopus Affordable Housing Fund has a strong net zero focus.
- The Fund has also agreed to invest in Natural Capital, with work ongoing to determine the size and make-up of this allocation.

The Fund looks to invest sustainably to support a Just Transition to a lower carbon economy but no longer targets a specific allocation of assets to sustainable / low carbon / climate solutions investments

Summary & Next Steps

Summary:

- **Good progress to date; the Fund’s listed equity and corporate bond portfolios are ahead of decarbonisation targets**
- **Good progress on alignment and climate solutions**
- **Too early to set net zero targets for private markets**
- **Look to agree approach to natural capital allocation and implementation plan**
- **Integrate nature risk assessment into approach**

Continue monitoring decarbonisation progress for listed assets

- **Listed Equity:** Carbon Footprint has decreased by 60% from the baseline in 2020 and is ahead of the pathway to achieve the interim target of 69% reduction by 2030.
- **Corporate Bonds:** Carbon Footprint has decreased by 47.7% since the baseline in 2020 and is ahead of the pathwa y to achieve the interim target of 50% reduction by 2030.

Continue to monitor alignment and stewardship targets

Assessing the alignment of assets with a low carbon transition, supported by stewardship, allows for a more holistic approach to a whole economy transition.

Consider evolving alignment and stewardship targets in 2025 for the listed equity and corporate bond portfolios as data improves.

Continue to consider potential role of exclusions

Implement an Engagement plan

Agreeing how to achieve targets is important, with stewardship playing a key role. Develop a more formal engagement plan for top contributors to reduce carbon footprint within the portfolio, with Brunel to implement.

We propose the first step is to engage with Brunel on most intensive companies not already under engagement by CA100+ or Brunel.

Progress Private markets disclosures

Brunel has begun providing TCFD data for property & infrastructure in 2024. Engage with Brunel on initial metrics and timeline for fuller disclosures. Explore adopting Brunel private market targets following this exercise.

Work with Schroders Greencoat and any new managers for the Local/Social Impact portfolio to develop climate and impact metrics reporting for these allocations.

Consider role of Natural Capital allocation in portfolio.

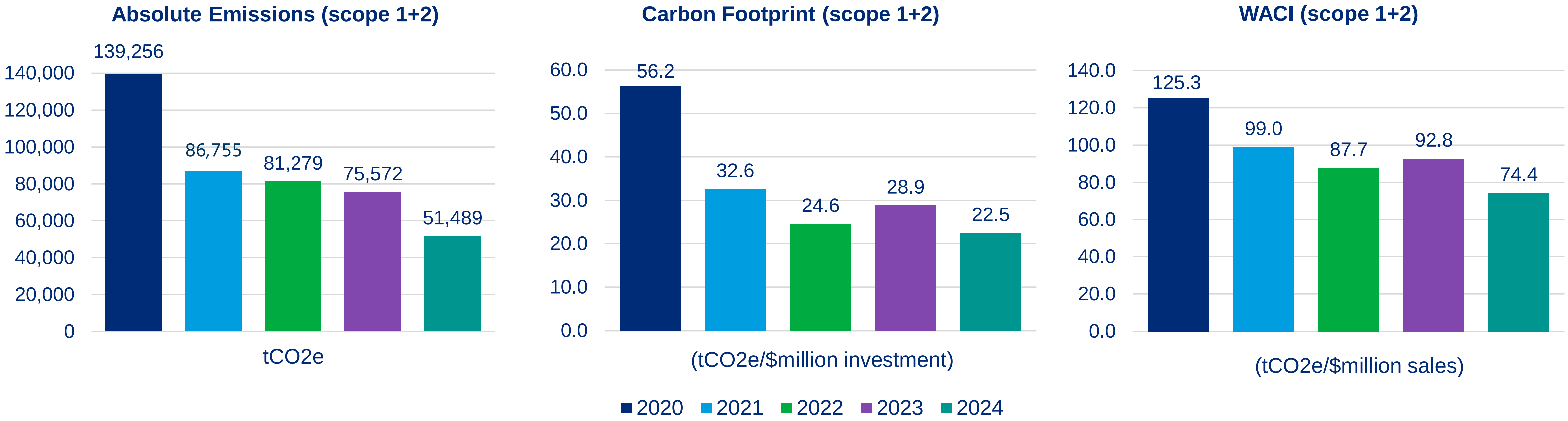
Incorporate biodiversity considerations across pillars

*Brunel have begun providing TCFD data for in 2024

TECHNICAL APPENDIX

Progress versus the baseline

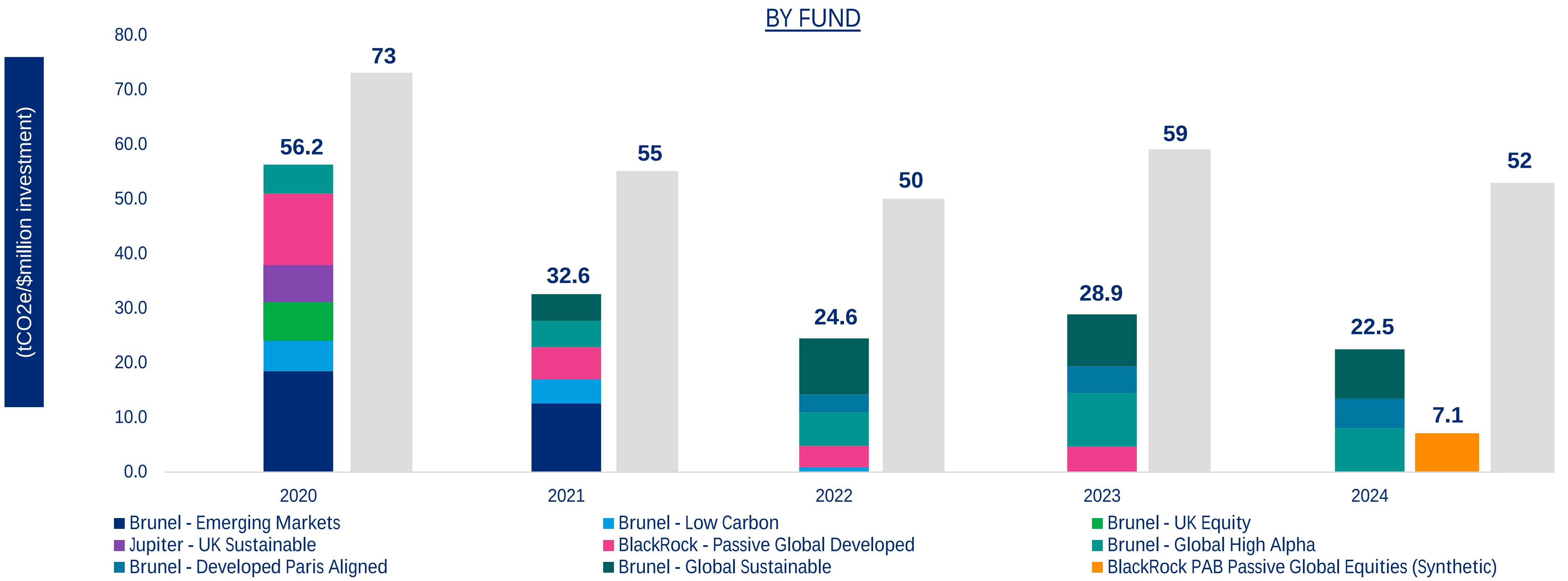
Listed Equities



- **The Fund's Listed Equities portfolio decreased by 60.0% on a Carbon Footprint basis, from December 2019 to December 2023. The Weighted Average Carbon Intensity (WACI) decreased by 40.7% in the same period, and the Absolute Emissions decreased by 63.0%.**
- During the 4-year period the **Listed Equities** portfolio underwent strategy changes, including the disinvestment from the **Brunel – UK Equity, Jupiter – UK Sustainable, Brunel – Emerging Markets**, **Brunel – Low Carbon** and **BlackRock – Passive Global Developed** mandates, and the investment in **Brunel – Developed Paris Aligned** and **Brunel – Global Sustainable.** The **Brunel – High Alpha** is the only mandate present throughout the entire analysis.
- The disinvestment from the **BlackRock – Passive Global Developed** mandate over the past year has had a positive impact on the portfolio's performance, as this was the most carbon intensive mandate amongst the equity portfolio in 2023.

Decarbonisation Path: 2020 - 2024

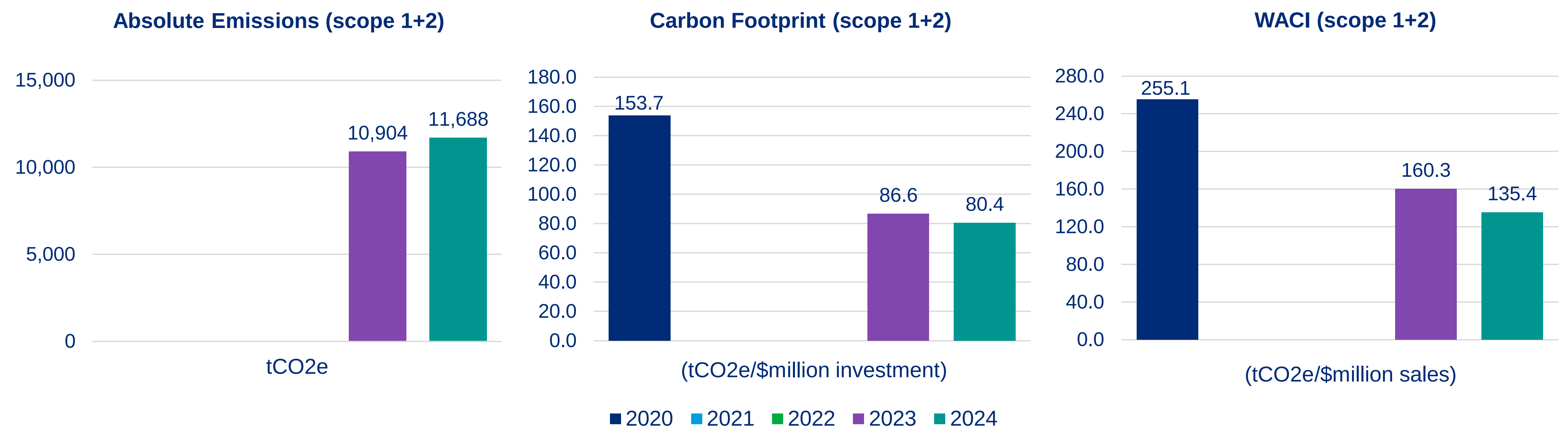
What has driven the change to the Listed Equities Carbon Footprint (scope 1+2)?



- **Understanding what has driven change in carbon footprint (scope 1+2)**
- **The Fund's Listed Equities portfolio decarbonised by 60.0% from 2020 to 2024**, as compared to a 27.6% decarbonisation seen for MSCI ACWI over the period. Moreover, the carbon footprint of the equity portfolio represented 77% of MSCI ACWI's carbon footprint in 2020, this decreased to 43% by 2024.
- The decarbonisation was **mainly driven by the significant changes in strategy that the Listed Equities portfolio has seen over the four-year period,** with the disinvestment from Brunel Emerging Markets driving a lot of that decarbonisation**.** From 2023 to 2024, the decarbonisation within the equity portfolio is due to the decarbonisation of the Brunel Global High Alpha and Brunel Developed Paris Aligned (which decreased by c.25% and c.20%, respectively) and the disinvestment from the BlackRock Passive Global Developed mandate.
- Note we do not include synthetic exposure (namely the BlackRock Paris Aligned mandate) in the total equity portfolio / total Fund analysis. Carbon metrics for the mandate are included in the appendix. Synthetic equity exposures are reported separately in line with best practice.

Progress versus the baseline

Corporate Bonds (exc. MAC) – BlackRock Corporate Bonds



- **The Fund's Corporate Bonds portfolio**, which is composed solely of the BlackRock – Corporate Bonds mandate, **decreased by 47.7% on a Carbon Footprint basis, from December 2019 to December 2023, while the Weighted Average Carbon Intensity (WACI) decreased by 46.9% during the same period.**
- The Carbon Footprint, which normalises Absolute Emissions by the dollar amount invested has fallen by **7.2%** over the last year. This decrease in Carbon Footprint reflects the underlying decarbonisation of the portfolio, as this metric is unaffected by the value of assets covered.

Climate metrics dashboard

Indicator of improved emissions performance vs last year
Indicator of worsened emissions performance vs last year
2023 figures shown in brackets

Scope 1 and 2 emissions – listed equity and corporate bonds

Asset Class	Mandate	WACI (tCO2e / $M sales)		Carbon Footprint (tCO2e / $M invested)		Absolute Emissions (tCO2e)		Allocation Weight
		Metric	Coverage	**Metric**	Coverage	**Metric**	Coverage	
Listed Equity	Brunel – Global High Alpha	**42.3** (68.4)	97.1%	**24.2** (32.5)	96.9%	**18,497** (25,568)	96.9%	10.5% (12.5%)
	Brunel – Global Sustainable	**101.6** (111.7)	97.8%	**27.0** (26.2)	97.8%	**20,592** (24,908)	97.8%	10.5% (15.0%)
	Brunel – Developed Paris Aligned	**79.2** (78.2)	99.7%	**16.3** (20.2)	99.6%	**12,401** (12,728)	99.7%	10.5% (10.0%)
Total listed equity		**74.4**	98.2%	**22.5**	98.1%	**51,489**	98.1%	**31.5%**
Corporate Bonds	BlackRock – Corporate Bonds	**135.4** (160.3)	94.3%	**80.4** (86.6)	68.4%	**11,688** (10,904)	68.4%	2.0% (2.0%)
Total corporate bonds		**135.4**	94.3%	**80.4**	68.4%	**11,688**	68.4%	**2.0%**
Total equity and corporate bonds		**78.0**	98.0%	**25.9**	96.3%	**63,177**	96.4%	**33.5%**
MAC	Brunel **–** Multi Asset Credit	**199.9** (200.5)	73.8%	**104.3** (82.4)	66.6%	**19,771** (16,901)	66.6%	2.6% (3.3%)
Synthetic Equity	BlackRock – PAB Passive Global	**35.0**	99.3%	**7.1**	99.1%	**5,414**	99.8%	10.5%
Comparator – MSCI ACWI		**122.7** (158.5)	99.6%	**52.8** (59.0)	99.6%	**-**	-	-

Source: MSCI and Mercer. All data as at 31 December 2023. An overview of these metrics is provided in the Appendix. Allocation weights represent the strategic asset allocation for that mandate or, for mixed mandates, the actual allocation to listed equity or corporate bonds within the mixed mandate.

Climate metrics dashboard

Scope 1 and 2 emissions – sovereign bonds

Asset Class	Mandate	Sovereign Carbon Intensity (tCO2e / $M PPP-Adjusted GDP)		Absolute Emissions (tCO2e)		Allocation Weight
		Metric	Coverage	**Metric**	Coverage	
Sovereign bonds	BlackRock LDI	**131.2**	100.0%	**374,095**	100.0%	12.0% (12.0%)
Total sovereign bonds		**131.2**	100.0%	**374,095**	100.0%	**12.0%**

Source: MSCI and Mercer. All data as at 31 December 2023. An overview of these metrics is provided in the Appendix. Allocation weights represent the strategic asset allocation for that mandate or, for mixed mandates, the actual allocation to sovereign bonds within the mixed mandate.

Notes: Sovereign emissions data shown are consistent with the PCAF definition of Scope 1 sovereign emissions, aligning with the UNFCCC definition of domestic territorial emissions, including emissions from exported goods and services. Emissions data include land use, land use change and forestry. Data sourced from OS-Climate.

Sovereigns methodology has improved over the year, rendering year on year comparison unfair. Values for prior years have therefore been excluded from this table.

For LDI, Absolute Emissions in respect of funded gilt exposure (£2,236.5M) are shown in the table above. The exposures from cash and liquidity funds (£88.0M) are not included in the analysis.

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Climate metrics dashboard

Scope 3 emissions – listed equity and corporate bonds

Asset Class	Mandate	WACI (tCO2e / $M sales)				Carbon Footprint (tCO2e / $M invested)				Absolute Emissions (tCO2e)				Allocation Weight
		Scope 3 Upstream		Scope 3 Downstream		Scope 3 Upstream		Scope 3 Downstream		Scope 3 Upstream		Scope 3 Downstream		
		Metric	Coverage	**Metric**	Coverage	**Metric**	Coverage	**Metric**	Coverage	**Metric**	Coverage	**Metric**	Coverage	
Listed equity	Brunel – Global High Alpha	**230.4**	97.0%	**289.5**	97.0%	**91.0**	96.9%	**190.1**	96.9%	**64,254**	96.9%	**131,681**	96.9%	10.5%
	Brunel – Global Sustainable	**229.0**	97.8%	**183.4**	97.8%	**67.0**	97.8%	**71.4**	97.8%	**51,319**	97.8%	**48,871**	97.8%	10.5%
	Brunel – Developed Paris Aligned	**245.3**	99.7%	**201.5**	99.7%	**65.3**	99.7%	**61.7**	99.7%	**47,652**	99.7%	**45,267**	99.7%	10.5%
Total listed equity		**234.9**	**98.2%**	**224.8**	**98.2%**	**74.5**	**98.1%**	**107.7**	**98.1%**	**163,225**	**98.1%**	**225,819**	**98.1%**	**31.5%**
Corp. Bonds	BlackRock – Corporate Bonds	**226.4**	93.7%	**346.1**	93.7%	**132.7**	68.4%	**227.5**	68.4%	**18,662**	68.4%	**33,842**	68.4%	2.0%
Total corporate bonds		**226.4**	93.7%	**346.1**	93.7%	**132.7**	68.4%	**227.5**	68.4%	**18,662**	68.4%	**33,842**	68.4%	2.0%
Total equity and corporate bonds		**234.4**	97.9%	**232.0**	97.9%	**77.9**	96.3%	**114.9**	96.3%	**181,887**	96.4%	**259,661**	96.4%	33.5%
MAC	Brunel **–** Multi Asset Credit	**284.1**	73.1%	**628.7**	73.1%	**180.8**	66.1%	**343.7**	66.1%	**35,042**	66.6%	**64,394**	66.6%	3.5%
Synth. Equity	BlackRock – PAB Passive Global	**214.6**	100.0%	**140.9**	100.0%	**53.0**	99.7%	**31.2**	99.7%	**37,080**	99.8%	**21,915**	99.8%	10.5%

Source: MSCI and Mercer. All data as at 31 December 2023. An overview of these metrics is provided in the Appendix. Allocation weights represent the strategic asset allocation for that mandate or, for mixed mandates, the actual allocation to listed equity or corporate bonds within the mixed mandate.

Portfolio Decarbonisation

Data availability

Manager	Asset class	Strategic Asset Allocation	Included in ACT analysis?	Targets set?	Indicative timeline for target setting	Comment	Recommended action
Brunel	Private Debt	4.5%	No	No	2024/26 (subject to data availability)	Brunel are requiring managers (on a best endeavours basis) to report climate data (mirroring basic company metrics) and disclosure percentage of reported/ estimated/ unknown, but note current levels of disclosure are very low. Brunel cannot guarantee disclosures as not all GPs (especially those in the US) will be willing to accept side letter requirements relating to climate. Making this a condition would limit access to the managers with strong teams/ track records/ returns.	Work towards target setting on this part of portfolio. Assess Brunel's 2024 TCFD reporting when available.
	Renewable Infrastructure	5.0%				Brunel provide sustainable exposure analysis and are aiming to work with Stepstone for TCFD reporting in June 2024.	
	Core Property	3.5%[1]				Some climate metrics, including percentage of funds who have committed to net zero will be provided in the 2022 Real Estate Reports. This is in addition to other metrics such as GRESB scores. Brunel plan to extend the range of metrics for TCFD by June 2024.	
	Secured Income	9.0%				Brunel plan to mirror a combination of property and infrastructure metrics, given the profile of the fund. Brunel plan to develop this as part of TCFD June 2024 implementation roll-out.	
IFM	Infrastructure	4.0%	No	No	2024/25	IFM have recently issued their inaugural Infrastructure Climate Change report, which includes carbon footprint data for the IFM Global Infrastructure Fund for the year ended 31 December 2022, and an update on progress vs. climate targets. Aiming to provide % of companies that have set net zero targets. Estimated emissions data provided to clients on request, with plans to increase reported data over time.	Review data and engage with manager on target setting
Partners Group	Overseas Property	3.5%[1]	No	No	N/A – legacy funds	No plans by the manager to provide metrics given legacy status of most funds (vintages from 2008 – 2015).	Lower priority given status of funds

[1] Strategic allocation to property is 7.0%.

Transition Alignment

Indicator of improved emissions performance vs last year
Indicator of worsened emissions performance vs last year
2023 figures shown in brackets

Annual Monitoring as at 2024

Asset Class	Mandate	Implied Temperature Rise (ºC)* Metric	SBTi**
Listed equity	Brunel – Global High Alpha	**2.3ºC**	**41.6%** (36.8%)
	Brunel – Global Sustainable	**2.0ºC**	**50.5%** (37.1%)
	Brunel – Developed Paris Aligned	**2.1ºC**	**52.0%** (48.0%)
Total listed equity		**2.2ºC**	**48.1%**
Corporate bonds	BlackRock – Corporate Bonds	**1.9ºC**	**44.9%** (41.1%)
Total corporate bonds		**1.9ºC**	**44.9%**
Total equity and corporate bonds		**2.1ºC**	**47.9%**
MAC	Brunel – Multi Asset Credit	**2.7ºC**	**18.9%** (13.0%)
Synthetic Equity	BlackRock – PAB Passive Global	**2.0ºC**	**46.2%**
Comparator – MSCI ACWI		**2.5ºC**	**41.1%**

✓ **Equity and Corporate Bond Funds display positive results compared to MSCI ACWI, with SBTi alignment improving across all managers as more companies set net zero targets**

Source: MSCI and Mercer. All data as at 31 December 2023. An overview of these metrics is provided in the Appendix. Allocation weights represent the strategic asset allocation for that mandate or, for mixed mandates, the actual allocation to listed equity or corporate bonds within the mixed mandate.
Notes: Scope 1+2 only. % of fund directly analysed reflects coverage under the MSCI tool used in this analysis.
*ITR aggregation methodology has improved over the year, rendering year on year comparison unfair. Values for prior years have therefore been excluded from this table.
** This metric measures the proportion of companies in the portfolio with one or more active carbon emissions reduction target/s approved by the Science Based Targets Initiative (SBTi).

Transition Alignment - EU Taxonomy

Indicator of improved performance vs last year
Indicator of worsened performance vs last year
2023 figures shown in brackets

EU Taxonomy Substantial Contribution to Climate Adaptation and Mitigation*

	Mandate	Allocation Weight %	MITIGATION: EU Taxonomy Estimated Substantial Contribution to Climate Mitigation – **Maximum Percentage of Revenue** (%)	MITIGATION: Reported Percentage of **Total CapEx Mitigation Aligned** for Non-Financial Companies (%)	MITIGATION: Reported Percentage of **Total CapEx Mitigation Enabling Aligned** for Non-Financial Companies (%)	ADAPTATION: EU Taxonomy Estimated Substantial Contribution to Climate Adaptation – **Maximum Percentage of Revenue** (%)	ADAPTATION: Reported Percentage of **Total CapEx Adaptation Aligned** for Non-Financial Companies (%)	ADAPTATION: Reported Percentage of **Total CapEx Adaptation Enabling Aligned** for Non-Financial Companies (%)
Listed equity	Brunel – Global High Alpha	10.5%	**5.1% (5.0%)**	0.5%	0.3%	**0.1% (0.1%)**	0.0%	0.0%
	Brunel – Global Sustainable	10.5%	**6.5% (5.9%)**	2.6%	2.2%	**0.2% (0.1%)**	0.0%	0.0%
	Brunel – Developed Paris Aligned	10.5%	**11.5% (7.4%)**	1.6%	0.9%	**0.1% (0.2%)**	0.0%	0.0%
Total listed equity		31.5%	**7.7%**	1.6%	1.1%	**0.1%**	0.0%	0.0%
Corporate Bonds	BlackRock – Corporate Bonds	2.0%	**8.5% (7.3%)**	9.8%	3.6%	**1.5% (1.4%)**	0.0%	0.0%
Total corporate bonds		2.0%	**8.5%**	9.8%	3.6%	**1.5%**	0.0%	0.0%
Total equity and corporate bonds		33.5%	**7.7%**	2.1%	1.3%	**0.2%**	0.0%	0.0%
MAC	Brunel – Multi Asset Credit	2.6%	**3.3%**	0.1%	0.0%	**0.5%**	0.0%	0.0%
Synthetic Equity	BlackRock – PAB Passive Global	10.5%	**12.2%**	3.1%	2.0%	**0.6%**	0.0%	0.0%

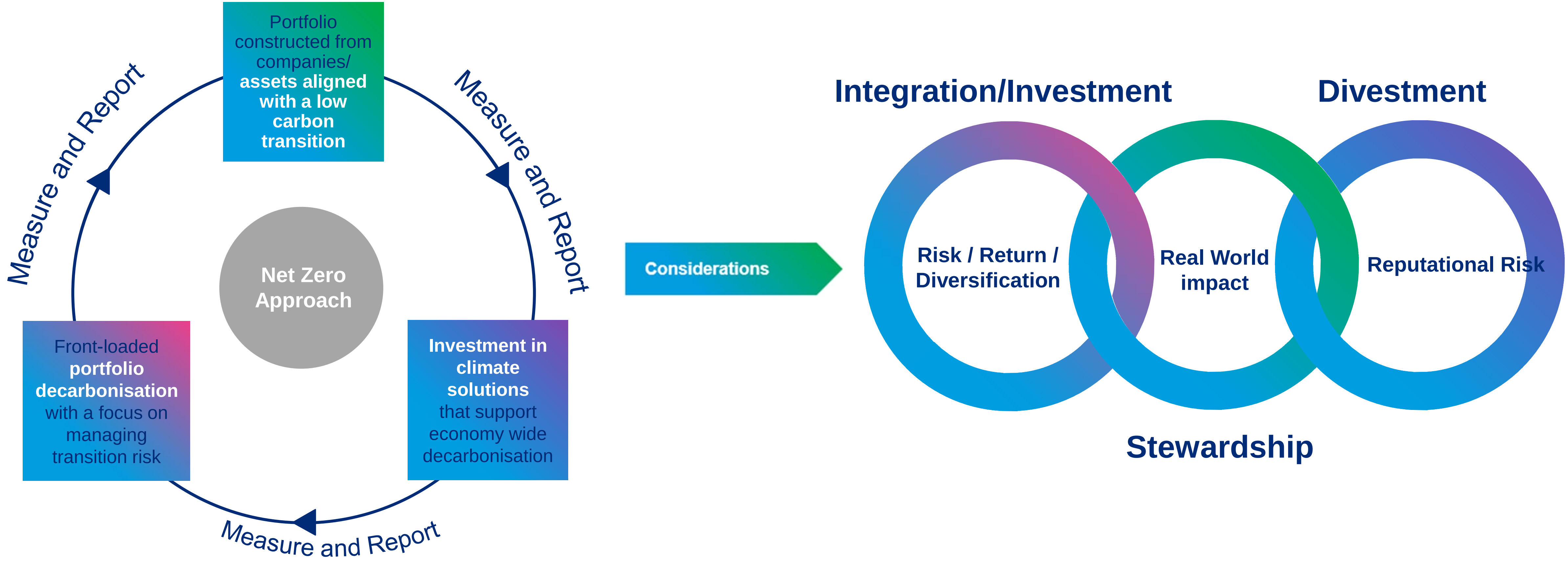
Encouraging progress on revenue exposure to mitigation and adaptation. Minimal exposure to adaptation capex

Source: MSCI and Mercer. All data as at 31 December 2023. Allocation weights represent the strategic asset allocation for that mandate or, for mixed mandates, the actual allocation to listed equity or corporate bonds within the mixed mandate.
*Definition of each factor can be found in the appendix.

APPENDIX

Net Zero Approach

Key considerations & levers

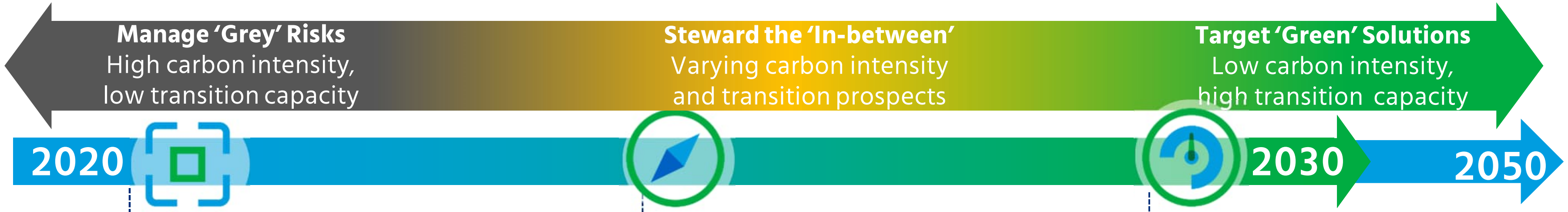


- It is **challenging to maximise every net zero approach** as there are trade-offs associated. When applied in isolation, they may lead to unintended outcomes from both a financial and sustainability perspective.
- Based on the Fund's objectives and commitments to stakeholders, it is important to **establish priorities and strive for balance** which supports financial objectives (risk, return, diversification) as well as real world impact.
- To date, the focus to reach net zero targets has been around decarbonisation followed by climate solutions. However, the **alignment assessment of assets is critical** to enable a more holistic approach to a whole economy transition.

Analytics for Climate Transition

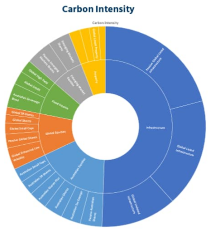
A Framework for Transition

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**

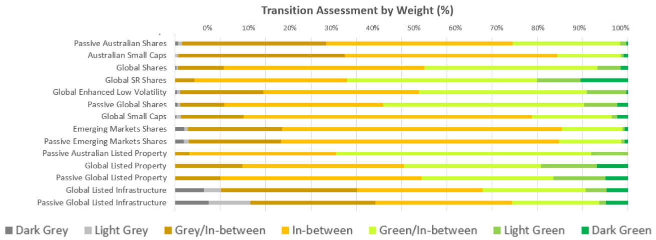
Calculations complete, dashboard drafted – total portfolio



	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 %
Public – Liquid	Australian Shares		189.7	T CO2e / $M Rev	0.4	0.5	30.9	40.0	22.6	1.6	0.2
	Australian Shares Plus		185.9	T CO2e / $M Rev	0.4	0.3	33.3	41.8	21.7	1.6	0.2
	Australian SR Shares		148.3	T CO2e / $M Rev	0.1	0.8	30.4	38.3	25.2	1.2	0.8
	Australian Tax Exempt		197.1	T CO2e / $M Rev	0.4	0.6	34.1	37.3	24.7	0.8	0.4
	Passive Australian Shares		218.3	T CO2e / $M Rev	0.7	0.8	31.7	41.0	23.6	1.5	0.3
	Australian Small Caps		145.1	T CO2e / $M Rev	0.0	0.6	30.7	39.2	11.6	0.6	0.8
	Global Shares		86.0	T CO2e / $M Rev	0.3	0.3	9.7	42.1	36.4	4.9	1.5
	Global SR Shares		73.6	T CO2e / $M Rev	0.0	0.0	4.1	31.8	39.6	9.2	9.8
	Global Enhanced Low Volatility		219.0	T CO2e / $M Rev	0.4	0.7	17.6	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

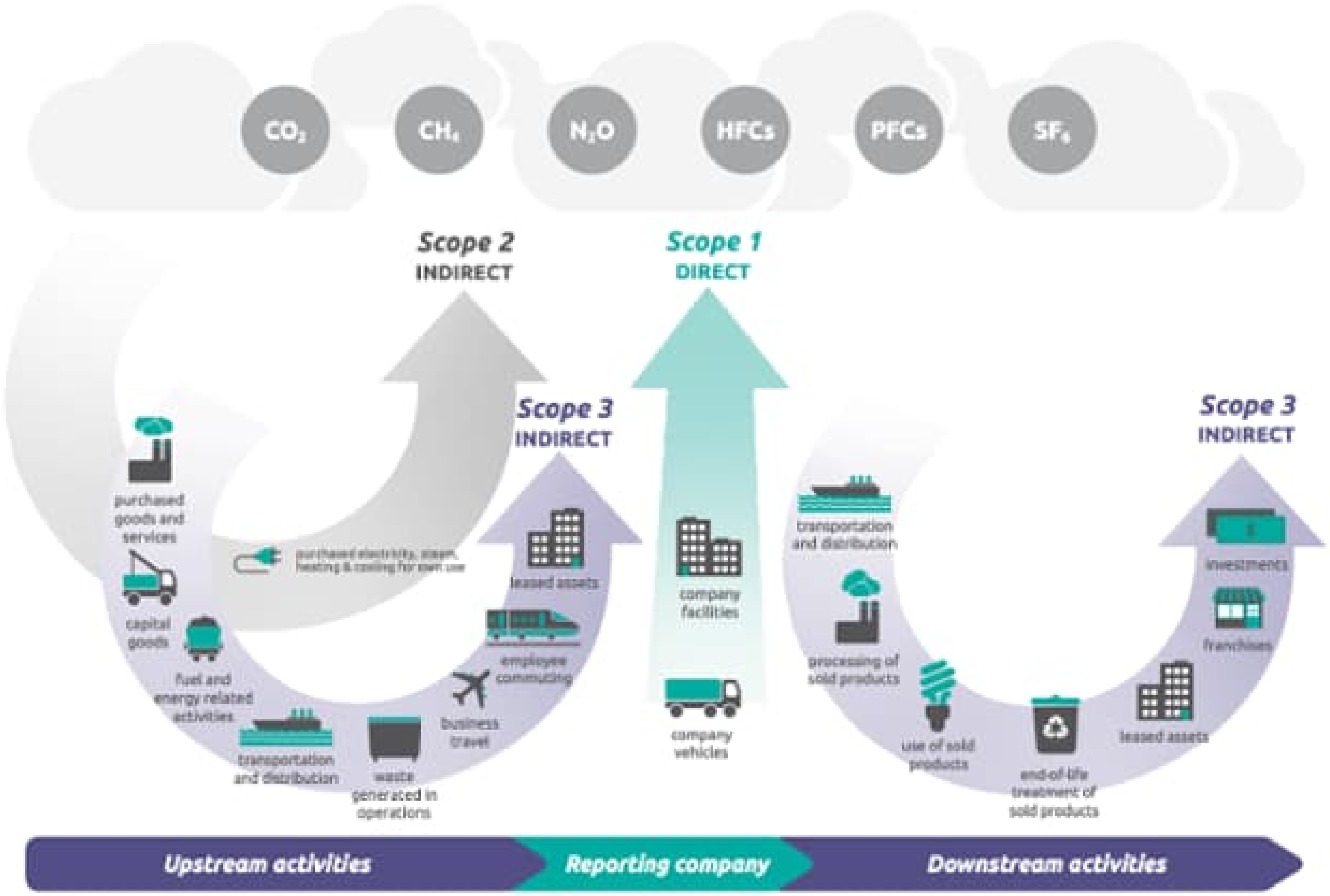
- Allocate to innovation and solutions
- Monitor developments and prices

Screening

- Restrict high carbon solutions where needed

Mercer

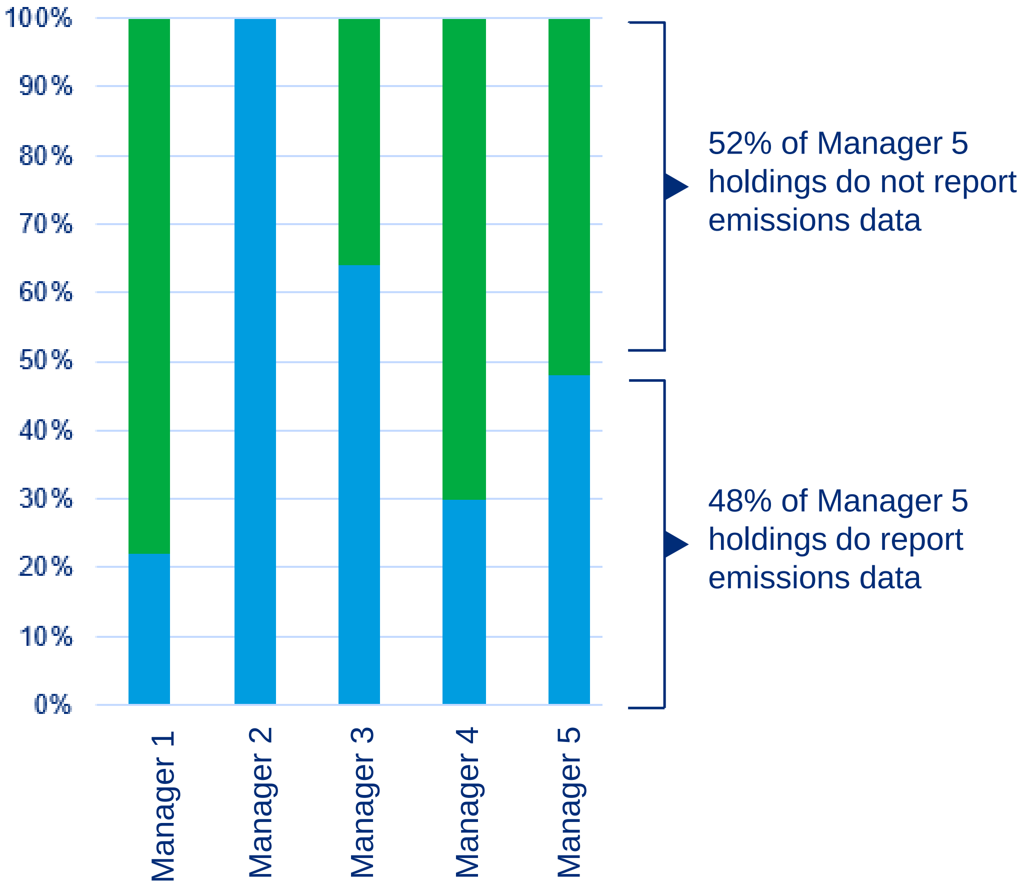
Emissions Data
Understanding the Scopes



Methodology

Data Coverage and Scaling

Absolute Emissions Coverage



Many of the mandates do not have complete coverage of emissions data; this may be because some companies do not yet measure and report their emissions.

We don't recommend for absolute emissions you only report a figure covering the % of the portfolio that there is coverage for. This essentially assumes 0 emissions for the portion of the portfolio for which there is no coverage.

Therefore the portion of the portfolio for which there is coverage is scaled up, to estimate an absolute emissions figure to cover 100% of the portfolio.

Example calculation :

Manager 5's absolute emissions for 48% covered holdings = 9,746 tons CO2e

Scaling up emissions calculation = 9,746 / 48%

Absolute emissions estimated for 100% coverage = 20,303 tons CO2e

Low carbon transition

Portfolio metrics summary

Weighted Average Carbon Intensity (WACI)	Carbon Footprint
• Operational carbon emissions • **Carbon emissions (Metric tons) / $ Million revenue * portfolio weights** • Measures the portfolio's exposure to emissions-intensive companies	• Operational carbon emissions • **Carbon emissions (Metric tons) / $ Million investment * portfolio weights** • Allows for portfolio decomposition and attribution analysis

Measures of 'current' emissions intensity

Absolute Emissions	Implied Temperature Rise
• Operational carbon emissions • **[Carbon emissions (Metric tons) * value of investment/company enterprise value] * portfolio weights** • Measures the portfolio's exposure to companies with high absolute emissions	• The implied temperature trajectory of a company's operations • **Expressed as ⁰C** • Allows for tilting of the portfolio towards companies with a <2⁰C implied temperature rise, to show alignment with the Paris Agreement ambition
Measure of absolute emissions	**Measure of transition alignment**

Emissions Intensity – Carbon Footprint

Carbon Footprint: $\dfrac{\text{Investor Absolute Emissions associated with a portfolio}}{\text{\$M invested in that portfolio}}$ = Portfolio Carbon Footprint (tons CO_2 equivalent / $million investment)

Answers how carbon efficient each portfolio is e.g. how many tons of carbon is associated with each $M invested in each portfolio?

- As an intensity metric it is a useful comparator across asset classes/portfolios and/or as compared with a benchmark on an ‘apples to apples’ basis.
- Allows for portfolio decomposition and attribution analysis.
- By normalising absolute emissions by the $M invested this metrics retains the direct link with real world emissions but avoids the drawbacks of the Absolute Emissions Metrics.

- Backward looking, so does not take into account future trajectory of underlying investee companies / assets

Carbon footprint is the primary metric used for decarbonisation monitoring

Transition Alignment - EU Taxonomy

Definitions

	MSCI Factor	Definition
Mitigation	Estimated Substantial Contribution to Climate Mitigation **Maximum Percentage of Revenue (%)**	EU Taxonomy Estimated Substantial Contribution to Climate Mitigation – Maximum Percentage of Revenue is the proportion of total revenue from products and services that provide solutions for reducing GHG emissions.
	Reported Percentage of **Total CapEx Mitigation Aligned** for Non-Financial Companies (%)	For Non-Financial companies, the reported percentage of total capital expenditure from the activities aligned under the Climate Change Mitigation objective of the EU Taxonomy regulation. The data is provided for the most recent fiscal year available.
	Reported Percentage of **Total CapEx Mitigation Enabling Aligned** for Non-Financial Companies (%)	For Non-Financial companies, the reported percentage of total capital expenditure from aligned and enabling activities under the Climate Change Mitigation objective of the EU Taxonomy regulation. The data is provided for the most recent fiscal year available.
Adaptation	Estimated Substantial Contribution to Climate Adaptation **Maximum Percentage of Revenue (%)**	EU Taxonomy Estimated Substantial Contribution to Climate Adaptation – Maximum Percentage of Revenue is the proportion of total revenue from products and services that reduce the risk of adverse impacts resulting from climate change.
	Reported Percentage of **Total CapEx Adaptation Aligned** for Non-Financial Companies (%)	For Non-Financial companies, the reported percentage of total capital expenditure from the activities aligned under the Climate Change Adaptation objective of the EU Taxonomy regulation. The data is provided for the most recent fiscal year available.
	Reported Percentage of **Total CapEx Adaptation Enabling Aligned** for Non-Financial Companies (%)	For Non-Financial companies, the reported percentage of total capital expenditure from aligned and enabling activities under the Climate Change Adaptation objective of the EU Taxonomy regulation. The data is provided for the most recent fiscal year available.

Decarbonisation – Emissions Metrics
Understanding the Approach & Limitations

- We analyse companies' absolute emissions, in metric tons in carbon dioxide equivalents. This data represents the company's reported *or* estimated greenhouse gas emissions, where available.
- The analysis includes various Scopes of emissions:
  - Scope 1 "direct" emissions: those from sources owned or controlled by the company (e.g. direct combustion of fuel from vehicles)
  - Scope 2 "indirect" emissions: those caused by the generation of energy (e.g. electricity) purchased by the company.
- We attribute company emissions to the Scheme, based on the value of investments.
- 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%. We assume companies not covered by the analysis are represented *within* the range of companies that have been covered in the analysis.
- The listed portfolio analysis focuses on the Listed Equity portfolio, corporate bond (including MAC) and LDI holdings, 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.
- 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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