



London Borough of Islington Pension Fund

Carbon Footprint Analysis: Summary of Results

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June 2023

welcome to brighter



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Carbon Footprint Analysis – 31 March 2023



Summary of Results

31 March 2023

Key:

Green (significantly below index)

Amber (in line with the index, or within 10% below index)

Grey (No benchmark)

Red (Has contributed negatively with above index performance)

Asset Class	Manager/ Mandate	Benchmark	WACI (tCO2e / \$M revenue)			Absolute Emissions (tCO2e)		Potential Emissions (tCO2e based on \$billion invested)			Implied Temperature Rise (°C)			SBTi (%)	Percentage of Actual Allocation for Asset Class (%)
			Coverage (%)	Fund	Benchmark	Coverage (%)	Fund	Fund	Benchmark	Coverage (%)	Fund	Benchmark			
Listed Equity	LGIM Global Developed Paris Aligned	MSCI World	97.1%	43.9	125.3	97.1%	3,551	179	1,213,101	97.0%	1.8	2.4	52.4%	9.4%	
	LGIM Low Carbon		99.0%	72.3		99.0%	4,391	144,300		98.9%	2.0		42.1%	11.3%	
	LCIV Sustainable (RBC)		98.2%	75.5		98.2%	3,881	1,197,812		96.3%	2.5		39.2%	9.6%	
	LCIV Global (Newton)		98.8%	47.3		98.8%	7,770	358,760		98.8%	1.9		32.9%	18.6%	
	LGIM RAFI EM	FTSE EM	96.7%	445.1	374.5	96.7%	11,751	12,522,549	6,681,500	96.6%	3.3	3.1	12.7%	2.1%	
	Polen Capital EM		91.0%	119.3		91.0%	2,493	17,094		91.0%	2.0		13.5%	3.9%	
Total Listed Equity		-	97.8%	77.3	-	97.8%	33,836	14,240,694	-	97.4%	2.2	-	37.1%	54.9%	
Corporate Bonds	Standard Life Credit	iBoxx Non- Gilts	91.8%	75.3	106.4	57.0%	2,174	-	-	55.1%	2.0	1.8	23.9%	3.8%**	
Multi-Asset Credit	M&G Alpha Opportunities*	iBoxx Non- Gilts	66.1%	118.3	106.4	53.2%	3,193	-	-	-	-	-	24.3%	4.5%	
Total Credit		-	91.8%	75.3	-	57.0%	5,367	-	-	55.1%	2.0	-	23.9%	3.8%	
Total Listed Equity & Credit		-	97.4%	77.2	-	95.2%	39,203	-	-	94.7%	2.2	-	36.2%	58.7%	

Notes: Scope 1+2 only. % of fund directly analysed reflects coverage under the MSCI tool used in this analysis.

*Data provided by the manager.

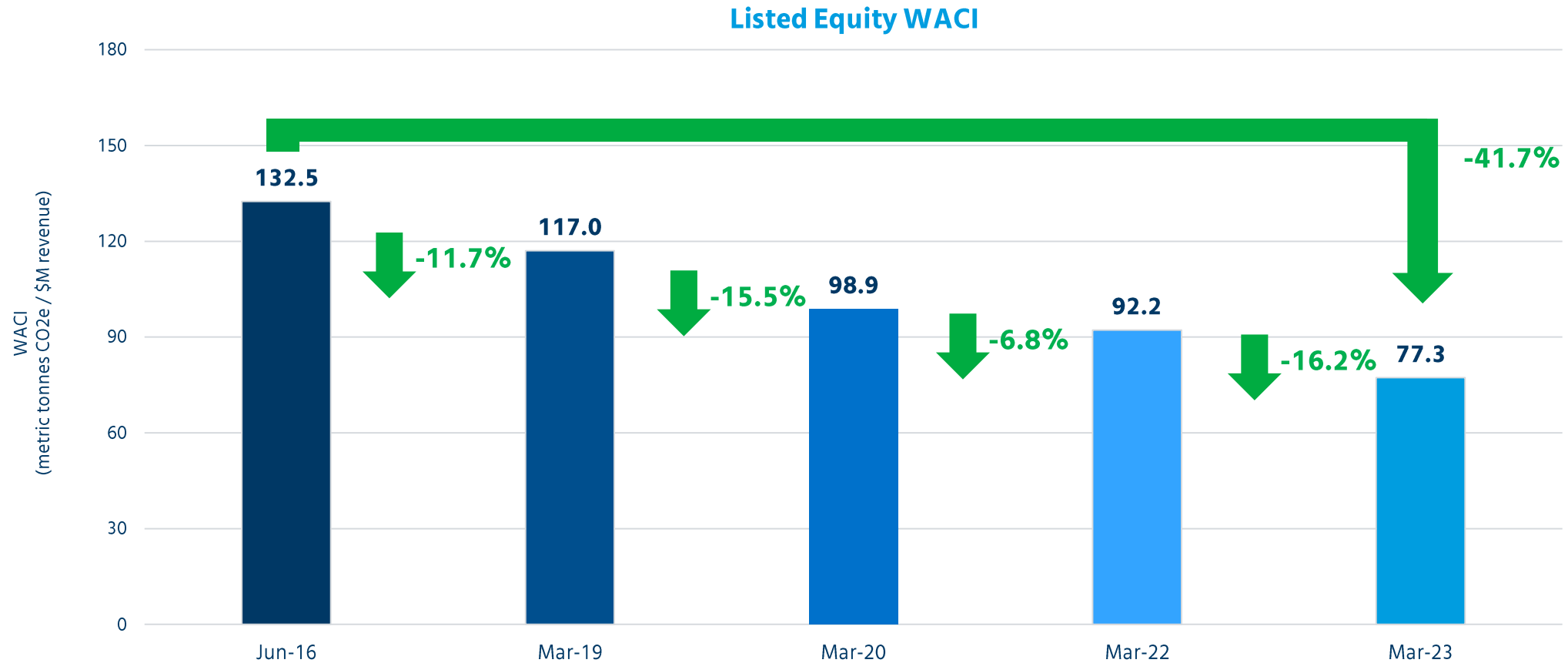
**The actual allocation weight (%) considers the respective asset class allocation for Standard Life Credit: 96.6% Corporate Bonds and 2.6% Sovereigns. Please note that the residual Sovereign portion was not included in the analysis.

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Summary of Results

Summary Timeline – WACI

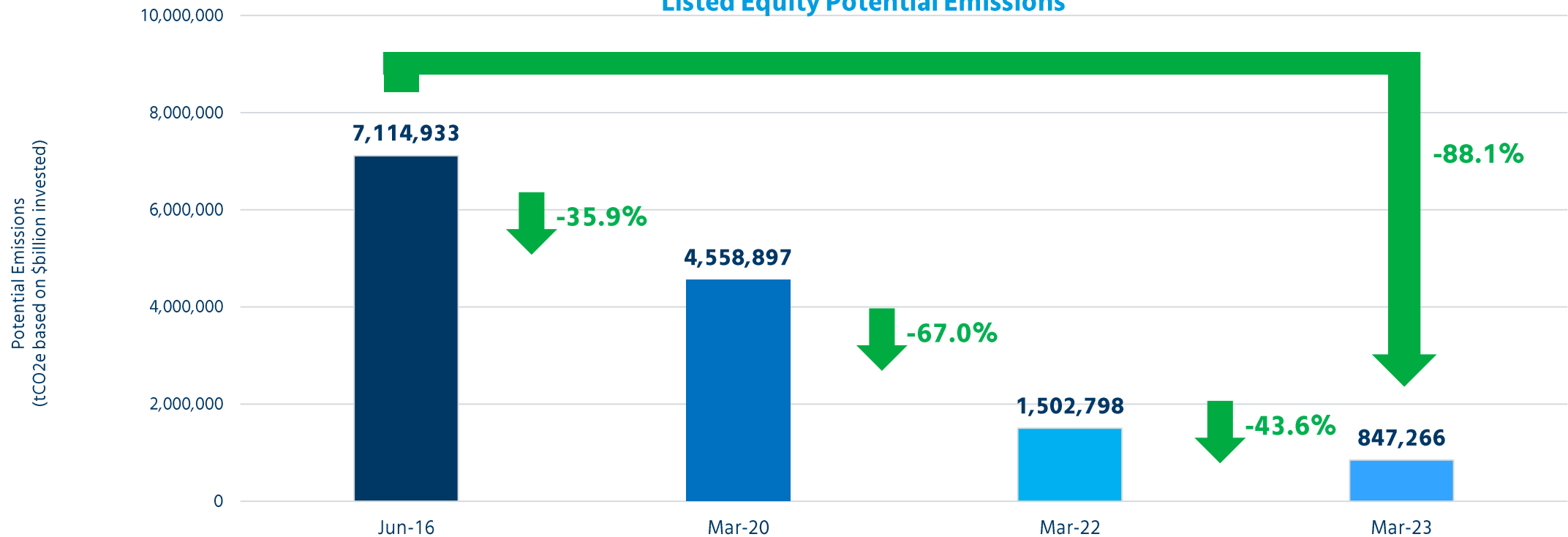


As at 31 March 2023, the **WACI of the listed equity portfolio was 77.3 tCO₂e per \$million revenue.** This represents a **c. 16.2% decrease in WACI** from 2022, and a **c. 41.7% decrease in WACI** from the 2016 baseline.

Summary of Results

Summary Timeline – Potential Emissions

Listed Equity Potential Emissions



As at 31 March 2023, the weighted average Potential Emissions of the listed equities portfolio was **847,266 tCO2e per \$billion invested**. This represents a **c. 43.6% decrease in Potential Emissions** from 2022, and a **c. 88.1% decrease in Potential Emissions** from the 2016 baseline.

Summary of Results

Absolute Emissions - Listed Equity and Corporate Credit



- Since undertaking ACT analysis in 2021 as part of agreeing a 2050 'Net Zero' objective, the **absolute emissions for the listed portfolio (equities and corporate bonds) have reduced by c40%**, meaning that the Fund is ahead of plan for both the 2026 and 2030 targets.
- One key driver of the reduction in emissions is the **switch from the in-house UK equity fund to the LGIM Future World Paris Aligned strategy**. There will also be other factors affecting the change including an increase in coverage for the mandates.
- We recommend that next year the **Committee assess the decarbonisation pathway in greater detail**, due to the fact that both scope 3 emissions and additional asset classes will need to be incorporated in future.
- This will include considering the baseline (with many Schemes coalescing around 31 December 2019, in line with IIGCC guidance) and the primary metric. We believe continuing to use absolute emissions as the primary metrics may present challenges when incorporating scope 3 emissions and additional asset classes, so propose discussing whether the revised decarbonisation pathway would use an emissions intensity metric, which would provide a more robust and fairer reflection of decarbonisation over time.

An aerial photograph of a long, narrow suspension bridge spanning a dense green forest. The bridge has a wooden deck and metal railings. Several people are walking across the bridge. The forest is lush and green, with many trees visible. The word "Appendix" is written in large white letters across the lower part of the image.

Appendix

London Borough of Islington Pension Fund

Summary of Results – 31 March 2022

Asset Class	Manager/ Mandate	Benchmark	Fund WACI	Benchmark WACI	Fund Potential Emissions	Benchmark Potential Emissions	Percentage of Portfolio
			(tons CO2e / \$M revenue)		(tons CO2e based on \$billion invested)		(%)
Listed Equity	In House UK Equity	FTSE All Share	142.1	129.8	4,701,313	4,377,820	9.5%
	BMO Emerging Markets Equity	FTSE EM	65.4	374.6	23,806	5,079,928	3.9%
	LGIM RAFI Emerging Markets Equity		472.3		11,894,449		2.1%
	LCIV RBC Sustainable Equity	FTSE All World	68.0	164.7	598,082	1,402,939	10.1%
	LCIV Newton Global Equity		55.9		274,033		17.2%
	LGIM Passive Low Carbon Equity		66.1		74,293		11.2%
Total Listed Equity		-	92.2	-	1,502,798 17,565,976*	-	54.0%

Notes: the range of holdings analysed reflect coverage under the MSCI tool used in this analysis.

*The two figures refer to (1) weighted average Potential Emissions and (2) simple summation of Potential Emissions, respectively.

Key:

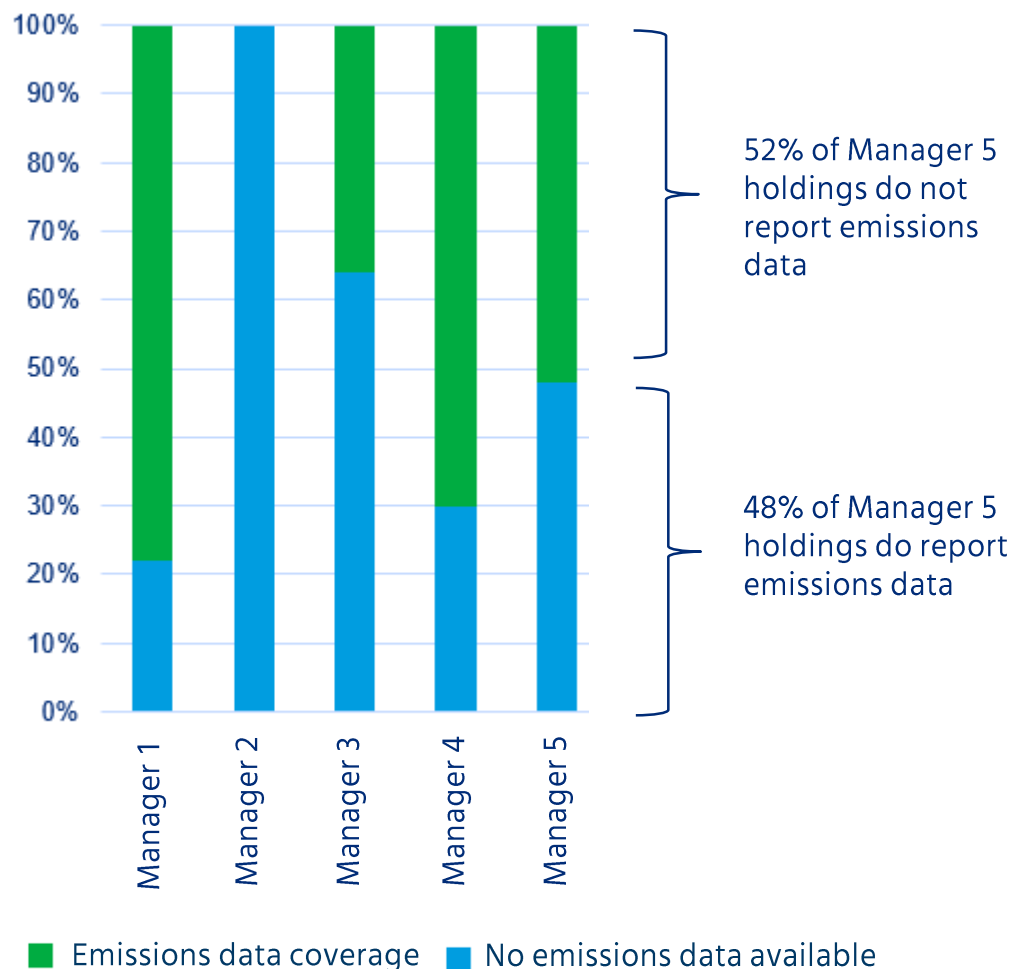
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Methodology – Data coverage and scaling

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)	Potential Emissions
<ul style="list-style-type: none"> Operational carbon emissions Carbon emissions (Metric tons) / \$ Million revenue * portfolio weights Measures the portfolio's exposure to emissions-intensive companies 	<ul style="list-style-type: none"> Potential emissions from fossil fuel reserves Carbon emissions (Metric tons), based on \$ Billion of investment Measures the portfolio's exposure to fossil fuel reserves, as a proxy for stranded asset risk

Measures of 'current' emissions intensity

Measure of possible 'future' emissions

Absolute Emissions	Implied Temperature Rise
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> The implied temperature trajectory of a company's operations Expressed as °C Allows for tilting of the portfolio towards companies with a <2°C implied temperature rise, to show alignment with the Paris Agreement ambition

Measure of absolute emissions

Measure of transition alignment

Know Your Metrics

Carbon Intensity – WACI

- Different methodologies can be used to calculate a portfolio’s exposure to carbon intensive companies. In this report we focus on **WACI** (of Scope 1 and Scope 2 emissions).
 - An **intensity** measure seeks to describe the **carbon** efficiency of corporate entities in the portfolio, by linking the **emissions** to, for example, revenue, whereas potential emissions seeks to reveal potential portfolio exposure to “stranded assets”.
- The CF methodology in this report is consistent with the preferred method of the Task Force on Climate-related Financial Disclosure (the TCFD) – the **weighted average carbon intensity** of a portfolio.
- This metric is useful because it:
 - Can be more easily applied across asset classes (equity and fixed income)
 - Is a fairly simple calculation and easier to communicate than other approaches
 - Allows for portfolio decomposition and attribution analysis

Metric	Supporting Information	
Weighted Average Carbon Intensity	<i>Description</i>	Portfolio's exposure to carbon-intensive companies, expressed in tons CO ₂ e / \$M revenue. <i>Metric recommended by the Task Force.</i>
	<i>Formula</i>	$\sum_n^i \left(\frac{\text{current value of investment}_i}{\text{current portfolio value}} * \frac{\text{issuer's emissions}_i}{\text{issuer's \$M revenue}_i} \right)$
	<i>Methodology</i>	Unlike the next three metrics, Scope 1 and Scope 2 GHG emissions are allocated based on portfolio weights (the current value of the investment relative to the current portfolio value), rather than the equity ownership approach (explained below).
	<i>Key Points + / -</i>	<ul style="list-style-type: none"> + Metric can be more easily applied across asset classes since it does not rely on equity ownership approach. + The calculation of this metric is fairly simple and easy to communicate to investors. + Metric allows for portfolio decomposition and attribution analysis. - Metric is sensitive to outliers. - Using revenue (instead of physical or other metrics) to normalize the data tends to favor companies with higher pricing levels relative to their peers.

Side note on Carbon Risk Management:

MSCI ESG Ratings measure and analyse company risk and opportunities from ESG issues, including an assessment of carbon management. This assessment analyses companies’ exposure to and management of carbon risks, such as carbon reduction targets, use of clean energy sources, energy consumption, and operational efficiency.

Source: Taskforce on Climate-related Financial Disclosures 2017 Recommendations.

Know Your Metrics

Absolute Emissions

- 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.

Note: as gases have different climatic impacts, expressing emissions in carbon dioxide equivalents helps for consistent reporting across GHGs.

Source: IPCC (2018) "Global Warming of 1.5°C"; *EU TEG report (2019) focuses on Scope 3 emissions as a proxy for risk (felt by all companies), with double counting always present not presenting an issue, given decarbonisation is relative.

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