

Carbon Footprint

East Sussex Pension Fund



S&P Dow Jones Indices
ESG Analysis



March 2018

CREDITS

Yohan Hill Research Manager

ABOUT TRUCOST, PART OF S&P DOW JONES INDICES

Trucost is part of S&P Dow Jones Indices. A leader in carbon and environmental data and risk analysis, Trucost assesses risks relating to climate change, natural resource constraints, and broader environmental, social, and governance factors. Companies and financial institutions use Trucost intelligence to understand their ESG exposure to these factors, inform resilience and identify transformative solutions for a more sustainable global economy. S&P Global's commitment to environmental analysis and product innovation allows us to deliver essential ESG investment-related information to the global marketplace. For more information, visit www.trucost.com.

ABOUT S&P DOW JONES INDICES

S&P Dow Jones Indices is the largest global resource for essential index-based concepts, data and research, and home to iconic financial market indicators, such as the S&P 500® and the Dow Jones Industrial Average®. More assets are invested in products based on our indices than products based on indices from any other provider in the world. Since Charles Dow invented the first index in 1884, S&P DJI has become home to over 1,000,000 indices across the spectrum of asset classes that have helped define the way investors measure and trade the markets.

S&P Dow Jones Indices is a division of S&P Global (NYSE: SPGI), which provides essential intelligence for individuals, companies, and governments to make decisions with confidence. For more information, visit www.spdji.com.

CONTACT

E: Trucostinfo@spglobal.com

T: +44(0)20 7160 9800

T: +1 800 402 8774

www.trucost.com

CONTENTS

<u>EXECUTIVE SUMMARY</u>	<u>4</u>
<u>INTRODUCTION</u>	<u>6</u>
<u>CARBON FOOTPRINT RESULTS</u>	<u>8</u>
CARBON FOOTPRINT – LGIM GLOBAL	8
CARBON FOOTPRINT – LGIM UK	13
CARBON FOOTPRINT – LONGVIEW	18
CARBON FOOTPRINT – SSGA EQUITIES	23
CARBON FOOTPRINT – NEWTON	28
CARBON FOOTPRINT – RUFFER	30
CARBON FOOTPRINT – AGGREGATE PORTFOLIO	32
<u>APPENDICES</u>	<u>35</u>
APPENDIX A	35
APPENDIX B	35
APPENDIX C	37
<u>GLOSSARY</u>	<u>39</u>
<u>CARBON DISCLOSURE CODE EXPLANATION</u>	<u>39</u>
<u>REFERENCES</u>	<u>42</u>
<u>NOTICE</u>	<u>43</u>
<u>DISCLAIMER</u>	<u>43</u>
<u>CONFIDENTIALITY & COPYRIGHT</u>	<u>44</u>

EXECUTIVE SUMMARY

Our analysis shows that three out of four of the relative-return portfolios analysed outperform their respective benchmarks.

- Trucost was commissioned by the East Sussex Pension Fund to conduct a carbon footprint analysis of six listed equity portfolios, as noted below:
 - LGIM Global
 - LGIM UK
 - Longview Partners Global Equity Strategy
 - Newton
 - Ruffer
 - State Street Global Advisers (SSGA)
- Two of these are absolute return portfolios (Newton and Ruffer). The others are relative return and, as such, Trucost compared their carbon footprint performance to their respective benchmarks as follows:

Portfolio	Benchmark
LGIM Global	FTSE World
LGIM UK	FTSE All Share
Longview	MSCI All Country World Index (ACWI)
SSGA	FTSE RAFI All-World 3000

- Based on the revenue method of analysis, we obtained the following results from that comparison:
 - **LGIM Global is 7.47% more carbon intensive** than its benchmark, FTSE World.
 - **LGIM UK is 1.12% more carbon intensive** than its benchmark, FTSE All Share.
 - **Longview is 82.59% less carbon intensive** than its benchmark, MSCI ACWI.
 - **SSGA is 4.08% less carbon intensive** than its benchmark, FTSE RAFI-All World 3000.
- Our assessment of the **aggregate portfolio** shows that the energy generation mix for the aggregate holdings has a **16.6% share of energy coming from renewable power generation**, which is less than half of the 2025 IEA World 2-degree scenario amount of 37.1%.

- **Coal power generation stands at 29.4% of total power generation**, which is above the 24.7% required by 2025, under the IEA World 2-degree scenario.
- In order to meet the more challenging 2030 IEA World target, the aggregate portfolio will need reduce the share of coal power generation to 14.9% of total power generation, and increase the share of renewable energy generation to 46.4%.

INTRODUCTION

Carbon footprints of investment portfolios can be used to identify carbon-related strengths, weaknesses, opportunities and threats from the shift to a low-carbon economy.

Trucost provides data and insight to help its clients understand the economic consequences of natural capital dependency. Our clients include companies and their advisors, the investment community, governments, academics and thought leaders.

Trucost was commissioned by the East Sussex Pension Fund to conduct a carbon footprint analysis of its listed equity portfolios.

Carbon footprints of investment portfolios can be used to identify carbon-related strengths, weaknesses, opportunities and threats from the shift to a low-carbon economy. The carbon footprint analysis helps to identify what the key climate change impacts of an investment portfolio are, and the related risks and opportunities. More information on carbon footprinting is provided in Appendix A.

This analysis assesses the carbon risks inherent in the following equity mandates:

- LGIM Global
- LGIM UK
- Longview
- Newton
- Ruffer
- State Street Global Advisers (SSGA)

Carbon footprint analysis quantifies greenhouse gas emissions (GHG) embedded within each investment portfolio presenting these as tonnes of carbon dioxide equivalents (tCO₂e). Comparing the total GHG emissions of each holding relative to annual revenue, gives a measure of carbon intensity that enables comparison between companies and countries, irrespective of size or geography.

Each holding's contribution to the carbon footprint of the portfolio is calculated on an ownership basis. The carbon footprint of the fund is the sum of these contributions normalised by revenue owned (revenue method) or by per million invested (AUM method). In addition, for comparison, we present the weighted average carbon intensity (WACI) method of analysis of holdings, which aggregates

the individual issuers' carbon footprint weighted by the proportion of portfolio holdings.

Trucost's assessment of the carbon footprint in East Sussex's equity funds includes:

- Measurements of the carbon efficiency of portfolios relative to benchmarks;
- Analysis of sector allocation effects and stock selection effects;
- Assessment of the transparency of carbon disclosure at portfolio and constituent level;
- Identification of key contributors to the carbon footprints of the funds;
- Highlighting of key (active) investees for engagement on carbon risk;
- Determination of the aggregate funds' exposures to the fossil fuel; and,
- Energy generation mix analysis of the aggregate portfolio.

A glossary of terms can be found in the Appendices. Values expressed in percentage terms have been constructed such that a positive number is good news for the fund's carbon risk exposure.

CARBON FOOTPRINT RESULTS

The LGIM Global portfolio is 7.47% more carbon intensive than its benchmark, the FTSE World Index, when compared using the revenue method.

CARBON FOOTPRINT – LGIM GLOBAL

Summary

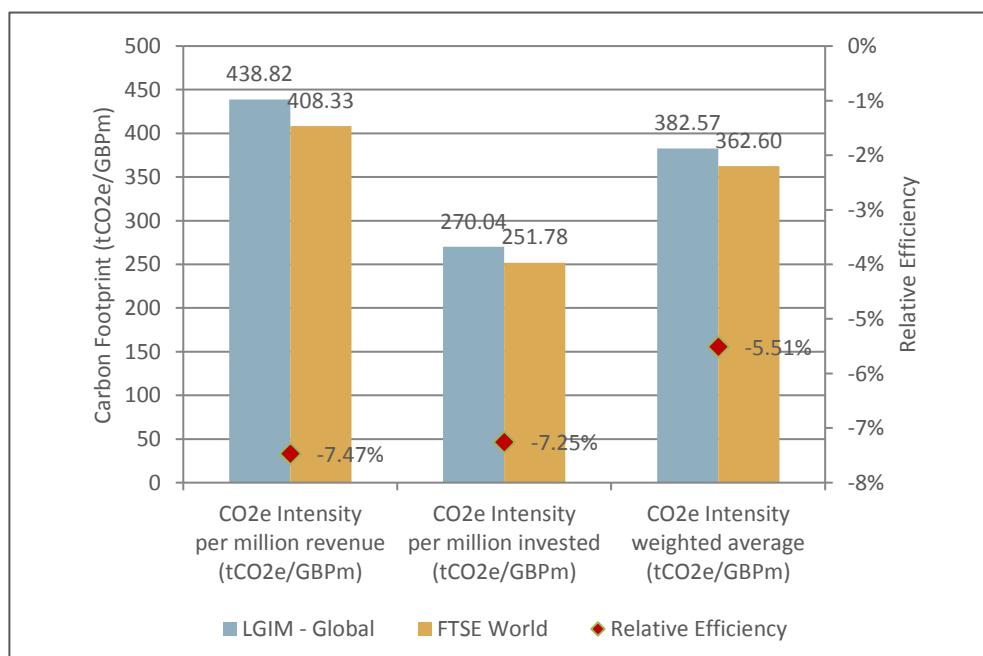
- The carbon footprint analysis of the LGIM Global portfolio was carried out for holdings data as at 30th September 2017.
- The FTSE World Index was used as the benchmark for this analysis.
- Our analysis covers companies of which holdings constitute 99.81% of the value of the portfolio. The equivalent coverage figure for the benchmark is 99.85%.

EXHIBIT 1: LGIM GLOBAL CARBON FOOTPRINT ANALYSIS

	CO2e Intensity per million revenue (tCO2e/GBPm)	CO2e Intensity per million invested (tCO2e/GBPm)	CO2e Intensity weighted average (tCO2e/GBPm)	Total Apportioned CO2e (tonnes)
LGIM - Global	438.82	270.04	382.57	153,654.23
FTSE World	408.33	251.78	362.60	143,263.23
Relative Efficiency	-7.47%	-7.25%	-5.51%	-7.25%

- The LGIM Global portfolio is 7.47% more carbon intensive than its benchmark when compared using the revenue method; 7.25% more carbon intensive when compared using the AUM method; and, 5.51% more carbon intensive when compared using the weighted average method.
- The following chart shows the comparison of the key metrics in graphical representation.

EXHIBIT 2: LGIM GLOBAL CARBON FOOTPRINT CHART



Sector Analysis

- The tables and charts below show how the sector and industry allocation as a proportion of the portfolio differs from that in the benchmark, and the effect of this allocation on the carbon footprint of the portfolio.
- The sectors with the highest levels of carbon intensity within this portfolio are Utilities (3,082.48 tCO₂e/GBPm) and Materials (1,695.29 tCO₂e/GBPm).

EXHIBIT 3: SECTOR WEIGHTS IN THE PORTFOLIO AND THE BENCHMARK

Sector	Sector Weighting		Carbon Intensity (tCO ₂ e/GBPm)	
	Portfolio	Benchmark	Portfolio	Benchmark
Automobiles & Components	2.66%	2.54%	122.94	120.58
Banks	10.63%	10.07%	15.78	16.19
Capital Goods	7.95%	8.10%	198.25	188.52
Commercial & Professional Services	0.87%	0.91%	238.68	223.91
Consumer Durables & Apparel	1.91%	1.97%	129.77	129.19
Consumer Services	1.66%	1.73%	263.79	264.50
Diversified Financials	4.38%	4.45%	161.44	164.34
Energy	6.29%	6.05%	975.70	921.58
Food & Staples Retailing	1.72%	1.77%	75.70	75.89
Food, Beverage & Tobacco	5.15%	5.32%	525.29	522.01
Health Care Equipment & Services	3.31%	3.46%	37.91	37.58
Household & Personal Products	2.01%	2.03%	237.44	233.13
Insurance	4.05%	4.04%	8.50	8.69
Materials	5.48%	5.49%	1,695.29	1564.13
Media	2.42%	2.53%	32.51	32.78
Pharmaceuticals, Biotechnology & Life Sciences	7.63%	7.90%	72.28	70.88
Real Estate	3.06%	2.94%	141.83	153.34
Retailing	3.40%	3.51%	80.48	79.70
Semiconductors & Semiconductor Equipment	2.93%	3.08%	219.66	211.33
Software & Services	9.08%	8.65%	40.28	40.07
Technology Hardware & Equipment	4.85%	5.03%	109.20	109.38
Telecommunication Services	3.15%	3.03%	78.47	77.07
Transportation	2.29%	2.30%	671.27	658.28
Utilities	3.12%	3.09%	3,082.48	2826.47
	100.00%	100.00%	438.82	408.33

EXHIBIT 4: SECTOR WEIGHTS CHART

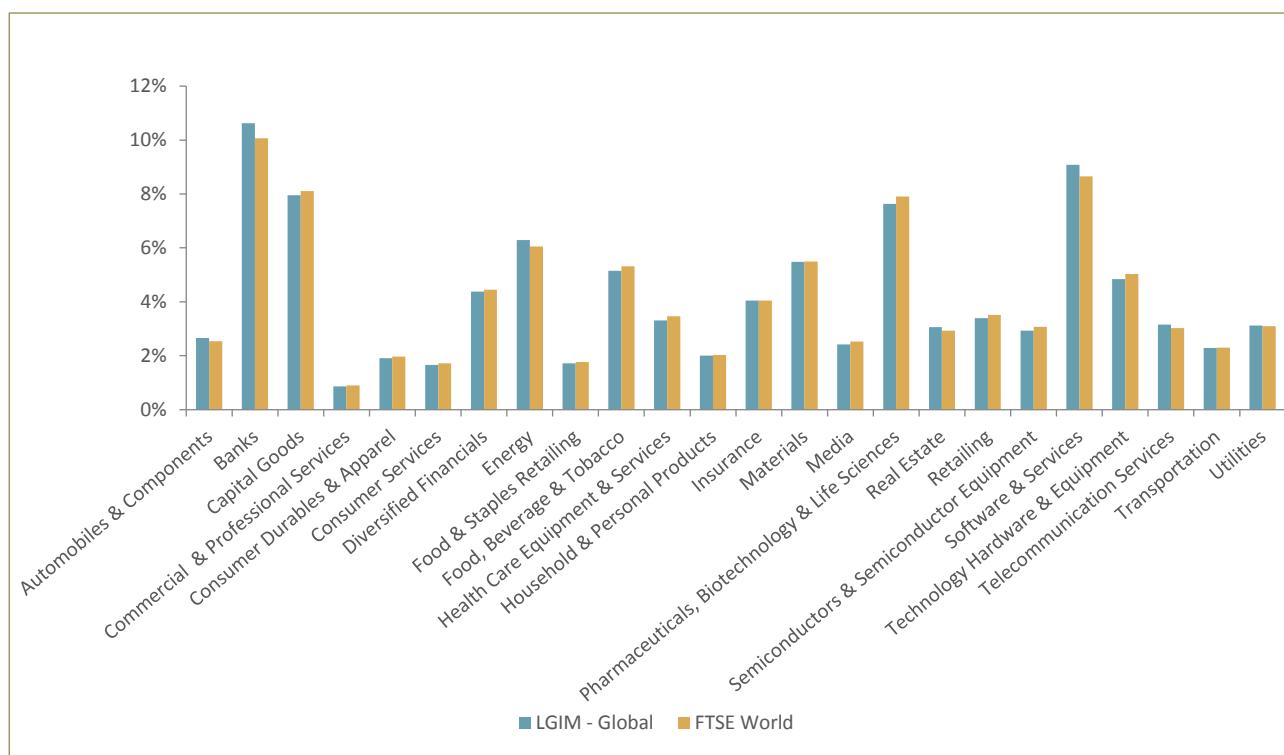
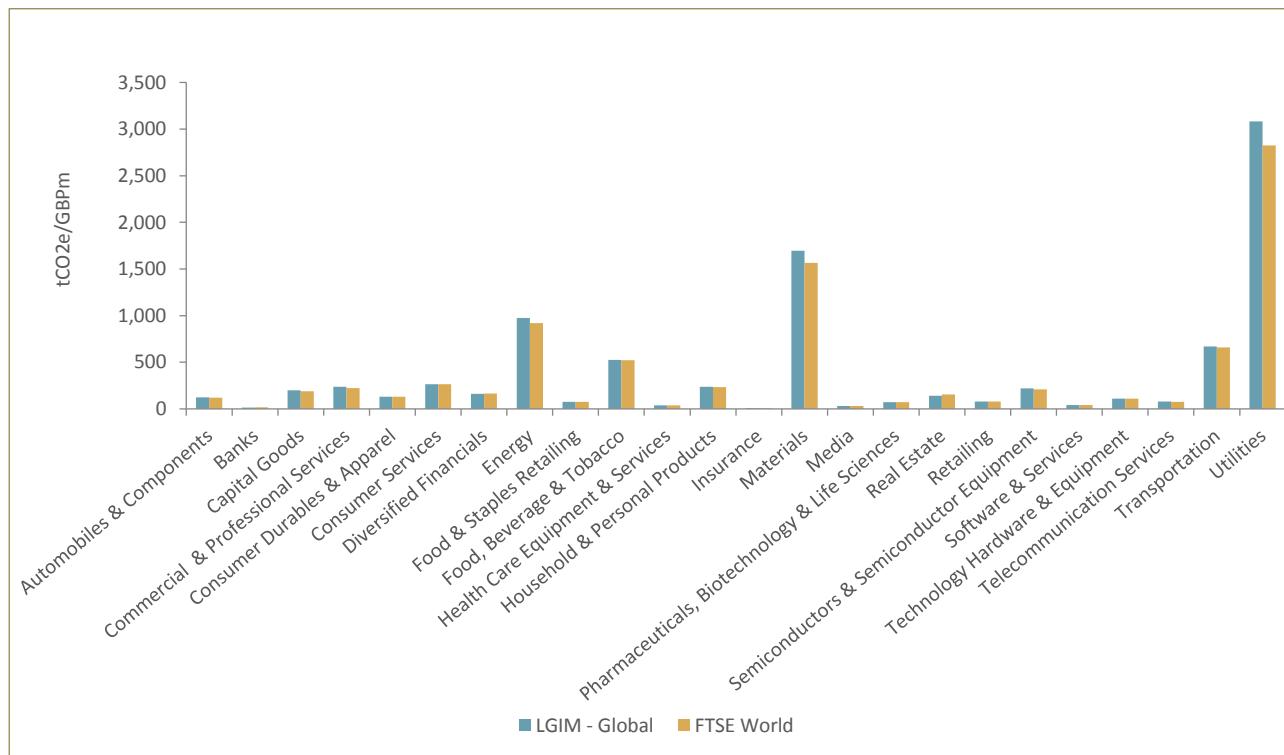


EXHIBIT 5: SECTOR CARBON INTENSITY CHART



Performance Attribution

- Sector allocation effects and stock selection effects are the principal reasons why the carbon intensity of a portfolio may differ from its benchmark. A portfolio that is overweight in carbon intensive sectors, or has holdings of the most carbon intensive stocks within any given sector, is likely to be more carbon intensive than its benchmark, and vice versa.
- The sectors that have the greatest effect on the LGIM Global's carbon intensity are Utilities, Materials and Energy, which together contribute negatively to the carbon intensity of the portfolio by -6.75%, relative to the benchmark.

EXHIBIT 6: PERFORMANCE ATTRIBUTION TABLE (REVENUE METHOD)

Sector	Footprint Attribution		
	Sector Allocation	Stock Selection	Total Effect
Automobiles & Components	-0.05%	-0.04%	-0.09%
Banks	0.25%	0.01%	0.26%
Capital Goods	-0.07%	-0.24%	-0.31%
Commercial & Professional Services	-0.02%	-0.03%	-0.05%
Consumer Durables & Apparel	-0.01%	0.00%	-0.02%
Consumer Services	-0.02%	0.00%	-0.02%
Diversified Financials	-0.05%	0.02%	-0.02%
Energy	-0.88%	-1.14%	-2.02%
Food & Staples Retailing	-0.15%	0.00%	-0.14%
Food, Beverage & Tobacco	0.03%	-0.03%	0.00%
Health Care Equipment & Services	-0.16%	0.00%	-0.16%
Household & Personal Products	-0.01%	-0.01%	-0.03%
Insurance	0.00%	0.00%	0.01%
Materials	0.03%	-2.06%	-2.03%
Media	-0.08%	0.00%	-0.08%
Pharmaceuticals, Biotechnology & Life Sciences	-0.08%	-0.01%	-0.09%
Real Estate	0.13%	0.04%	0.17%
Retailing	-0.07%	-0.01%	-0.07%
Semiconductors & Semiconductor Equipment	-0.02%	-0.02%	-0.05%
Software & Services	0.02%	0.00%	0.02%
Technology Hardware & Equipment	-0.07%	0.00%	-0.07%
Telecommunication Services	0.12%	-0.01%	0.11%
Transportation	0.01%	-0.08%	-0.06%
Utilities	0.05%	-2.75%	-2.70%
	-1.09%	-6.38%	-7.47%

Top Contributors

- The 10 companies that contribute most to the LGIM Global portfolio's carbon footprint are tabulated below. Note that a company may appear in this list because of the proportion owned, rather than because it is among the 10 most carbon intensive stocks held.
- These companies, belonging to the Utilities, Materials and Energy sectors, contribute negatively to the total carbon intensity of the portfolio by -11.70%, with maximum negative contribution of -1.43% by Exxon Mobil Corp.

EXHIBIT 7: TOP 10 CONTRIBUTORS TO CARBON FOOTPRINT (REVENUE METHOD)

Company Name	Sector	Holding (GBPm)	Carbon Apportioned (tonnes)	Carbon Apportioned (%)	Company CO2e intensity (tonnes/GBPm)	Carbon Footprint Contribution (%)	CO2e Intensity Rank in Benchmark Sector	Data Source (Scope 1)
Exxon Mobil Corp	Energy	4.56	3,549.13	2.31%	1,137.79	-1.43%	78/112	Full Disclosure
RWE AG	Utilities	0.15	2,341.69	1.52%	3,883.66	-1.35%	74/116	Full Disclosure
ArcelorMittal Inc	Materials	0.20	2,180.00	1.42%	4,587.14	-1.28%	222/241	Full Disclosure
American Electric Power	Utilities	0.45	2,053.37	1.34%	8,785.54	-1.27%	110/116	Full Disclosure
LafargeHolcim Ltd	Materials	0.29	1,997.22	1.30%	8,311.30	-1.23%	235/241	Full Disclosure
Southern Co	Utilities	0.64	1,863.20	1.21%	6,593.13	-1.13%	104/116	Full Disclosure
Duke Energy Corp	Utilities	0.77	1,841.54	1.20%	5,674.15	-1.11%	92/116	Full Disclosure
Korea Elec Power Corp	Utilities	0.11	1,721.87	1.12%	5,921.09	-1.04%	97/116	Partial Disclosure
Tokyo Electric Power Co. Holding Inc.	Utilities	0.08	1,736.72	1.13%	2,849.23	-0.96%	68/116	Full Disclosure
Nippon Steel & Sumitomo Metal Corp	Materials	0.23	1,541.74	1.00%	3,753.35	-0.89%	214/241	Partial Disclosure

CARBON FOOTPRINT – LGIM UK

The LGIM UK portfolio is 1% more carbon intensive than its benchmark, FTSE All Share, when compared using the revenue method.

Summary

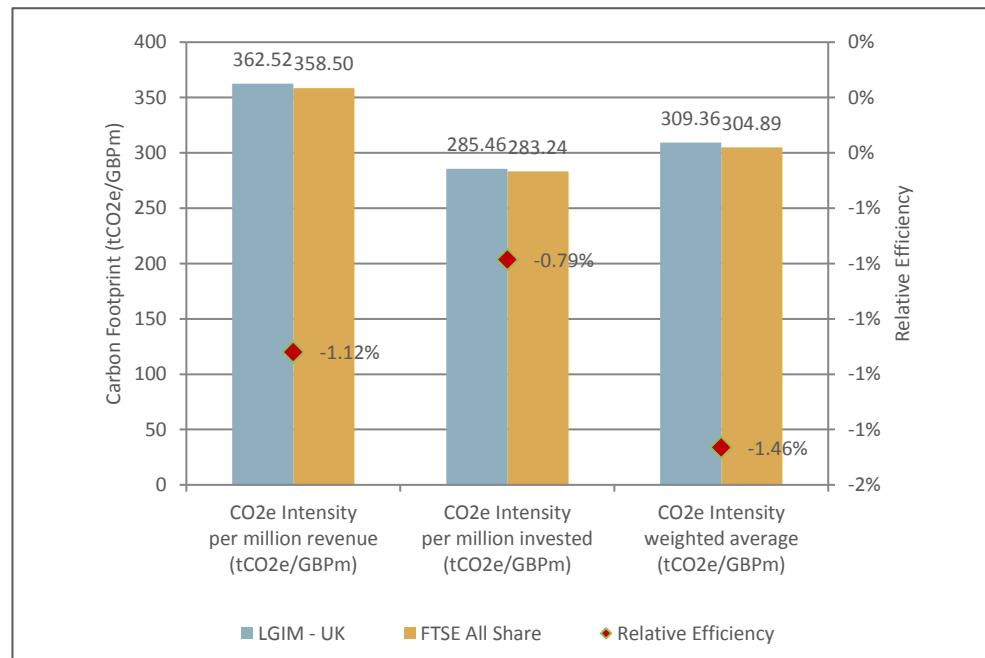
- The carbon footprint analysis of the LGIM - UK portfolio was carried out for holdings data as at 30th September 2017.
- The FTSE All Share Index was used as the benchmark for this analysis.
- Our analysis covers companies of which holdings constitute 95.82% of the value of the portfolio. The equivalent coverage figure for the benchmark is 95.52%.

EXHIBIT 8: LGIM UK CARBON FOOTPRINT ANALYSIS

	CO2e Intensity per million revenue (tCO2e/GBPm)	CO2e Intensity per million invested (tCO2e/GBPm)	CO2e Intensity weighted average (tCO2e/GBPm)	Total Apportioned CO2e (tonnes)
LGIM - UK	362.52	285.46	309.36	89,369.71
FTSE All Share	358.50	283.24	304.89	88,673.13
Relative Efficiency	-1.12%	-0.79%	-1.46%	-0.79%

- The LGIM UK portfolio is 1.12% more carbon intensive than its benchmark when compared using the revenue method; 0.79% more carbon intensive when compared using the AUM method; and, 1.49% more carbon intensive when compared using the weighted average method.
- The following chart shows the comparison of the key metrics in graphical representation.

EXHIBIT 9: LGIM UK CARBON FOOTPRINT CHART



Sector Analysis

- The tables and charts below show how the sector and industry allocation as a proportion of the portfolio differs from that in the benchmark, and the effect of this allocation on the carbon footprint of the portfolio.
- The sectors that have the highest levels of carbon intensity within this portfolio are Materials (892.10 tCO2e/GBPm), Transportation (779.28 tCO2e/GBPm), Utilities (770.01 tCO2e/GBPm) and Energy (743.95 tCO2e/GBPm).

EXHIBIT 10: SECTOR WEIGHTS IN THE PORTFOLIO AND THE BENCHMARK

Sector	Sector Weighting		Carbon Intensity (tCO2e/GBPm)	
	Portfolio	Benchmark	Portfolio	Benchmark
Automobiles & Components	0.26%	0.26%	266.98	266.98
Banks	11.81%	11.78%	19.75	19.74
Capital Goods	5.76%	5.80%	90.83	91.92
Commercial & Professional Services	2.53%	2.52%	73.46	72.17
Consumer Durables & Apparel	2.05%	2.06%	82.95	83.49
Consumer Services	3.74%	3.72%	269.92	270.29
Diversified Financials	2.63%	2.65%	16.74	16.70
Energy	12.86%	12.83%	743.95	743.30
Food & Staples Retailing	1.27%	1.27%	75.37	75.31
Food, Beverage & Tobacco	9.90%	9.42%	349.97	311.15
Health Care Equipment & Services	1.04%	1.05%	88.87	88.88
Household & Personal Products	4.16%	4.14%	159.04	159.02
Insurance	6.27%	6.26%	7.01	7.05
Materials	9.38%	9.36%	892.10	893.17
Media	3.04%	3.05%	29.43	30.90
Pharmaceuticals, Biotechnology & Life Sciences	7.89%	8.38%	70.25	69.77
Real Estate	2.51%	2.55%	74.13	74.04
Retailing	1.87%	1.87%	53.59	53.72
Semiconductors & Semiconductor Equipment	0.02%	0.02%	99.53	111.43
Software & Services	2.31%	2.34%	17.20	17.26
Technology Hardware & Equipment	0.62%	0.60%	90.61	90.98
Telecommunication Services	3.70%	3.69%	71.33	71.35
Transportation	1.18%	1.18%	779.28	775.64
Utilities	3.19%	3.18%	770.01	767.90
	100.00%	100.00%	362.52	358.50

EXHIBIT 11: SECTOR WEIGHTS CHART

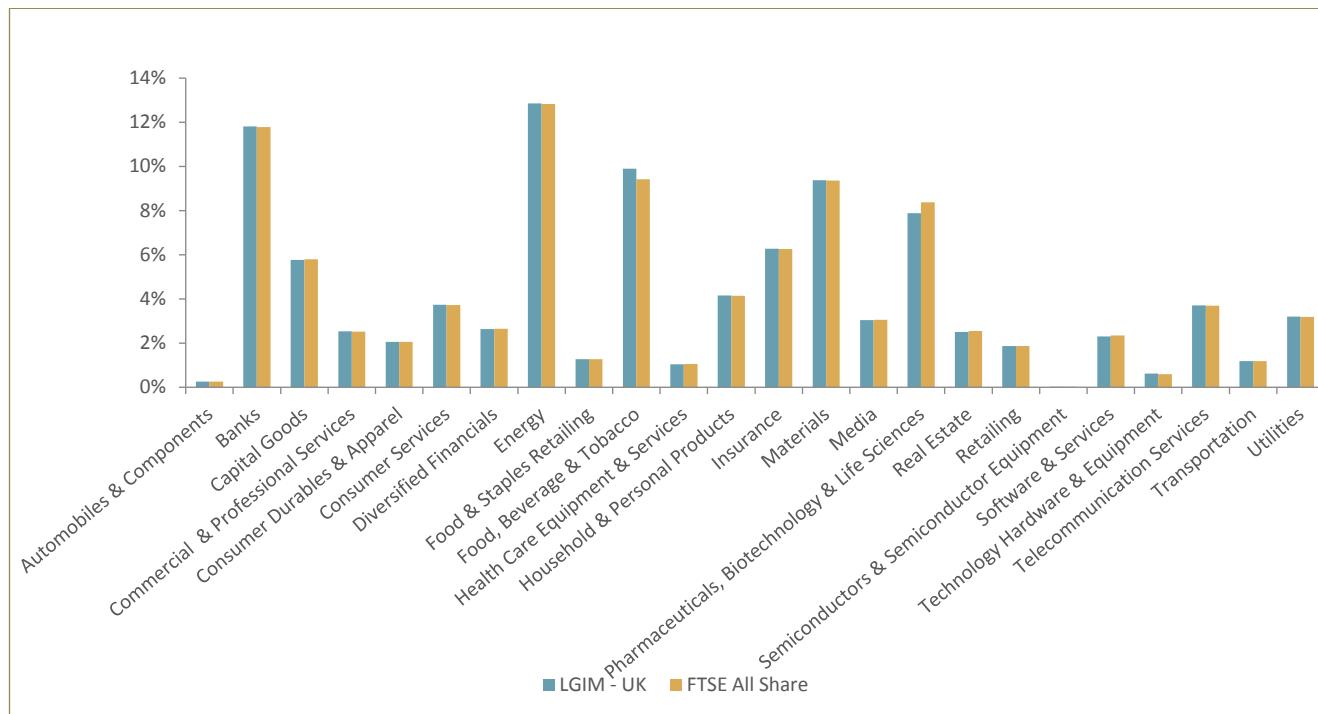
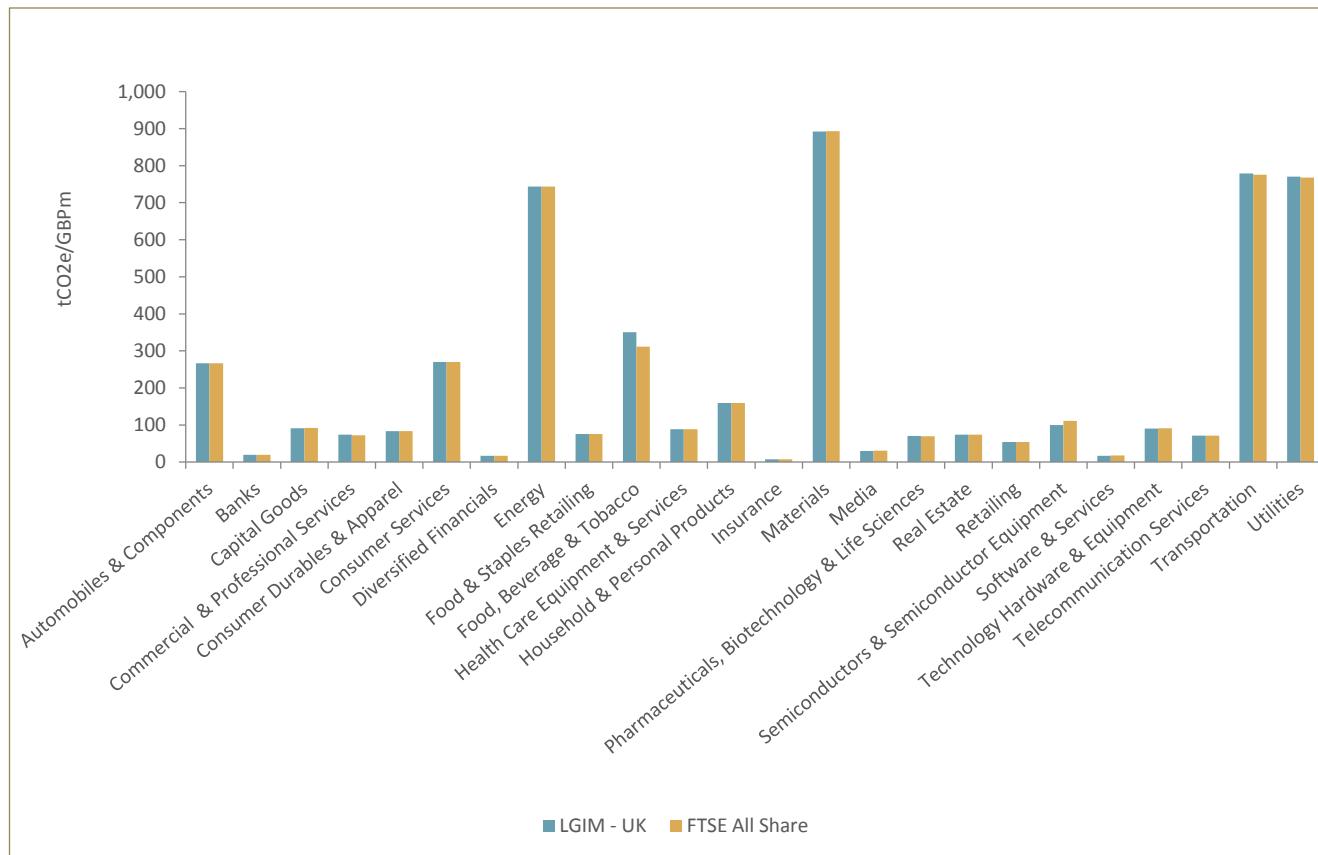


EXHIBIT 12: SECTOR CARBON INTENSITY CHART



Performance Attribution

- Sector allocation effects and stock selection effects are the principal reasons why the carbon intensity of a portfolio may differ from its benchmark. A portfolio that is overweight in carbon intensive sectors, or has holdings of the most carbon intensive stocks within any given sector, is likely to be more carbon intensive than its benchmark, and vice versa.
- The sectors that have the greatest effect on the LGIM UK's carbon intensity are Food, Beverage and Tobacco and Capital Goods, which together contribute negatively to the carbon intensity of the portfolio by -0.67%, relative to the benchmark.

EXHIBIT 13: PERFORMANCE ATTRIBUTION TABLE (REVENUE METHOD)

Sector	Footprint Attribution		
	Sector Allocation	Stock Selection	Total Effect
Automobiles & Components	0.00%	0.00%	0.00%
Banks	0.04%	0.00%	0.04%
Capital Goods	-0.25%	0.02%	-0.22%
Commercial & Professional Services	-0.15%	-0.01%	-0.16%
Consumer Durables & Apparel	0.00%	0.00%	0.00%
Consumer Services	0.01%	0.00%	0.01%
Diversified Financials	0.00%	0.00%	0.00%
Energy	-0.13%	-0.04%	-0.17%
Food & Staples Retailing	0.00%	0.00%	0.00%
Food, Beverage & Tobacco	0.05%	-0.50%	-0.45%
Health Care Equipment & Services	0.00%	0.00%	0.00%
Household & Personal Products	0.01%	0.00%	0.01%
Insurance	0.06%	0.00%	0.06%
Materials	-0.01%	0.03%	0.02%
Media	-0.04%	0.01%	-0.03%
Pharmaceuticals, Biotechnology & Life Sciences	-0.06%	0.00%	-0.06%
Real Estate	-0.05%	0.00%	-0.05%
Retailing	-0.03%	0.00%	-0.02%
Semiconductors & Semiconductor Equipment	0.00%	0.00%	0.00%
Software & Services	-0.01%	0.00%	-0.01%
Technology Hardware & Equipment	0.01%	0.00%	0.01%
Telecommunication Services	0.02%	0.00%	0.02%
Transportation	-0.01%	-0.03%	-0.04%
Utilities	-0.04%	-0.03%	-0.07%
	-0.59%	-0.53%	-1.12%

Top Contributors

- The 10 companies that contribute most to the LGIM UK portfolio's carbon footprint are tabulated below. Note that a company may appear in this list because of the proportion owned, rather than because it is among the 10 most carbon intensive stocks held.
- These companies, belonging to Energy, Materials, Utilities and Transportation sectors, contribute negatively by -39.19% to the total carbon intensity of the portfolio, with maximum negative contribution of -8.50% by BP.

EXHIBIT 14: TOP 10 CONTRIBUTORS TO CARBON FOOTPRINT (REVENUE METHOD)

Company Name	Sector	Holding (GBPm)	Carbon Apportioned (tonnes)	Carbon Apportioned (%)	Company CO2e intensity (tonnes/GBPm)	Carbon Footprint Contribution (%)	CO2e Intensity Rank in Benchmark Sector	Data Source (Scope 1)
BP	Energy	12.68	14,190.86	15.88%	714.23	-8.50%	10/18	Full Disclosure
Royal Dutch Shell PLC	Energy	11.90	9,685.27	10.84%	809.57	-6.29%	13/18	Full Disclosure
Royal Dutch Shell PLC	Energy	10.42	8,475.63	9.48%	809.57	-5.47%	13/18	Full Disclosure
CRH Plc	Materials	3.30	4,900.73	5.48%	1,451.29	-4.17%	32/38	Full Disclosure
International Consolidated Airlines Group SA	Transportation	1.37	3,288.44	3.68%	1,455.29	-2.79%	12/12	Full Disclosure
Drax Group	Utilities	0.18	2,575.01	2.88%	5,725.09	-2.70%	8/8	Full Disclosure
Rio Tinto Plc	Materials	5.69	3,133.21	3.51%	1,280.80	-2.54%	29/38	Full Disclosure
Vedanta Resources Inc	Materials	0.10	2,267.83	2.54%	7,195.34	-2.41%	38/38	Full Disclosure
Evraz Group GDR	Materials	0.21	2,069.48	2.32%	7,021.33	-2.20%	37/38	Full Disclosure
Mondi Ltd	Materials	1.02	2,106.90	2.36%	3,370.66	-2.11%	36/38	Full Disclosure

CARBON FOOTPRINT – LONGVIEW

The Longview portfolio is 82.59% less carbon intensive than its benchmark, MSCI ACWI, when compared using the revenue method.

Summary

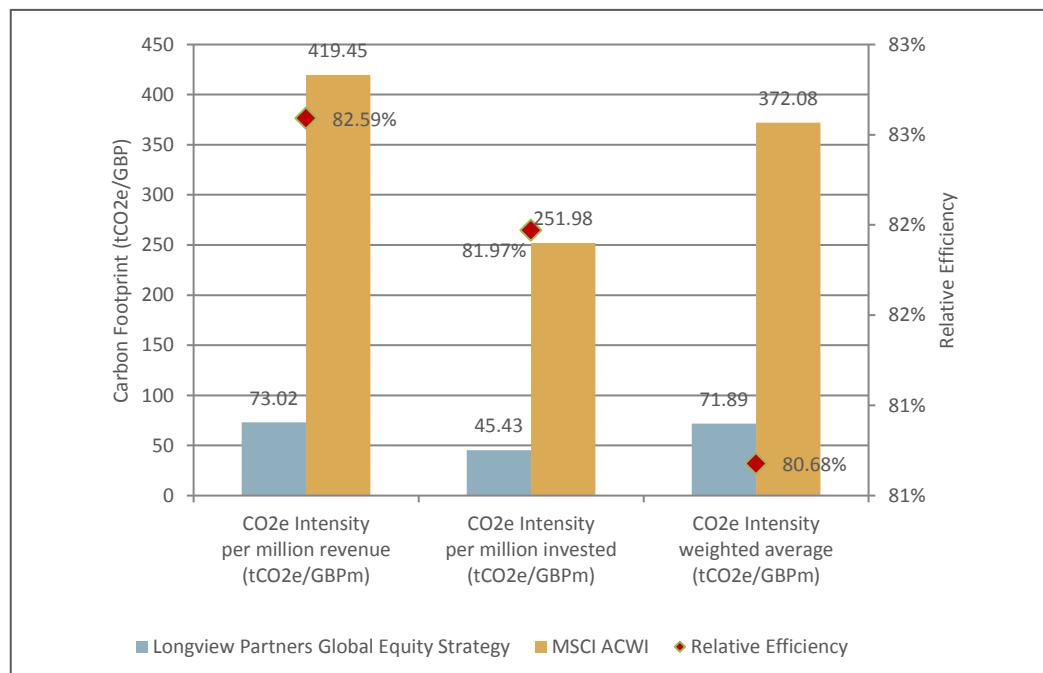
- The carbon footprint analysis of the Longview portfolio was carried out for holdings data as at 30th September 2017.
- The MSCI ACWI was used as the benchmark for this analysis.
- Our analysis covers companies of which holdings constitute 100% of the value of the portfolio. The equivalent coverage figure for the benchmark is 99.92%.

EXHIBIT 15: LONGVIEW CARBON FOOTPRINT ANALYSIS

	CO2e Intensity per million revenue (tCO2e/GBPm)	CO2e Intensity per million invested (tCO2e/GBPm)	CO2e Intensity weighted average (tCO2e/GBPm)	Total Apportioned CO2e (tonnes)
Longview Partners Global Equity Strategy	73.02	45.43	71.89	8,028.73
MSCI ACWI	419.45	251.98	372.08	44,531.97
Relative Efficiency	82.59%	81.97%	80.68%	81.97%

- The Longview portfolio is 82.59% less carbon intensive than its benchmark when compared using the revenue method; 81.97% less carbon intensive when compared using the AUM method; and, 80.68% less carbon intensive when compared using the weighted average method.
- The following chart shows the comparison of the key metrics in graphical representation.

EXHIBIT 16: LONGVIEW CARBON FOOTPRINT CHART



Sector Analysis

- The tables and charts below show how the sector and industry allocation as a proportion of the portfolio differs from that in the benchmark, and the effect of this allocation on the carbon footprint of the portfolio.
- The two sectors that have the highest levels of carbon intensity within this portfolio are Automobiles and Components (189.37 tCO2e/GBPm) and Capital Goods (132.58 tCO2e/GBPm).

EXHIBIT 17: SECTOR WEIGHTS IN THE PORTFOLIO AND THE BENCHMARK

Sector	Sector Weighting		Carbon Intensity (tCO2e/GBPm)	
	Portfolio	Benchmark	Portfolio	Benchmark
Automobiles & Components	7.99%	2.58%	189.37	117.50
Banks	7.31%	10.57%	11.99	15.86
Capital Goods	11.30%	7.94%	132.58	192.66
Commercial & Professional Services	1.31%	0.79%	28.07	259.60
Consumer Durables & Apparel		1.90%		131.31
Consumer Services	8.54%	1.68%	69.60	268.65
Diversified Financials	7.20%	4.09%	18.71	132.30
Energy		6.37%		976.16
Food & Staples Retailing		1.69%		76.83
Food, Beverage & Tobacco		5.10%		515.18
Health Care Equipment & Services	11.83%	3.34%	61.46	37.49
Household & Personal Products		2.02%		218.41
Insurance	9.27%	4.08%	23.14	8.01
Materials		5.31%		1640.41
Media	5.57%	2.39%	27.68	32.25
Pharmaceuticals, Biotechnology & Life Sciences	14.55%	7.61%	69.20	72.26
Real Estate		3.07%		135.09
Retailing	3.77%	3.47%	99.17	86.47
Semiconductors & Semiconductor Equipment		2.95%		219.57
Software & Services	10.42%	9.77%	32.41	39.89
Technology Hardware & Equipment	0.93%	4.81%	50.07	107.09
Telecommunication Services		3.21%		78.91
Transportation		2.18%		633.02
Utilities		3.08%		3001.62
	100.00%	100.00%	73.02	419.45

EXHIBIT 18: SECTOR WEIGHTS CHART

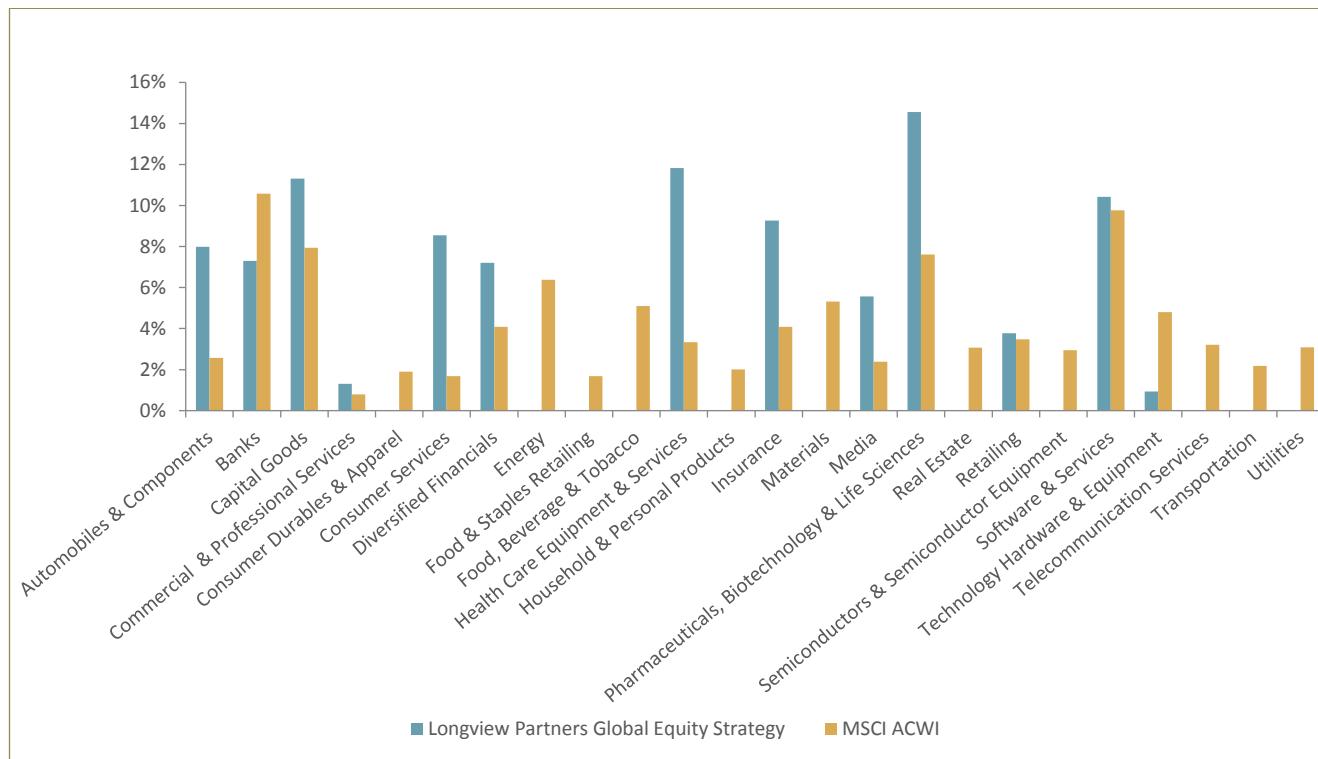
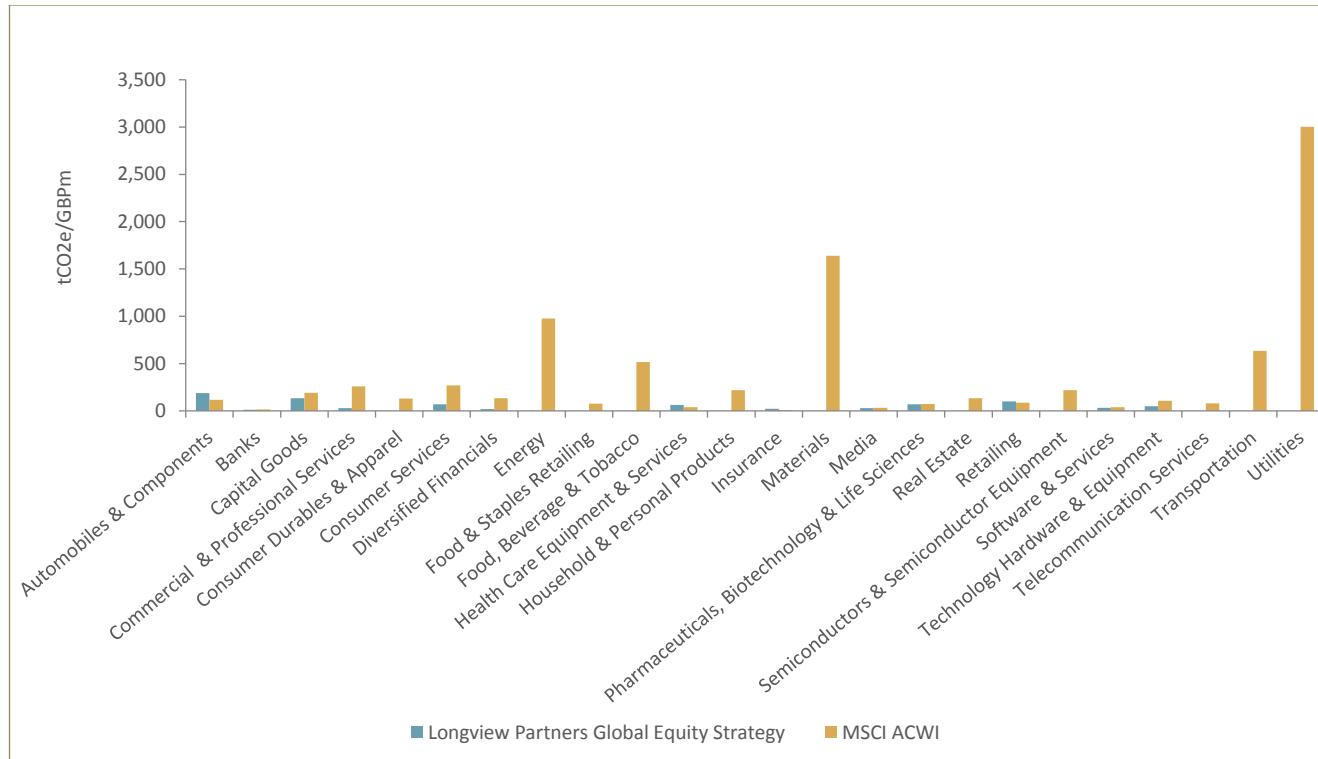


EXHIBIT 19: SECTOR CARBON INTENSITY CHART



Performance Attribution

- Sector allocation effects and stock selection effects are the principal reasons why the carbon intensity of a portfolio may differ from its benchmark. A portfolio that is overweight in carbon intensive sectors, or has holdings of the most carbon intensive stocks within any given sector, is likely to be more carbon intensive than its benchmark, and vice versa.
- The two sectors with the greatest total effect on the portfolio are Utilities and Materials, which together reduce the carbon intensity of the portfolio relative to the benchmark by 43.98%.

EXHIBIT 20: PERFORMANCE ATTRIBUTION TABLE (REVENUE METHOD)

Sector	Footprint Attribution		
	Sector Allocation	Stock Selection	Total Effect
Automobiles & Components	2.92%	-1.87%	1.05%
Banks	2.08%	0.08%	2.16%
Capital Goods	0.48%	1.58%	2.06%
Commercial & Professional Services	-0.12%	0.30%	0.18%
Consumer Durables & Apparel	-1.48%		-1.48%
Consumer Services	3.38%	4.97%	8.35%
Diversified Financials	0.25%	0.93%	1.18%
Energy	11.60%		11.60%
Food & Staples Retailing	-4.72%		-4.72%
Food, Beverage & Tobacco	0.95%		0.95%
Health Care Equipment & Services	11.25%	-1.02%	10.23%
Household & Personal Products	-0.53%		-0.53%
Insurance	-1.57%	-0.23%	-1.80%
Materials	18.19%		18.19%
Media	7.16%	0.11%	7.27%
Pharmaceuticals, Biotechnology & Life Sciences	2.89%	0.05%	2.93%
Real Estate	-0.81%		-0.81%
Retailing	1.17%	-0.15%	1.02%
Semiconductors & Semiconductor Equipment	-0.54%		-0.54%
Software & Services	0.87%	0.07%	0.94%
Technology Hardware & Equipment	-0.19%	0.70%	0.52%
Telecommunication Services	-3.08%		-3.08%
Transportation	1.15%		1.15%
Utilities	25.79%		25.79%
	77.07%	5.52%	82.59%

Top Contributors

- The 10 companies that contribute most to the Longview portfolio's carbon footprint are tabulated below. Note that a company may appear in this list because of the proportion owned, rather than because it is among the 10 most carbon intensive stocks held.
- These companies contribute negatively by -37.14% to the total carbon intensity of the portfolio, with maximum negative contribution of -16.13% by Continental AG.

EXHIBIT 21: TOP 10 CONTRIBUTORS TO CARBON FOOTPRINT (REVENUE METHOD)

Company Name	Sector	Holding (GBPm)	Carbon Apportioned (tonnes)	Carbon Apportioned (%)	Company CO2e intensity (tonnes/GBPm)	Carbon Footprint Contribution (%)*	CO2e Intensity Rank in Benchmark Sector**	Data Source (Scope 1)
Continental AG	Automobiles & Components	7.37	1,728.12	21.52%	244.51	-16.13%	55/79	Full Disclosure
Parker-Hannifin Corp	Capital Goods	6.80	926.24	11.54%	278.61	-8.78%	188/237	Full Disclosure
Emerson Electric Co	Capital Goods	6.04	445.88	5.55%	197.84	-3.58%	154/237	Partial Disclosure
Aptiv plc	Automobiles & Components	7.18	547.38	6.82%	110.61	-2.43%	39/79	Full Disclosure
HCA Healthcare Inc	Health Care Equipment & Services	6.32	885.22	11.03%	89.43	-2.22%	57/77	Modelled
Dollar General Corp	Retailing	6.34	545.39	6.79%	99.17	-1.88%	60/84	Modelled
Whitbread	Consumer Services	7.26	380.03	4.73%	116.32	-1.82%	25/56	Full Disclosure
Zimmer Biomet Holdings Inc	Health Care Equipment & Services	6.35	173.77	2.16%	77.71	-0.13%	46/77	Full Disclosure
Pfizer Inc	Pharmaceuticals, Biotechnology & Life Sciences	6.32	132.85	1.65%	77.76	-0.10%	65/93	Full Disclosure
IQVIA Holdings Inc	Pharmaceuticals, Biotechnology & Life Sciences	6.30	136.01	1.69%	75.79	-0.06%	59/93	Partial Disclosure

CARBON FOOTPRINT – SSGA EQUITIES

The SSGA portfolio is 4.08% less carbon intensive than its benchmark, FTSE RAFI-All World 3000, when compared using the revenue method.

Summary

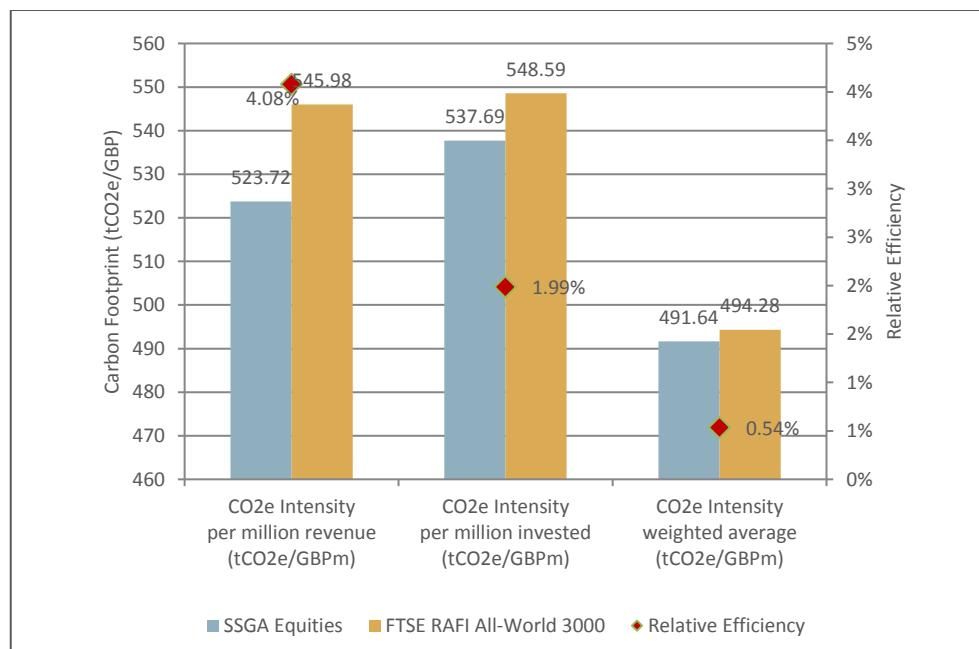
- The carbon footprint analysis of the SSGA portfolio was carried out for holdings data as at 30th September 2017.
- The FTSE RAFI-All World 3000 was the benchmark for this analysis.
- Our analysis covers companies of which holdings constitute 99.74% of the value of the portfolio. The equivalent coverage figure for the benchmark is 99.81%.

EXHIBIT 22: SSGA CARBON FOOTPRINT ANALYSIS

	CO2e Intensity per million revenue (tCO2e/GBPm)	CO2e Intensity per million invested (tCO2e/GBPm)	CO2e Intensity weighted average (tCO2e/GBPm)	Total Apportioned CO2e (tonnes)
SSGA Equities	523.72	537.69	491.64	352,207.12
FTSE RAFI All-World 3000	545.98	548.59	494.28	359,347.55
Relative Efficiency	4.08%	1.99%	0.54%	1.99%

- The SSGA portfolio is 4.08% less carbon intensive than its benchmark when compared using the revenue method; 1.99% less carbon intensive when compared using the AUM method; and, 0.54% less carbon intensive when compared using the weighted average method.
- The following chart shows the comparison of the key metrics in graphical representation.

EXHIBIT 23: SSGA EQUITIES CARBON FOOTPRINT CHART



Sector Analysis

- The tables and charts below show how the sector and industry allocation as a proportion of the portfolio differs from that in the benchmark, and the effect of this allocation on the carbon footprint of the portfolio.
- The two sectors that have the highest levels of carbon intensity within this portfolio are Utilities (2,882.08 tCO2e/GBPm) and Materials (1,722.72 tCO2e/GBPm).

EXHIBIT 24: SECTOR WEIGHTS IN THE PORTFOLIO AND THE BENCHMARK

Sector	Sector Weighting		Carbon Intensity (tCO2e/GBPm)	
	Portfolio	Benchmark	Portfolio	Benchmark
Automobiles & Components	4.10%	4.10%	110.93	112.86
Banks	14.43%	13.96%	15.49	15.13
Capital Goods	8.43%	8.38%	192.73	217.60
Commercial & Professional Services	0.73%	0.79%	235.97	191.75
Consumer Durables & Apparel	1.63%	1.72%	129.68	125.35
Consumer Services	1.15%	1.20%	284.65	271.14
Diversified Financials	4.02%	3.97%	134.54	137.82
Energy	11.09%	10.58%	961.55	1004.07
Food & Staples Retailing	2.39%	2.43%	82.67	82.80
Food, Beverage & Tobacco	3.83%	3.91%	650.02	657.21
Health Care Equipment & Services	2.38%	2.46%	44.57	43.22
Household & Personal Products	1.26%	1.31%	220.88	225.63
Insurance	6.03%	6.00%	7.35	7.34
Materials	6.99%	6.56%	1,722.72	1770.22
Media	1.73%	1.75%	34.73	35.52
Pharmaceuticals, Biotechnology & Life Sciences	4.62%	4.84%	73.76	75.99
Real Estate	2.73%	2.87%	130.56	133.28
Retailing	2.09%	2.12%	85.69	84.73
Semiconductors & Semiconductor Equipment	1.62%	1.64%	251.54	243.82
Software & Services	3.10%	3.27%	42.51	42.98
Technology Hardware & Equipment	4.15%	4.18%	113.53	119.39
Telecommunication Services	4.43%	4.46%	76.97	77.95
Transportation	2.28%	2.34%	804.88	813.74
Utilities	4.81%	5.16%	2,882.08	2825.81
	100.00%	100.00%	523.72	545.98

EXHIBIT 25: SECTOR WEIGHTS CHART

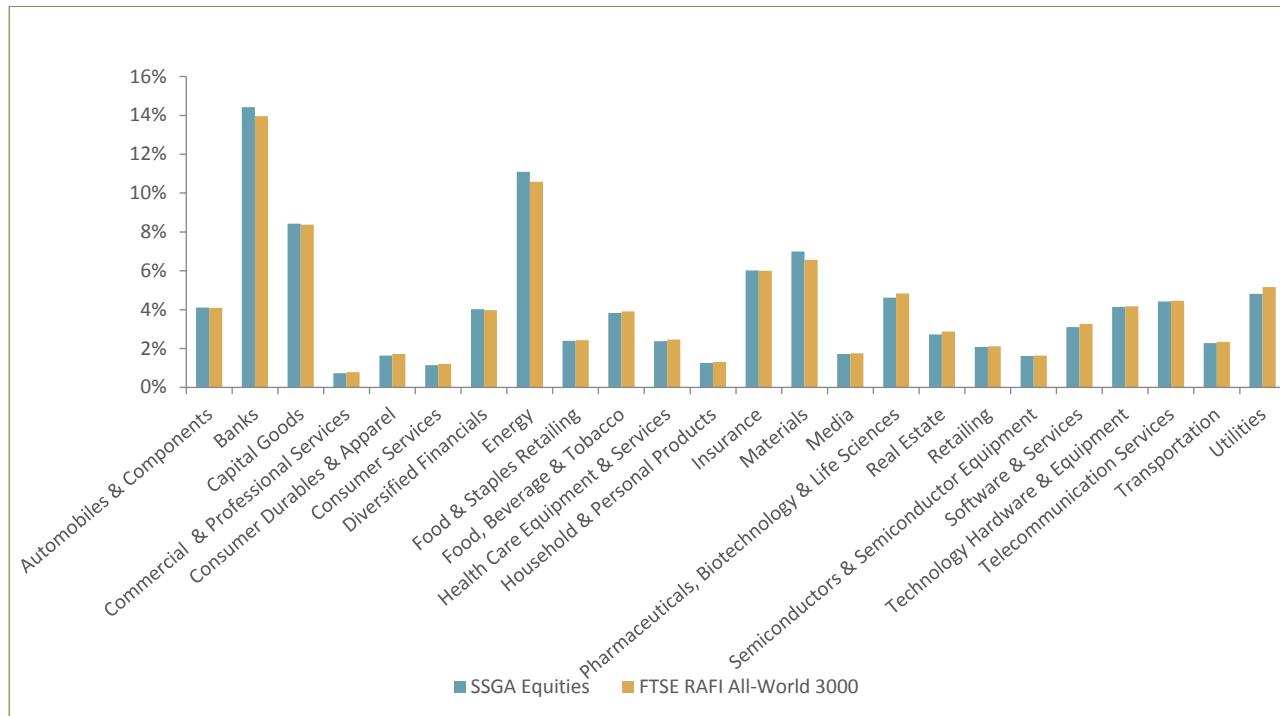
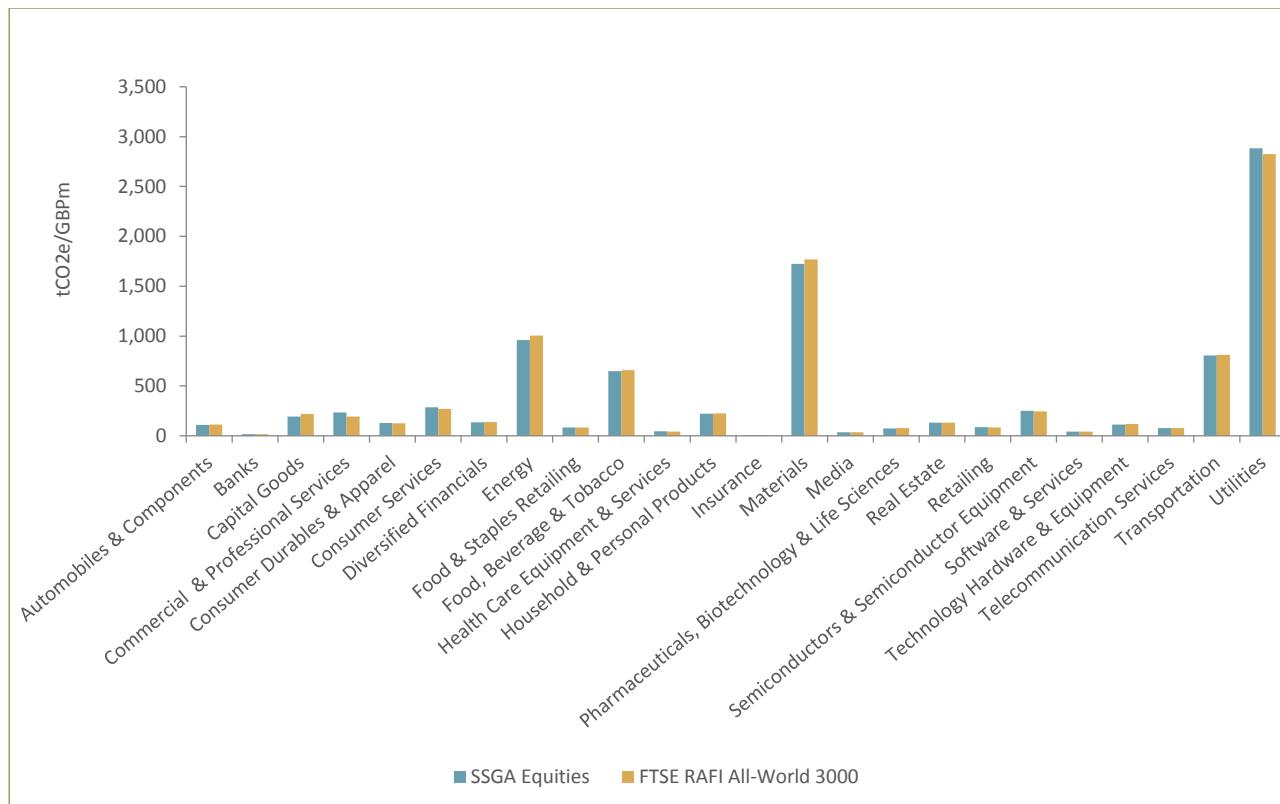


EXHIBIT 26: SECTOR CARBON INTENSITY CHART



Performance Attribution

- Sector allocation effects and stock selection effects are the principal reasons why the carbon intensity of a portfolio may differ from its benchmark. A portfolio that is overweight in carbon intensive sectors, or has holdings of the most carbon intensive stocks within any given sector, is likely to be more carbon intensive than its benchmark, and vice versa.
- The two sectors with the greatest total effect on the portfolio are Utilities and Capital Goods, which together reduce the carbon intensity of the portfolio relative to the benchmark by 3.67%.

EXHIBIT 27: PERFORMANCE ATTRIBUTION TABLE (REVENUE METHOD)

Sector	Footprint Attribution		
	Sector Allocation	Stock Selection	Total Effect
Automobiles & Components	-0.05%	0.03%	-0.02%
Banks	0.13%	0.00%	0.13%
Capital Goods	0.75%	0.53%	1.28%
Commercial & Professional Services	-0.08%	-0.07%	-0.15%
Consumer Durables & Apparel	-0.10%	-0.01%	-0.11%
Consumer Services	-0.02%	-0.02%	-0.03%
Diversified Financials	0.02%	0.01%	0.03%
Energy	-0.01%	0.91%	0.90%
Food & Staples Retailing	0.07%	0.00%	0.08%
Food, Beverage & Tobacco	0.01%	0.04%	0.05%
Health Care Equipment & Services	-0.05%	-0.01%	-0.06%
Household & Personal Products	0.00%	0.00%	0.00%
Insurance	-0.14%	0.00%	-0.14%
Materials	-0.80%	0.61%	-0.19%
Media	-0.02%	0.00%	-0.02%
Pharmaceuticals, Biotechnology & Life Sciences	-0.07%	0.01%	-0.07%
Real Estate	-0.07%	0.00%	-0.07%
Retailing	-0.13%	-0.01%	-0.14%
Semiconductors & Semiconductor Equipment	-0.01%	-0.01%	-0.01%
Software & Services	-0.06%	0.00%	-0.06%
Technology Hardware & Equipment	0.08%	0.06%	0.13%
Telecommunication Services	0.00%	0.01%	0.00%
Transportation	0.10%	0.04%	0.14%
Utilities	3.05%	-0.66%	2.39%
	2.62%	1.46%	4.08%

Top Contributors

- The 10 companies that contribute most to the Longview portfolio's carbon footprint are tabulated below. Note that a company may appear in this list because of the proportion owned, rather than because it is among the 10 most carbon intensive stocks held.
- These companies, made up of Utilities, Materials and Energy sector companies, contribute negatively by -17.42% to the total carbon intensity of the portfolio, with maximum negative contribution of -3.77% by RWE AG.

EXHIBIT 28: TOP 10 CONTRIBUTORS TO CARBON FOOTPRINT (REVENUE METHOD)

Company Name	Sector	Holding (GBPm)	Carbon Apportioned (tonnes)	Carbon Apportioned (%)	Company CO2e intensity (tonnes/GBPm)	Carbon Footprint Contribution (%)*	CO2e Intensity Rank in Benchmark Sector**	Data Source (Scope 1)
RWE AG	Utilities	0.98	15,271.55	4.34%	3,883.66	-3.77%	105/162	Full Disclosure
Tokyo Electric Power Co. Holding Inc.	Utilities	0.55	11,368.42	3.23%	2,849.23	-2.65%	93/162	Full Disclosure
ArcelorMittal Inc	Materials	0.74	7,959.19	2.26%	4,587.14	-2.01%	264/290	Full Disclosure
Gazprom PJSC	Energy	1.19	8,185.62	2.32%	3,202.14	-1.95%	177/187	Full Disclosure
Korea Elec Power Corp	Utilities	0.43	6,615.66	1.88%	5,921.09	-1.72%	131/162	Partial Disclosure
Engie	Utilities	1.48	6,512.92	1.85%	2,268.98	-1.43%	88/162	Full Disclosure
Dynegy Inc	Utilities	0.05	3,680.50	1.04%	19,008.27	-1.02%	156/162	Full Disclosure
Enel SpA	Utilities	1.87	4,802.60	1.36%	1,913.54	-0.99%	82/162	Full Disclosure
Nippon Steel & Sumitomo Metal Corp	Materials	0.59	3,890.95	1.10%	3,753.35	-0.95%	254/290	Partial Disclosure
China National Building Material Co. Ltd. - H Shares	Materials	0.12	3,569.52	1.01%	6,519.75	-0.93%	276/290	Modelled

CARBON FOOTPRINT – NEWTON

The Newton portfolio has a carbon intensity of 377.68 tCO₂e per million GBP, when analysed using the revenue method.

Summary

- The carbon footprint analysis of the Newton portfolio was carried out for holdings data as at 30th September 2017.
- No benchmark was used for this analysis (as the portfolio was one of the two absolute return funds analysed).
- Our analysis covers companies of which holdings constitute 90.60% of the value of the portfolio.

EXHIBIT 29: NEWTON CARBON FOOTPRINT ANALYSIS

	CO ₂ e Intensity per million revenue (tCO ₂ e/GBPm)	CO ₂ e Intensity per million invested (tCO ₂ e/GBPm)	CO ₂ e Intensity weighted average (tCO ₂ e/GBPm)	Total Apportioned CO ₂ e (tonnes)
Newton Equities	377.68	191.88	402.20	31,418.77

- The Newton portfolio has a carbon intensity of 377.68 tCO₂e per million GBP, when analysed using the revenue method.

Top Contributors

- The 10 companies that contribute most to the Newton portfolio's carbon footprint are tabulated below. Note that a company may appear in this list because of the proportion owned, rather than because it is among the 10 most carbon intensive stocks held.
- These companies contribute negatively by -48.14% to the total carbon intensity of the portfolio, with maximum negative contribution of -17.76% by CMS Energy Corp.

EXHIBIT 30: TOP 10 CONTRIBUTORS TO CARBON FOOTPRINT (REVENUE METHOD)

Company Name	Sector	Holding (GBPm)	Carbon Apportioned (tonnes)	Carbon Apportioned (%)	Company CO2e intensity (tonnes/GBPm)	Carbon Footprint Contribution (%)*)	CO2e Intensity Rank in Benchmark Sector**	Data Source (Scope 1)
CMS Energy Corp	Utilities	4.15	6,266.57	19.95%	2,837.75	-17.76%	5/5	Full Disclosure
Albemarle Corp	Materials	3.65	3,431.06	10.92%	4,865.99	-10.16%	18/18	Full Disclosure
CRH Plc	Materials	1.85	2,740.29	8.72%	1,451.29	-6.60%	17/18	Full Disclosure
Royal Dutch Shell PLC	Energy	2.97	2,414.16	7.68%	809.57	-4.25%	3/3	Full Disclosure
Total S.A.	Energy	3.00	2,030.26	6.46%	559.53	-2.20%	2/3	Full Disclosure
Associated British Foods	Food, Beverage & Tobacco	2.41	1,171.94	3.73%	846.26	-2.10%	7/7	Full Disclosure
Orsted	Utilities	3.15	1,095.98	3.49%	904.14	-2.06%	4/5	Full Disclosure
Eversource Energy	Utilities	5.10	1,426.85	4.54%	646.24	-1.94%	3/5	Full Disclosure
Gold Fields Ltd	Materials	0.47	352.45	1.12%	904.90	-0.66%	14/18	Full Disclosure
Newcrest Mining Ltd	Materials	0.85	215.08	0.68%	962.66	-0.42%	15/18	Full Disclosure

CARBON FOOTPRINT – RUFFER

The Ruffer portfolio has a carbon intensity of 196.91 tCO₂e per million GBP, when analysed using the revenue method.

Summary

- The carbon footprint analysis of the Ruffer portfolio was carried out for holdings data as at 30th September 2017.
- No benchmark was used for this analysis (as the portfolio was one of the two absolute return funds analysed).
- Our analysis covers companies of which holdings constitute 72.29% of the value of the portfolio.

EXHIBIT 31: RUFFER CARBON FOOTPRINT ANALYSIS

	CO ₂ e Intensity per million revenue (tCO ₂ e/GBPm)	CO ₂ e Intensity per million invested (tCO ₂ e/GBPm)	CO ₂ e Intensity weighted average (tCO ₂ e/GBPm)	Total Apportioned CO ₂ e (tonnes)
Ruffer Equities	196.91	247.76	255.34	24,156.15

- The Ruffer portfolio has a carbon intensity of 196.91 tCO₂e per million GBP, when analysed using the revenue method.

Top Contributors

- The 10 companies that contribute most to the Ruffer portfolio's carbon footprint are tabulated below. Note that a company may appear in this list because of the proportion owned, rather than because it is among the 10 most carbon intensive stocks held.
- These companies contribute negatively by -61.65% to the total carbon intensity of the portfolio, with maximum negative contribution of -32.64% by HeidelbergCement AG.

EXHIBIT 32: TOP 10 CONTRIBUTORS TO CARBON FOOTPRINT (REVENUE METHOD)

Company Name	Sector	Holding (GBPm)	Carbon Apportioned (tonnes)	Carbon Apportioned (%)	Company CO2e intensity (tonnes/GBPm)	Carbon Footprint Contribution (%)*	CO2e Intensity Rank in Benchmark Sector**	Data Source (Scope 1)
HeidelbergCement AG	Materials	1.58	8,070.76	33.41%	5,725.59	-32.64%	3/3	Full Disclosure
Leucadia National Corp (NY)	Diversified Financials	2.78	2,532.00	10.48%	756.79	-7.97%	6/6	Modelled
Imperial Oil Ltd	Energy	2.12	1,886.48	7.81%	1,167.40	-6.58%	4/4	Full Disclosure
Exxon Mobil Corp	Energy	1.94	1,509.29	6.25%	1,137.79	-5.22%	3/4	Full Disclosure
BP	Energy	0.95	1,068.60	4.42%	714.52	-3.24%	2/4	Full Disclosure
Phillips 66	Energy	0.94	1,111.36	4.60%	606.25	-3.15%	1/4	Partial Disclosure
Newcrest Mining Ltd	Materials	2.43	612.62	2.54%	962.66	-2.03%	2/3	Full Disclosure
Groupe Bruxelles Lambert	Diversified Financials	2.31	496.98	2.06%	297.36	-0.70%	5/6	Modelled
TP ICAP Plc	Diversified Financials	0.46	2.32	0.01%	15.13	0.12%	2/6	Full Disclosure

CARBON FOOTPRINT – AGGREGATE PORTFOLIO

Companies for Engagement

- Trucost has identified 10 companies of the aggregated portfolio that do not fully disclose up-to-date data, while contributing negatively to the aggregated portfolio's carbon footprint.
- These companies are ranked according to the size of their impact on the footprint as estimated, using Trucost's proprietary environmental profiling model.
- Transparency is key to monitor company's performance and strategy and commitments regarding the environment. The companies in the aggregate portfolio where engagement may be beneficial are listed in the table below.

EXHIBIT 33: TOP 10 CONTRIBUTORS FOR ENGAGEMENT

Company Name	Bond Name	Sector	Holding (mGBP)	Carbon Apportioned (tonnes)	Carbon Apportioned (%)	Company CO2e intensity (tonnes/mGBP)	Carbon Footprint Contribution (%)	CO2e Intensity Rank in Benchmark Sector	Data Source (Scope 1)
Korea Elec Power Corp		Utilities	0.43	6,615.66	1.00%	5,921.09	-0.93%	241/303	Partial Disclosure
Nippon Steel & Sumitomo Metal Corp		Materials	0.59	3,890.95	0.59%	3,753.35	-0.53%	513/597	Partial Disclosure
China National Building Material Co. Ltd. - H Shares		Materials	0.12	3,569.52	0.54%	6,519.75	-0.51%	562/597	Modelled
AES Corp		Utilities	0.26	3,473.21	0.53%	6,645.42	-0.49%	259/303	Partial Disclosure
Metalurgica Gerdau		Materials	0.10	2,912.52	0.44%	4,184.18	-0.40%	527/597	Modelled
Huaneng Power International Inc		Utilities	0.10	2,437.60	0.37%	19,066.81	-0.36%	288/303	Partial Disclosure
China Resources Power Holdings Co. Ltd.		Utilities	0.11	2,429.83	0.37%	21,188.81	-0.36%	294/303	Partial Disclosure
Cemex SA		Materials	0.41	2,369.32	0.36%	5,280.73	-0.33%	551/597	Partial Disclosure
Chubu Electric Power Co		Utilities	0.25	2,399.17	0.36%	4,031.42	-0.33%	199/303	Partial Disclosure
Kobe Steel		Materials	0.25	2,138.40	0.32%	2,532.79	-0.27%	470/597	Partial Disclosure

Fossil Fuel Analysis

- As of 30th September 2017, East Sussex has invested in 216 companies that derive at least some revenue from fossil fuel extraction (accounting for 10.02% of total value of holdings).
- The aggregate portfolio's exposure to companies with fossil fuel reserves equates to 9.08% of total value of holdings.
- Total financed future emissions from fossil fuel reserves is approximately 13,613,122 tCO₂e or 6,892 tCO₂e per million GBP invested.

EXHIBIT 34: EXPOSURE TO EXTRACTIVE INDUSTRIES CHART

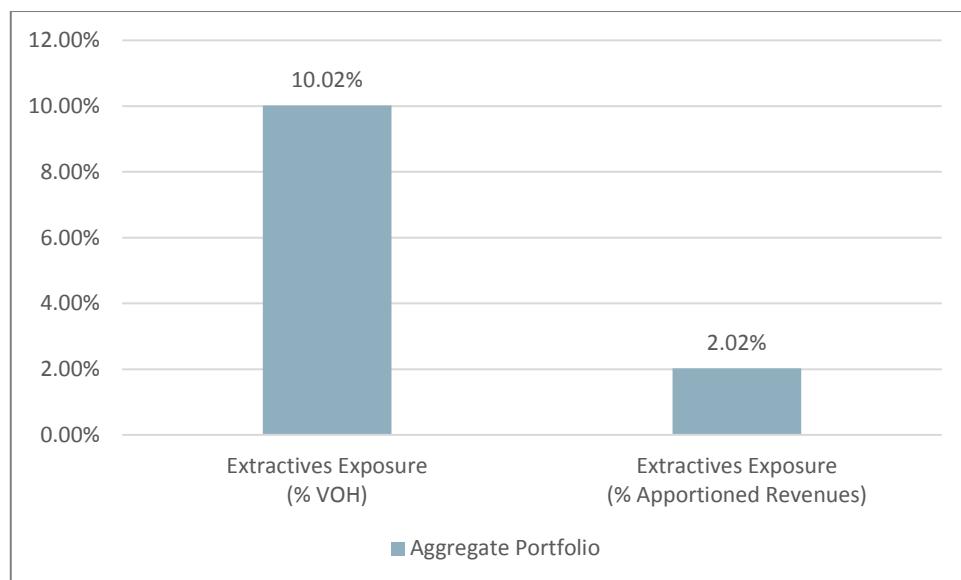
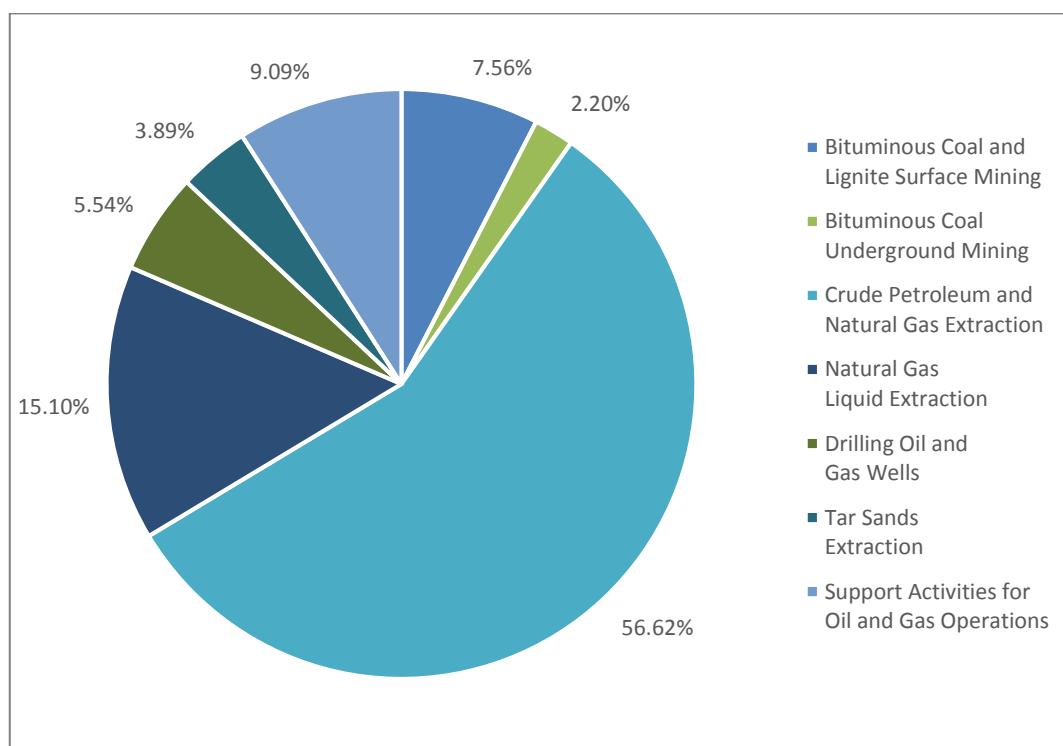


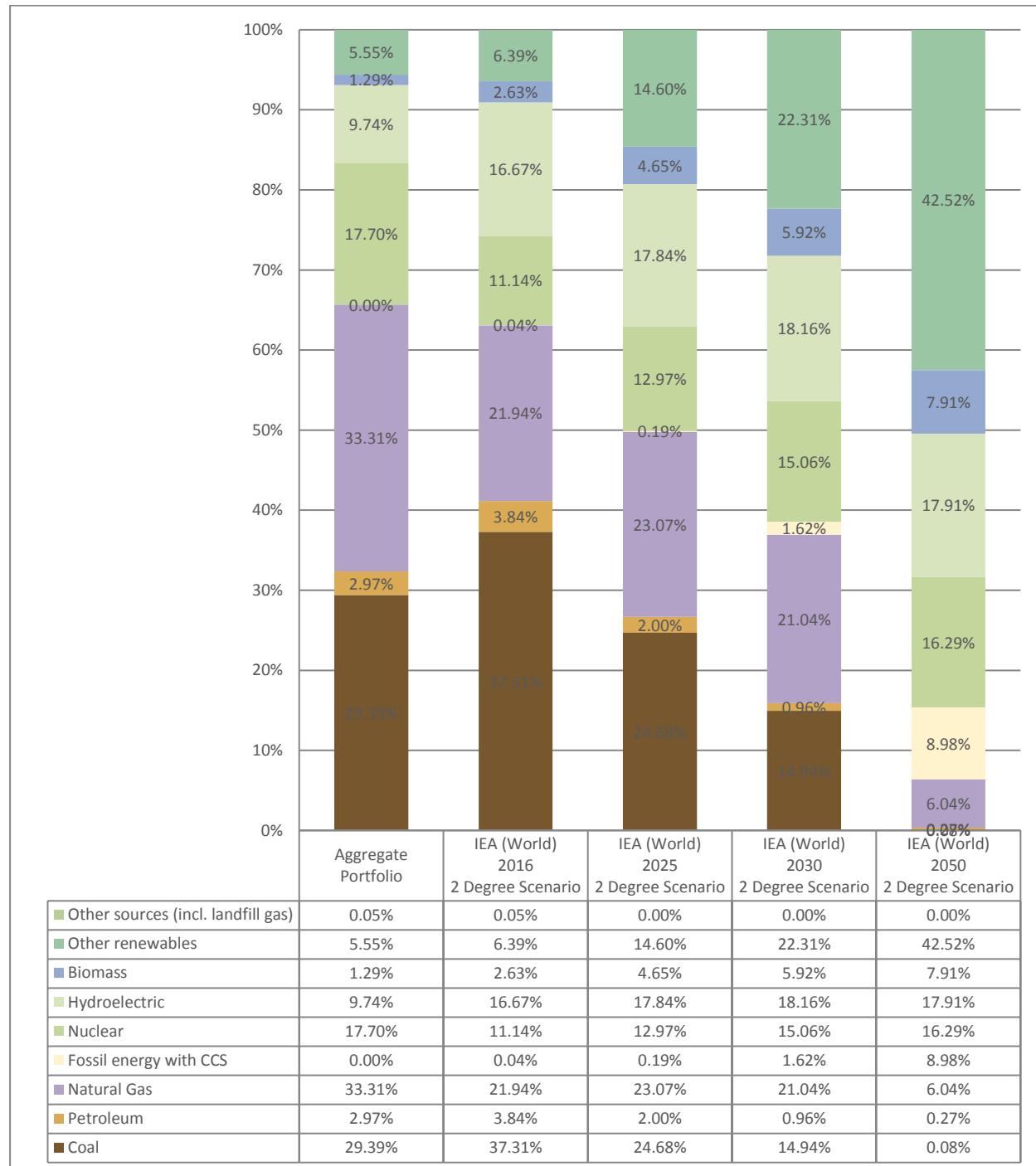
EXHIBIT 35: REVENUE BREAKDOWN OF EXTRACTIVES EXPOSURE BY ACTIVITY TYPE



Energy Generation Mix Analysis

- The table below shows the key energy generation mix analysis of the aggregated portfolio and those of the aggregated benchmark.
- The energy generation mix assessment is for holdings data as of 30th September 2017.
- The proportion of the aggregated holdings covered in the analysis is 96.62%.

EXHIBIT 36: ENERGY GENERATION MIX CHART



APPENDICES

APPENDIX A

Trucost's approach to calculating carbon footprints of portfolios

The carbon footprint is a measure of the greenhouse gas emissions (GHGs) associated with each portfolio. This is calculated by allocating GHGs from each constituent company held in the portfolio in proportion to the client's equity ownership of that company. The GHGs measured are converted into their carbon dioxide equivalents (CO₂e). The carbon footprint is expressed as metric tons of GHGs emitted by the companies within the portfolio, per million US Dollars (mUSD) of revenue from holdings. This normalized measure of carbon performance enables comparison of portfolios and benchmarks, irrespective of the type and size of the portfolios. The GHGs and revenue allocated to each holding are summed to calculate the overall carbon footprint of the client's listed equity holdings.

GHG emissions data for companies analysed are the latest available in Trucost's database (the Trucost Environmental Register) – the world's largest and most comprehensive database of corporate natural capital impact data covering 93% of global markets by market capitalization. Where companies do not provide usable data on GHG emissions, Trucost uses its environmentally extended input-output (EEO) model to calculate likely emissions based on business activities in 464 sectors.

APPENDIX B

Company Analysis

Trucost maintains the world's largest database of standardised corporate natural capital impact data. Trucost's comprehensive coverage of more than 5,000 companies since 2000 ensures that virtually all companies in a portfolio or Index are included, not just those that disclose environmental information.

To calculate the carbon emissions of companies included in the study, Trucost reviewed company annual reports and accounts, environmental/sustainability reports, public disclosures and corporate websites. However, Trucost might standardise or normalise disclosed data where necessary. Where a company only discloses data for part of its overall activities, analysts may standardise or normalise quantities in order to calculate the carbon impacts of the business's entire operations in line with the Greenhouse Gas Protocol. Where companies only disclose resource use, such as fuel consumption, this information is used to derive emissions data where possible.

Trucost uses its environmental profiling model to calculate the environmental impacts of companies that do not disclose adequate data, as well as the upstream impacts from supply chains. These include GHG emissions from the production of purchased goods and services, under Scope 3 of the Greenhouse Gas Protocol. The input-output model examines interactions between 464 sectors to calculate each company's likely direct and supply chain environmental impacts. These calculations combine quantitative government census and survey data on natural resource use through economic interactions between sectors with information on pollutant releases from national emissions registries. Information on company revenues in different industries is used to map environmental impacts from business activities.

Environmental profiling using an input-output model, overseen by an academic advisory panel, is a "best efforts" attempt to understand environmental impacts in the current absence of sufficient and comparable company disclosures on the environmental impacts of operations and supply chains.

Calculations incorporate disclosed quantitative data on industrial facilities' actual pollutant releases where available. Trucost engages with companies so that they have the opportunity to verify their environmental profiles and provide more information. Analysts quality check any further disclosures made, which are exclusive to Trucost and further augment the database.

GHG emissions for each company analysed are measured in tonnes of carbon dioxide equivalents (CO2e). The analysis includes the six GHGs covered by the UN Kyoto Protocol. Each GHG has a different capacity to cause global warming. Trucost's conversion of GHGs to CO2e is based on the Global Warming Potential (GWP) index published by the Intergovernmental Panel on Climate Change, which assesses the effect of the emissions of different gases over a 100-year time period relative to the emission of an equal mass of CO2.

Where reported, data on GHG emissions from operations and purchased electricity, under Scopes 1 and 2 of the Greenhouse Gas Protocol corporate accounting standard, are included in Trucost's database.

To limit any issues associated with double counting greenhouse gas emissions, Trucost analysed only the direct and first-tier indirect emissions for each company. First-tier emissions are emissions purchased upstream from the company's direct suppliers. These included purchased electricity and business air travel. Most companies are not major emitters of direct greenhouse gases and adopting this method ensures that the study assesses the carbon impacts of business activities – such as extraction, production, transport and logistics – outsourced to companies excluded from this analysis. In many sectors, indirect greenhouse gas emissions are greater than their direct emissions. It is important to take into account indirect exposure to carbon costs as suppliers may pass these on down the value chain.

Company carbon intensity is calculated throughout this report as total direct and first-tier indirect greenhouse gas emissions per GBP million of revenue, unless stated otherwise. This quantitative approach enables businesses of different sizes within different industries to be compared.

APPENDIX C

Interpretation of sector allocation & stock selection effects

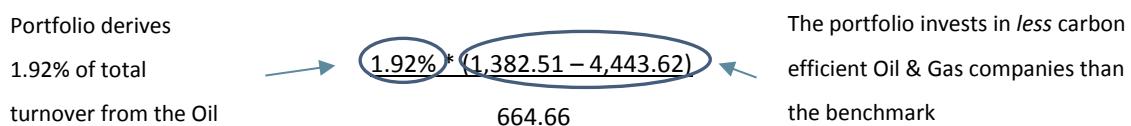
Attribution analysis identifies drivers of carbon performance relative to a benchmark. Trucost conducts attribution analysis to identify the effects of sector allocation (based on the GICS sector breakdown) and stock selection decisions on portfolio carbon footprints relative to the relevant indices selected as their benchmarks. The sum of these stock and sector allocation effects results in either a positive or negative overall portfolio carbon efficiency relative to a benchmark.

Where the percentage difference in the carbon efficiency of the portfolio against its benchmark is positive (indicated by a “+” sign), the portfolio is more carbon efficient than its benchmark. This indicates that the portfolio has a smaller carbon footprint than this benchmark. Conversely, where the percentage difference in the carbon efficiency of the portfolio against its benchmark is negative (indicated by a “-” symbol), the portfolio is more carbon intensive than its benchmark. The portfolio therefore has a larger carbon footprint than the benchmark index.

Sector allocation effects are based on a combination of the amount of the portfolio’s assets allocated to a sector relative to the benchmark allocation to that sector in apportioned revenue terms, and the average carbon intensity of the sector compared to the benchmark’s total footprint. For example, a portfolio derives 1.92% of its total apportioned turnover from the Oil & Gas sector, whereas the benchmark derives 24.64% of its total apportioned revenue from the oil & gas sector. The benchmark’s total footprint is 664.66 metric tons of CO₂e/mUSD, whereas the benchmark’s Oil & Gas sector carbon footprint is 1,382.5 metric tons of CO₂e/mUSD. The Oil & Gas sector allocation effect would therefore be +24.54%:

Portfolio is underweight the Oil & Gas sector in revenue	$(1.92\% - 24.64\%) * (664.66 - 1,382.51)$	The sector is <i>less</i> carbon efficient than the benchmark
	664.66	

Stock selection effects are based on the average carbon intensity of the companies held in the portfolio, combined with the holdings per company, compared with the companies present in their sector and their allocation in the benchmark. Stock selection effects indicate the potential to reduce carbon risk in the holdings without adjusting sector weightings. The carbon performance of companies directly contributes to the carbon embedded within portfolio holdings. For example, a portfolio derives 1.92% of its total turnover from the Oil & Gas sector. The portfolio's sector carbon footprint is 4,443.62CO₂e/ mUSD. The benchmark's total footprint is 664.66 metric tons of CO₂e/ mUSD and the benchmark's Oil & Gas sector carbon footprint is 1,382.5 metric tons of CO₂e/ mUSD. The Oil & Gas stock allocation effect would be -8.84%.



GLOSSARY

CARBON DISCLOSURE CODE EXPLANATION

Year: All Trucost environmental data is concurrent with the company's financial information and covers the same reporting period as the accounts. The accounting year given is the balance sheet date.

Benchmark: Standalone or composite index against which a portfolio is compared.

Carbon Disclosure: The source of direct carbon emissions is identified and divided into Trucost estimates and company disclosures. The flag details the source of data disclosure and whether Trucost had to perform an adjustment to convert the data into a standardized figure is captured and stated.

Carbon Scope 1 and Direct Emissions (tonnes CO₂e): Greenhouse gas emissions generated from burning fossil fuels and production processes which are owned or controlled by the company (reference: GHG Protocol).

Carbon First Tier Indirect Emissions (tonnes CO₂e): CO₂ and other greenhouse gases emitted by the direct suppliers to a company. The most significant sources are typically purchased electricity (Scope 2 of the GHG Protocol) and employees' business air travel (reference: GHG Protocol).

Carbon Footprint (tonnes CO₂e/GBPm): The direct and first tier indirect GHG emissions apportioned to the portfolio per million GBP revenue generated by the portfolio. Each holding's contribution to the carbon footprint of the portfolio is calculated on an equity ownership basis. The carbon footprint of the fund is the sum of these contributions, normalised by revenue owned.

Carbon Intensity - Direct + First Tier indirect (tonnes CO₂e/GBPm): Direct + first tier indirect CO₂e emissions/GBPm for selected company against peer companies and peer group (carbon footprint).

CO₂ Equivalent (CO₂e): Each greenhouse gas differs in its ability to absorb heat in the atmosphere. HFCs and PFCs are the most heat-absorbent. Calculations of greenhouse gas emissions are presented in units of millions of metric tons of carbon equivalents (MMTCE), which weights each gas by its GWP value, or Global Warming Potential. The Global Warming Potentials used in this analysis are:

Greenhouse Gas	CO ₂ Equivalent
Carbon Dioxide	1
Methane	21
Nitrous Oxide	310

Sulphur Hexaflouride	23,900
Per Fluoro Carbons	7,850
Hydro Flouro Carbons	5,920

See www.unfccc.org for more information about global warming.

Fossil Fuel Reserves: Quantity of fossil fuel not yet extracted.

Financial institutions' revenue: Trucost's approach for calculating the revenue for financial institution companies is as follows: Revenue is based on the sum of 1) net interest income and 2) non-interest income reported by the company in a given period. Net interest income is broadly calculated as interest receivable on loans and advances less interest payable on customer deposits. Non-interest income includes, but is not limited to, gross fees and commission income, income from trading activities and other operating income such as share of profit and dividend received from associated companies, and profit or loss on the sale of non-current assets held for sale. This revenue calculation is intended to reflect the inflow of economic benefits from the operating activities of a financial institution which could result in environmental damages.

Financed Emissions per GBPm Invested (tonnes CO₂e/GBPm): The direct and first tier indirect GHG emissions apportioned to the portfolio per million GBP invested in the portfolio. Each holding's contribution to the apportioned carbon emissions of the portfolio is calculated on an equity ownership basis. The value for Financed Emissions per GBP m Invested is the sum of these contributions, normalised by the total AUM of the fund.

GHG: Abbreviation for Greenhouse Gases. Emissions to air that contribute to the greenhouse effect and global warming. Each greenhouse gas differs in its ability to absorb heat in the atmosphere. HFCs and PFCs are the most heat-absorbent. Methane traps over 21 times more heat per molecule than carbon dioxide, and nitrous oxide absorbs 270 times more heat per molecule than carbon dioxide. Often, estimates of greenhouse gas emissions are presented in units of millions of metric tons of carbon equivalents (MMTCE), which weights each gas by its GWP value, or Global Warming Potential.

GICS Sector: The Global Industry Classification Standard (GICS®) was developed by MSCI and Standard & Poor's (S&P) to enhance the investment research and asset management process for financial professionals worldwide. The GICS structure consists of 10 sectors, 24 industry groups, 67 industries and 156 sub-industries.

Input-Output Model: In economics, a model used to capture how each business sector interdepends on its own and other sectors for the flow of goods and services

ISIN: International Securities Identification Number (ISIN) is a 12 character alpha-numerical code that uniquely identifies a security listed on a stock exchange.

Sector Carbon Footprint Attribution: Effects of sector allocation and stock allocation in the carbon footprint attribution of the portfolio relative to its benchmark. The sector allocation effect expresses the impact of sector weighting on the carbon footprint i.e. whether portfolio under/over performance from a carbon perspective is due to a higher/lower weight in relative high/low carbon sector with respect to the benchmark. Stock selection effect expresses the extent to which the portfolio's carbon performance is due to picking more or less carbon intensive companies within a sector compared to the benchmark. Total effect is the sum of the stock and sector allocation effects.

Sector Carbon intensity Chart/Table: Analysis of the weighted average carbon intensity (tCO₂e/GBPm) in each sector within the portfolio and the benchmark.

Sector Weighting Chart/Table: Analysis of the relative holdings in each sector within the portfolio and the benchmark. The benchmark is market capitalisation weighted as per the market capitalisation as of the end of the month.

REFERENCES

1. International Energy Agency Technology Perspectives 2015 report:
<https://www.iea.org/etp/etp2015/>.

NOTICE

Copyright © 2017 S&P Trucost Limited (“Trucost”), an affiliate of S&P Dow Jones Indices LLC. All rights reserved. Redistribution or reproduction in whole or in part is prohibited without written permission. All information provided by Trucost is impersonal and not tailored to the needs of any person, entity or group of persons. This publication and related materials are not intended to provide and do not constitute financial or investment advice.

DISCLAIMER

Copyright © 2017 S&P Trucost Limited (“Trucost”), an affiliate of S&P Dow Jones Indices LLC. All rights reserved.

This publication and related materials are not intended to provide and do not constitute financial or investment advice. The information in this publication should not be construed or relied upon in making, or refraining from making, any investment decisions with respect to a specific company or security or be used as legal advice. Trucost is not an investment advisor, and Trucost makes no representation regarding the advisability of investing in any investment fund or other investment vehicle. A decision to invest in any investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document.

This publication and related materials (“Information”) have been prepared solely for informational purposes only based upon information generally available to the public from sources believed to be reliable. The Information may not be reproduced or disseminated in whole or in part without the prior written permission of Trucost. The information may not be used to verify or correct other data, create indexes, risk models, or analytics or in connection with issuing, offering, sponsoring, managing, marketing any securities, portfolios, financial products, or other investment vehicles.

Historical data and analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction.

Trucost, its affiliates, or its and their third-party data providers and licensors (collectively “Trucost Parties”) do not guarantee the accuracy or completeness of the Information. Trucost Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Information. THE TRUCOST PARTIES MAKE NO WARRANTIES OR REPRESENTATIONS, AND, TO THE MAXIMUM EXTENT PERMITTED BY LAW, EACH TRUCOST PARTY HEREBY EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING ANY OF THE FOREGOING AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, IN NO EVENT

SHALL ANY OF THE TRUCOST PARTIES HAVE ANY LIABILITY REGARDING ANY OF THE INFORMATION FOR DIRECT, INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR AN OTHER DAMAGES EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited.

'Trucost' is the trading name of S&P Trucost Limited a limited company registered in England company number 3929223 whose registered office is at 20 Canada Square, London E14 5HL, UK.

CONFIDENTIALITY & COPYRIGHT

The information contained in this report is confidential and is submitted by Trucost on the understanding that it will be used only by your staff and consultants. Where consultants are [self] employed, the use of this information is restricted to use in relation to your business. In particular, the contents of this report may not be disclosed in whole or in part to any other party without the prior written consent of Trucost.



S&P Dow Jones Indices
ESG Analysis

Carbon Footprint

CONTENTS

<u>summary information</u>	2
<u>detailed findings</u>	3
<u>sector analysis</u>	4
<u>sector allocation & stock selection effect</u>	5
<u>largest carbon contributors to the portfolio's carbon footprint</u>	6
<u>environmental skylines for largest two contributors</u>	7
<u>company reporting assessment</u>	8
<u>detailed data for companies in your portfolio</u>	9
<u>next steps</u>	93
<u>legal disclaimer</u>	94

LGIM Global

- Carbon footprint analysis quantifies greenhouse gas emissions (GHG) embedded within the portfolio presenting these as tonnes of carbon dioxide equivalents (tCO₂e). Comparing the total GHG emissions of each holding relative to annual revenue, gives a measure of carbon intensity that enables comparison between companies, irrespective of size or geography.
 - The carbon footprint is an analysis of the GHG embedded within the portfolio. This is achieved by carrying out a carbon footprint for each individual holding encapsulating both direct and first tier indirect impacts.
 - Direct emissions result from a company's own operations and include GHG emissions from boilers and company owned vehicles, emissions from any manufacturing operations and waste produced.
 - First tier indirect impacts, also termed supply chain impacts, occur because of the goods or services a company procures. This includes purchased electricity, business travel and logistics.
- | | |
|--------------------------|----------------------|
| PORTFOLIO: | LGIM Global |
| BENCHMARK: | FTSE All World Index |
| DATE OF HOLDINGS: | September 30, 2017 |
| DATE OF ANALYSIS: | April 19, 2018 |
- Each holding's contribution to the carbon footprint of the portfolio is calculated on an equity ownership basis. The carbon footprint of the fund is the sum of these contributions, normalised by revenue owned.



Carbon Footprint

CARBON FOOTPRINT

Carbon Footprint analysis measures the carbon risks and opportunities not captured by standard portfolio analysis and presents a systematic assessment of carbon impacts relative to your benchmark

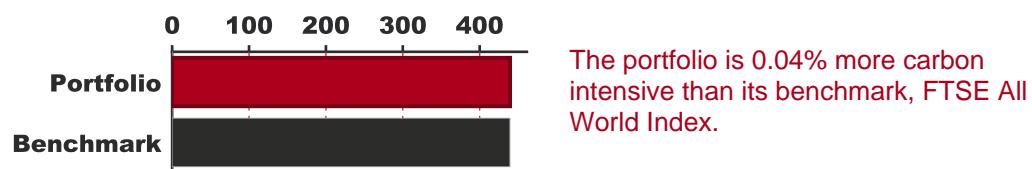
LGIM Global

1 Summary Information

Carbon footprint analysis was carried out on 19 April 2018 for holdings data as at 30 September 2017. The benchmark used for this analysis was the FTSE All World Index.

	Number of Companies	Value of Holdings (£ mn)	Total Carbon Emissions (tCO2e)	Total Footprint (tCO2e/£mn)
Portfolio	2,968	569.01	153,850	439.41
Benchmark	3,061	569.01	153,126	439.21

The carbon footprint of the portfolio is 439.41 compared to the benchmark which is 439.21.



KEY FINDINGS

The portfolio is 0.04% more carbon intensive than FTSE All World Index benchmark.

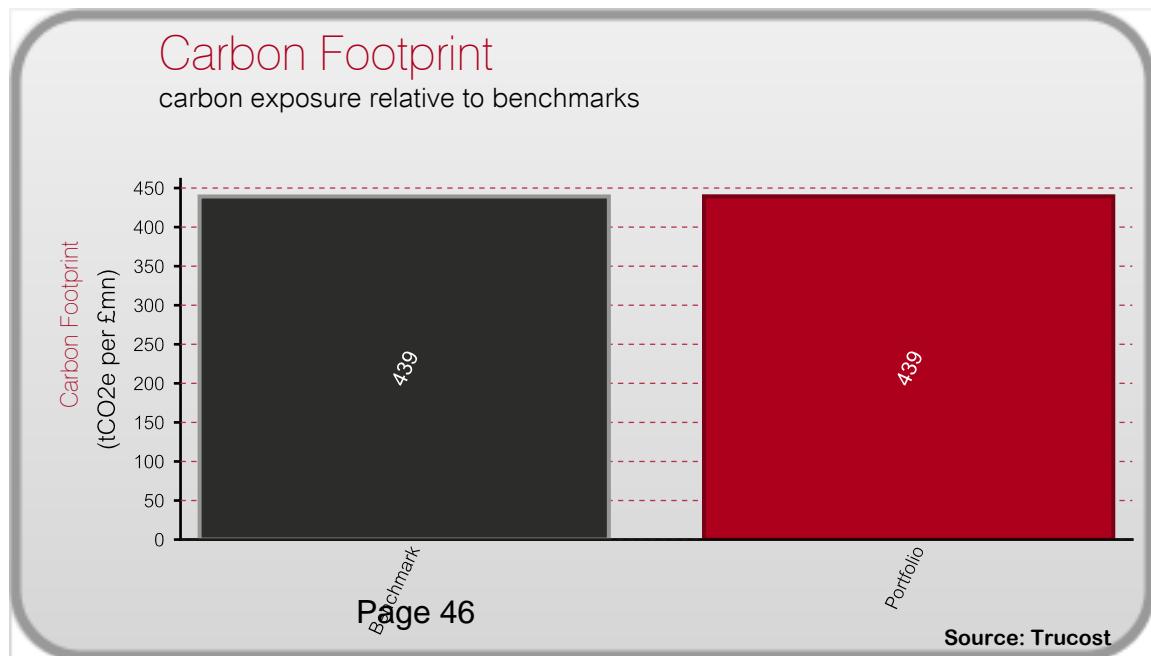
This efficiency is due to a combination of 0.97% negative sector allocation effects and 0.92% positive stock selection effects.

In aggregate the carbon exposure of the fund is equivalent to 1.02% of the aggregate turnover of the fund.

To give context to the carbon performance, the portfolio has been compared to some key indices.

Carbon has been assessed based on an average annual price of £27

The price of carbon used in the Trucost model is based on academic research into the external damage costs of carbon emissions.





Carbon Footprint

2 Detailed Findings

The two principal reasons why the carbon exposure of the portfolio may differ from the benchmark are due to sector allocation decisions and stock allocation decisions.

Sector allocation decisions will cause the carbon intensity of the portfolio to diverge markedly from the benchmark where the sector/s are either carbon intensive or low carbon. If the portfolio is overweight in carbon intensive sectors the portfolio is likely to be more carbon intensive than the benchmark.

However, if the stocks within a carbon intensive sector are the most carbon efficient companies, it is possible that the portfolio may still have a lower carbon footprint than the benchmark.

Trucost has developed a carbon optimisation product that can help minimise the carbon footprint associated with a portfolio. For more information, please go to <http://www.trucost.com/investments>

Summary of Stock and Sector Allocation Effects

Portfolio

	Sector Weighting		Carbon Intensity (tCO2e/£mn revenue)		Carbon Footprint Attribution		
	Portfolio	Benchmark	Portfolio	Benchmark	Sector Allocation	Stock Selection	Total Effect
Consumer Discretionary	12.05 %	12.02 %	113.31	112.88	0.00 %	-0.02 %	-0.02 %
Consumer Staples	8.88 %	8.88 %	261.57	261.40	-0.01 %	-0.00 %	-0.01 %
Energy	6.29 %	6.02 %	976.25	1,000.99	-0.83 %	0.49 %	-0.35 %
Financials	19.06 %	19.39 %	38.75	38.07	-0.39 %	-0.03 %	-0.42 %
Health Care	10.93 %	10.92 %	50.75	50.81	-0.01 %	0.00 %	-0.01 %
Industrials	11.11 %	11.08 %	285.60	285.04	-0.02 %	-0.02 %	-0.03 %
Information Technology	16.86 %	16.83 %	102.19	102.04	-0.02 %	-0.00 %	-0.03 %
Materials	5.48 %	5.50 %	1,702.70	1,716.23	0.19 %	0.20 %	0.39 %
Real Estate	3.06 %	3.05 %	141.67	142.74	-0.00 %	0.00 %	0.00 %
Telecommunication Services	3.15 %	3.17 %	78.47	78.54	-0.02 %	0.00 %	-0.02 %
Utilities	3.12 %	3.12 %	3,084.93	3,115.22	0.14 %	0.30 %	0.45 %
Total	100.00 %	100.00 %	439.41	439.21	-0.97 %	0.92 %	-0.04 %

The portfolio is 0.04% more carbon intensive than the benchmark.

- The stock selection results in the portfolio being 0.92% more carbon efficient than the benchmark.
- This is offset by the sector allocation however, which is 0.97% more carbon intensive than the benchmark.
- In aggregate, the two sectors that have the greatest positive effect on carbon efficiency are Utilities and Materials, which together contribute 0.84% of the increased carbon efficiency. The two worst performing sectors in the portfolio are Financials and Energy, which contribute to 0.77% of reduced carbon efficiency.



Carbon Footprint

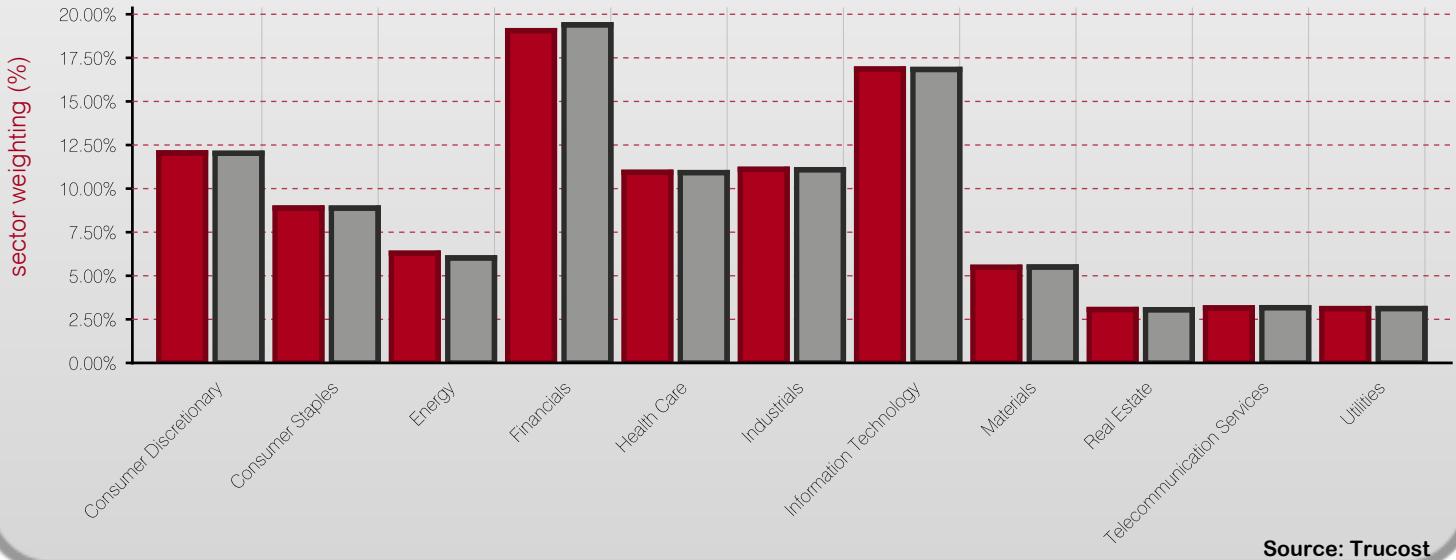
3 Sector Analysis

The graphs below show how the sector allocation in the portfolio differs from that in the benchmark and the effect on the Carbon Footprint of the fund. The four sectors that contribute the highest levels of carbon intensity to the portfolio are Utilities (3,085 tCO₂e/£mn), Materials (1,703 tCO₂e/£mn), Energy (976 tCO₂e/£mn), and Industrials (286 tCO₂e/£mn). Sectors have been defined using the Global Industry Classification Standard (GICS) system.

Sector Analysis

sector weighting of portfolio and benchmark in % terms

 Portfolio
 Benchmark



Source: Trucost

Carbon Footprint Of Portfolio and Benchmark

by sector (tCO₂e/£mn revenue)

 Portfolio
 Benchmark





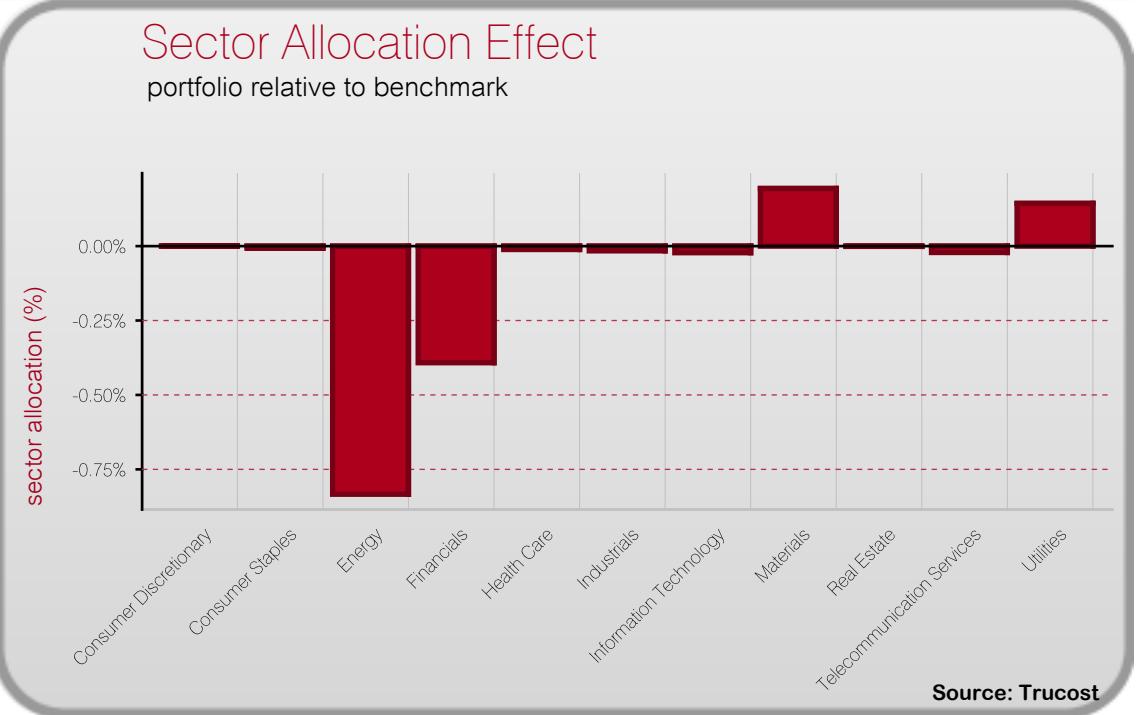
Carbon Footprint

④ Sector Allocation & Stock Selection Effect

This graph analyses the sector allocation effect on the carbon footprint of the portfolio.

If the bar is negative, you are more heavily invested in a carbon intensive sector than the benchmark, or you are underweight in a carbon "light" sector.

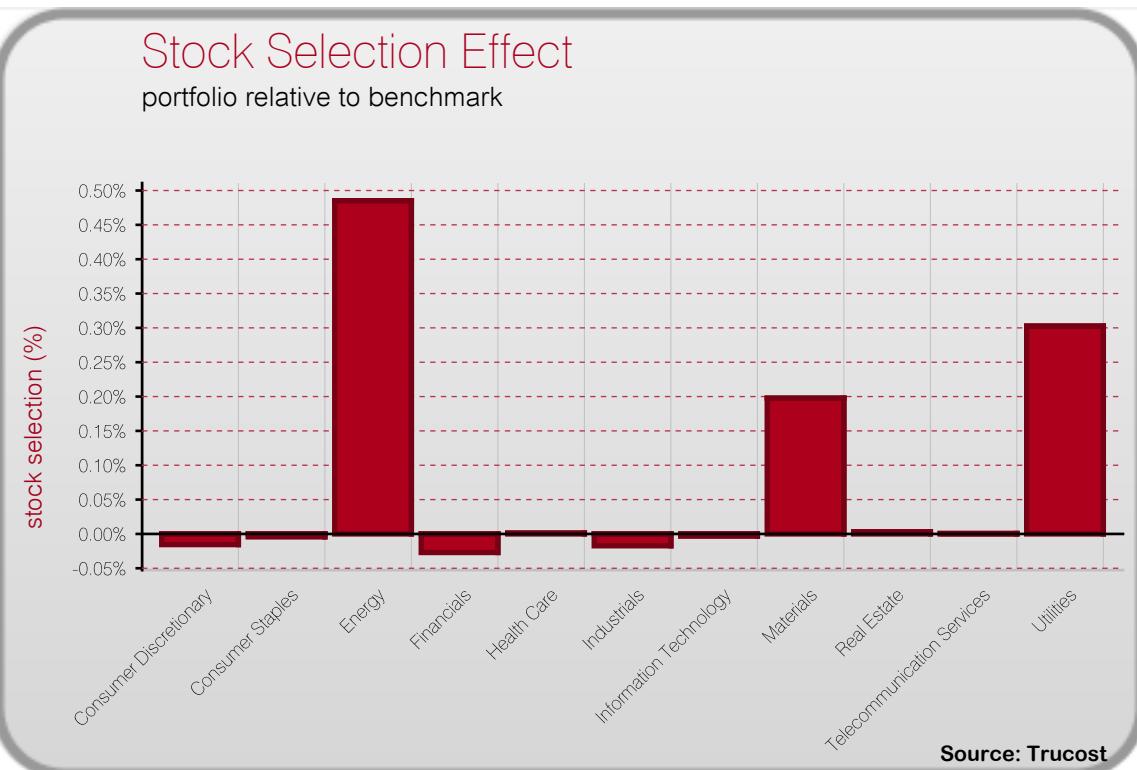
The reverse is true if the bar is positive.



This graph shows the effect of stock selection within sectors on the carbon footprint of the portfolio relative to the benchmark.

If the bar is positive, you are invested in companies that are less carbon intensive relative to peers within their benchmark sector.

If the bar is negative, you are invested in more carbon intensive companies within sectors.



Carbon efficiency can be used as a proxy for efficient management of a company. Therefore you may want to see how companies in your fund rank within their sectors from a carbon efficiency perspective. This "rank in sector" information is available in the Data Sheets at the back of this report.

Page 49



Carbon Footprint

5 Largest Carbon Contributors to the Portfolio's Carbon Footprint

The ten companies that contribute the most to the portfolio's carbon footprint are shown below. Note that a company may appear due to the proportion owned, rather than because it is the most carbon intensive stock held. The rank in benchmark sector column is very useful in assessing the carbon intensity of your top ten contributors relative to their peers.

Largest Contributors to Portfolio's Carbon Footprint

Company Name	Holding (£ mn)	Carbon Apportioned Tonnes	Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*)	Footprint Rank in Benchmark Sector**	Data Source***
LafargeHolcim Ltd	0.365	2,530	1.64%	8,311	-1.56 %	277 / 292
Exxon Mobil Corp	4.565	3,549	2.31%	1,138	-1.43 %	103 / 150
RWE AG	0.151	2,342	1.52%	3,884	-1.35 %	93 / 158
ArcelorMittal Inc	0.203	2,180	1.42%	4,587	-1.28 %	254 / 292
American Electric Power	0.454	2,053	1.33%	8,786	-1.27 %	137 / 158
Southern Co	0.642	1,863	1.21%	6,593	-1.13 %	128 / 158
Gazprom PJSC	0.286	1,973	1.28%	3,202	-1.11 %	142 / 150
Duke Energy Corp	0.772	1,842	1.20%	5,674	-1.11 %	113 / 158
Korea Elec Power Corp	0.113	1,722	1.12%	5,921	-1.04 %	120 / 158
Tokyo Electric Power Co. Holding Inc.	0.084	1,737	1.13%	2,849	-0.96 %	84 / 158
Total	7.634	21,791	14.16%	-12.23 %		

* The Carbon Footprint Contribution is the percentage decrease in performance between what the Carbon Footprint of the portfolio would be without the holding and what the Carbon Footprint is currently. This is a measurement of how much a specific holding reduces the carbon performance of the portfolio.

** Footprint Rank in Benchmark Sector - A ranking of one indicates that the stock has the lowest carbon footprint among the stocks in the benchmark sector. An entry of N/A indicates that the stock is not a member of the benchmark.

*** See table below for definitions of the Data Source.

Carbon Footprint

Data Source Definitions

Code	Explanation
AR	Exact Value from Annual Report/10K/Financial Accounts Disclosure
AR*	Value derived from data provided in Annual Report/Financial Accounts Disclosure
CDP	Exact Value from CDP
CDP*	Value derived from data provided in CDP
ENV	Exact Value from Environmental/CSR
ENV*	Value derived from data provided in Environmental/CSR
OTH	Exact Value from personal communication
OTH*	Value derived from personal communication
PDD	Estimate scaled according to company-specific data
PRE	Derived from previous year
TC	Data Calculated by Trucost
TC*	Estimate derived from production data



Carbon Footprint

6 Environmental Skylines for Largest Two Contributors

The largest contributors to the carbon footprint of the portfolio are LafargeHolcim Ltd and Exxon Mobil Corp.

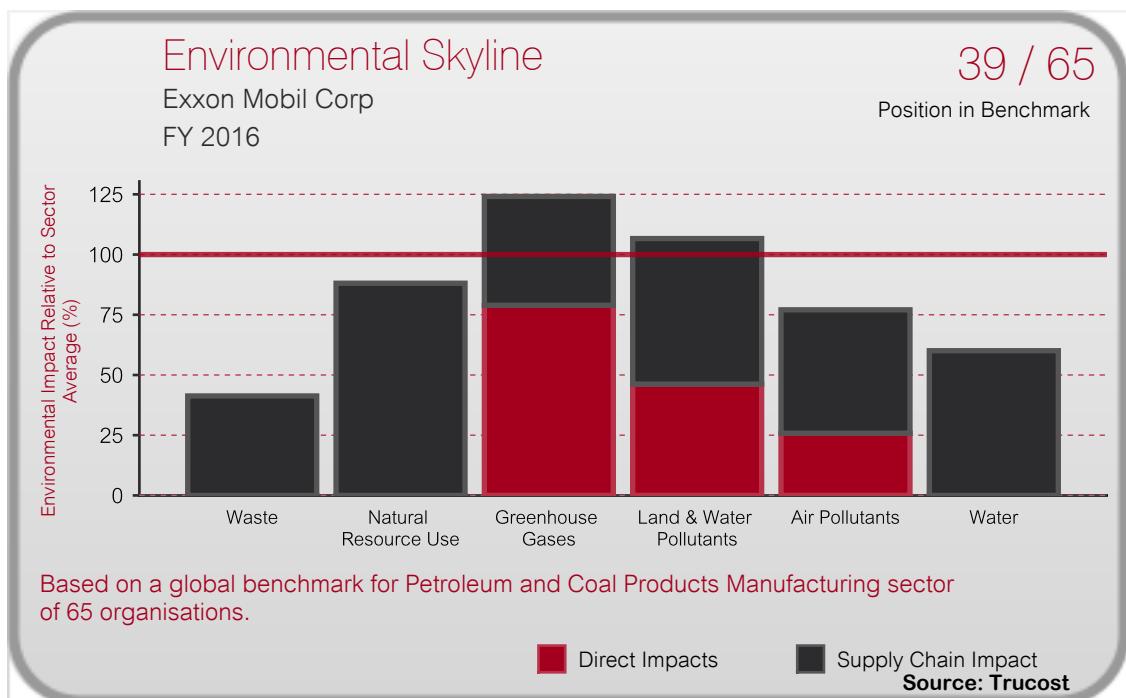
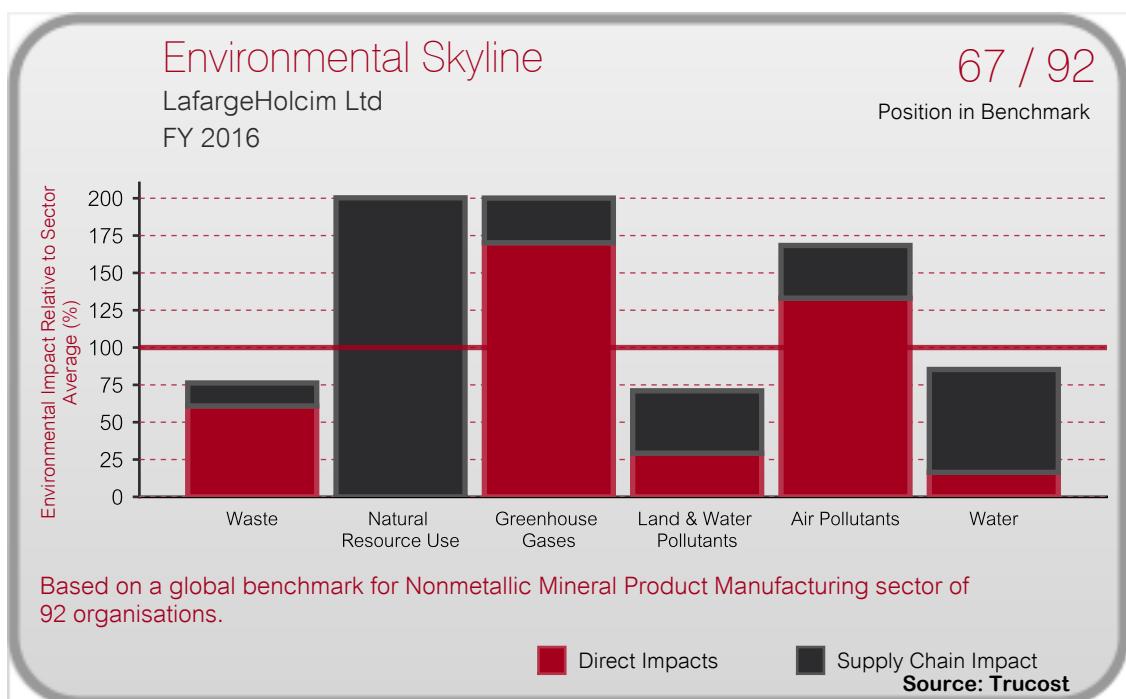
The two charts below look at each company's environmental skyline across six broad environmental groups (Greenhouse Gases, Water, Waste, Land & Water Pollutants, Air Pollutants, Natural Resource Use) relative to its benchmark sector.

Direct environmental impacts are displayed (red bar) as well as those contained within the first-tier of the supply chain (grey bar).

The overall performance across the six environmental groups has been assessed relative to the sector benchmark for both companies. Business activities are analysed according to the North American Industry Classification (NAICS) 3-digit code.

The red line denotes the average direct and supply chain impact for all the organisations that share this organisation's primary business activity.

A bar above the red line indicates that this organisation is more environmentally intensive per unit of revenue generated than the benchmark sector for that particular environmental impact.





Carbon Footprint

7 Company Reporting Assessment

In order to rank stocks for engagement purposes we have identified five companies which do not disclose up-to-date data. These companies are ranked according to the size of their impact on your footprint as estimated by Trucost, using our unique environmental profiling model.

Not all companies report in a way considered best practice. The five companies in your portfolio we would draw your attention to, where engagement may be beneficial, are listed in the table below.

Company Reporting Assessment

Portfolio

Company Name	Holding (£ mn)	Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector**	Data Source***
		Tonnes	(%)				
Korea Elec Power Corp	0.113	1,722	1.12%	5,921	-1.04 %	120 / 158	PRE
China Resources Power Holdings Co. Ltd.	0.044	994	0.65%	21,189	-0.63 %	149 / 158	PRE
China National Building Material Co. Ltd. - H Shares	0.029	827	0.54%	6,520	-0.50 %	269 / 292	TC
PPL Corp	0.339	602	0.39%	5,652	-0.36 %	112 / 158	PRE
Dominion Energy Inc	0.647	612	0.40%	3,667	-0.35 %	89 / 158	PRE
Total	1.171	4,757	3.09%		-2.88 %		

* The Carbon Footprint Contribution is the percentage decrease in performance between what the Carbon Footprint of the portfolio would be without the holding and what the Carbon Footprint is currently. This is a measurement of how much a specific holding reduces the carbon performance of the portfolio.

** Footprint rank in benchmark sector - A ranking of one indicates that the stock has the lowest carbon footprint among the stocks in the benchmark sector. An entry of N/A indicates that the stock is not a member of the benchmark.

*** Definitions of the Data Sources may be found in section 5 of this report.



Carbon Footprint

8 Detailed Data for Companies in your Portfolio

The following table shows how each company contributes to the overall portfolio footprint. It allows you to see which stocks are the greatest contributors to your portfolio's CO₂e emissions in absolute terms as well as helping you to understand how your owned stocks compare on a sector by sector basis with other stocks in the benchmark. This will help in managing your overall footprint without compromising your sector allocations. Further detail and regular updates are available from Trucost.

Company Breakdown

Portfolio

Company details	Weighting		Carbon Apportioned		Carbon Intensity (tCO ₂ e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO ₂ e	% of Portfolio's Total Carbon Apportioned				
Consumer Discretionary	12.05 %	12.02 %	6,192	4.02 %	113	13.72 %		
ABC-Mart Inc	0.00 %	0.00 %	1	0.00 %	68	0.00 %	145 / 445	TC
Accor	0.02 %	0.02 %	19	0.01 %	1,317	-0.01 %	443 / 445	AR*
Adastria Holdings Co Ltd	0.00 %	0.00 %	1	0.00 %	103	0.00 %	258 / 445	TC
Adidas AG	0.10 %	0.10 %	18	0.01 %	64	0.07 %	132 / 445	CDP
Adient Inc.	0.02 %	0.02 %	55	0.04 %	238	0.03 %	379 / 445	TC
Advance Auto Parts Inc	0.02 %	0.02 %	13	0.01 %	123	0.02 %	294 / 445	TC
Aisin Seiki Co	0.02 %	0.02 %	63	0.04 %	313	0.02 %	413 / 445	CDP
Alibaba Pictures Group Ltd	0.00 %	0.00 %	0	0.00 %	28	0.00 %	48 / 445	TC
Alsea SA	0.00 %	0.00 %	4	0.00 %	207	0.00 %	352 / 445	AR
Altice SA	0.03 %	0.03 %	5	0.00 %	32	0.04 %	57 / 445	TC
Amazon.com Inc	0.88 %	0.88 %	133	0.09 %	83	0.37 %	184 / 445	TC
ANTA Sports Products Ltd.	0.01 %	0.01 %	2	0.00 %	166	0.00 %	339 / 445	TC
Aoyama Trading Co	0.00 %	0.00 %	2	0.00 %	108	0.00 %	270 / 445	TC
Aptiv plc	0.06 %	0.06 %	26	0.02 %	111	0.05 %	277 / 445	CDP
Aramark	0.02 %	0.02 %	28	0.02 %	155	0.03 %	327 / 445	TC
Arcelik Co	0.00 %	0.00 %	5	0.00 %	220	0.00 %	360 / 445	TC
Aristocrat Leisure Ltd	0.02 %	0.02 %	1	0.00 %	64	0.01 %	133 / 445	TC
Asics Corp	0.01 %	0.01 %	3	0.00 %	70	0.01 %	152 / 445	CDP
Askul Corp	0.00 %	0.00 %	1	0.00 %	103	0.00 %	253 / 445	TC
Astra International Tbk PT	0.03 %	0.03 %	56	0.04 %	585	-0.01 %	436 / 445	ENV*
Astro Malaysia Holdings Bhd	0.00 %	0.00 %	0	0.00 %	21	0.00 %	31 / 445	TC
Autobacs Seven Co	0.00 %	0.00 %	1	0.00 %	91	0.00 %	212 / 445	TC
Autoliv Inc	0.02 %	0.02 %	33	0.02 %	231	0.02 %	376 / 445	AR*
AutoNation Inc	0.01 %	0.01 %	21	0.01 %	103	0.05 %	255 / 445	TC
AutoZone Inc	0.04 %	0.04 %	16	0.01 %	110	0.03 %	276 / 445	TC
Axel Springer SE	0.01 %	0.01 %	1	0.00 %	59	0.01 %	119 / 445	CDP
BAIC Motor Corporation Ltd - H share	0.00 %	0.00 %	Page 53 ³	0.00 %	55	0.01 %	103 / 445	TC
Bajaj Auto Ltd	0.01 %	0.01 %	4	0.00 %	332	0.00 %	417 / 445	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Bandai Namco Holdings Inc	0.02 %	0.02 %	7	0.00 %	136	0.01 %	306 / 445	PRE
Barratt Developments	0.02 %	0.02 %	7	0.00 %	87	0.02 %	197 / 445	CDP
Bayer Motoren Werke AG (BMW)	0.09 %	0.09 %	45	0.03 %	54	0.21 %	94 / 445	CDP
BEC World PCL	0.00 %	0.00 %	0	0.00 %	19	0.00 %	15 / 445	TC
Bed Bath & Beyond Inc	0.01 %	0.01 %	18	0.01 %	118	0.03 %	289 / 445	TC
Bellway	0.01 %	0.01 %	4	0.00 %	89	0.01 %	207 / 445	ENV*
Benesse Holdings Inc	0.01 %	0.01 %	1	0.00 %	19	0.01 %	16 / 445	CDP
Berjaya Sports Toto Bhd	0.00 %	0.00 %	1	0.00 %	61	0.00 %	128 / 445	TC
Berkeley Group Holdings Plc	0.01 %	0.01 %	3	0.00 %	95	0.01 %	226 / 445	CDP
Best Buy Co Inc	0.03 %	0.03 %	19	0.01 %	44	0.11 %	83 / 445	CDP
Bharat Forge Ltd	0.00 %	0.00 %	5	0.00 %	886	-0.00 %	442 / 445	CDP
BIC CAMERA	0.00 %	0.00 %	8	0.00 %	95	0.02 %	229 / 445	TC
Block H & R Inc	0.01 %	0.01 %	1	0.00 %	38	0.01 %	76 / 445	TC
Bloomberry Resorts Corp.	0.00 %	0.00 %	0	0.00 %	155	0.00 %	325 / 445	TC
Booking Holdings Inc	0.21 %	0.21 %	4	0.00 %	27	0.04 %	45 / 445	TC
Borgwarner Inc	0.02 %	0.02 %	29	0.02 %	228	0.02 %	372 / 445	CDP*
Bosch Ltd	0.01 %	0.01 %	1	0.00 %	263	0.00 %	394 / 445	TC
Bosideng International Holdings Ltd.	0.00 %	0.00 %	1	0.00 %	135	0.00 %	303 / 445	TC
Bridgestone Corp	0.07 %	0.07 %	99	0.06 %	294	0.03 %	404 / 445	CDP
Brilliance China Automotive Holdings Ltd.	0.02 %	0.02 %	0	0.00 %	55	0.00 %	101 / 445	TC
Burberry Group	0.02 %	0.02 %	2	0.00 %	42	0.01 %	80 / 445	CDP
BYD Co. Ltd. - H Shares	0.01 %	0.01 %	5	0.00 %	109	0.01 %	272 / 445	TC
Cafe de Coral Holdings Ltd.	0.00 %	0.00 %	2	0.00 %	247	0.00 %	386 / 445	ENV*
Canadian Tire Corporation Limited	0.02 %	0.02 %	4	0.00 %	30	0.03 %	52 / 445	CDP
Canon Marketing Japan Inc	0.00 %	0.00 %	0	0.00 %	16	0.01 %	8 / 445	PRE
Carmax Inc	0.03 %	0.03 %	22	0.01 %	116	0.04 %	286 / 445	TC
Carnival Plc	0.09 %	0.09 %	150	0.10 %	834	-0.05 %	440 / 445	CDP
Casio Computer Co	0.01 %	0.01 %	3	0.00 %	95	0.01 %	230 / 445	CDP
CBS Corp	0.05 %	0.05 %	5	0.00 %	31	0.04 %	53 / 445	TC
CCC SA	0.00 %	0.00 %	1	0.00 %	91	0.00 %	211 / 445	TC
Charter Communications Inc A	0.16 %	0.16 %	6	0.00 %	19	0.08 %	20 / 445	TC
Cheil Worldwide Inc	0.00 %	0.00 %	0	0.00 %	12	0.01 %	3 / 445	PRE
Cheng Shin Rubber Industry	0.01 %	0.01 %	9	0.01 %	292	0.00 %	403 / 445	TC
China Dongxiang (Group) Co Ltd	0.00 %	0.00 %	0	0.00 %	68	0.00 %	147 / 445	TC
China Motor Co	0.00 %	0.00 %	0	0.00 %	55	0.00 %	100 / 445	TC
China Travel International Investment Hong Kong	0.00 %	0.00 %	0	0.00 %	92	0.00 %	218 / 445	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Chipotle Mexican Grill Inc.	0.02 %	0.02 %	8	0.00 %	152	0.01 %	319 / 445	TC
Chongqing Changan Automobile Co Ltd	0.00 %	0.00 %	1	0.00 %	55	0.01 %	105 / 445	TC
Chow Tai Fook Jewellery Group Ltd	0.00 %	0.00 %	1	0.00 %	112	0.00 %	279 / 445	TC
Christian Dior SE	0.01 %	0.01 %	3	0.00 %	78	0.01 %	169 / 445	AR
Comcast Corp	0.42 %	0.42 %	43	0.03 %	37	0.30 %	74 / 445	CDP
Compass Group	0.08 %	0.08 %	19	0.01 %	52	0.09 %	93 / 445	CDP
Continental AG	0.06 %	0.06 %	84	0.05 %	245	0.04 %	382 / 445	CDP
Coway Co Ltd	0.01 %	0.01 %	4	0.00 %	204	0.00 %	350 / 445	CDP
Crown Resorts Ltd	0.01 %	0.01 %	2	0.00 %	101	0.00 %	249 / 445	CDP
Ctrip.com International ADR	0.01 %	0.01 %	0	0.00 %	34	0.00 %	65 / 445	TC
Cyber Agent Ltd	0.01 %	0.01 %	1	0.00 %	33	0.01 %	62 / 445	TC
Cyfrowy Polsat SA	0.00 %	0.00 %	0	0.00 %	20	0.00 %	23 / 445	TC
DAIICHIKOSHCO CO LTD	0.00 %	0.00 %	1	0.00 %	113	0.00 %	282 / 445	TC
Daily Mail & General Trust	0.01 %	0.01 %	2	0.00 %	57	0.01 %	114 / 445	AR*
Daimler AG	0.17 %	0.18 %	117	0.08 %	54	0.54 %	98 / 445	CDP
Darden Restaurants Inc	0.02 %	0.02 %	24	0.02 %	305	0.01 %	409 / 445	PRE
Delek Automotive Systems Ltd	0.00 %	0.00 %	0	0.00 %	103	0.00 %	254 / 445	TC
Denso Co	0.06 %	0.06 %	65	0.04 %	226	0.04 %	365 / 445	PRE
Dentsu Inc	0.02 %	0.02 %	7	0.00 %	14	0.14 %	5 / 445	CDP
Discovery, Inc	0.02 %	0.02 %	2	0.00 %	21	0.03 %	27 / 445	TC
DISH Network Corp	0.03 %	0.03 %	2	0.00 %	19	0.03 %	21 / 445	TC
Dixons Carphone Plc	0.01 %	0.01 %	5	0.00 %	32	0.04 %	58 / 445	CDP
Dollar General Corp	0.05 %	0.05 %	25	0.02 %	99	0.06 %	242 / 445	TC
Dollar Tree Inc	0.05 %	0.05 %	19	0.01 %	101	0.04 %	247 / 445	TC
Dollarama Inc	0.03 %	0.03 %	2	0.00 %	99	0.01 %	243 / 445	TC
Domino's Pizza Enterprises Ltd	0.01 %	0.01 %	1	0.00 %	163	0.00 %	334 / 445	TC
Domino's Pizza Inc	0.02 %	0.02 %	5	0.00 %	145	0.01 %	312 / 445	TC
Don Quijote Holdings Co Ltd	0.01 %	0.01 %	6	0.00 %	94	0.01 %	224 / 445	TC
Dongfeng Motor Group Co. Ltd. - H Shares	0.01 %	0.01 %	5	0.00 %	54	0.02 %	95 / 445	TC
Dufry AG	0.01 %	0.01 %	6	0.00 %	83	0.02 %	181 / 445	TC
DXB Entertainment PJSC	0.00 %	0.00 %	0	0.00 %	81	0.00 %	176 / 445	TC
Eclat Textile Co Ltd	0.01 %	0.01 %	2	0.00 %	231	0.00 %	375 / 445	TC
El Puerto de Liverpool SAB de CV	0.00 %	0.00 %	1	0.00 %	87	0.00 %	196 / 445	TC
Electrolux AB	0.02 %	0.02 %	32	0.02 %	217	0.02 %	359 / 445	CDP
Elior Group	0.01 %	0.01 %	11	0.01 %	159	0.01 %	333 / 445	TC
Esprit Holdings Ltd.	0.00 %	0.00 %	1	0.00 %	31	0.01 %	54 / 445	ENV*



Carbon Footprint

Company Breakdown

Portfolio

Company details	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Estacio Participacoes S.A.	0.01 %	0.01 %	2	0.00 %	213	0.00 %	356 / 445	TC
Eutelsat Communications Promesses	0.01 %	0.01 %	1	0.00 %	34	0.00 %	68 / 445	TC
Exedy Corp	0.00 %	0.00 %	4	0.00 %	255	0.00 %	390 / 445	ENV*
Exide Industries Ltd	0.00 %	0.00 %	1	0.00 %	233	0.00 %	378 / 445	TC
Expedia Group, Inc.	0.04 %	0.04 %	3	0.00 %	34	0.03 %	66 / 445	TC
Fairfax Media Ltd	0.00 %	0.00 %	2	0.00 %	106	0.00 %	268 / 445	AR*
Famous Brands	0.00 %	0.00 %	1	0.00 %	301	0.00 %	408 / 445	AR*
Fast Retailing Co	0.04 %	0.03 %	7	0.00 %	69	0.02 %	148 / 445	ENV*
Faurecia	0.01 %	0.01 %	42	0.03 %	222	0.03 %	363 / 445	ENV*
Feng Tay Enterprise	0.00 %	0.00 %	3	0.00 %	229	0.00 %	373 / 445	ENV*
Ferrari NV	0.03 %	0.03 %	1	0.00 %	55	0.01 %	104 / 445	TC
FF Group (Folli Follie)	0.00 %	0.00 %	1	0.00 %	94	0.00 %	223 / 445	TC
Fiat Chrysler Automobiles NV	0.04 %	0.04 %	83	0.05 %	86	0.22 %	192 / 445	CDP
Fielmann AG	0.01 %	0.00 %	1	0.00 %	87	0.00 %	198 / 445	TC
Flight Centre Travel Group Ltd	0.00 %	0.00 %	1	0.00 %	37	0.00 %	73 / 445	TC
Foot Locker Inc	0.01 %	0.01 %	10	0.01 %	104	0.02 %	260 / 445	TC
Ford Motor Co	0.11 %	0.11 %	142	0.09 %	67	0.51 %	142 / 445	CDP
Ford Otomotive Sanayii AS	0.00 %	0.00 %	1	0.00 %	70	0.00 %	149 / 445	CDP
Formosa Taffeta Co Ltd	0.00 %	0.00 %	6	0.00 %	541	-0.00 %	433 / 445	CDP
Fuji Television Network Inc	0.00 %	0.00 %	0	0.00 %	17	0.01 %	10 / 445	PRE
Fujitsu General	0.00 %	0.00 %	3	0.00 %	222	0.00 %	362 / 445	TC
FuYao Glass Industry Group Co Ltd	0.00 %	0.00 %	4	0.00 %	609	-0.00 %	437 / 445	TC
Galaxy Entertainment Group Ltd.	0.03 %	0.03 %	8	0.01 %	176	0.01 %	341 / 445	TC
Gap Inc	0.02 %	0.02 %	9	0.01 %	77	0.03 %	167 / 445	CDP
Garmin Ltd	0.01 %	0.01 %	2	0.00 %	68	0.01 %	144 / 445	TC
Geely Automobile Holdings Ltd.	0.03 %	0.03 %	5	0.00 %	79	0.01 %	171 / 445	ENV*
General Motors Company	0.12 %	0.12 %	188	0.12 %	88	0.50 %	202 / 445	CDP
Gentex Corp	0.01 %	0.01 %	6	0.00 %	245	0.00 %	383 / 445	PRE
Genting Bhd	0.01 %	0.01 %	31	0.02 %	875	-0.01 %	441 / 445	TC
Genting Malaysia Bhd	0.01 %	0.01 %	1	0.00 %	66	0.00 %	138 / 445	ENV
Genting Singapore Plc	0.01 %	0.01 %	1	0.00 %	94	0.00 %	221 / 445	ENV*
Genuine Parts Co	0.03 %	0.03 %	13	0.01 %	60	0.05 %	123 / 445	TC
Giant Mfg Co	0.00 %	0.00 %	6	0.00 %	295	0.00 %	405 / 445	TC
GKN	0.02 %	0.02 %	44	0.03 %	267	0.02 %	397 / 445	CDP
Global Brands Group Holding	0.00 %	0.00 %	2	0.00 %	70	0.01 %	150 / 445	TC
Golden Eagle Retail Group Ltd.	0.00 %	0.00 %	0	0.00 %	86	0.00 %	193 / 445	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
GOME Retail Holdings Ltd	0.00 %	0.00 %	15	0.01 %	146	0.02 %	313 / 445	PRE
Goodyear Tire & Rubber Co	0.02 %	0.02 %	77	0.05 %	357	0.01 %	419 / 445	CDP
Grandvision B.V.	0.00 %	0.00 %	0	0.00 %	39	0.00 %	77 / 445	CDP
Great Wall Motor Co. Ltd. - H Shares	0.01 %	0.01 %	4	0.00 %	71	0.01 %	156 / 445	TC
Grupo Televisa SAB	0.03 %	0.03 %	2	0.00 %	33	0.02 %	61 / 445	CDP
Guangzhou Automobile Group	0.01 %	0.01 %	2	0.00 %	61	0.01 %	126 / 445	TC
H2O Retailing Corp	0.00 %	0.00 %	7	0.00 %	101	0.01 %	248 / 445	TC
Haier Electronics Group Co Ltd	0.01 %	0.01 %	6	0.00 %	91	0.01 %	210 / 445	TC
Hakuhodo DY Holdings	0.01 %	0.01 %	3	0.00 %	42	0.02 %	79 / 445	TC
Hanesbrands Inc	0.02 %	0.02 %	7	0.00 %	86	0.02 %	191 / 445	CDP
Hankook Tire Co Ltd/New	0.01 %	0.01 %	20	0.01 %	409	0.00 %	425 / 445	CDP
Hanon Systems	0.00 %	0.00 %	5	0.00 %	242	0.00 %	380 / 445	CDP
Hanssem Co Ltd	0.00 %	0.00 %	1	0.00 %	120	0.00 %	291 / 445	TC
Harley-Davidson Inc	0.02 %	0.02 %	21	0.01 %	244	0.01 %	381 / 445	ENV*
Harvey Norman Hldgs Ltd	0.00 %	0.00 %	2	0.00 %	203	0.00 %	348 / 445	PRE
Hasbro Inc	0.03 %	0.03 %	6	0.00 %	99	0.01 %	241 / 445	CDP
Haseko Corp	0.01 %	0.01 %	10	0.01 %	134	0.02 %	302 / 445	TC
Heiwa Corp	0.00 %	0.00 %	2	0.00 %	156	0.00 %	329 / 445	TC
HELLA GmbH & Co. KGaA	0.01 %	0.01 %	6	0.00 %	185	0.01 %	342 / 445	TC
HengTen Networks Group Ltd	0.00 %	0.00 %	0	0.00 %	109	0.00 %	273 / 445	TC
Hennes & Mauritz AB B	0.06 %	0.06 %	10	0.01 %	55	0.05 %	106 / 445	CDP
Hermes Intl	0.04 %	0.04 %	5	0.00 %	217	0.00 %	358 / 445	TC
Hero Motocorp Ltd	0.01 %	0.01 %	9	0.01 %	314	0.00 %	415 / 445	PRE
Hikari Tsushin Inc	0.01 %	0.01 %	2	0.00 %	72	0.01 %	157 / 445	TC
Hilton Worldwide Holdings Inc	0.03 %	0.03 %	28	0.02 %	271	0.01 %	399 / 445	CDP
HIS Co Ltd	0.00 %	0.00 %	2	0.00 %	51	0.01 %	90 / 445	TC
Home Depot Inc	0.45 %	0.45 %	73	0.05 %	65	0.27 %	136 / 445	CDP
Home Product Center PCL	0.00 %	0.00 %	1	0.00 %	97	0.00 %	233 / 445	TC
Honda Motor Co	0.12 %	0.12 %	186	0.12 %	126	0.30 %	297 / 445	CDP*
Horton D.R. Inc	0.03 %	0.03 %	19	0.01 %	123	0.03 %	295 / 445	TC
Hotai Motor Co Ltd	0.01 %	0.01 %	6	0.00 %	98	0.01 %	239 / 445	TC
Hotel Shilla	0.00 %	0.00 %	4	0.00 %	98	0.01 %	238 / 445	TC
Hugo Boss AG	0.01 %	0.01 %	3	0.00 %	88	0.01 %	205 / 445	OTH
Husqvarna AB	0.01 %	0.01 %	6	0.00 %	158	0.01 %	332 / 445	CDP
Hyundai Dept Store	0.00 %	0.00 %	1	0.00 %	86	0.00 %	194 / 445	TC
Hyundai Mobis	0.03 %	0.03 %	61	0.04 %	194	0.05 %	344 / 445	ENV*



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Hyundai Motor Co	0.06 %	0.05 %	56	0.04 %	71	0.19 %	154 / 445	CDP
Hyundai Wia Corp	0.00 %	0.00 %	12	0.01 %	222	0.01 %	361 / 445	TC
Iida Group Holdings Co Ltd	0.01 %	0.01 %	8	0.01 %	140	0.01 %	309 / 445	TC
Imperial Hldgs Ltd	0.01 %	0.01 %	18	0.01 %	204	0.01 %	349 / 445	CDP
Inchcape	0.01 %	0.01 %	3	0.00 %	19	0.04 %	17 / 445	AR*
Inditex SA	0.09 %	0.09 %	9	0.01 %	96	0.02 %	231 / 445	CDP
Informa PLC	0.02 %	0.02 %	1	0.00 %	28	0.01 %	47 / 445	AR*
InterContinental Hotels Group Plc	0.02 %	0.02 %	45	0.03 %	1,877	-0.02 %	445 / 445	CDP
Interpublic Group Cos	0.02 %	0.02 %	4	0.00 %	36	0.03 %	70 / 445	TC
Isetan Mitsukoshi Holdings Ltd	0.01 %	0.01 %	11	0.01 %	98	0.03 %	240 / 445	TC
Isuzu Motors	0.02 %	0.02 %	7	0.00 %	59	0.03 %	118 / 445	CDP
ITV Plc	0.02 %	0.02 %	1	0.00 %	24	0.01 %	35 / 445	AR*
Izumi Co	0.00 %	0.00 %	4	0.00 %	97	0.01 %	236 / 445	TC
J Front Retailing Co Ltd	0.01 %	0.01 %	11	0.01 %	100	0.02 %	245 / 445	TC
Jardine Cycle & Carriage Ltd	0.01 %	0.01 %	23	0.01 %	399	0.00 %	424 / 445	TC
JC Decaux Intl SA	0.01 %	0.01 %	1	0.00 %	67	0.00 %	140 / 445	CDP
JD.com Inc ADR	0.02 %	0.02 %	6	0.00 %	82	0.02 %	178 / 445	TC
Jollibee Foods Corp	0.00 %	0.00 %	2	0.00 %	147	0.00 %	314 / 445	TC
Jumbo SA	0.00 %	0.00 %	1	0.00 %	95	0.00 %	228 / 445	TC
K's Holdings Corp	0.00 %	0.00 %	5	0.00 %	105	0.01 %	262 / 445	TC
Kangwon Land Inc	0.01 %	0.01 %	1	0.00 %	83	0.00 %	182 / 445	ENV*
Kering	0.07 %	0.07 %	6	0.00 %	50	0.03 %	87 / 445	CDP
Kia Motors Corp	0.02 %	0.02 %	27	0.02 %	67	0.10 %	141 / 445	ENV*
Kingfisher	0.02 %	0.02 %	13	0.01 %	63	0.05 %	129 / 445	CDP
Kohl's Corp	0.02 %	0.02 %	18	0.01 %	76	0.06 %	166 / 445	CDP
Koito Manufacturing Co	0.02 %	0.02 %	12	0.01 %	205	0.01 %	351 / 445	TC
Komeri Co	0.00 %	0.00 %	1	0.00 %	87	0.00 %	200 / 445	TC
Kroton Educational S.A.	0.02 %	0.02 %	1	0.00 %	51	0.01 %	89 / 445	TC
L Brands Inc	0.02 %	0.02 %	9	0.01 %	71	0.03 %	155 / 445	CDP
L'Occitane International SA	0.00 %	0.00 %	1	0.00 %	104	0.00 %	259 / 445	TC
Lagardere S.C.A.	0.01 %	0.01 %	5	0.00 %	51	0.03 %	91 / 445	AR*
Lao Feng Xiang Co Ltd	0.00 %	0.00 %	2	0.00 %	98	0.00 %	237 / 445	TC
Las Vegas Sands	0.05 %	0.05 %	10	0.01 %	136	0.01 %	307 / 445	CDP
Lear Corp	0.03 %	0.03 %	55	0.04 %	207	0.04 %	353 / 445	PRE
Leggett & Platt	0.01 %	0.01 %	12	0.01 %	228	0.01 %	371 / 445	TC
Lennar Corp	0.02 %	0.02 %	15	0.01 %	115	0.03 %	283 / 445	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
LG Electronics Inc	0.02 %	0.02 %	56	0.04 %	116	0.10 %	284 / 445	CDP
Li & Fung Ltd.	0.01 %	0.01 %	3	0.00 %	20	0.04 %	25 / 445	ENV*
Li Ning Co. Ltd.	0.00 %	0.00 %	2	0.00 %	163	0.00 %	336 / 445	TC
Liberty Broadband Corp	0.03 %	0.03 %	0	0.00 %	32	0.00 %	56 / 445	TC
Liberty Global plc	0.06 %	0.06 %	10	0.01 %	43	0.06 %	82 / 445	CDP
Lifestyle International Holdings Ltd.	0.00 %	0.00 %	0	0.00 %	92	0.00 %	216 / 445	TC
LKQ Corp	0.02 %	0.03 %	8	0.00 %	65	0.03 %	137 / 445	TC
Lojas Americanas	0.01 %	0.01 %	1	0.00 %	32	0.01 %	59 / 445	CDP
Lojas Renner SA	0.02 %	0.02 %	1	0.00 %	32	0.01 %	55 / 445	CDP
Lotte Shopping	0.01 %	0.01 %	7	0.00 %	57	0.03 %	111 / 445	PRE
Lowe's Cos Inc	0.16 %	0.15 %	68	0.04 %	91	0.17 %	213 / 445	CDP
LPP SA	0.01 %	0.01 %	2	0.00 %	92	0.00 %	215 / 445	TC
Lululemon Athletica inc	0.01 %	0.01 %	1	0.00 %	38	0.00 %	75 / 445	CDP
Luxottica Group SpA	0.02 %	0.02 %	4	0.00 %	87	0.01 %	199 / 445	TC
LVMH-Moet Vuitton	0.16 %	0.16 %	21	0.01 %	73	0.07 %	158 / 445	AR*
Macau Legend Development Limited	0.00 %	0.00 %	0	0.00 %	107	0.00 %	269 / 445	TC
Macy's Inc	0.02 %	0.02 %	32	0.02 %	99	0.07 %	244 / 445	TC
Magna International Inc	0.04 %	0.04 %	128	0.08 %	252	0.06 %	389 / 445	CDP
Mahindra & Mahindra Ltd	0.01 %	0.01 %	7	0.00 %	110	0.01 %	274 / 445	TC
Mando Corp	0.00 %	0.00 %	12	0.01 %	226	0.01 %	367 / 445	TC
Marks & Spencer Group	0.02 %	0.02 %	13	0.01 %	66	0.05 %	139 / 445	CDP*
Marriott Intl	0.08 %	0.08 %	108	0.07 %	522	-0.01 %	430 / 445	CDP
Marui Group Co Ltd	0.01 %	0.01 %	2	0.00 %	93	0.01 %	220 / 445	ENV
Maruti Suzuki India Ltd	0.03 %	0.03 %	4	0.00 %	94	0.01 %	222 / 445	ENV
Matahari Department Store Tbk	0.00 %	0.00 %	1	0.00 %	86	0.00 %	195 / 445	TC
Mattel Inc	0.01 %	0.01 %	10	0.01 %	135	0.02 %	305 / 445	CDP
Mazda Motor Corp	0.02 %	0.02 %	25	0.02 %	74	0.08 %	161 / 445	CDP
McDonald's Corp	0.30 %	0.29 %	45	0.03 %	128	0.07 %	300 / 445	CDP
Media Nusantara Citra Tbk PT	0.00 %	0.00 %	0	0.00 %	21	0.00 %	28 / 445	TC
Mediaset Espana	0.01 %	0.00 %	0	0.00 %	10	0.00 %	1 / 445	ENV*
Mediaset SpA	0.00 %	0.00 %	0	0.00 %	23	0.00 %	34 / 445	AR*
Megacable Holdings SAB de CV	0.00 %	0.00 %	0	0.00 %	24	0.00 %	36 / 445	TC
Melco International Development Ltd.	0.01 %	0.01 %	4	0.00 %	155	0.00 %	326 / 445	TC
Merlin Entertainments Plc	0.01 %	0.01 %	2	0.00 %	102	0.00 %	251 / 445	AR*
MGM China Holdings Ltd	0.00 %	0.00 %	0	0.00 %	61	0.00 %	127 / 445	AR*
MGM Resorts International	0.04 %	0.04 %	14	0.01 %	121	0.02 %	292 / 445	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Michael Kors Holdings Ltd	0.02 %	0.02 %	5	0.00 %	84	0.01 %	189 / 445	TC
Michelin CGDE A Beiges	0.06 %	0.06 %	99	0.06 %	313	0.03 %	414 / 445	CDP
Minor International PCL	0.01 %	0.01 %	2	0.00 %	133	0.00 %	301 / 445	TC
Minth Group Ltd.	0.01 %	0.01 %	3	0.00 %	226	0.00 %	369 / 445	TC
Mitsubishi Motors Corp	0.01 %	0.01 %	7	0.00 %	68	0.02 %	146 / 445	CDP
Mohawk Industries Inc	0.04 %	0.04 %	53	0.03 %	503	-0.00 %	429 / 445	CDP
Moncler SpA	0.01 %	0.01 %	1	0.00 %	127	0.00 %	299 / 445	TC
Motherson Sumi Systems Ltd	0.01 %	0.01 %	5	0.00 %	252	0.00 %	388 / 445	CDP*
Mr Price Group	0.01 %	0.01 %	2	0.00 %	151	0.00 %	317 / 445	AR*
MRF Ltd	0.00 %	0.00 %	2	0.00 %	340	0.00 %	418 / 445	TC
Multiplus SA	0.00 %	0.00 %	0	0.00 %	29	0.00 %	50 / 445	TC
Naspers Ltd N	0.21 %	0.21 %	4	0.00 %	60	0.02 %	120 / 445	AR*
Nemak S.A.B. de C.V.	0.00 %	0.00 %	6	0.00 %	538	-0.00 %	432 / 445	AR*
NetFlix Inc	0.17 %	0.17 %	3	0.00 %	27	0.03 %	44 / 445	TC
New Oriental Education & Technology ADR	0.00 %	0.01 %	0	0.00 %	60	0.00 %	124 / 445	TC
Newell Brands Inc	0.05 %	0.05 %	49	0.03 %	265	0.02 %	396 / 445	CDP
News Corp	0.01 %	0.02 %	6	0.00 %	95	0.02 %	225 / 445	CDP
Next	0.02 %	0.02 %	5	0.00 %	64	0.02 %	135 / 445	ENV*
Nexteer Automotive	0.00 %	0.00 %	4	0.00 %	226	0.00 %	368 / 445	TC
NGK Spark Plug	0.01 %	0.01 %	11	0.01 %	322	0.00 %	416 / 445	CDP
NHK Spring Co	0.00 %	0.00 %	17	0.01 %	385	0.00 %	423 / 445	ENV*
Nifco Inc	0.01 %	0.01 %	6	0.00 %	297	0.00 %	406 / 445	TC
NIKE Inc	0.16 %	0.16 %	26	0.02 %	83	0.07 %	187 / 445	CDP
Nikon Corp	0.01 %	0.01 %	10	0.01 %	135	0.01 %	304 / 445	CDP
Nippon Television Holdings Inc	0.00 %	0.00 %	0	0.00 %	36	0.00 %	71 / 445	TC
Nissan Motor Co	0.04 %	0.04 %	47	0.03 %	82	0.13 %	179 / 445	CDP
Nissan Shatai Co	0.00 %	0.00 %	2	0.00 %	64	0.01 %	131 / 445	TC
Nitori Holdings Co	0.02 %	0.02 %	4	0.00 %	122	0.01 %	293 / 445	TC
NOK Corp	0.01 %	0.01 %	13	0.01 %	256	0.01 %	391 / 445	TC
Nokian Renkaat Oyj	0.01 %	0.01 %	4	0.00 %	190	0.00 %	343 / 445	ENV*
Nordstrom Inc	0.01 %	0.01 %	7	0.00 %	56	0.03 %	108 / 445	CDP
Norwegian Cruise Line Holdings Ltd	0.02 %	0.02 %	86	0.06 %	1,606	-0.04 %	444 / 445	TC
NVR Inc	0.02 %	0.02 %	9	0.01 %	118	0.02 %	288 / 445	TC
O'Reilly Automotive	0.04 %	0.04 %	12	0.01 %	103	0.03 %	257 / 445	TC
Omnicom Group	0.04 %	0.04 %	8	0.01 %	34	0.06 %	64 / 445	CDP
OPAP S.A.	0.01 %	0.01 %	3	0.00 %	67	0.01 %	143 / 445	PRE



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Oriental Land Co	0.03 %	0.03 %	2	0.00 %	89	0.01 %	206 / 445	ENV*
Paddy Power Betfair Plc	0.02 %	0.02 %	1	0.00 %	48	0.01 %	85 / 445	TC
PALTAC Corporation	0.00 %	0.00 %	3	0.00 %	71	0.01 %	153 / 445	TC
Panasonic Corp	0.07 %	0.07 %	156	0.10 %	231	0.09 %	374 / 445	CDP
Pandora A/S	0.02 %	0.02 %	4	0.00 %	92	0.01 %	217 / 445	TC
Paradise Co Ltd	0.00 %	0.00 %	1	0.00 %	156	0.00 %	328 / 445	TC
Pearson	0.02 %	0.02 %	4	0.00 %	50	0.02 %	86 / 445	CDP
Persimmon	0.02 %	0.02 %	5	0.00 %	84	0.01 %	190 / 445	CDP
Peugeot SA	0.02 %	0.02 %	32	0.02 %	81	0.09 %	177 / 445	CDP
Pirelli & C. SpA	0.00 %		22	0.01 %	390	0.00 %	N / A	CDP
Plastic Omnium	0.01 %	0.01 %	8	0.01 %	217	0.01 %	357 / 445	ENV
Polaris Inds Inc	0.01 %	0.01 %	12	0.01 %	198	0.01 %	347 / 445	TC
Pou Chen Corp	0.01 %	0.01 %	18	0.01 %	164	0.02 %	337 / 445	PRE
Prada SpA	0.00 %	0.00 %	1	0.00 %	97	0.00 %	234 / 445	ENV
ProSiebenSat.1 Media SE	0.02 %	0.02 %	1	0.00 %	12	0.02 %	4 / 445	CDP
Publicis Groupe	0.03 %	0.03 %	3	0.00 %	21	0.04 %	30 / 445	AR
Pulte Group Inc	0.02 %	0.02 %	11	0.01 %	118	0.02 %	287 / 445	TC
PVH Corp	0.02 %	0.02 %	5	0.00 %	56	0.02 %	110 / 445	CDP
Qurate Retail Group, Inc. QVC Group	0.02 %	0.02 %	2	0.00 %	19	0.03 %	19 / 445	TC
Rajesh Exports Ltd	0.00 %	0.00 %	16	0.01 %	112	0.03 %	280 / 445	TC
Rakuten Inc	0.02 %	0.02 %	1	0.00 %	16	0.02 %	6 / 445	CDP*
Ralph Lauren Corp	0.01 %	0.01 %	3	0.00 %	45	0.02 %	84 / 445	PRE
REA Group Ltd	0.01 %	0.01 %	2	0.00 %	728	-0.00 %	439 / 445	PRE
RELX PLC	0.10 %	0.10 %	3	0.00 %	25	0.03 %	39 / 445	CDP
Renault SA	0.04 %	0.04 %	27	0.02 %	59	0.11 %	117 / 445	OTH*
Resorttrust	0.00 %	0.00 %	1	0.00 %	157	0.00 %	330 / 445	TC
Restaurant Brands International Inc.	0.03 %	0.03 %	7	0.00 %	127	0.01 %	298 / 445	TC
Richemont, Cie Financiere A Br	0.11 %	0.11 %	10	0.01 %	80	0.03 %	172 / 445	CDP
Rinnai Corp	0.01 %	0.01 %	5	0.00 %	232	0.00 %	377 / 445	CDP
Ross Stores Inc	0.06 %	0.06 %	16	0.01 %	105	0.03 %	263 / 445	TC
Royal Caribbean Cruises Ltd	0.05 %	0.05 %	66	0.04 %	680	-0.02 %	438 / 445	CDP
RTL Group	0.01 %	0.01 %	0	0.00 %	18	0.01 %	12 / 445	PRE
Ryohin Keikaku Co	0.02 %	0.02 %	3	0.00 %	97	0.01 %	235 / 445	TC
Sa Sa International Holdings Ltd.	0.00 %	0.00 %	0	0.00 %	57	0.00 %	112 / 445	AR*
SACI Falabella	0.01 %	0.01 %	4	0.00 %	89	0.01 %	208 / 445	TC
Salvatore Ferragamo SpA	0.00 %	0.00 %	1	0.00 %	102	0.00 %	250 / 445	CDP*



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Samsonite International SA	0.01 %	0.01 %	5	0.00 %	139	0.01 %	308 / 445	TC
Sands China Ltd.	0.03 %	0.03 %	6	0.00 %	211	0.00 %	355 / 445	PRE
Sankyo Co Ltd	0.00 %	0.00 %	1	0.00 %	158	0.00 %	331 / 445	TC
Sanrio Co	0.00 %	0.00 %	0	0.00 %	34	0.00 %	63 / 445	TC
Schibsted AS	0.01 %	0.01 %	1	0.00 %	41	0.01 %	78 / 445	CDP
Scripps Networks Interactive	0.02 %	0.02 %	0	0.00 %	12	0.01 %	2 / 445	CDP
SEB SA	0.01 %	0.01 %	10	0.01 %	226	0.01 %	364 / 445	CDP
Sega Sammy Holdings Inc	0.01 %	0.01 %	3	0.00 %	124	0.01 %	296 / 445	CDP
Sekisui Chemical Co	0.02 %	0.02 %	20	0.01 %	247	0.01 %	385 / 445	CDP
Sekisui House	0.02 %	0.02 %	9	0.01 %	54	0.04 %	97 / 445	CDP
SES	0.02 %	0.02 %	1	0.00 %	26	0.01 %	43 / 445	CDP
Seven West Media Ltd	0.00 %	0.00 %	0	0.00 %	36	0.00 %	69 / 445	TC
Shangri-La Asia Ltd.	0.00 %	0.00 %	5	0.00 %	585	-0.00 %	435 / 445	CDP
Sharp Corp	0.01 %	0.01 %	3	0.00 %	145	0.00 %	311 / 445	ENV
Shaw Communications Inc	0.02 %	0.02 %	1	0.00 %	33	0.01 %	60 / 445	TC
Shenzhou International Group Holdings Ltd.	0.01 %	0.01 %	7	0.00 %	544	-0.00 %	434 / 445	TC
Shimachu Co	0.00 %	0.00 %	1	0.00 %	92	0.00 %	214 / 445	TC
Shimamura Co	0.01 %	0.01 %	4	0.00 %	106	0.01 %	266 / 445	TC
Shimano Inc	0.02 %	0.02 %	10	0.01 %	270	0.00 %	398 / 445	TC
Shinsegae Co Ltd	0.00 %	0.00 %	2	0.00 %	77	0.01 %	168 / 445	TC
Shochiku Co	0.00 %	0.00 %	0	0.00 %	43	0.00 %	81 / 445	TC
Signet Jewelers Ltd	0.01 %	0.01 %	10	0.01 %	105	0.02 %	264 / 445	TC
Singapore Press Hldgs	0.01 %	0.01 %	1	0.00 %	105	0.00 %	261 / 445	TC
Sirius XM Holdings Inc	0.04 %	0.04 %	1	0.00 %	21	0.02 %	29 / 445	TC
SJM Holdings Ltd.	0.00 %	0.00 %	4	0.00 %	155	0.00 %	323 / 445	TC
Sky Network Television Limited	0.00 %	0.00 %	0	0.00 %	21	0.00 %	26 / 445	TC
SKY Perfect JSAT Holdings Inc.	0.00 %	0.00 %	0	0.00 %	25	0.00 %	38 / 445	TC
Sky Plc	0.03 %	0.03 %	3	0.00 %	20	0.04 %	24 / 445	CDP
SkyCity Entertainment Group	0.00 %	0.00 %	1	0.00 %	105	0.00 %	265 / 445	TC
Skylark Co Ltd	0.00 %	0.00 %	5	0.00 %	152	0.01 %	318 / 445	TC
Smiles S.A.	0.00 %	0.00 %	0	0.00 %	58	0.00 %	115 / 445	TC
Sodexo	0.03 %	0.02 %	9	0.01 %	51	0.04 %	88 / 445	CDP
Sony Corp	0.11 %	0.11 %	53	0.03 %	64	0.20 %	134 / 445	CDP
Stanley Electric Co	0.01 %	0.01 %	13	0.01 %	368	0.00 %	421 / 445	ENV*
Starbucks Corp	0.17 %	0.17 %	21	0.01 %	75	0.07 %	164 / 445	CDP
Start Today Co Ltd	0.01 %	0.01 %	0	0.00 %	97	0.00 %	232 / 445	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Steinhoff Intl Hldgs N.V.	0.03 %	0.03 %	6	0.00 %	56	0.03 %	107 / 445	PRE
SUBARU CORPORATION	0.05 %	0.05 %	20	0.01 %	74	0.06 %	162 / 445	CDP
Sumitomo Electric Industries	0.03 %	0.03 %	73	0.05 %	256	0.03 %	392 / 445	CDP
Sumitomo Forestry Co	0.00 %	0.00 %	7	0.00 %	87	0.02 %	201 / 445	CDP
Sumitomo Rubber Industries	0.01 %	0.01 %	20	0.01 %	307	0.01 %	410 / 445	CDP
Sun TV Network Ltd	0.00 %	0.00 %	0	0.00 %	22	0.00 %	32 / 445	TC
Super Group Ltd	0.00 %	0.00 %	1	0.00 %	76	0.00 %	165 / 445	TC
Surya Citra Media	0.00 %	0.00 %	0	0.00 %	19	0.00 %	14 / 445	TC
Suzuki Motor Corp	0.05 %	0.05 %	25	0.02 %	90	0.06 %	209 / 445	TC
Swatch Group AG	0.04 %	0.04 %	8	0.01 %	102	0.02 %	252 / 445	TC
Tabcorp Hldgs Ltd	0.01 %	0.01 %	1	0.00 %	29	0.01 %	51 / 445	ENV*
Takashimaya Co	0.01 %	0.01 %	8	0.00 %	93	0.02 %	219 / 445	TC
TAL Education Group	0.01 %	0.01 %	0	0.00 %	57	0.00 %	113 / 445	TC
Tapestry, Inc	0.03 %	0.03 %	6	0.00 %	106	0.01 %	267 / 445	CDP*
Target Corp	0.08 %	0.07 %	70	0.05 %	80	0.20 %	173 / 445	CDP
Tata Motors Ltd	0.02 %	0.02 %	13	0.01 %	63	0.05 %	130 / 445	TC
Tatts Group Limited	0.01 %	0.01 %	1	0.00 %	29	0.01 %	49 / 445	AR
Taylor Wimpey	0.02 %	0.02 %	6	0.00 %	80	0.02 %	174 / 445	CDP
Techtronic Industries Co. Ltd.	0.02 %	0.02 %	8	0.01 %	150	0.01 %	316 / 445	TC
TEGNA Inc	0.01 %	0.01 %	1	0.00 %	27	0.01 %	46 / 445	TC
Telenet Group Holding NV	0.01 %	0.01 %	0	0.00 %	16	0.00 %	7 / 445	PRE
Television Broadcasts Ltd.	0.00 %	0.00 %	0	0.00 %	19	0.00 %	22 / 445	AR*
Tesla, Inc	0.10 %	0.10 %	5	0.00 %	60	0.02 %	122 / 445	TC
Texwinca Holdings Ltd.	0.00 %	0.00 %	2	0.00 %	309	0.00 %	412 / 445	TC
The Foschini Group Ltd	0.01 %	0.01 %	4	0.00 %	165	0.00 %	338 / 445	CDP
The Star Entertainment Group Limited	0.01 %	0.01 %	2	0.00 %	109	0.00 %	271 / 445	ENV*
Tiffany & Co	0.02 %	0.02 %	2	0.00 %	37	0.01 %	72 / 445	CDP
Time Warner Inc	0.18 %	0.18 %	7	0.00 %	17	0.11 %	9 / 445	CDP
Titan Co Ltd	0.01 %	0.01 %	1	0.00 %	88	0.00 %	204 / 445	PRE
TJX Cos Inc	0.11 %	0.11 %	24	0.02 %	60	0.10 %	125 / 445	CDP
Tofas Turk Otomobil Fab Co	0.00 %	0.00 %	1	0.00 %	70	0.00 %	151 / 445	CDP
Toho Co	0.01 %	0.01 %	1	0.00 %	56	0.00 %	109 / 445	TC
Tokai Rika Co	0.00 %	0.00 %	6	0.00 %	263	0.00 %	395 / 445	TC
Tokyo Broadcasting System Holdings Inc	0.00 %	0.00 %	0	0.00 %	26	0.00 %	41 / 445	TC
Toll Brothers Inc	0.01 %	0.01 %	8	0.01 %	119	0.01 %	290 / 445	TC
Toyo Tire & Rubber Co	0.01 %	0.01 %	14	0.01 %	358	0.00 %	420 / 445	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Toyoda Gosei Co	0.00 %	0.00 %	14	0.01 %	300	0.00 %	407 / 445	CDP
Toyota Boshoku Corp	0.00 %	0.00 %	12	0.01 %	248	0.01 %	387 / 445	ENV
Toyota Industries Corp	0.02 %	0.02 %	25	0.02 %	227	0.02 %	370 / 445	CDP
Toyota Motor Corp	0.36 %	0.36 %	184	0.12 %	79	0.55 %	170 / 445	CDP
Tractor Supply Co	0.02 %	0.02 %	8	0.01 %	88	0.02 %	203 / 445	TC
TripAdvisor Inc.	0.01 %	0.01 %	1	0.00 %	34	0.00 %	67 / 445	TC
Truworths International Ltd	0.01 %	0.01 %	2	0.00 %	112	0.00 %	278 / 445	CDP
Ts Tech Co Ltd	0.00 %	0.00 %	10	0.01 %	263	0.00 %	393 / 445	TC
Tsogo Sun Holdings Ltd	0.00 %	0.00 %	2	0.00 %	384	0.00 %	422 / 445	AR*
TUI AG	0.02 %	0.02 %	97	0.06 %	500	-0.01 %	428 / 445	CDP
TV Asahi Holdings Corp	0.00 %	0.00 %	0	0.00 %	24	0.00 %	37 / 445	TC
Twenty-First Century Fox Inc	0.09 %	0.09 %	6	0.00 %	19	0.08 %	18 / 445	CDP
Ulta Beauty, Inc	0.03 %	0.03 %	4	0.00 %	95	0.01 %	227 / 445	TC
UMW Holdings Bhd	0.00 %	0.00 %	2	0.00 %	74	0.01 %	163 / 445	ENV*
Under Armour Inc	0.01 %	0.01 %	4	0.00 %	60	0.01 %	121 / 445	TC
USS Co Ltd	0.01 %	0.01 %	0	0.00 %	74	0.00 %	160 / 445	TC
Valeo	0.04 %	0.04 %	63	0.04 %	245	0.03 %	384 / 445	AR
VF Corp	0.05 %	0.05 %	8	0.01 %	59	0.04 %	116 / 445	CDP*
Viacom Inc	0.02 %	0.02 %	3	0.00 %	19	0.04 %	13 / 445	CDP
Vivendi SA	0.06 %	0.06 %	4	0.00 %	26	0.04 %	42 / 445	AR*
Volkswagen AG	0.08 %	0.08 %	116	0.08 %	83	0.33 %	186 / 445	CDP
Wacoal Holdings Corp	0.00 %	0.00 %	3	0.00 %	149	0.00 %	315 / 445	TC
Walt Disney Co	0.36 %	0.35 %	41	0.03 %	54	0.19 %	96 / 445	CDP
Whirlpool Corp	0.03 %	0.03 %	81	0.05 %	271	0.03 %	400 / 445	OTH
Whitbread	0.02 %	0.02 %	6	0.00 %	116	0.01 %	285 / 445	CDP
William Hill	0.01 %	0.01 %	2	0.00 %	52	0.01 %	92 / 445	AR*
Wolters Kluwer NV	0.03 %	0.03 %	1	0.00 %	18	0.02 %	11 / 445	CDP
Woolworth Hldgs	0.01 %	0.01 %	10	0.01 %	196	0.01 %	346 / 445	CDP
WPP Plc	0.05 %	0.05 %	7	0.00 %	25	0.07 %	40 / 445	CDP
Wyndham Worldwide Corp	0.03 %	0.02 %	9	0.01 %	110	0.02 %	275 / 445	CDP
Wynn Macau	0.01 %	0.01 %	2	0.00 %	155	0.00 %	321 / 445	TC
Wynn Resorts Ltd	0.03 %	0.03 %	8	0.00 %	155	0.01 %	322 / 445	TC
Xinyi Glass Holdings Ltd.	0.00 %	0.00 %	6	0.00 %	531	-0.00 %	431 / 445	TC
Yamada Denki Co	0.01 %	0.01 %	13	0.01 %	100	0.03 %	246 / 445	TC
Yamaha Corp	0.01 %	0.01 %	4	0.00 %	113	0.01 %	281 / 445	CDP*
Yamaha Motor Co	0.02 %	0.02 %	32	0.02 %	208	0.02 %	354 / 445	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Yokohama Rubber Co	0.00 %	0.00 %	13	0.01 %	277	0.01 %	401 / 445	CDP
Yue Yuen Industrial (Holdings) Ltd.	0.01 %	0.01 %	8	0.00 %	143	0.01 %	310 / 445	TC
Yulon Motor Co Ltd	0.00 %	0.00 %	2	0.00 %	55	0.01 %	102 / 445	TC
Yum China Holdings Inc	0.04 %	0.03 %	45	0.03 %	472	-0.00 %	427 / 445	PRE
Yum! Brands Inc	0.06 %	0.06 %	41	0.03 %	452	-0.00 %	426 / 445	CDP*
Zalando SE	0.01 %	0.01 %	2	0.00 %	83	0.01 %	183 / 445	TC
Zee Entertainment Enterprises Ltd	0.01 %	0.01 %	0	0.00 %	22	0.00 %	33 / 445	TC
Zensho Holdings Co Ltd	0.00 %	0.00 %	6	0.00 %	167	0.01 %	340 / 445	TC
Zhongsheng Group Holdings Ltd.	0.00 %	0.00 %	4	0.00 %	103	0.01 %	256 / 445	TC
Consumer Staples	8.88 %	8.88 %	10,277	6.68 %	262	5.12 %		
Aeon Co Ltd	0.02 %	0.02 %	62	0.04 %	90	0.16 %	60 / 257	CDP
Ahold Delhaize Koninklijke NV	0.05 %	0.05 %	89	0.06 %	136	0.13 %	87 / 257	CDP
Ain Holdings Inc	0.00 %	0.00 %	1	0.00 %	98	0.00 %	71 / 257	TC
Ajinomoto Co	0.02 %	0.02 %	66	0.04 %	609	-0.01 %	206 / 257	CDP
Alimentation Couche Tard Inc	0.04 %	0.04 %	29	0.02 %	99	0.07 %	75 / 257	TC
Almacenes Exito	0.00 %	0.00 %	5	0.00 %	42	0.03 %	9 / 257	ENV
Altria Group Inc	0.28 %	0.28 %	65	0.04 %	176	0.06 %	109 / 257	CDP
Ambev S.A.	0.07 %	0.07 %	12	0.01 %	237	0.01 %	143 / 257	PRE
Amorepacific Corp	0.02 %	0.02 %	3	0.00 %	64	0.01 %	24 / 257	CDP
Amorepacific Group	0.01 %	0.01 %	2	0.00 %	60	0.01 %	17 / 257	ENV*
Anadolu Efes Biracilik Ve Malt	0.00 %	0.00 %	3	0.00 %	199	0.00 %	119 / 257	PRE
Anheuser Busch Inbev NV	0.21 %	0.21 %	103	0.07 %	356	0.02 %	173 / 257	CDP
Anhui Gujing Distillery	0.00 %	0.00 %	0	0.00 %	157	0.00 %	101 / 257	TC
Arca Continental, SAB de CV	0.01 %	0.01 %	4	0.00 %	267	0.00 %	153 / 257	ENV*
Archer-Daniels-Midland Co	0.05 %	0.05 %	1,023	0.67 %	1,176	-0.42 %	244 / 257	CDP
Ariake Japan Co	0.00 %	0.00 %	1	0.00 %	360	0.00 %	175 / 257	TC
ARYZTA	0.01 %	0.01 %	12	0.01 %	227	0.01 %	136 / 257	CDP
Asahi Group Holdings Ltd	0.04 %	0.04 %	43	0.03 %	245	0.02 %	148 / 257	AR*
Associated British Foods	0.03 %	0.03 %	93	0.06 %	846	-0.03 %	223 / 257	CDP
Avenue Supermarts Ltd	0.00 %	0.00 %	0	0.00 %	96	0.00 %	66 / 257	TC
AVI Ltd	0.01 %	0.01 %	5	0.00 %	543	-0.00 %	196 / 257	ENV*
Barry Callebaut AG	0.01 %	0.01 %	10	0.01 %	335	0.00 %	169 / 257	CDP
Becle, S.A. De C.V.	0.00 %	0.00 %	1	0.00 %	333	0.00 %	168 / 257	TC
Beiersdorf AG	0.03 %	0.02 %	Page 65 ³	0.00 %	78	0.01 %	41 / 257	CDP
BGF Co	0.00 %	0.00 %		2	0.00 %	83	0.01 %	46 / 257



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Bid Corporation Limited	0.02 %	0.02 %	19	0.01 %	160	0.02 %	103 / 257	ENV
BIM Birlesik Magazalar AS	0.01 %	0.01 %	6	0.00 %	83	0.02 %	47 / 257	TC
Booker Group Plc	0.01 %	0.01 %	4	0.00 %	44	0.02 %	13 / 257	AR*
BRF S.A.	0.02 %	0.02 %	56	0.04 %	589	-0.01 %	202 / 257	CDP
Britannia Industries Ltd.	0.00 %	0.00 %	1	0.00 %	232	0.00 %	140 / 257	PRE
British American Tobacco Malaysia Bhd	0.00 %	0.00 %	1	0.00 %	184	0.00 %	113 / 257	AR
British American Tobacco Plc	0.33 %	0.33 %	58	0.04 %	208	0.04 %	125 / 257	CDP
Brown-Forman Corp	0.02 %	0.02 %	4	0.00 %	206	0.00 %	122 / 257	CDP
Bunge Ltd	0.02 %	0.02 %	632	0.41 %	1,019	-0.23 %	235 / 257	PRE
Calbee Inc	0.01 %	0.01 %	8	0.01 %	566	-0.00 %	200 / 257	AR*
Campbell Soup Co	0.02 %	0.02 %	29	0.02 %	479	-0.00 %	190 / 257	CDP
Carlsberg AS	0.03 %	0.03 %	33	0.02 %	269	0.01 %	154 / 257	CDP
Carrefour SA	0.02 %	0.03 %	49	0.03 %	60	0.21 %	16 / 257	CDP*
Casino Guichard-Perrachon	0.01 %	0.01 %	19	0.01 %	62	0.07 %	22 / 257	CDP
CECONOMY AG	0.00 %	0.00 %	29	0.02 %	65	0.11 %	25 / 257	ENV*
Cencosud SA	0.01 %	0.01 %	8	0.01 %	83	0.02 %	49 / 257	TC
Charoen Pokphand Foods	0.01 %	0.01 %	105	0.07 %	1,164	-0.04 %	242 / 257	TC
Charoen Pokphand Indonesia Tbk PT	0.00 %	0.00 %	11	0.01 %	614	-0.00 %	207 / 257	TC
China Agri-Industries Holdings Ltd.	0.00 %	0.00 %	89	0.06 %	1,460	-0.04 %	252 / 257	ENV*
China Foods Ltd.	0.00 %	0.00 %	2	0.00 %	137	0.00 %	90 / 257	TC
China Mengniu Dairy Co. Ltd.	0.02 %	0.02 %	92	0.06 %	1,164	-0.04 %	243 / 257	TC
China Resources Beer (Holdings) Co Ltd	0.01 %	0.01 %	8	0.01 %	271	0.00 %	156 / 257	TC
Church & Dwight Co	0.03 %	0.03 %	7	0.00 %	146	0.01 %	96 / 257	CDP
Cia Brasileira de Distribuicao	0.01 %	0.01 %	7	0.00 %	77	0.02 %	38 / 257	CDP
CJ CheilJedang Corp	0.01 %	0.01 %	25	0.02 %	270	0.01 %	155 / 257	CDP
Clicks Group Ltd	0.01 %	0.01 %	2	0.00 %	89	0.00 %	57 / 257	CDP
Clorox Co	0.04 %	0.04 %	35	0.02 %	449	-0.00 %	187 / 257	CDP
Coca-Cola Amatil Ltd	0.01 %	0.01 %	8	0.00 %	195	0.01 %	118 / 257	CDP
Coca-Cola Bottlers Japan Co	0.01 %	0.01 %	7	0.00 %	207	0.01 %	124 / 257	CDP
Coca-Cola Co	0.40 %	0.40 %	122	0.08 %	228	0.07 %	138 / 257	CDP
Coca-Cola European Partners plc	0.02 %	0.02 %	7	0.00 %	154	0.01 %	100 / 257	CDP
Coca-Cola Femsa SAB de CV	0.01 %	0.01 %	4	0.00 %	141	0.01 %	92 / 257	ENV*
Coca-Cola HBC AG	0.01 %	0.02 %	10	0.01 %	203	0.01 %	121 / 257	CDP*
Coca-Cola Icecek Uretim AS	0.00 %	0.00 %	1	0.00 %	153	0.00 %	99 / 257	CDP
Colgate-Palmolive Co	0.14 %	0.14 %	36	0.02 %	169	0.04 %	105 / 257	CDP
Colgate-Palmolive India Ltd	0.00 %	0.00 %	0	0.00 %	134	0.00 %	85 / 257	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Colruyt SA	0.01 %	0.01 %	2	0.00 %	44	0.01 %	12 / 257	PRE
Compania Cervecerias Unidas S.A.	0.00 %	0.00 %	4	0.00 %	281	0.00 %	158 / 257	PRE
Conagra Brands, Inc	0.03 %	0.03 %	80	0.05 %	598	-0.01 %	205 / 257	CDP
Constellation Brands Inc	0.07 %	0.07 %	12	0.01 %	161	0.01 %	104 / 257	CDP
Cosmos Pharmaceutical	0.00 %	0.00 %	2	0.00 %	97	0.00 %	70 / 257	TC
Costco Wholesale Corp	0.17 %	0.16 %	68	0.04 %	43	0.41 %	10 / 257	CDP
Coty Inc.	0.02 %	0.02 %	4	0.00 %	96	0.01 %	67 / 257	TC
CP ALL PCL	0.02 %	0.02 %	8	0.00 %	72	0.03 %	32 / 257	TC
CVS Health Corporation	0.19 %	0.19 %	67	0.04 %	26	0.69 %	2 / 257	CDP*
Dabur India Ltd	0.01 %	0.01 %	1	0.00 %	150	0.00 %	97 / 257	PRE
Dairy Farm Intl Hldgs Ltd	0.00 %	0.01 %	5	0.00 %	93	0.01 %	61 / 257	TC
Dali Foods Group Company Ltd	0.00 %	0.00 %	2	0.00 %	402	0.00 %	183 / 257	TC
Danone	0.10 %	0.11 %	228	0.15 %	764	-0.06 %	220 / 257	CDP
Davide Campari Group Milano SpA	0.01 %	0.01 %	2	0.00 %	157	0.00 %	102 / 257	TC
Diageo Plc	0.19 %	0.19 %	71	0.05 %	238	0.04 %	144 / 257	CDP
Dis-Chem Pharmacies Limited	0.00 %	0.00 %	0	0.00 %	86	0.00 %	50 / 257	TC
Distribuidora Internacional De Alimentacion	0.01 %	0.01 %	15	0.01 %	113	0.03 %	78 / 257	CDP
Dongsuh Companies Inc	0.00 %	0.00 %	0	0.00 %	61	0.00 %	21 / 257	TC
Dr Pepper Snapple Group	0.04 %	0.04 %	19	0.01 %	210	0.01 %	127 / 257	CDP
E-Mart Co. Ltd	0.01 %	0.01 %	3	0.00 %	25	0.04 %	1 / 257	PRE
Edgewell Personal Care Co.	0.01 %	0.01 %	13	0.01 %	400	0.00 %	182 / 257	TC
Emami Ltd	0.00 %	0.00 %	0	0.00 %	83	0.00 %	48 / 257	PRE
Embotelladora Andina SA	0.00 %	0.00 %	2	0.00 %	191	0.00 %	117 / 257	TC
Essity AB	0.04 %	0.04 %	54	0.03 %	380	0.01 %	179 / 257	ENV
Estee Lauder Cos.	0.05 %	0.05 %	6	0.00 %	67	0.02 %	28 / 257	CDP
Eurocash SA	0.00 %	0.00 %	3	0.00 %	61	0.01 %	18 / 257	TC
Ezaki Glico Co	0.01 %	0.01 %	18	0.01 %	681	-0.00 %	213 / 257	TC
Familymart UNY Holdings Co	0.01 %	0.01 %	12	0.01 %	416	0.00 %	185 / 257	AR*
Felda Global Ventures Holdings Bhd	0.00 %	0.00 %	36	0.02 %	1,119	-0.01 %	240 / 257	TC
Fomento Economico Mexicano S.A.B. de C.	0.05 %	0.05 %	34	0.02 %	115	0.06 %	80 / 257	ENV*
Fuji Oil Co	0.00 %	0.00 %	11	0.01 %	760	-0.00 %	218 / 257	CDP
General Mills Inc	0.07 %	0.07 %	120	0.08 %	596	-0.02 %	204 / 257	CDP
George Weston Ltd	0.01 %	0.01 %	5	0.00 %	27	0.05 %	4 / 257	CDP
Glanbia Plc	0.01 %	0.01 %	35	0.02 %	1,230	-0.01 %	247 / 257	TC
GlaxoSmithKline Consumer Healthcare Ltd	0.00 %	0.00 %	2	0.00 %	1,113	-0.00 %	239 / 257	AR*
Godrej Consumer Products Ltd	0.01 %	0.01 %	1	0.00 %	141	0.00 %	93 / 257	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Golden Agri Resources Ltd	0.00 %	0.00 %	36	0.02 %	697	-0.01 %	214 / 257	CDP
Gruma SAB	0.01 %	0.01 %	31	0.02 %	1,311	-0.01 %	249 / 257	TC
Grupo Bimbo S.A.B.	0.01 %	0.01 %	22	0.01 %	226	0.01 %	134 / 257	AR*
Grupo Comercial Chedraui SA de CV	0.00 %	0.00 %	2	0.00 %	87	0.00 %	56 / 257	TC
Grupo Lala S.A.B. de C.V.	0.00 %	0.00 %	6	0.00 %	653	-0.00 %	211 / 257	PRE
GS Retail Co Ltd	0.00 %	0.00 %	3	0.00 %	90	0.01 %	59 / 257	TC
Gudang Garam Tbk PT	0.01 %	0.01 %	4	0.00 %	186	0.00 %	114 / 257	TC
Hanjaya Mandala Sampoerna Tbk PT	0.01 %	0.01 %	1	0.00 %	176	0.00 %	110 / 257	TC
Health and Happiness International Holdings	0.00 %	0.00 %	2	0.00 %	496	-0.00 %	191 / 257	TC
Heineken Holding NV	0.03 %	0.02 %	45	0.03 %	280	0.02 %	157 / 257	CDP
Heineken NV	0.05 %	0.05 %	31	0.02 %	266	0.01 %	152 / 257	CDP*
Hengan International Group Co. Ltd.	0.02 %	0.02 %	24	0.02 %	968	-0.01 %	230 / 257	TC
Henkel AG & Co. KGaA	0.09 %	0.09 %	26	0.02 %	132	0.04 %	84 / 257	CDP
Herbalife Ltd	0.01 %	0.01 %	3	0.00 %	61	0.01 %	19 / 257	TC
Hershey Foods Corp	0.03 %	0.03 %	12	0.01 %	176	0.01 %	108 / 257	CDP
Hindustan Unilever Ltd	0.03 %	0.03 %	5	0.00 %	231	0.00 %	139 / 257	PRE
Hite Jinro	0.00 %	0.00 %	3	0.00 %	323	0.00 %	164 / 257	TC
Hormel Foods Corp	0.02 %	0.02 %	66	0.04 %	962	-0.02 %	228 / 257	CDP*
House Foods Group Inc	0.01 %	0.01 %	10	0.01 %	550	-0.00 %	197 / 257	TC
Hypera SA	0.01 %	0.01 %	1	0.00 %	65	0.00 %	26 / 257	TC
ICA Gruppen AB	0.01 %	0.01 %	2	0.00 %	33	0.02 %	7 / 257	AR
Imperial Brands Plc	0.09 %	0.09 %	74	0.05 %	140	0.10 %	91 / 257	ENV*
Indofood CBP Sukses Makmur TBK PT	0.00 %	0.00 %	3	0.00 %	402	0.00 %	184 / 257	TC
Indofood Sukses Makmur Tbk PT	0.01 %	0.01 %	35	0.02 %	979	-0.01 %	234 / 257	TC
Industrias Bachoco SAB de CV	0.00 %	0.00 %	19	0.01 %	1,770	-0.01 %	253 / 257	TC
Ingredion Inc	0.02 %	0.02 %	149	0.10 %	1,981	-0.08 %	256 / 257	CDP
IOI Corp Bhd	0.01 %	0.01 %	20	0.01 %	1,061	-0.01 %	237 / 257	PRE
ITC Ltd	0.03 %	0.03 %	11	0.01 %	471	-0.00 %	189 / 257	CDP
Ito En	0.00 %	0.00 %	18	0.01 %	740	-0.00 %	216 / 257	PRE
Japan Tobacco Inc	0.09 %	0.09 %	36	0.02 %	216	0.02 %	128 / 257	CDP
JBS SA	0.01 %	0.00 %	294	0.19 %	1,266	-0.12 %	248 / 257	CDP
Jeronimo Martins & Filito SGPS	0.01 %	0.01 %	9	0.01 %	97	0.02 %	68 / 257	CDP
Kagome Co	0.01 %	0.01 %	8	0.01 %	398	0.00 %	181 / 257	CDP
Kao Corp	0.07 %	0.07 %	34	0.02 %	183	0.03 %	111 / 257	CDP
Kellogg Co	0.04 %	0.04 %	56	0.04 %	504	-0.00 %	193 / 257	CDP
Kernel Holding SA	0.00 %	0.00 %	10	0.01 %	622	-0.00 %	208 / 257	CDP*

Page 68



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Kerry Group A	0.03 %	0.03 %	19	0.01 %	238	0.01 %	145 / 257	TC
Kesko Oyj	0.01 %	0.01 %	4	0.00 %	35	0.03 %	8 / 257	CDP
Kewpie Corporation	0.01 %	0.01 %	21	0.01 %	398	0.00 %	180 / 257	TC
Kikkoman Corp	0.01 %	0.01 %	9	0.01 %	245	0.00 %	147 / 257	CDP
Kimberly Clark de Mexico S.A.B. de C.V.	0.00 %	0.00 %	5	0.00 %	677	-0.00 %	212 / 257	ENV*
Kimberly-Clark	0.10 %	0.10 %	122	0.08 %	470	-0.01 %	188 / 257	CDP
Kirin Holdings Co Ltd	0.05 %	0.05 %	58	0.04 %	234	0.03 %	141 / 257	CDP
Kobayashi Pharmaceutical Co	0.01 %	0.01 %	1	0.00 %	77	0.00 %	39 / 257	TC
Kose Corp	0.01 %	0.01 %	1	0.00 %	104	0.00 %	77 / 257	TC
Kroger Co	0.04 %	0.04 %	156	0.10 %	114	0.29 %	79 / 257	CDP*
KT&G Corp.	0.02 %	0.02 %	9	0.01 %	199	0.01 %	120 / 257	PRE
Kuala Lumpur Kepong Bhd	0.01 %	0.01 %	32	0.02 %	1,331	-0.01 %	250 / 257	TC
Kusuri No Aoki Holdings	0.00 %	0.00 %	1	0.00 %	97	0.00 %	69 / 257	TC
L'Oreal	0.12 %	0.12 %	11	0.01 %	64	0.04 %	23 / 257	CDP
Lamb Weston Holdings Inc	0.02 %	0.02 %	24	0.02 %	625	-0.00 %	210 / 257	TC
Lawson Inc	0.01 %	0.01 %	1	0.00 %	27	0.01 %	5 / 257	CDP
LG Household & Health Care	0.02 %	0.02 %	3	0.00 %	78	0.01 %	40 / 257	CDP
Lindt & Sprungli AG Br	0.03 %	0.03 %	7	0.00 %	152	0.01 %	98 / 257	CDP
Lion Corp	0.01 %	0.01 %	6	0.00 %	137	0.01 %	89 / 257	CDP
Loblaw Companies Ltd	0.03 %	0.03 %	12	0.01 %	46	0.07 %	14 / 257	CDP
Lotte Chilsung Beverage	0.00 %	0.00 %	3	0.00 %	188	0.00 %	115 / 257	PRE
Lotte Corp	0.00 %	0.00 %	7	0.00 %	748	-0.00 %	217 / 257	TC
M Dias Branco SA	0.00 %	0.00 %	2	0.00 %	261	0.00 %	150 / 257	TC
Magnit PJSC	0.03 %	0.03 %	15	0.01 %	86	0.04 %	52 / 257	TC
Marico Ltd	0.00 %	0.00 %	0	0.00 %	77	0.00 %	37 / 257	TC
Marine Harvest ASA	0.02 %	0.02 %	11	0.01 %	244	0.01 %	146 / 257	CDP
Massmart Holdings Ltd	0.00 %	0.00 %	5	0.00 %	124	0.01 %	82 / 257	CDP
Matsumotokiyoshi Co	0.01 %	0.01 %	4	0.00 %	95	0.01 %	63 / 257	TC
McCormick & Co	0.03 %	0.03 %	14	0.01 %	251	0.01 %	149 / 257	OTH
MEGMILK Snow Brand Co	0.00 %	0.00 %	39	0.03 %	1,109	-0.02 %	238 / 257	CDP
MEIJI Holdings Co Ltd	0.02 %	0.02 %	95	0.06 %	854	-0.03 %	224 / 257	AR*
Metcash Ltd	0.00 %	0.00 %	3	0.00 %	27	0.03 %	3 / 257	PRE
METRO AG	0.01 %	0.01 %	38	0.02 %	102	0.08 %	76 / 257	TC
Metro Inc.	0.02 %	0.02 %	7	0.00 %	52	0.03 %	15 / 257	CDP
Mitsubishi Shokuhin Co Ltd	0.00 %	0.00 %	4	0.00 %	71	0.02 %	31 / 257	TC
Molson Coors Brewing Co	0.03 %	0.03 %	17	0.01 %	223	0.01 %	133 / 257	CDP*



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Mondelez International Inc	0.14 %	0.14 %	118	0.08 %	327	0.03 %	165 / 257	CDP
Monster Beverage Corp	0.05 %	0.05 %	3	0.00 %	86	0.01 %	51 / 257	TC
Morinaga & Co	0.01 %	0.01 %	5	0.00 %	367	0.00 %	176 / 257	TC
Morrison (WM) Supermarkets	0.02 %	0.02 %	21	0.01 %	78	0.06 %	42 / 257	PRE
Natura Cosmeticos SA	0.00 %	0.00 %	1	0.00 %	68	0.00 %	29 / 257	CDP
Nestle India Ltd	0.01 %	0.01 %	5	0.00 %	973	-0.00 %	233 / 257	PRE
Nestle SA	0.60 %	0.60 %	720	0.47 %	562	-0.10 %	199 / 257	CDP
Nichirei Corp	0.01 %	0.01 %	22	0.01 %	504	-0.00 %	192 / 257	TC
Nippon Meat Packers Inc	0.01 %	0.01 %	118	0.08 %	965	-0.04 %	229 / 257	CDP
Nisshin Seifun Group Inc	0.01 %	0.01 %	49	0.03 %	1,020	-0.02 %	236 / 257	ENV*
Nissin Food Products Co	0.01 %	0.01 %	9	0.01 %	341	0.00 %	171 / 257	AR*
Nong Shim Co	0.00 %	0.00 %	5	0.00 %	331	0.00 %	166 / 257	TC
Organizacion Soriana	0.00 %	0.00 %	2	0.00 %	86	0.00 %	54 / 257	TC
ORION Holdings Corp	0.00 %	0.00 %	4	0.00 %	207	0.00 %	123 / 257	TC
Orkla AS	0.02 %	0.02 %	14	0.01 %	288	0.00 %	159 / 257	CDP
Ottogi Corp	0.00 %	0.00 %	3	0.00 %	358	0.00 %	174 / 257	PRE
PepsiCo Inc	0.37 %	0.37 %	333	0.22 %	372	0.04 %	178 / 257	CDP
Pernod-Ricard	0.07 %	0.07 %	30	0.02 %	298	0.01 %	161 / 257	CDP
Philip Morris International	0.40 %	0.40 %	180	0.12 %	169	0.19 %	106 / 257	CDP
Pick' N Pay Stores	0.00 %	0.00 %	11	0.01 %	226	0.01 %	135 / 257	CDP*
Pigeon Corp	0.01 %	0.01 %	1	0.00 %	99	0.00 %	74 / 257	TC
Pioneer Food Group Ltd	0.00 %	0.00 %	6	0.00 %	536	-0.00 %	195 / 257	AR*
Pola Orbis Holdings Inc	0.01 %	0.01 %	1	0.00 %	89	0.00 %	58 / 257	TC
PPB Group Bhd	0.01 %	0.01 %	6	0.00 %	914	-0.00 %	226 / 257	TC
President Chain Store	0.01 %	0.01 %	4	0.00 %	74	0.01 %	34 / 257	TC
Procter & Gamble	0.54 %	0.53 %	189	0.12 %	219	0.12 %	132 / 257	CDP
Raia Drogasil S.A.	0.01 %	0.01 %	3	0.00 %	86	0.01 %	55 / 257	TC
Reckitt Benckiser Group PLC	0.13 %	0.13 %	16	0.01 %	98	0.04 %	72 / 257	CDP
Remy Cointreau SA	0.01 %	0.01 %	2	0.00 %	235	0.00 %	142 / 257	CDP
Sainsbury (J)	0.01 %	0.01 %	25	0.02 %	76	0.08 %	36 / 257	CDP
Sao Martinho S.A.	0.00 %	0.00 %	3	0.00 %	1,226	-0.00 %	245 / 257	AR*
Sapporo Holdings Ltd.	0.00 %	0.00 %	13	0.01 %	209	0.01 %	126 / 257	CDP
Saputo Inc	0.02 %	0.02 %	80	0.05 %	1,387	-0.04 %	251 / 257	CDP
SCA	0.01 %	0.01 %	120	0.08 %	720	-0.03 %	215 / 257	CDP
Seven & I Holdings Co Ltd	0.07 %	0.07 %	72	0.05 %	131	0.11 %	83 / 257	CDP
Shiseido Co	0.04 %	0.04 %	7	0.00 %	66	0.03 %	27 / 257	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Shoprite Hldgs Ltd	0.02 %	0.02 %	23	0.01 %	261	0.01 %	151 / 257	ENV*
Shufersal Ltd.	0.00 %	0.00 %	1	0.00 %	82	0.00 %	44 / 257	TC
Smucker J.M. Co	0.03 %	0.03 %	52	0.03 %	557	-0.01 %	198 / 257	CDP*
Spar Group	0.01 %	0.01 %	2	0.00 %	29	0.02 %	6 / 257	CDP
Strauss Group	0.00 %	0.00 %	4	0.00 %	578	-0.00 %	201 / 257	PRE
Sudzucker AG	0.00 %	0.00 %	26	0.02 %	774	-0.01 %	221 / 257	TC
Sugi Holdings Co Ltd	0.00 %	0.00 %	2	0.00 %	93	0.01 %	62 / 257	TC
Sun Art Retail Group Ltd	0.00 %	0.00 %	4	0.00 %	86	0.01 %	53 / 257	TC
Sundrug Co Ltd	0.01 %	0.01 %	3	0.00 %	96	0.01 %	65 / 257	TC
Suntory Beverage & Food Ltd	0.01 %	0.01 %	10	0.01 %	134	0.02 %	86 / 257	CDP
Swedish Match AB	0.01 %	0.01 %	4	0.00 %	137	0.01 %	88 / 257	CDP
Sysco Corp	0.06 %	0.06 %	46	0.03 %	73	0.15 %	33 / 257	CDP
Takara Holdings Inc	0.00 %	0.00 %	7	0.00 %	349	0.00 %	172 / 257	TC
Tate & Lyle	0.01 %	0.01 %	110	0.07 %	2,540	-0.06 %	257 / 257	CDP
Tesco	0.05 %	0.05 %	77	0.05 %	75	0.24 %	35 / 257	CDP*
Thai Union Group PCL	0.00 %	0.00 %	14	0.01 %	440	-0.00 %	186 / 257	ENV*
The Kraft Heinz Company	0.11 %	0.11 %	111	0.07 %	594	-0.02 %	203 / 257	CDP
Tiger Brands Ltd	0.01 %	0.01 %	18	0.01 %	761	-0.00 %	219 / 257	CDP
Tingyi (Cayman Islands) Holdings Corp.	0.01 %	0.01 %	9	0.01 %	216	0.01 %	129 / 257	TC
Tongaat-Hulett	0.00 %	0.00 %	24	0.02 %	1,920	-0.01 %	255 / 257	CDP
Toyo Suisan Kaisha	0.01 %	0.01 %	12	0.01 %	368	0.00 %	177 / 257	TC
Treasury Wine Estates	0.02 %	0.02 %	7	0.00 %	301	0.00 %	162 / 257	AR*
Tsingtao Brewery Co Ltd	0.00 %	0.00 %	7	0.00 %	513	-0.00 %	194 / 257	PRE
Tsuruha Holdings Inc	0.01 %	0.01 %	4	0.00 %	96	0.01 %	64 / 257	TC
Tyson Foods Inc	0.05 %	0.04 %	383	0.25 %	968	-0.14 %	231 / 257	CDP
Ulker Gida Sanayi ve Ticaret	0.00 %	0.00 %	2	0.00 %	297	0.00 %	160 / 257	CDP
Uni Charm Corp	0.02 %	0.02 %	55	0.04 %	973	-0.02 %	232 / 257	TC
Uni-President China Holdings Ltd.	0.00 %	0.00 %	3	0.00 %	218	0.00 %	130 / 257	TC
Uni-President Enterprises	0.02 %	0.02 %	33	0.02 %	219	0.02 %	131 / 257	AR*
Unilever	0.36 %	0.36 %	143	0.09 %	189	0.12 %	116 / 257	CDP
Unilever Indonesia Tbk PT	0.01 %	0.01 %	1	0.00 %	116	0.00 %	81 / 257	PRE
United Breweries Ltd	0.00 %	0.00 %	1	0.00 %	315	0.00 %	163 / 257	TC
United Spirits Ltd	0.01 %	0.01 %	3	0.00 %	183	0.00 %	112 / 257	TC
Universal Robina Corp	0.01 %	0.01 %	4	0.00 %	339	0.00 %	170 / 257	TC
Walgreens Boots Alliance Inc	0.17 %	0.16 %	60	0.04 %	44	0.35 %	11 / 257	CDP
Walmart de Mexico SAB de CV	0.03 %	0.03 %	8	0.01 %	69	0.03 %	30 / 257	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Walmart Inc.	0.26 %	0.26 %	237	0.15 %	81	0.69 %	43 / 257	CDP
Want Want China Holdings Ltd.	0.01 %	0.01 %	11	0.01 %	623	-0.00 %	209 / 257	TC
WELCIA HOLDINGS CO LTD	0.00 %	0.00 %	3	0.00 %	98	0.01 %	73 / 257	TC
Wesfarmers Ltd	0.08 %	0.08 %	90	0.06 %	142	0.12 %	94 / 257	CDP
WH Group Ltd	0.02 %	0.02 %	216	0.14 %	1,227	-0.09 %	246 / 257	ENV*
Wilmar International	0.01 %	0.01 %	141	0.09 %	796	-0.04 %	222 / 257	CDP
Woolworths Group Ltd	0.06 %	0.06 %	76	0.05 %	142	0.10 %	95 / 257	CDP
Yakult Honsha Co	0.02 %	0.02 %	22	0.01 %	953	-0.01 %	227 / 257	TC
Yamazaki Baking Co	0.01 %	0.01 %	18	0.01 %	227	0.01 %	137 / 257	TC
Yantai Changyu Pioneer Wine Co Ltd	0.00 %	0.00 %	1	0.00 %	333	0.00 %	167 / 257	TC
Energy	6.29 %	6.02 %	29,441	19.14 %	976	-11.51 %		
Adaro Energy Tbk PT	0.00 %	0.00 %	54	0.04 %	3,709	-0.03 %	145 / 150	TC
Aker BP ASA	0.00 %	0.00 %	5	0.00 %	864	-0.00 %	77 / 150	CDP
Anadarko Petroleum Corp	0.06 %	0.06 %	209	0.14 %	1,739	-0.10 %	127 / 150	CDP
Andeavor	0.04 %	0.03 %	342	0.22 %	998	-0.12 %	90 / 150	ENV*
Antero Resources Corp	0.01 %	0.01 %	14	0.01 %	625	-0.00 %	45 / 150	TC
Apache Corp	0.04 %	0.04 %	198	0.13 %	2,526	-0.11 %	137 / 150	PRE
ARC Resources Ltd.	0.01 %	0.01 %	18	0.01 %	1,555	-0.01 %	123 / 150	CDP
Baker Hughes, a GE company	0.04 %	0.04 %	41	0.03 %	297	0.01 %	23 / 150	CDP
Banpu Public Co Ltd	0.00 %	0.01 %	70	0.05 %	3,069	-0.04 %	138 / 150	ENV*
Bashneft PJSC	0.00 %	0.00 %	8	0.01 %	809	-0.00 %	72 / 150	TC
Bharat Petroleum Corp Ltd	0.02 %	0.02 %	139	0.09 %	941	-0.05 %	85 / 150	TC
BP	0.28 %		1,776	1.15 %	714	-0.45 %	N / A	CDP
Brightoil Petroleum (Holdings) Ltd.	0.00 %	0.00 %	4	0.00 %	142	0.00 %	6 / 150	TC
Bukit Asam (Persero) Tbk PT	0.00 %	0.00 %	3	0.00 %	541	-0.00 %	38 / 150	PRE
Bumi Armada Bhd	0.00 %	0.00 %	1	0.00 %	272	0.00 %	21 / 150	PRE
Cabot Oil & Gas A	0.03 %	0.03 %	10	0.01 %	646	-0.00 %	52 / 150	TC
Caltex Australia Ltd	0.02 %	0.02 %	100	0.06 %	519	-0.01 %	37 / 150	AR*
Canadian Natural Resources Limited	0.09 %	0.09 %	359	0.23 %	3,080	-0.20 %	139 / 150	CDP
Cenovus Energy Inc	0.03 %	0.03 %	156	0.10 %	1,334	-0.07 %	115 / 150	CDP
Cheniere Energy Inc	0.02 %	0.02 %	3	0.00 %	204	0.00 %	10 / 150	TC
Chevron Corp	0.51 %	0.51 %	1,646	1.07 %	1,050	-0.62 %	98 / 150	CDP
China Coal Energy Co Ltd	0.00 %	0.00 %	41	0.03 %	3,328	-0.02 %	143 / 150	TC
China Oilfield Services Ltd	0.00 %	0.00 %	Page 72 ⁵	0.00 %	725	-0.00 %	64 / 150	AR*
China Petroleum & Chemical Corp	0.04 %	0.04 %			223			



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
China Shenhua Energy Co Ltd	0.02 %	0.02 %	694	0.45 %	13,017	-0.44 %	150 / 150	AR*
Cimarex Energy Co	0.02 %	0.02 %	22	0.01 %	1,284	-0.01 %	111 / 150	PRE
CNOOC Ltd.	0.05 %	0.05 %	49	0.03 %	438	0.00 %	31 / 150	ENV
Coal India Ltd	0.01 %	0.01 %	186	0.12 %	4,394	-0.11 %	147 / 150	TC
Concho Resources Inc	0.04 %	0.04 %	15	0.01 %	646	-0.00 %	50 / 150	TC
ConocoPhillips	0.14 %	0.14 %	487	0.32 %	1,442	-0.22 %	119 / 150	CDP
Continental Resources Inc/OK	0.01 %	0.01 %	4	0.00 %	646	-0.00 %	49 / 150	TC
Core Laboratories N.V.	0.01 %	0.01 %	1	0.00 %	117	0.00 %	5 / 150	PRE
Cosan SA Industria e Comercio	0.00 %	0.00 %	2	0.00 %	240	0.00 %	15 / 150	PRE
Cosmo Energy Holding	0.00 %	0.00 %	149	0.10 %	799	-0.04 %	71 / 150	CDP
Crescent Point Energy Corp	0.01 %	0.01 %	61	0.04 %	2,240	-0.03 %	134 / 150	CDP
Dana Gas PJSC	0.00 %	0.00 %	2	0.00 %	646	-0.00 %	53 / 150	TC
Delek Group Ltd	0.00 %	0.00 %	10	0.01 %	1,305	-0.00 %	114 / 150	TC
Devon Energy Corp	0.04 %	0.04 %	125	0.08 %	719	-0.03 %	63 / 150	CDP
Ecopetrol SA	0.00 %	0.01 %	21	0.01 %	864	-0.01 %	79 / 150	ENV*
Empresas COPEC SA	0.01 %	0.01 %	41	0.03 %	543	-0.01 %	39 / 150	TC
Enbridge Inc	0.16 %	0.16 %	138	0.09 %	377	0.01 %	28 / 150	PRE
EnCana Corp	0.03 %	0.03 %	76	0.05 %	1,829	-0.04 %	130 / 150	ENV*
Energy Absolute Public Company Limited	0.00 %	0.00 %	0	0.00 %	313	0.00 %	24 / 150	TC
ENI SpA	0.09 %	0.10 %	649	0.42 %	1,080	-0.25 %	99 / 150	CDP
EOG Resources	0.13 %	0.13 %	97	0.06 %	908	-0.03 %	81 / 150	CDP
EQT Corporation	0.03 %	0.03 %	14	0.01 %	614	-0.00 %	44 / 150	TC
Exxaro Resources	0.00 %	0.00 %	12	0.01 %	1,128	-0.00 %	102 / 150	CDP
Exxon Mobil Corp	0.80 %	0.80 %	3,549	2.31 %	1,138	-1.43 %	103 / 150	CDP
Formosa Petrochemical Corp	0.01 %	0.01 %	64	0.04 %	1,806	-0.03 %	129 / 150	PRE
Galp Energia SGPS SA	0.02 %	0.02 %	91	0.06 %	729	-0.02 %	65 / 150	CDP
Gazprom PJSC	0.05 %	0.05 %	1,973	1.28 %	3,202	-1.11 %	142 / 150	ENV*
Grupa Lotos SA	0.00 %	0.00 %	25	0.02 %	632	-0.00 %	47 / 150	TC
GS Holdings Corp	0.01 %	0.01 %	75	0.05 %	885	-0.02 %	80 / 150	TC
Halliburton Co	0.09 %	0.09 %	72	0.05 %	318	0.02 %	25 / 150	CDP
Hellenic Petroleum SA	0.00 %	0.00 %	23	0.01 %	1,045	-0.01 %	96 / 150	OTH
Helmerich & Payne Inc	0.01 %	0.01 %	10	0.01 %	487	-0.00 %	34 / 150	TC
Hess Corp	0.03 %	0.03 %	75	0.05 %	1,237	-0.03 %	108 / 150	CDP
Hindustan Petroleum Corp Ltd	0.01 %	0.01 %	81	0.05 %	678	-0.02 %	58 / 150	ENV*
HollyFrontier Corporation	0.01 %	0.01 %	117	0.08 %	790	-0.03 %	69 / 150	TC
Husky Energy Inc	0.01 %	0.01 %	86	0.06 %	1,980	-0.04 %	132 / 150	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Idemitsu Kosan Co Ltd	0.01 %	0.01 %	261	0.17 %	997	-0.10 %	88 / 150	ENV*
Imperial Oil Ltd	0.02 %	0.02 %	97	0.06 %	1,167	-0.04 %	106 / 150	CDP
Indian Oil Corp Ltd	0.02 %	0.02 %	177	0.11 %	937	-0.06 %	84 / 150	CDP
Inner Mongolia Yitai Coal	0.00 %	0.00 %	50	0.03 %	3,478	-0.03 %	144 / 150	TC
INPEX Corp	0.02 %	0.02 %	12	0.01 %	186	0.01 %	8 / 150	CDP*
Inter Pipeline Ltd.	0.02 %	0.02 %	11	0.01 %	591	-0.00 %	41 / 150	CDP
IRPC PCL	0.00 %	0.00 %	47	0.03 %	1,249	-0.02 %	109 / 150	ENV
Japan Petroleum Exploration	0.00 %	0.00 %	9	0.01 %	663	-0.00 %	55 / 150	TC
JXTG Holdings Inc	0.04 %	0.04 %	400	0.26 %	485	-0.02 %	33 / 150	CDP
Kinder Morgan Inc	0.09 %	0.08 %	72	0.05 %	450	-0.00 %	32 / 150	TC
Kunlun Energy Co. Ltd.	0.01 %	0.01 %	25	0.02 %	504	-0.00 %	36 / 150	TC
Lukoil PJSC	0.06 %	0.06 %	509	0.33 %	847	-0.16 %	76 / 150	CDP
Lundin Petroleum A	0.01 %	0.01 %	3	0.00 %	332	0.00 %	26 / 150	CDP
Marathon Oil Corp	0.03 %	0.03 %	59	0.04 %	1,043	-0.02 %	95 / 150	ENV*
Marathon Petroleum Corp.	0.06 %	0.06 %	827	0.54 %	924	-0.28 %	82 / 150	PRE
MOL HUNGARIAN OIL AND GAS NY	0.01 %	0.01 %	88	0.06 %	1,035	-0.03 %	93 / 150	CDP
Motor Oil Hellas SA	0.00 %	0.00 %	37	0.02 %	754	-0.01 %	66 / 150	PRE
Murphy Oil Corp	0.01 %	0.01 %	38	0.02 %	1,580	-0.02 %	124 / 150	ENV*
National Oilwell Varco Inc	0.03 %	0.03 %	24	0.02 %	226	0.01 %	13 / 150	PRE
Neste Oyj	0.01 %	0.01 %	56	0.04 %	631	-0.01 %	46 / 150	CDP
Newfield Exploration Co	0.01 %	0.01 %	20	0.01 %	962	-0.01 %	87 / 150	PRE
Noble Energy Inc	0.03 %	0.03 %	45	0.03 %	943	-0.02 %	86 / 150	CDP
Novatek PJSC	0.03 %	0.03 %	43	0.03 %	1,091	-0.02 %	101 / 150	ENV
Occidental Petroleum	0.11 %	0.11 %	288	0.19 %	2,004	-0.15 %	133 / 150	CDP
Oil & Gas Development Co Ltd	0.00 %	0.00 %	2	0.00 %	699	-0.00 %	61 / 150	TC
Oil & Natural Gas Corp Ltd	0.02 %	0.02 %	94	0.06 %	1,382	-0.04 %	116 / 150	ENV*
Oil India Ltd	0.00 %	0.00 %	3	0.00 %	676	-0.00 %	57 / 150	ENV*
Oil Refineries Ltd	0.00 %	0.00 %	21	0.01 %	794	-0.01 %	70 / 150	TC
Oil Search Ltd	0.01 %	0.01 %	13	0.01 %	997	-0.00 %	89 / 150	CDP
OMV AG	0.02 %	0.02 %	130	0.08 %	1,004	-0.05 %	91 / 150	CDP
ONEOK Inc	0.05 %	0.05 %	73	0.05 %	612	-0.01 %	43 / 150	CDP
Origin Energy Ltd	0.02 %	0.02 %	366	0.24 %	3,199	-0.21 %	141 / 150	CDP
Pakistan Petroleum Ltd	0.00 %	0.00 %	2	0.00 %	679	-0.00 %	59 / 150	TC
Paz Oil Company Ltd	0.00 %	0.00 %	11	0.01 %	354	0.00 %	27 / 150	TC
Pembina Pipeline Corporation	0.03 %	0.03 %	13	0.01 %	296	0.00 %	22 / 150	TC
Petrobras SA	0.08 %	0.08 %	697	0.45 %	1,167	-0.28 %	105 / 150	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
PetroChina Co Ltd	0.03 %	0.03 %	94	0.06 %	425	0.00 %	30 / 150	ENV*
Petrofac	0.00 %		3	0.00 %	103	0.01 %	N / A	CDP*
Petron Corp	0.00 %	0.00 %	18	0.01 %	665	-0.00 %	56 / 150	PRE
Petronas Dagangan BHD	0.00 %	0.00 %	1	0.00 %	63	0.01 %	2 / 150	TC
Petronet LNG Ltd	0.00 %	0.00 %	3	0.00 %	632	-0.00 %	48 / 150	TC
Phillips 66	0.09 %	0.09 %	621	0.40 %	606	-0.11 %	42 / 150	PRE
Pioneer Natural Resources	0.06 %	0.06 %	50	0.03 %	1,464	-0.02 %	120 / 150	ENV*
Polski Koncern Naftowy SA	0.02 %	0.02 %	264	0.17 %	1,290	-0.11 %	113 / 150	PRE
Polskie Gornictwo Naftowe	0.01 %	0.01 %	43	0.03 %	1,203	-0.02 %	107 / 150	AR*
PTT Exploration & Production PCL	0.01 %	0.01 %	27	0.02 %	1,289	-0.01 %	112 / 150	CDP*
PTT PCL	0.04 %	0.04 %	316	0.21 %	925	-0.11 %	83 / 150	ENV
Qatar Gas Transport	0.00 %	0.00 %	12	0.01 %	1,606	-0.01 %	126 / 150	TC
Range Resources Corp	0.01 %	0.01 %	11	0.01 %	683	-0.00 %	60 / 150	PRE
Reliance Industries Ltd	0.09 %	0.09 %	353	0.23 %	1,277	-0.15 %	110 / 150	ENV*
Repsol SA	0.05 %	0.05 %	503	0.33 %	1,163	-0.20 %	104 / 150	OTH
Rosneft PJSC	0.01 %	0.01 %	180	0.12 %	1,600	-0.08 %	125 / 150	ENV
Royal Dutch Shell PLC	0.57 %	0.58 %	2,630	1.71 %	810	-0.79 %	73 / 150	CDP
S-Oil Corp	0.01 %	0.01 %	74	0.05 %	1,049	-0.03 %	97 / 150	ENV*
Saipem SpA Ord	0.01 %	0.01 %	37	0.02 %	400	0.00 %	29 / 150	AR*
Santos Ltd	0.01 %	0.01 %	77	0.05 %	2,466	-0.04 %	136 / 150	ENV
Sapura Energy Berhad	0.00 %	0.00 %	5	0.00 %	235	0.00 %	14 / 150	TC
Sasol Ltd	0.03 %	0.03 %	985	0.64 %	7,966	-0.61 %	149 / 150	CDP
Schlumberger Ltd	0.22 %	0.22 %	99	0.06 %	249	0.05 %	17 / 150	ENV*
Semirara Mining and Power Corp	0.00 %	0.00 %	17	0.01 %	5,326	-0.01 %	148 / 150	AR*
Showa Shell Sekiyu KK	0.01 %	0.01 %	100	0.06 %	864	-0.03 %	78 / 150	OTH*
SK Innovation Co Ltd	0.02 %	0.02 %	266	0.17 %	843	-0.08 %	75 / 150	ENV*
Snam SpA	0.03 %	0.03 %	19	0.01 %	756	-0.01 %	67 / 150	CDP
Statoil ASA	0.04 %	0.04 %	154	0.10 %	818	-0.05 %	74 / 150	CDP
Suncor Energy Inc	0.13 %	0.13 %	418	0.27 %	1,438	-0.19 %	118 / 150	CDP
Surgutneftegas OJSC	0.02 %	0.02 %	24	0.02 %	268	0.01 %	20 / 150	PRE
Targa Resources Corp	0.02 %	0.02 %	15	0.01 %	160	0.02 %	7 / 150	TC
Tatneft PJSC	0.03 %	0.03 %	62	0.04 %	712	-0.02 %	62 / 150	TC
TechnipFMC Ltd	0.03 %	0.03 %	12	0.01 %	197	0.01 %	9 / 150	PRE
Tenaris SA	0.02 %	0.02 %	36	0.02 %	1,488	-0.02 %	121 / 150	PRE
Thai Oil PCL	0.01 %	0.01 %	55	0.04 %	1,019	-0.02 %	92 / 150	ENV*
The Williams Companies Inc	0.06 %	0.06 %	191	0.12 %	1,787	-0.09 %	128 / 150	PRE



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Total S.A.	0.27 %	0.27 %	1,025	0.67 %	560	-0.14 %	40 / 150	CDP
Tourmaline Oil Corp	0.01 %	0.01 %	7	0.00 %	646	-0.00 %	51 / 150	TC
TransCanada Corp	0.10 %	0.10 %	306	0.20 %	2,261	-0.16 %	135 / 150	CDP
Transneft Prf	0.01 %	0.01 %	10	0.01 %	240	0.01 %	16 / 150	TC
Tupras-Turkiye Petrol Rafine	0.01 %	0.01 %	86	0.06 %	1,080	-0.03 %	100 / 150	AR*
Ultrapar Participacoes S.A.	0.02 %	0.02 %	20	0.01 %	80	0.06 %	3 / 150	CDP
Valero Energy Corp	0.08 %	0.08 %	848	0.55 %	777	-0.24 %	68 / 150	TC
Vopak NV	0.01 %	0.01 %	2	0.00 %	207	0.00 %	11 / 150	AR*
Weatherford Intl Ltd	0.01 %	0.01 %	19	0.01 %	256	0.01 %	18 / 150	CDP
Whitehaven Coal Ltd	0.00 %	0.00 %	10	0.01 %	1,391	-0.00 %	117 / 150	ENV*
WOOD GROUP (JOHN) PLC	0.01 %	0.01 %	5	0.00 %	93	0.01 %	4 / 150	AR*
Woodside Petroleum Ltd	0.04 %	0.04 %	156	0.10 %	3,106	-0.09 %	140 / 150	ENV*
WorleyParsons Ltd	0.00 %	0.00 %	2	0.00 %	35	0.01 %	1 / 150	CDP
Yanzhou Coal Mining Co Ltd	0.00 %	0.00 %	75	0.05 %	4,089	-0.04 %	146 / 150	AR*
Financials	19.06 %	19.39 %	2,402	1.56 %	39	19.62 %		
3I Group	0.03 %	0.03 %	0	0.00 %	9	0.00 %	219 / 522	CDP
77 Bank Ltd	0.00 %	0.00 %	0	0.00 %	8	0.00 %	191 / 522	TC
ABN AMRO Group NV	0.03 %	0.03 %	1	0.00 %	8	0.02 %	162 / 522	ENV*
Abu Dhabi Commercial Bank	0.01 %	0.01 %	0	0.00 %	14	0.00 %	301 / 522	PRE
Ackermans & Van Haaren NV	0.01 %	0.01 %	4	0.00 %	103	0.01 %	504 / 522	TC
Acom Co	0.00 %	0.00 %	0	0.00 %	20	0.00 %	412 / 522	TC
Admiral Group	0.01 %	0.01 %	0	0.00 %	6	0.00 %	77 / 522	ENV*
Aegon NV	0.02 %	0.02 %	2	0.00 %	5	0.12 %	23 / 522	CDP
AEON Financial Service Co Ltd	0.01 %	0.01 %	0	0.00 %	20	0.00 %	418 / 522	TC
Affiliated Managers Grp	0.02 %	0.02 %	0	0.00 %	15	0.01 %	336 / 522	TC
AFLAC Inc	0.07 %	0.07 %	2	0.00 %	5	0.09 %	41 / 522	CDP*
AGEAS	0.02 %	0.02 %	2	0.00 %	12	0.06 %	282 / 522	PRE
AGNC Investment Corp	0.02 %	0.02 %	1	0.00 %	100	0.00 %	503 / 522	TC
Agricultural Bank of China Ltd	0.03 %	0.03 %	1	0.00 %	8	0.02 %	173 / 522	TC
AIA Group Ltd	0.21 %	0.20 %	2	0.00 %	5	0.11 %	32 / 522	ENV
AIB Group Plc	0.01 %	0.01 %	0	0.00 %	12	0.00 %	285 / 522	CDP
Aiful Corp	0.00 %	0.00 %	0	0.00 %	20	0.00 %	416 / 522	TC
Akbank TAS	0.01 %	0.01 %	1	0.00 %	17	0.01 %	362 / 522	CDP
Alior Bank	0.00 %	0.00 %	0	0.00 %	10	0.00 %	249 / 522	TC
Alleghany Corp (NY)	0.02 %	0.02 %	1	0.00 %	7	0.02 %	97 / 522	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Alliance Bank Malaysia Bhd	0.00 %	0.00 %	0	0.00 %	9	0.00 %	220 / 522	TC
Allianz SE	0.23 %	0.23 %	12	0.01 %	7	0.49 %	113 / 522	CDP
Allstate Corp	0.08 %	0.08 %	7	0.00 %	12	0.15 %	288 / 522	CDP*
Ally Financial Inc	0.02 %	0.03 %	1	0.00 %	15	0.03 %	310 / 522	TC
Alpha Bank A.E.	0.01 %	0.01 %	1	0.00 %	29	0.01 %	451 / 522	CDP
American Express Co	0.15 %	0.15 %	5	0.00 %	12	0.10 %	290 / 522	CDP
American Intl Group Inc	0.13 %	0.13 %	4	0.00 %	5	0.22 %	59 / 522	TC
Ameriprise Financial Inc	0.05 %	0.05 %	2	0.00 %	11	0.05 %	269 / 522	CDP
AMMB Holdings Bhd	0.00 %	0.00 %	0	0.00 %	9	0.00 %	214 / 522	TC
AMP Ltd	0.03 %	0.03 %	1	0.00 %	7	0.04 %	103 / 522	CDP
Amundi SA	0.01 %	0.01 %	0	0.00 %	15	0.00 %	324 / 522	TC
Annaly Capital Management Inc.	0.03 %	0.03 %	0	0.00 %	5	0.01 %	44 / 522	TC
ANZ Banking Group	0.16 %	0.16 %	6	0.00 %	25	0.07 %	444 / 522	CDP
Aon plc	0.09 %	0.09 %	4	0.00 %	21	0.05 %	435 / 522	CDP
Aozora Bank Ltd	0.01 %	0.01 %	0	0.00 %	10	0.00 %	255 / 522	TC
Arch Capital Group Ltd	0.03 %	0.03 %	0	0.00 %	5	0.02 %	63 / 522	TC
Ashmore Group PLC	0.00 %	0.00 %	0	0.00 %	14	0.00 %	303 / 522	AR*
ASR Nederland	0.01 %	0.01 %	1	0.00 %	6	0.03 %	73 / 522	AR*
Assicurazioni Generali SpA	0.06 %	0.06 %	6	0.00 %	6	0.31 %	78 / 522	TC
Assurant Inc	0.01 %	0.01 %	1	0.00 %	8	0.03 %	160 / 522	CDP
ASX Limited	0.02 %	0.02 %	0	0.00 %	34	0.00 %	468 / 522	AR*
Aviva	0.06 %	0.06 %	4	0.00 %	3	0.31 %	7 / 522	CDP
Awa Bank	0.00 %	0.00 %	0	0.00 %	10	0.00 %	252 / 522	TC
AXA	0.13 %	0.13 %	6	0.00 %	4	0.40 %	18 / 522	OTH
Axis Bank Ltd	0.03 %	0.03 %	2	0.00 %	55	0.01 %	490 / 522	CDP
Axis Capital Hldgs Ltd	0.01 %	0.01 %	0	0.00 %	5	0.02 %	57 / 522	TC
Ayala Corp	0.01 %	0.01 %	5	0.00 %	326	0.00 %	514 / 522	PRE
B3 S.A. - Brasil, Bolsa, Balcao	0.03 %	0.03 %	0	0.00 %	12	0.00 %	277 / 522	CDP
Bajaj Finance Ltd	0.01 %	0.01 %	0	0.00 %	20	0.00 %	413 / 522	TC
Bajaj Finserv Ltd	0.01 %	0.01 %	0	0.00 %	20	0.00 %	423 / 522	TC
Bajaj Holdings and Investment Ltd	0.00 %	0.00 %	0	0.00 %	48	0.00 %	485 / 522	TC
Baloise Holding AG	0.02 %	0.02 %	1	0.00 %	4	0.03 %	19 / 522	AR*
Banca Mediolanum	0.01 %	0.01 %	0	0.00 %	6	0.01 %	79 / 522	TC
Banco Bilbao Vizcaya Argentaria SA	0.14 %	0.14 %	9	0.01 %	19	0.13 %	397 / 522	CDP
Banco Bpm SpA	0.01 %	0.30 %	0	0.00 %	7	0.01 %	142 / 522	PRE
Banco Bradesco	0.09 %	0.10 %	2	0.00 %	6	0.07 %	91 / 522	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Banco de Chile	0.01 %	0.01 %	0	0.00 %	7	0.00 %	148 / 522	TC
Banco de Credito e Inversiones	0.01 %	0.01 %	0	0.00 %	8	0.00 %	205 / 522	TC
Banco de Sabadell SA	0.03 %	0.03 %	0	0.00 %	5	0.03 %	24 / 522	CDP*
Banco do Brasil	0.03 %	0.03 %	1	0.00 %	9	0.04 %	223 / 522	CDP
Banco Santander Brazil	0.01 %	0.01 %	0	0.00 %	8	0.01 %	171 / 522	CDP
Banco Santander Chile	0.01 %	0.01 %	0	0.00 %	10	0.00 %	245 / 522	CDP
Banco Santander Mexico	0.01 %	0.01 %	0	0.00 %	7	0.00 %	119 / 522	TC
Banco Santander SA	0.25 %	0.25 %	8	0.01 %	10	0.22 %	244 / 522	CDP
BanColombia SA	0.02 %	0.02 %	0	0.00 %	10	0.01 %	235 / 522	CDP
Bangkok Bank Co.	0.01 %	0.01 %	0	0.00 %	13	0.00 %	298 / 522	ENV*
Bangkok Life Assurance PCL	0.00 %	0.00 %	0	0.00 %	5	0.00 %	48 / 522	TC
Bank Central Asia Tbk PT	0.03 %	0.03 %	0	0.00 %	10	0.01 %	247 / 522	TC
Bank Danamon Indonesia Tbk PT	0.00 %	0.00 %	0	0.00 %	7	0.00 %	117 / 522	TC
Bank Handlowy w Warszawie	0.00 %	0.00 %	0	0.00 %	40	0.00 %	476 / 522	PRE
Bank Hapoalim BM Br	0.02 %	0.02 %	0	0.00 %	7	0.01 %	123 / 522	TC
Bank Leumi Le-Israel BM	0.02 %	0.02 %	0	0.00 %	9	0.01 %	224 / 522	CDP
Bank Mandiri Tbk PT	0.02 %	0.02 %	0	0.00 %	8	0.01 %	168 / 522	TC
Bank Millennium SA	0.00 %	0.00 %	0	0.00 %	72	0.00 %	497 / 522	CDP*
Bank Negara Indonesia Persero Tbk PT	0.01 %	0.01 %	0	0.00 %	11	0.00 %	265 / 522	TC
Bank of America Corp	0.58 %	0.57 %	25	0.02 %	22	0.30 %	437 / 522	CDP
Bank of Baroda	0.00 %	0.00 %	0	0.00 %	11	0.00 %	270 / 522	TC
Bank of China Ltd	0.09 %	0.09 %	2	0.00 %	8	0.06 %	180 / 522	TC
Bank of Communications Co Ltd	0.01 %	0.01 %	0	0.00 %	8	0.01 %	175 / 522	CDP
Bank of East Asia	0.01 %	0.01 %	0	0.00 %	12	0.00 %	281 / 522	CDP*
Bank of India	0.00 %	0.00 %	0	0.00 %	11	0.00 %	258 / 522	TC
Bank of Ireland Group	0.02 %	0.02 %	0	0.00 %	6	0.02 %	96 / 522	TC
Bank of Kyoto	0.01 %	0.01 %	0	0.00 %	11	0.00 %	268 / 522	TC
Bank of Montreal	0.11 %	0.11 %	3	0.00 %	11	0.06 %	273 / 522	CDP
Bank of Nova Scotia Halifax	0.18 %	0.18 %	4	0.00 %	13	0.08 %	291 / 522	CDP
Bank of Piraeus	0.00 %	0.00 %	1	0.00 %	28	0.01 %	450 / 522	OTH
Bank of Queensland Ltd	0.01 %	0.01 %	0	0.00 %	7	0.00 %	152 / 522	TC
Bank of the Philippine Islands	0.01 %	0.01 %	0	0.00 %	31	0.00 %	457 / 522	ENV*
Bank Pekao SA	0.01 %	0.01 %	0	0.00 %	7	0.00 %	109 / 522	TC
Bank Rakyat Indonesia Persero Tbk PT	0.03 %	0.03 %	0	0.00 %	7	0.01 %	136 / 522	TC
Bank Zachodni WBK SA	0.01 %	0.01 %	0	0.00 %	10	0.00 %	231 / 522	TC
Bankia SA	0.01 %	0.01 %	0	0.00 %	17	0.01 %	373 / 522	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Bankinter SA	0.02 %	0.01 %	0	0.00 %	9	0.01 %	226 / 522	CDP
Banque Cant Vaudoise Ptg	0.01 %	0.00 %	0	0.00 %	7	0.00 %	143 / 522	CDP
Banregio Grupo Financiero SA de CV	0.00 %	0.00 %	0	0.00 %	7	0.00 %	130 / 522	TC
Barclays	0.10 %	0.10 %	19	0.01 %	43	0.11 %	481 / 522	CDP
Barclays Africa Group Ltd	0.01 %	0.02 %	3	0.00 %	33	0.02 %	462 / 522	CDP
BB Seguridade Participacoes S.A.	0.01 %	0.01 %	0	0.00 %	12	0.00 %	275 / 522	TC
BB&T Corp	0.09 %	0.09 %	2	0.00 %	11	0.04 %	264 / 522	TC
BDO Unibank Inc	0.01 %	0.01 %	0	0.00 %	8	0.00 %	177 / 522	TC
Bendigo and Adelaide Bank Limited	0.01 %	0.01 %	1	0.00 %	41	0.00 %	478 / 522	CDP
Berkshire Hathaway	0.80 %	0.80 %	1,331	0.86 %	544	-0.17 %	518 / 522	TC
BlackRock Inc	0.13 %	0.13 %	2	0.00 %	13	0.03 %	296 / 522	CDP
BNK Financial Group Inc	0.01 %	0.01 %	1	0.00 %	22	0.01 %	440 / 522	PRE
BNP Paribas	0.20 %	0.20 %	11	0.01 %	11	0.28 %	259 / 522	CDP
BOC Hong Kong (Holdings) Ltd.	0.04 %	0.04 %	1	0.00 %	13	0.01 %	292 / 522	ENV*
Brait SA	0.00 %	0.00 %	0	0.00 %	18	0.00 %	382 / 522	TC
Brighthouse Financial Inc	0.01 %	0.01 %	0	0.00 %	5	0.01 %	53 / 522	TC
Brookfield Asset Management Inc	0.08 %	0.08 %	18	0.01 %	78	0.05 %	499 / 522	AR*
Brown & Brown Inc	0.01 %	0.01 %	0	0.00 %	17	0.01 %	370 / 522	TC
CaixaBank	0.04 %	0.04 %	1	0.00 %	8	0.02 %	207 / 522	CDP
Canadian Imperial Bank of Commerce	0.09 %	0.09 %	2	0.00 %	11	0.05 %	274 / 522	OTH
Canara Bank	0.00 %	0.00 %	0	0.00 %	8	0.00 %	188 / 522	TC
Capital One Financial	0.09 %	0.09 %	5	0.00 %	15	0.10 %	311 / 522	CDP*
Capital Securities Corp	0.00 %	0.00 %	0	0.00 %	15	0.00 %	323 / 522	TC
Capitec Bank Hldgs	0.01 %	0.01 %	0	0.00 %	43	0.00 %	480 / 522	AR*
Cathay Financial Holding	0.03 %	0.03 %	1	0.00 %	5	0.04 %	36 / 522	PRE
Cboe Global Markets, Inc	0.03 %	0.03 %	0	0.00 %	15	0.00 %	326 / 522	TC
Challenger Limited	0.01 %	0.01 %	0	0.00 %	8	0.01 %	163 / 522	TC
Chang Hwa Commercial Bank	0.01 %	0.01 %	0	0.00 %	7	0.00 %	118 / 522	TC
Chiba Bank	0.01 %	0.01 %	0	0.00 %	8	0.00 %	194 / 522	TC
China Cinda Asset Management Co Ltd	0.01 %	0.01 %	1	0.00 %	15	0.01 %	335 / 522	TC
China CITIC Bank Corp Ltd	0.01 %	0.01 %	1	0.00 %	14	0.01 %	308 / 522	CDP
China Construction Bank Corp	0.17 %	0.17 %	3	0.00 %	9	0.11 %	213 / 522	CDP*
China Development Financial Co	0.01 %	0.01 %	0	0.00 %	35	0.00 %	471 / 522	CDP
China Everbright Bank Company Limited	0.00 %	0.00 %	0	0.00 %	9	0.00 %	222 / 522	TC
China Everbright Ltd.	0.01 %	0.00 %	0	0.00 %	6	0.00 %	90 / 522	AR*
China Galaxy Securities Company Limited	0.01 %	0.01 %	0	0.00 %	15	0.00 %	337 / 522	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
China Huarong Asset Management Co Ltd	0.01 %	0.01 %	0	0.00 %	15	0.01 %	331 / 522	TC
China International Capital Corp Ltd	0.00 %	0.00 %	0	0.00 %	15	0.00 %	342 / 522	TC
China Life Insurance	0.01 %	0.01 %	1	0.00 %	7	0.02 %	112 / 522	ENV*
China Life Insurance Co Ltd	0.05 %	0.05 %	1	0.00 %	5	0.07 %	58 / 522	TC
China Merchants Bank Co Ltd	0.03 %	0.03 %	0	0.00 %	7	0.02 %	132 / 522	TC
China Merchants Securities Co Ltd	0.00 %	0.00 %	0	0.00 %	15	0.00 %	340 / 522	TC
China Minsheng Banking Corp Ltd	0.01 %	0.01 %	0	0.00 %	7	0.01 %	129 / 522	TC
China Pacific Insurance (Group) Co Ltd	0.03 %	0.03 %	1	0.00 %	5	0.04 %	56 / 522	TC
China Reinsurance Group Corp	0.00 %	0.00 %	0	0.00 %	5	0.01 %	46 / 522	TC
China Taiping Insurance Holdings Co. Ltd.	0.01 %	0.01 %	1	0.00 %	5	0.03 %	55 / 522	TC
Chongqing Rural Commercial Bank	0.00 %	0.00 %	0	0.00 %	10	0.00 %	253 / 522	TC
Chubb Limited	0.15 %	0.15 %	3	0.00 %	7	0.13 %	110 / 522	CDP
Chugoku Bank	0.01 %	0.01 %	0	0.00 %	10	0.00 %	233 / 522	TC
CI Financial Corp	0.01 %	0.01 %	0	0.00 %	5	0.01 %	45 / 522	TC
CIMB Group Holdings Bhd	0.02 %	0.02 %	0	0.00 %	10	0.01 %	254 / 522	TC
Cincinnati Financial Corp	0.03 %	0.03 %	1	0.00 %	10	0.02 %	242 / 522	CDP
CIT Group Inc	0.02 %	0.02 %	0	0.00 %	7	0.01 %	151 / 522	TC
CITIC Securities Co Ltd	0.01 %	0.01 %	0	0.00 %	14	0.01 %	300 / 522	TC
Citigroup Inc	0.46 %	0.46 %	20	0.01 %	20	0.27 %	427 / 522	CDP*
Citizens Financial Group Inc	0.04 %	0.04 %	1	0.00 %	7	0.02 %	133 / 522	TC
CME Group Inc	0.11 %	0.11 %	1	0.00 %	15	0.01 %	334 / 522	TC
CNP Assurances	0.01 %	0.01 %	0	0.00 %	3	0.04 %	3 / 522	CDP*
Comerica Inc (MI)	0.03 %	0.03 %	1	0.00 %	32	0.01 %	460 / 522	CDP
Commerce Bancshares Inc (MO)	0.01 %	0.01 %	0	0.00 %	8	0.00 %	208 / 522	TC
Commercial Bank of Qatar	0.00 %	0.00 %	0	0.00 %	7	0.00 %	137 / 522	TC
Commercial International Bank (Egypt) S.A.	0.01 %	0.01 %	0	0.00 %	7	0.00 %	134 / 522	TC
Commerzbank AG	0.03 %	0.03 %	2	0.00 %	17	0.04 %	372 / 522	OTH*
Commonwealth Bank Australia	0.23 %	0.23 %	3	0.00 %	12	0.07 %	280 / 522	CDP
Concordia Financial Group	0.01 %	0.01 %	1	0.00 %	19	0.01 %	400 / 522	CDP
Coronation Fund Managers Ltd	0.00 %	0.00 %	0	0.00 %	6	0.00 %	76 / 522	TC
Corporacion Financiera Alba	0.00 %	0.00 %	0	0.00 %	133	0.00 %	509 / 522	TC
Credicorp Limited	0.03 %	0.03 %	0	0.00 %	10	0.01 %	232 / 522	CDP
Credit Agricole SA	0.05 %	0.05 %	2	0.00 %	6	0.10 %	89 / 522	CDP
Credit Saison Co	0.01 %	0.01 %	1	0.00 %	30	0.01 %	455 / 522	TC
Credit Suisse Group AG	0.09 %	0.09 %	7	0.00 %	18	0.10 %	375 / 522	CDP
CTBC Financial Holding Co Ltd	0.03 %	0.03 %	1	0.00 %	8	0.04 %	210 / 522	ENV*



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
CYBG PLC	0.01 %	0.01 %	0	0.00 %	30	0.00 %	453 / 522	PRE
Dah Sing Banking Group Ltd.	0.00 %	0.00 %	0	0.00 %	8	0.00 %	178 / 522	TC
Dah Sing Financial Holdings Ltd.	0.00 %	0.00 %	0	0.00 %	8	0.00 %	166 / 522	TC
Dai-ichi Life Holdings Inc	0.05 %	0.05 %	5	0.00 %	7	0.20 %	104 / 522	CDP
Daishi Bank	0.00 %	0.00 %	0	0.00 %	16	0.00 %	358 / 522	TC
Daiwa Securities Group Inc	0.02 %	0.02 %	1	0.00 %	16	0.02 %	355 / 522	ENV
Danske Bank A/S	0.06 %	0.06 %	1	0.00 %	5	0.04 %	38 / 522	ENV*
DB INSURANCE	0.01 %	0.01 %	1	0.00 %	5	0.04 %	26 / 522	PRE
DBS Group Holdings	0.06 %	0.06 %	1	0.00 %	12	0.02 %	284 / 522	TC
Deutsche Bank AG	0.07 %	0.07 %	9	0.01 %	20	0.12 %	406 / 522	ENV*
Deutsche Boerse AG	0.05 %	0.05 %	1	0.00 %	17	0.01 %	374 / 522	CDP
DGB Financial Group Inc	0.00 %	0.00 %	0	0.00 %	13	0.01 %	295 / 522	CDP
Direct Line Insurance Group	0.02 %	0.02 %	0	0.00 %	7	0.02 %	145 / 522	CDP
Discover Financial Services	0.06 %	0.05 %	2	0.00 %	17	0.04 %	366 / 522	TC
Discovery Ltd	0.01 %	0.01 %	0	0.00 %	22	0.01 %	436 / 522	CDP
DNB ASA	0.05 %	0.05 %	0	0.00 %	6	0.02 %	85 / 522	CDP
Doha Bank	0.00 %	0.00 %	0	0.00 %	7	0.00 %	116 / 522	TC
Dubai Financial Market	0.00 %	0.00 %	0	0.00 %	15	0.00 %	322 / 522	TC
Dubai Investments (DI)	0.00 %	0.00 %	1	0.00 %	330	0.00 %	516 / 522	TC
Dubai Islamic Bank	0.00 %	0.00 %	0	0.00 %	12	0.00 %	286 / 522	TC
E Sun Financial Hldgs Co Ltd	0.01 %	0.01 %	0	0.00 %	8	0.00 %	159 / 522	PRE
E*TRADE Financial Corp	0.03 %	0.03 %	0	0.00 %	15	0.01 %	330 / 522	TC
EFG Eurobank Ergasias	0.00 %	0.00 %	0	0.00 %	8	0.01 %	184 / 522	TC
Egyptian Financial Group-Hermes Holding	0.00 %	0.00 %	0	0.00 %	15	0.00 %	332 / 522	TC
Erste Group Bank AG	0.03 %	0.03 %	1	0.00 %	16	0.02 %	352 / 522	AR*
Euler Hermes Group	0.00 %	0.00 %	0	0.00 %	5	0.01 %	33 / 522	AR*
Eurazeo	0.01 %	0.01 %	1	0.00 %	38	0.01 %	473 / 522	ENV*
Everest Re Group Ltd	0.02 %	0.02 %	0	0.00 %	5	0.02 %	52 / 522	TC
EXOR NV	0.02 %	0.02 %	55	0.04 %	57	0.24 %	491 / 522	TC
Fairfax Financial Holdings Limited	0.03 %	0.03 %	1	0.00 %	5	0.04 %	61 / 522	TC
Far East Horizon Ltd	0.01 %	0.00 %	0	0.00 %	16	0.00 %	348 / 522	TC
Far Eastern Intl Bank	0.00 %	0.00 %	0	0.00 %	7	0.00 %	141 / 522	TC
Fidelity National Financial Inc	0.03 %	0.03 %	4	0.00 %	32	0.03 %	461 / 522	TC
Fifth Third Bancorp (OH)	0.05 %	0.05 %	3	0.00 %	31	0.02 %	456 / 522	CDP
FinecoBank Spa	0.01 %	0.01 %	0	0.00 %	7	0.00 %	127 / 522	TC
FIRST ABU DHABI BANK	0.02 %	0.02 %	0	0.00 %	17	0.00 %	369 / 522	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
First Financial Holding Co Ltd	0.01 %	0.01 %	0	0.00 %	27	0.00 %	447 / 522	CDP
First Intl Bank of Israel	0.00 %	0.00 %	0	0.00 %	7	0.00 %	120 / 522	TC
First Pacific Co. Ltd.	0.00 %	0.00 %	45	0.03 %	858	-0.01 %	521 / 522	AR*
First Republic Bank	0.04 %	0.04 %	0	0.00 %	7	0.01 %	131 / 522	TC
FIRSTRAND LIMITED	0.03 %	0.03 %	3	0.00 %	73	0.01 %	498 / 522	CDP
Franklin Resources Inc	0.04 %	0.03 %	1	0.00 %	13	0.02 %	293 / 522	CDP
Fubon Financial Holding	0.03 %	0.03 %	1	0.00 %	7	0.04 %	105 / 522	CDP
Fukuoka Financial Group	0.01 %	0.01 %	0	0.00 %	19	0.01 %	404 / 522	TC
Gallagher Arthur J. & Co	0.03 %	0.03 %	1	0.00 %	14	0.02 %	307 / 522	TC
Gentera SAB de CV	0.00 %	0.00 %	0	0.00 %	23	0.00 %	442 / 522	PRE
GF Securities Co Ltd	0.01 %	0.01 %	0	0.00 %	15	0.00 %	329 / 522	TC
Gjensidige Forsikring ASA	0.01 %	0.01 %	0	0.00 %	3	0.00 %	5 / 522	CDP
Goldman Sachs Group Inc	0.20 %	0.20 %	6	0.00 %	14	0.11 %	305 / 522	CDP
Great-West Lifeco Inc	0.02 %	0.02 %	1	0.00 %	5	0.04 %	42 / 522	CDP
Groupe Bruxelles Lambert	0.02 %	0.02 %	21	0.01 %	297	0.01 %	513 / 522	TC
Grupo Aval Acciones y Valores	0.00 %	0.00 %	0	0.00 %	7	0.00 %	125 / 522	TC
GRUPO CATALANA OCCIDENTE SA	0.00 %	0.00 %	0	0.00 %	5	0.00 %	47 / 522	TC
Grupo de Inversiones Suramericana SA	0.01 %	0.01 %	0	0.00 %	9	0.01 %	229 / 522	CDP*
Grupo Elektra S.A.B. de C.V.	0.01 %	0.01 %	0	0.00 %	30	0.00 %	454 / 522	ENV*
Grupo Financiero Banorte	0.04 %	0.04 %	1	0.00 %	23	0.01 %	441 / 522	CDP
Grupo Financiero Inbursa	0.01 %	0.01 %	0	0.00 %	7	0.00 %	126 / 522	TC
GT Capital Holdings Inc	0.00 %	0.00 %	1	0.00 %	57	0.01 %	492 / 522	TC
Gunma Bank	0.01 %	0.01 %	0	0.00 %	10	0.00 %	240 / 522	TC
Guotai Junan International Holdings Ltd.	0.00 %	0.00 %	0	0.00 %	8	0.00 %	187 / 522	ENV*
Habib Bank Ltd	0.00 %	0.00 %	0	0.00 %	12	0.00 %	276 / 522	TC
Hachijuni Bank	0.01 %	0.01 %	0	0.00 %	19	0.00 %	403 / 522	CDP
HACI OMER SABANCI HOLDING	0.01 %	0.01 %	25	0.02 %	398	0.00 %	517 / 522	TC
Haitong International Security Group	0.00 %	0.00 %	0	0.00 %	15	0.00 %	327 / 522	TC
Haitong Securities Co. Ltd.	0.01 %	0.01 %	0	0.00 %	15	0.00 %	346 / 522	TC
Hana Financial Group Inc	0.03 %	0.03 %	2	0.00 %	16	0.03 %	350 / 522	CDP
Hang Seng Bank Ltd.	0.04 %	0.04 %	0	0.00 %	10	0.01 %	234 / 522	CDP*
Hannover Ruck SE	0.02 %	0.02 %	1	0.00 %	5	0.03 %	60 / 522	TC
Hanwha Life Insurance Co Ltd	0.00 %	0.00 %	0	0.00 %	5	0.02 %	49 / 522	TC
Harel Insurance Inv Ltd 1	0.00 %	0.00 %	0	0.00 %	6	0.01 %	74 / 522	TC
Hargreaves Lansdown Plc	0.01 %	0.01 %	0	0.00 %	8	0.00 %	165 / 522	ENV*
Hartford Finl Services Group	0.05 %	0.05 %	1	0.00 %	5	0.07 %	39 / 522	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Helvetia Holding AG	0.01 %	0.01 %	0	0.00 %	4	0.02 %	13 / 522	CDP
Hiroshima Bank	0.01 %	0.01 %	0	0.00 %	8	0.00 %	199 / 522	TC
Hitachi Capital Corp	0.00 %	0.00 %	0	0.00 %	20	0.00 %	419 / 522	TC
Hokuhoku Financial Group Inc	0.00 %	0.00 %	0	0.00 %	8	0.01 %	193 / 522	TC
Hong Kong Exchanges and Clearing Ltd.	0.08 %	0.08 %	0	0.00 %	19	0.01 %	402 / 522	ENV
Hong Leong Bank Bhd	0.01 %	0.01 %	0	0.00 %	8	0.00 %	158 / 522	TC
Hong Leong Financial Group Bhd	0.00 %	0.00 %	0	0.00 %	8	0.00 %	169 / 522	TC
Housing Development Finance Corp	0.10 %	0.10 %	1	0.00 %	15	0.02 %	345 / 522	TC
HSBC Holdings Plc	0.45 %	0.46 %	15	0.01 %	15	0.27 %	318 / 522	CDP
Hua Nan Financial Holdings	0.01 %	0.01 %	0	0.00 %	7	0.00 %	144 / 522	TC
Huatai Securities Co Ltd	0.01 %	0.01 %	0	0.00 %	15	0.00 %	328 / 522	TC
Huntington Bancshares (OH)	0.03 %	0.03 %	2	0.00 %	36	0.01 %	472 / 522	CDP
Hyundai Fire & Marine Ins	0.01 %	0.01 %	1	0.00 %	4	0.04 %	16 / 522	CDP
Ichigo Inc	0.00 %	0.00 %	0	0.00 %	110	0.00 %	506 / 522	TC
ICICI Bank Ltd	0.01 %	0.01 %	0	0.00 %	11	0.01 %	263 / 522	TC
ICICI Prudential Life Insurance Company Ltd	0.00 %	0.00 %	0	0.00 %	6	0.00 %	94 / 522	TC
IDFC Bank Ltd	0.00 %	0.00 %	0	0.00 %	19	0.00 %	399 / 522	TC
IGM Financial Inc	0.01 %	0.01 %	0	0.00 %	4	0.00 %	12 / 522	CDP
Indiabulls Housing Finance Limited	0.01 %	0.01 %	0	0.00 %	20	0.00 %	409 / 522	TC
Indusind Bank Ltd	0.01 %	0.01 %	0	0.00 %	72	0.00 %	496 / 522	CDP
Industrial and Commercial Bank of China Ltd	0.13 %	0.13 %	2	0.00 %	9	0.07 %	228 / 522	TC
Industrial Bank of Korea	0.01 %	0.01 %	1	0.00 %	21	0.01 %	434 / 522	PRE
Industrivarden AB	0.02 %	0.02 %	1	0.00 %	8	0.03 %	179 / 522	CDP
ING Groep NV	0.16 %	0.16 %	4	0.00 %	12	0.09 %	278 / 522	CDP
Insurance Australia Group Ltd	0.03 %	0.03 %	1	0.00 %	16	0.02 %	351 / 522	CDP
Intact Financial Corporation	0.02 %	0.02 %	0	0.00 %	5	0.03 %	35 / 522	CDP
Intercontinental Exchange Inc	0.09 %	0.09 %	1	0.00 %	15	0.02 %	333 / 522	TC
Intesa SanPaolo	0.11 %	0.11 %	4	0.00 %	11	0.10 %	272 / 522	CDP
Invesco Ltd	0.03 %	0.03 %	1	0.00 %	18	0.02 %	376 / 522	CDP
Investec Ltd	0.00 %	0.00 %	0	0.00 %	38	0.00 %	474 / 522	CDP
Investec PLC.	0.01 %	0.01 %	0	0.00 %	35	0.00 %	470 / 522	CDP
Investor AB	0.05 %	0.05 %	4	0.00 %	84	0.01 %	501 / 522	TC
loof Hldgs Ltd	0.01 %	0.01 %	0	0.00 %	11	0.00 %	261 / 522	PRE
Israel Discount Bank 0.1	0.01 %	0.01 %	1	0.00 %	35	0.01 %	469 / 522	PRE
Israel Phoenix Assurance 1	0.00 %	0.00 %	0	0.00 %	5	0.00 %	69 / 522	TC
Itau Corpbanca S.A.	0.00 %	0.00 %	0	0.00 %	7	0.00 %	135 / 522	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Itau Unibanco Holding SA	0.10 %	0.10 %	2	0.00 %	8	0.07 %	185 / 522	OTH
Itausa Investimentos Itau S.A	0.03 %	0.03 %	9	0.01 %	328	0.00 %	515 / 522	CDP
Iyo Bank	0.01 %	0.01 %	0	0.00 %	10	0.00 %	230 / 522	TC
Jafco Co	0.00 %	0.00 %	0	0.00 %	18	0.00 %	384 / 522	TC
Japan Exchange Group Inc	0.02 %	0.02 %	0	0.00 %	18	0.00 %	383 / 522	TC
Japan Post Bank co	0.01 %	0.01 %	0	0.00 %	8	0.00 %	195 / 522	TC
Japan Post Holdings co	0.03 %	0.04 %	25	0.02 %	59	0.10 %	493 / 522	TC
Japan Post Insurance co	0.00 %	0.00 %	0	0.00 %	6	0.02 %	93 / 522	TC
JP Morgan Chase & Co	0.78 %	0.78 %	25	0.02 %	18	0.38 %	387 / 522	CDP
JSE Ltd	0.00 %	0.00 %	0	0.00 %	80	0.00 %	500 / 522	CDP
Julius Baer Group	0.03 %	0.03 %	0	0.00 %	7	0.01 %	102 / 522	CDP
Juroku Bank	0.00 %	0.00 %	0	0.00 %	16	0.00 %	357 / 522	TC
Jyske Bank AS	0.01 %	0.01 %	0	0.00 %	8	0.00 %	167 / 522	TC
Kasikornbank	0.03 %	0.03 %	2	0.00 %	22	0.02 %	438 / 522	ENV*
KB Financial Group Inc.	0.04 %	0.04 %	3	0.00 %	24	0.03 %	443 / 522	CDP*
KBC Group NV	0.05 %	0.05 %	2	0.00 %	15	0.03 %	312 / 522	CDP
Keiyo Bank	0.00 %	0.00 %	0	0.00 %	8	0.00 %	189 / 522	TC
KeyCorp	0.05 %	0.05 %	2	0.00 %	21	0.02 %	433 / 522	CDP
Kingston Financial Froup Ltd	0.00 %	0.00 %	0	0.00 %	45	0.00 %	483 / 522	TC
Kinnevik Investment AB	0.02 %	0.02 %	0	0.00 %	64	0.00 %	495 / 522	TC
Komercki Banka	0.01 %	0.01 %	0	0.00 %	7	0.00 %	146 / 522	TC
Korea Investment Holdings Co Ltd	0.00 %	0.00 %	1	0.00 %	13	0.01 %	297 / 522	TC
Kotak Mahindra Bank Ltd	0.01 %	0.01 %	0	0.00 %	15	0.00 %	344 / 522	CDP
KRUK SA	0.00 %	0.00 %	0	0.00 %	17	0.00 %	363 / 522	TC
Krung Thai Bank Co	0.01 %	0.01 %	0	0.00 %	8	0.01 %	183 / 522	TC
Kyushu Financial Hds	0.01 %	0.01 %	0	0.00 %	10	0.00 %	241 / 522	TC
L&T Finance Holdings Ltd	0.00 %	0.00 %	0	0.00 %	19	0.00 %	398 / 522	TC
Latour Investment AB	0.00 %	0.00 %	0	0.00 %	215	0.00 %	512 / 522	TC
Legal & General Group	0.05 %	0.05 %	2	0.00 %	7	0.08 %	101 / 522	CDP
Leucadia National Corp (NY)	0.02 %	0.02 %	97	0.06 %	757	-0.03 %	520 / 522	TC
Liberty Hldgs	0.00 %	0.00 %	0	0.00 %	15	0.01 %	317 / 522	CDP
LIC Housing Finance Ltd	0.01 %	0.01 %	0	0.00 %	20	0.00 %	415 / 522	TC
Lincoln National Corp	0.04 %	0.04 %	1	0.00 %	4	0.05 %	8 / 522	CDP
Lloyds Banking Group Plc	0.15 %	0.15 %	8	0.00 %	10	0.22 %	237 / 522	CDP
Loews Corp	0.03 %	0.03 %	19	0.01 %	123	0.03 %	507 / 522	TC
London Stock Exchange Plc	0.04 %	0.04 %	1	0.00 %	20	0.01 %	422 / 522	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Lundbergs AB-B Shs	0.00 %	0.01 %	1	0.00 %	170	0.00 %	511 / 522	TC
M&T Bank Corp	0.05 %	0.05 %	1	0.00 %	10	0.02 %	238 / 522	TC
Macquarie Group Ltd	0.05 %	0.05 %	2	0.00 %	18	0.03 %	388 / 522	CDP
Magellan Financial Group Limited	0.01 %	0.01 %	0	0.00 %	4	0.00 %	11 / 522	CDP*
Mahindra & Mahindra Financial Services Ltd	0.00 %	0.00 %	0	0.00 %	9	0.00 %	221 / 522	CDP
Malayan Banking Bhd	0.03 %	0.03 %	1	0.00 %	18	0.02 %	385 / 522	CDP
Manulife Financial Corporation	0.09 %	0.09 %	13	0.01 %	22	0.16 %	439 / 522	CDP
Mapfre SA	0.01 %	0.01 %	1	0.00 %	5	0.04 %	29 / 522	CDP
Markel Corp	0.03 %	0.03 %	0	0.00 %	5	0.02 %	50 / 522	TC
Marsh & McLennan Companies	0.10 %	0.10 %	3	0.00 %	18	0.05 %	395 / 522	CDP
Masraf Al Rayan Bank	0.01 %	0.01 %	0	0.00 %	7	0.00 %	154 / 522	TC
Matsui Securities Co Ltd	0.00 %	0.00 %	0	0.00 %	18	0.00 %	380 / 522	TC
Mbank	0.00 %	0.00 %	0	0.00 %	16	0.00 %	349 / 522	PRE
Mebuki Financial Group Inc	0.01 %	0.01 %	0	0.00 %	10	0.00 %	246 / 522	TC
Medibank Private Limited	0.01 %	0.01 %	0	0.00 %	6	0.02 %	83 / 522	TC
Mediobanca SpA	0.01 %	0.01 %	0	0.00 %	5	0.01 %	34 / 522	CDP
Mega Financial Holding Co Ltd	0.02 %	0.02 %	0	0.00 %	7	0.01 %	150 / 522	TC
Metlife Inc	0.11 %	0.11 %	4	0.00 %	5	0.25 %	28 / 522	CDP
Metro Pacific Investments Corp	0.00 %	0.00 %	1	0.00 %	131	0.00 %	508 / 522	TC
Metropolitan Bank & Trust	0.01 %	0.00 %	0	0.00 %	9	0.00 %	227 / 522	TC
Migdal Insurance Hdls	0.00 %	0.00 %	0	0.00 %	6	0.01 %	71 / 522	TC
Mirae Asset Daewoo	0.01 %	0.01 %	0	0.00 %	18	0.00 %	396 / 522	CDP
Mitsubishi UFJ Financial Group Inc	0.19 %	0.19 %	7	0.00 %	15	0.12 %	316 / 522	CDP
Mitsubishi UFJ Lease & Finance Co Ltd	0.01 %	0.01 %	2	0.00 %	47	0.01 %	484 / 522	TC
Mizrahi Tefahot Bank Ltd	0.01 %	0.01 %	0	0.00 %	27	0.00 %	448 / 522	PRE
Mizuho Financial Group Inc	0.10 %	0.10 %	6	0.00 %	20	0.08 %	407 / 522	CDP
MMI Holdings Ltd	0.00 %	0.00 %	1	0.00 %	34	0.01 %	467 / 522	CDP
Moneta Money Bank	0.00 %	0.00 %	0	0.00 %	52	0.00 %	487 / 522	CDP
Moody's Corp	0.05 %	0.05 %	1	0.00 %	19	0.01 %	405 / 522	CDP
Morgan Stanley	0.15 %	0.15 %	7	0.00 %	18	0.11 %	390 / 522	CDP
Moscow Exchange MICEX-RTS PJSC	0.01 %	0.01 %	0	0.00 %	15	0.00 %	339 / 522	TC
MS&AD Insurance Group Holdings Inc	0.04 %	0.04 %	3	0.00 %	7	0.12 %	111 / 522	CDP
Munich Re AG	0.07 %	0.07 %	4	0.00 %	6	0.21 %	81 / 522	PRE
Nasdaq Inc	0.02 %	0.02 %	1	0.00 %	33	0.01 %	464 / 522	TC
National Australia Bank Ltd	0.15 %	0.15 %	4	0.00 %	18	0.06 %	392 / 522	CDP
National Bank of Canada	0.04 %	0.04 %	0	0.00 %	6	0.02 %	88 / 522	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
National Bank of Greece SA	0.00 %	0.00 %	1	0.00 %	32	0.01 %	458 / 522	CDP
Natixis	0.02 %	0.02 %	1	0.00 %	6	0.03 %	75 / 522	CDP
Navient Corp	0.01 %	0.01 %	1	0.00 %	17	0.01 %	368 / 522	TC
Nedbank Group	0.01 %	0.01 %	1	0.00 %	61	0.00 %	494 / 522	CDP
NEW CHINA LIFE INSURANCE CO	0.01 %	0.01 %	0	0.00 %	5	0.02 %	68 / 522	TC
New York Community Bancorp Inc	0.01 %	0.01 %	0	0.00 %	7	0.01 %	124 / 522	TC
NH Investment & Securities Co/ New	0.00 %	0.00 %	0	0.00 %	8	0.00 %	203 / 522	PRE
Nihon M&A Center Inc	0.01 %	0.01 %	0	0.00 %	33	0.00 %	463 / 522	TC
Nishi-Nippon Financial Holdings Inc	0.00 %	0.00 %	0	0.00 %	8	0.00 %	196 / 522	TC
NN Group N.V.	0.03 %	0.03 %	1	0.00 %	3	0.07 %	6 / 522	CDP
Nomura Holdings Inc	0.04 %	0.04 %	3	0.00 %	21	0.04 %	432 / 522	CDP
Nordea AB	0.10 %	0.10 %	1	0.00 %	9	0.03 %	211 / 522	CDP
North Pacific Bank Ltd	0.00 %	0.00 %	0	0.00 %	8	0.00 %	192 / 522	TC
Northern Trust Corp (IL)	0.04 %	0.04 %	1	0.00 %	19	0.02 %	401 / 522	CDP*
Old Mutual	0.03 %	0.03 %	9	0.01 %	40	0.06 %	477 / 522	CDP
Old Republic Intl Corp	0.01 %	0.01 %	0	0.00 %	5	0.02 %	51 / 522	TC
Orient Corp	0.00 %	0.00 %	0	0.00 %	20	0.00 %	417 / 522	TC
Orient Securities Company Limited	0.00 %	0.00 %	0	0.00 %	15	0.00 %	341 / 522	TC
Orix Corp	0.05 %	0.05 %	10	0.01 %	43	0.06 %	482 / 522	CDP
OTP Bank	0.02 %	0.02 %	1	0.00 %	18	0.01 %	391 / 522	PRE
Overseas-Chinese Banking	0.06 %	0.06 %	1	0.00 %	9	0.05 %	215 / 522	TC
Pargesa Hldgs SA Br	0.01 %	0.01 %	38	0.02 %	1,558	-0.02 %	522 / 522	TC
Partners Group Hldg	0.03 %	0.03 %	0	0.00 %	20	0.00 %	428 / 522	CDP
People's Insurance Co. (Group) of China	0.01 %	0.01 %	1	0.00 %	6	0.06 %	72 / 522	TC
People's United Financial Inc	0.01 %	0.01 %	0	0.00 %	7	0.00 %	121 / 522	TC
Perpetual Limited	0.00 %	0.00 %	0	0.00 %	15	0.00 %	315 / 522	PRE
PICC Property and Casualty Co. Ltd. - H	0.02 %	0.02 %	1	0.00 %	5	0.05 %	54 / 522	TC
Ping An Insurance (Group) Co of China Ltd	0.09 %	0.09 %	3	0.00 %	6	0.12 %	84 / 522	TC
PKO Bank Polski SA	0.02 %	0.02 %	0	0.00 %	9	0.01 %	217 / 522	TC
Platinum Asset Management Limited	0.00 %	0.00 %	0	0.00 %	7	0.00 %	114 / 522	TC
PNC Finl Services Group	0.15 %	0.15 %	7	0.00 %	32	0.06 %	459 / 522	CDP
Porto Seguro SA	0.00 %	0.00 %	0	0.00 %	7	0.00 %	99 / 522	CDP*
Postal Savings Bank of China Co Ltd	0.01 %	0.01 %	0	0.00 %	8	0.01 %	172 / 522	TC
Poste Italiane Spa	0.01 %	0.01 %	3	0.00 %	14	0.05 %	304 / 522	TC
Power Corporation of Canada	0.02 %	0.02 %	2	0.00 %	5	0.12 %	25 / 522	CDP
Power Finance Corp Ltd	0.00 %	0.00 %	0	0.00 %	20	0.00 %	421 / 522	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Power Financial Corp	0.01 %	0.02 %	1	0.00 %	4	0.04 %	21 / 522	CDP
Powszechny Zaklad Ubezpieczen SA	0.02 %	0.02 %	0	0.00 %	5	0.02 %	65 / 522	TC
Principal Financial Group	0.04 %	0.04 %	1	0.00 %	7	0.05 %	115 / 522	CDP*
Progressive Corp	0.06 %	0.06 %	6	0.00 %	18	0.09 %	378 / 522	PRE
Provident Financial	0.00 %	0.00 %	0	0.00 %	8	0.01 %	206 / 522	CDP
Prudential Financial Inc	0.11 %	0.10 %	6	0.00 %	7	0.24 %	100 / 522	OTH*
Prudential Plc	0.14 %	0.14 %	4	0.00 %	4	0.23 %	20 / 522	CDP
PSG Group Ltd	0.00 %	0.00 %	0	0.00 %	20	0.00 %	429 / 522	TC
Public Bank Bhd	0.03 %	0.03 %	0	0.00 %	9	0.02 %	218 / 522	TC
Punjab National Bank	0.00 %	0.00 %	0	0.00 %	11	0.00 %	262 / 522	TC
Qatar Insurance Company	0.00 %	0.00 %	0	0.00 %	7	0.01 %	108 / 522	TC
Qatar International Islam	0.00 %	0.00 %	0	0.00 %	9	0.00 %	212 / 522	TC
Qatar Islamic Bank	0.00 %	0.00 %	0	0.00 %	7	0.00 %	140 / 522	TC
Qatar National Bank	0.02 %	0.02 %	0	0.00 %	10	0.01 %	239 / 522	CDP
QBE Insurance Group Ltd	0.03 %	0.02 %	1	0.00 %	5	0.06 %	31 / 522	ENV*
Raiffeisen Bank International AG	0.01 %	0.01 %	0	0.00 %	11	0.01 %	267 / 522	CDP
Rand Merchant Investment Holdings Limited	0.00 %	0.00 %	0	0.00 %	6	0.00 %	82 / 522	TC
Raymond James Financial Inc	0.02 %	0.02 %	1	0.00 %	15	0.02 %	319 / 522	TC
Regions Financial Corp	0.04 %	0.04 %	1	0.00 %	8	0.02 %	182 / 522	TC
Reliance Capital Ltd	0.00 %	0.00 %	0	0.00 %	13	0.00 %	299 / 522	TC
Remgro Ltd	0.02 %	0.02 %	16	0.01 %	721	-0.00 %	519 / 522	CDP
RenaissanceRe Hldgs	0.01 %	0.01 %	0	0.00 %	5	0.01 %	30 / 522	PRE
Resona Holdings Inc	0.03 %	0.03 %	2	0.00 %	20	0.02 %	430 / 522	ENV*
RHB Bank Bhd	0.00 %	0.00 %	0	0.00 %	8	0.00 %	176 / 522	TC
RMB Holdings	0.01 %	0.01 %	0	0.00 %	12	0.00 %	279 / 522	TC
Royal Bank of Canada	0.26 %	0.26 %	4	0.00 %	10	0.12 %	236 / 522	CDP
Royal Bank of Scotland Group	0.03 %	0.03 %	2	0.00 %	26	0.02 %	446 / 522	AR*
RSA Insurance Group Plc	0.02 %	0.02 %	1	0.00 %	5	0.04 %	40 / 522	AR*
Rural Electrification Corp Ltd	0.00 %	0.00 %	0	0.00 %	20	0.00 %	420 / 522	TC
S&P Global Inc	0.09 %	0.09 %	1	0.00 %	18	0.02 %	394 / 522	CDP
Sampo Oyj A	0.06 %	0.06 %	0	0.00 %	4	0.03 %	10 / 522	AR*
Samsung Card	0.00 %	0.00 %	0	0.00 %	17	0.00 %	364 / 522	TC
Samsung Fire & Marine	0.02 %	0.02 %	1	0.00 %	4	0.05 %	14 / 522	CDP
Samsung Life Insurance Co Ltd	0.01 %	0.01 %	1	0.00 %	9	0.04 %	216 / 522	PRE
Samsung Secs Co	0.00 %	0.00 %	0	0.00 %	7	0.01 %	107 / 522	CDP
San-In Godo Bank	0.00 %	0.00 %	0	0.00 %	15	0.00 %	314 / 522	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Sanlam Ltd	0.02 %	0.02 %	1	0.00 %	10	0.02 %	257 / 522	CDP
Santam Ltd	0.00 %	0.00 %	0	0.00 %	8	0.00 %	174 / 522	PRE
Sberbank of Russia PJSC	0.08 %	0.08 %	5	0.00 %	20	0.06 %	408 / 522	PRE
SBI Holdings Inc	0.01 %	0.01 %	0	0.00 %	16	0.01 %	356 / 522	TC
Schroders Plc	0.01 %	0.01 %	0	0.00 %	6	0.00 %	80 / 522	CDP
Schwab Charles Corp	0.12 %	0.12 %	1	0.00 %	12	0.03 %	289 / 522	CDP
Schweiz-Ruckversicherungs Br	0.06 %	0.06 %	2	0.00 %	3	0.16 %	4 / 522	CDP
SCOR SE	0.01 %	0.01 %	1	0.00 %	4	0.05 %	17 / 522	OTH*
SEB-Skand Enskilda Banken	0.04 %	0.04 %	0	0.00 %	8	0.02 %	157 / 522	CDP
SEI Investments Corp	0.02 %	0.02 %	0	0.00 %	15	0.00 %	338 / 522	TC
Senshu Ikeda Holdings	0.00 %	0.00 %	0	0.00 %	8	0.00 %	197 / 522	TC
Seven Bank Ltd	0.01 %	0.01 %	0	0.00 %	6	0.00 %	87 / 522	CDP
Shiga Bank	0.00 %	0.00 %	0	0.00 %	8	0.00 %	198 / 522	TC
Shin Kong Financial Hdlgs	0.01 %	0.01 %	1	0.00 %	7	0.03 %	106 / 522	TC
Shinhan Financial Group Ltd	0.05 %	0.05 %	3	0.00 %	13	0.06 %	294 / 522	CDP
Shinsei Bank Ltd	0.01 %	0.01 %	0	0.00 %	18	0.00 %	379 / 522	TC
Shizuoka Bank	0.01 %	0.01 %	0	0.00 %	9	0.01 %	225 / 522	TC
Shriram Transport Finance Co Ltd	0.01 %	0.01 %	0	0.00 %	20	0.00 %	414 / 522	TC
Siam Commercial Bank PCL	0.03 %	0.03 %	0	0.00 %	8	0.01 %	170 / 522	TC
Singapore Exchange Ltd	0.01 %	0.01 %	0	0.00 %	17	0.00 %	361 / 522	TC
SinoPac Financial Holdings Co	0.01 %	0.01 %	0	0.00 %	16	0.00 %	354 / 522	ENV*
Societe Generale	0.10 %	0.10 %	6	0.00 %	10	0.16 %	251 / 522	CDP
Sofina	0.01 %	0.01 %	0	0.00 %	43	0.00 %	479 / 522	TC
Sompo Holdings Inc	0.03 %	0.03 %	2	0.00 %	7	0.08 %	147 / 522	CDP*
SONY FINANCIAL HOLDINGS INC	0.01 %	0.01 %	0	0.00 %	6	0.01 %	95 / 522	TC
St James's Place	0.02 %	0.02 %	1	0.00 %	2	0.06 %	1 / 522	CDP
Standard Bank Group Ltd	0.03 %	0.03 %	4	0.00 %	34	0.03 %	466 / 522	CDP
Standard Chartered	0.06 %	0.06 %	4	0.00 %	25	0.04 %	445 / 522	ENV
Standard Life Aberdeen	0.04 %	0.04 %	1	0.00 %	6	0.03 %	70 / 522	CDP
State Bank of India	0.01 %	0.02 %	1	0.00 %	11	0.01 %	271 / 522	TC
State Street Corp	0.08 %	0.08 %	3	0.00 %	18	0.04 %	393 / 522	CDP
Sul America SA	0.00 %	0.00 %	0	0.00 %	3	0.01 %	2 / 522	CDP
Sumitomo Mitsui Financial Group	0.12 %	0.12 %	5	0.00 %	12	0.10 %	283 / 522	TC
Sumitomo Mitsui Trust Holdings Inc	0.03 %	0.03 %	1	0.00 %	12	0.03 %	287 / 522	CDP
Sun Life Financial Serv Canada	0.06 %	0.06 %	3	0.00 %	10	0.07 %	256 / 522	CDP
Suncorp Group Ltd	0.03 %	0.03 %	1	0.00 %	10	0.04 %	250 / 522	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
SunTrust Banks Inc (GA)	0.07 %	0.07 %	1	0.00 %	8	0.03 %	209 / 522	TC
Suruga Bank	0.01 %	0.01 %	0	0.00 %	8	0.00 %	202 / 522	TC
Svenska Handelsbanken	0.05 %	0.05 %	1	0.00 %	11	0.01 %	266 / 522	CDP
Swedbank AB	0.07 %	0.07 %	1	0.00 %	10	0.02 %	243 / 522	CDP
Swiss Life Reg	0.03 %	0.03 %	1	0.00 %	4	0.08 %	9 / 522	CDP
Synchrony Financial	0.06 %	0.06 %	3	0.00 %	17	0.06 %	367 / 522	TC
T Rowe Price Group Inc	0.05 %	0.05 %	1	0.00 %	17	0.02 %	360 / 522	OTH
T&D Holdings Inc	0.02 %	0.02 %	1	0.00 %	8	0.05 %	164 / 522	CDP
Taishin Financial Hdlgs	0.01 %	0.01 %	0	0.00 %	8	0.00 %	161 / 522	ENV*
Taiwan Business Bank	0.00 %	0.00 %	0	0.00 %	7	0.00 %	153 / 522	TC
Taiwan Cooperative Financial Holding	0.01 %	0.01 %	0	0.00 %	7	0.00 %	138 / 522	TC
Talanx AG	0.00 %	0.00 %	0	0.00 %	5	0.02 %	67 / 522	TC
TD Ameritrade Holding Corporation	0.03 %	0.03 %	0	0.00 %	16	0.01 %	353 / 522	TC
The Bank of New York Mellon Corp	0.12 %	0.12 %	4	0.00 %	20	0.06 %	425 / 522	CDP
Thomson Reuters Corporation	0.03 %	0.03 %	3	0.00 %	54	0.02 %	489 / 522	CDP
TMB Bank Pcl	0.00 %	0.00 %	0	0.00 %	7	0.00 %	139 / 522	TC
Tokai Tokyo Financial Holdings Inc	0.00 %	0.00 %	0	0.00 %	18	0.00 %	381 / 522	TC
Tokio Marine Holdings Inc	0.06 %	0.06 %	3	0.00 %	6	0.12 %	92 / 522	CDP
Tokyo Century Corp	0.00 %	0.00 %	2	0.00 %	53	0.01 %	488 / 522	TC
Torchmark Corp	0.02 %	0.02 %	0	0.00 %	7	0.02 %	155 / 522	TC
Toronto-Dominion Bank	0.24 %	0.24 %	5	0.00 %	15	0.10 %	309 / 522	CDP
Travelers Cos Inc	0.08 %	0.08 %	2	0.00 %	5	0.11 %	37 / 522	CDP
Tryg A/S	0.01 %	0.01 %	0	0.00 %	5	0.00 %	27 / 522	PRE
Turkiye Garanti Bankasi	0.01 %	0.01 %	1	0.00 %	17	0.01 %	371 / 522	CDP
Turkiye Halk Bankasi	0.00 %	0.00 %	0	0.00 %	20	0.01 %	424 / 522	CDP
Turkiye Is Bankasi A	0.01 %	0.01 %	0	0.00 %	8	0.01 %	181 / 522	ENV*
Turkiye Vakiflar Bankasi TAO	0.00 %	0.00 %	0	0.00 %	7	0.01 %	98 / 522	CDP
UBI Banca	0.01 %	0.01 %	1	0.00 %	16	0.01 %	359 / 522	ENV*
UBS Group AG	0.14 %	0.14 %	6	0.00 %	15	0.11 %	313 / 522	CDP
Unicredit SpA Ord	0.11 %	0.11 %	7	0.00 %	20	0.09 %	431 / 522	CDP
UnipolSai Assicurazioni SpA	0.01 %	0.01 %	1	0.00 %	18	0.02 %	386 / 522	ENV
United Overseas Bank	0.05 %	0.05 %	0	0.00 %	8	0.02 %	156 / 522	TC
Unum Group	0.03 %	0.03 %	1	0.00 %	5	0.04 %	43 / 522	CDP
US Bancorp	0.20 %	0.19 %	8	0.01 %	27	0.08 %	449 / 522	CDP*
Vienna Insurance Group	0.00 %	0.00 %	0	0.00 %	5	0.01 %	66 / 522	TC
Voya Financial, Inc	0.02 %	0.02 %	1	0.00 %	6	0.06 %	86 / 522	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
VTB Bank PJSC	0.01 %	0.01 %	0	0.00 %	8	0.01 %	186 / 522	TC
Wells Fargo & Co	0.57 %	0.57 %	23	0.01 %	20	0.31 %	426 / 522	CDP
Wendel	0.01 %	0.01 %	11	0.01 %	148	0.01 %	510 / 522	AR*
Westpac Banking Corp	0.20 %	0.20 %	4	0.00 %	18	0.06 %	377 / 522	CDP
Willis Towers Watson PLC	0.04 %	0.04 %	3	0.00 %	29	0.03 %	452 / 522	TC
Woori Bank	0.02 %	0.02 %	2	0.00 %	34	0.02 %	465 / 522	PRE
WR Berkley Corp	0.01 %	0.01 %	0	0.00 %	5	0.03 %	62 / 522	TC
XL Group Ltd	0.02 %	0.02 %	1	0.00 %	4	0.04 %	15 / 522	ENV*
Yamaguchi Financial Group	0.01 %	0.01 %	0	0.00 %	8	0.00 %	201 / 522	TC
Yapi Ve Kredi Bankasi	0.00 %	0.00 %	0	0.00 %	14	0.00 %	302 / 522	CDP
Yes Bank Ltd	0.02 %	0.02 %	0	0.00 %	48	0.00 %	486 / 522	CDP*
Yuanta Financial Holding Co Ltd	0.01 %	0.01 %	0	0.00 %	8	0.01 %	204 / 522	ENV*
Zenkoku Hosho Co Ltd	0.00 %	0.00 %	0	0.00 %	20	0.00 %	411 / 522	TC
Zions Bancorp (UT)	0.02 %	0.02 %	0	0.00 %	7	0.01 %	122 / 522	TC
Zurich Insurance Group AG	0.11 %	0.11 %	4	0.00 %	4	0.26 %	22 / 522	CDP
Health Care	10.93 %	10.92 %	1,507	0.98 %	51	8.20 %		
3SBio Inc	0.00 %	0.00 %	0	0.00 %	65	0.00 %	64 / 189	TC
Abbott Laboratories	0.21 %	0.21 %	104	0.07 %	359	0.02 %	186 / 189	CDP
AbbVie Inc.	0.33 %	0.32 %	21	0.01 %	57	0.09 %	38 / 189	CDP
Aetna Inc	0.12 %	0.12 %	9	0.01 %	11	0.25 %	5 / 189	PRE
Agilent Technologies Inc	0.05 %	0.05 %	4	0.00 %	67	0.01 %	84 / 189	CDP*
Alexion Pharmaceuticals Inc	0.07 %	0.07 %	3	0.00 %	76	0.01 %	112 / 189	TC
Alfresa Holdings Corp	0.01 %	0.01 %	5	0.00 %	25	0.05 %	11 / 189	AR*
Align Technology Inc	0.03 %	0.03 %	2	0.00 %	111	0.00 %	162 / 189	TC
Alkermes plc	0.02 %	0.02 %	1	0.00 %	65	0.00 %	66 / 189	TC
Allergan plc	0.16 %	0.16 %	10	0.01 %	47	0.05 %	29 / 189	CDP
AmerisourceBergen Corp	0.03 %	0.03 %	25	0.02 %	18	0.40 %	8 / 189	OTH
Amgen Inc	0.32 %	0.31 %	12	0.01 %	36	0.09 %	19 / 189	CDP
Ansell Ltd	0.01 %	0.01 %	6	0.00 %	272	0.00 %	184 / 189	PRE
Anthem Inc	0.12 %	0.12 %	5	0.00 %	4	0.34 %	1 / 189	CDP
Asahi Intecc Co Ltd	0.01 %	0.01 %	0	0.00 %	108	0.00 %	159 / 189	TC
Aspen Pharmacare Holdings Ltd	0.02 %	0.02 %	3	0.00 %	137	0.00 %	173 / 189	CDP
Astellas Pharma Inc	0.06 %	0.06 %	9	0.01 %	61	0.03 %	48 / 189	CDP
AstraZeneca Plc	0.19 %	0.19 %	19	0.01 %	63	0.07 %	53 / 189	CDP
Aurobindo Pharma Ltd	0.01 %	0.01 %	7	0.00 %	651	-0.00 %	188 / 189	PRE



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Bangkok Dusit Medical Services PCL	0.01 %	0.01 %	1	0.00 %	89	0.00 %	145 / 189	TC
Bard C.R. Inc	0.05 %	0.05 %	5	0.00 %	92	0.01 %	148 / 189	PRE
Baxter Intl Inc	0.07 %	0.07 %	18	0.01 %	134	0.03 %	171 / 189	CDP
Bayer AG	0.26 %	0.26 %	85	0.06 %	117	0.15 %	165 / 189	CDP
Becton Dickinson & Co	0.10 %	0.10 %	16	0.01 %	93	0.04 %	151 / 189	CDP
Biogen Inc	0.15 %	0.15 %	6	0.00 %	34	0.04 %	17 / 189	CDP
Biomarin Pharmaceutical Inc	0.04 %	0.04 %	1	0.00 %	65	0.00 %	63 / 189	TC
BioMerieux	0.01 %	0.01 %	1	0.00 %	65	0.00 %	62 / 189	PRE
Bioverativ	0.02 %	0.01 %	1	0.00 %	65	0.00 %	76 / 189	TC
Boston Scientific Corp	0.09 %	0.09 %	7	0.00 %	55	0.03 %	35 / 189	CDP
Bristol-Myers Squibb	0.24 %	0.24 %	16	0.01 %	57	0.07 %	39 / 189	CDP*
Bumrungrad Hospital PCL	0.00 %	0.00 %	0	0.00 %	89	0.00 %	146 / 189	TC
Cadila Healthcare Ltd	0.00 %	0.00 %	1	0.00 %	127	0.00 %	169 / 189	PRE
Cardinal Health Inc	0.05 %	0.05 %	43	0.03 %	27	0.43 %	12 / 189	CDP
Celgene Corp	0.26 %	0.26 %	5	0.00 %	33	0.04 %	16 / 189	CDP
Celltrion Inc	0.02 %	0.02 %	0	0.00 %	77	0.00 %	120 / 189	TC
Centene Corp	0.04 %	0.04 %	3	0.00 %	5	0.16 %	4 / 189	TC
Cerner Corp	0.05 %	0.05 %	2	0.00 %	27	0.02 %	13 / 189	TC
China Medical System Holdings Ltd.	0.01 %	0.00 %	0	0.00 %	65	0.00 %	65 / 189	TC
China Resources Pharmaceutical Group Ltd	0.01 %	0.00 %	5	0.00 %	60	0.02 %	44 / 189	ENV*
China Traditional Chinese Medicine	0.00 %	0.00 %	0	0.00 %	65	0.00 %	69 / 189	TC
Chugai Pharmaceutical Co	0.02 %	0.02 %	1	0.00 %	55	0.01 %	36 / 189	CDP
Cigna Corporation	0.11 %	0.11 %	3	0.00 %	5	0.16 %	3 / 189	CDP
Cipla Ltd/India	0.01 %	0.01 %	1	0.00 %	86	0.00 %	138 / 189	PRE
Cochlear Ltd	0.02 %	0.02 %	1	0.00 %	108	0.00 %	160 / 189	TC
Coloplast AS B	0.02 %	0.02 %	2	0.00 %	93	0.00 %	150 / 189	CDP
ConvaTec Group Plc	0.01 %	0.01 %	1	0.00 %	65	0.00 %	61 / 189	AR*
Cooper Companies Inc	0.03 %	0.03 %	2	0.00 %	86	0.01 %	137 / 189	TC
CSL Ltd	0.11 %	0.11 %	7	0.00 %	95	0.02 %	152 / 189	CDP
CSPC Pharmaceutical Group Ltd.	0.02 %	0.02 %	1	0.00 %	65	0.00 %	72 / 189	TC
Daiichi Sankyo Co Ltd	0.03 %	0.03 %	7	0.00 %	70	0.02 %	91 / 189	CDP
DaVita Inc	0.02 %	0.02 %	7	0.00 %	44	0.04 %	23 / 189	CDP
Dentsply Sirona Inc.	0.03 %	0.03 %	6	0.00 %	113	0.01 %	163 / 189	PRE
Divi's Laboratories Ltd	0.00 %	0.00 %	2	0.00 %	899	-0.00 %	189 / 189	PRE
Dr Reddy's Laboratories Ltd	0.01 %	0.01 %	5	0.00 %	339	0.00 %	185 / 189	CDP
Edwards Lifesciences Corp	0.05 %	0.05 %	3	0.00 %	65	0.01 %	60 / 189	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Eisai Co	0.03 %	0.03 %	4	0.00 %	72	0.01 %	102 / 189	CDP
Essilor Intl	0.06 %	0.06 %	10	0.01 %	92	0.02 %	149 / 189	CDP
Eurofins Scientific	0.01 %	0.01 %	2	0.00 %	88	0.00 %	140 / 189	TC
Express Scripts Holding Co.	0.08 %	0.08 %	42	0.03 %	30	0.38 %	14 / 189	TC
Fisher & Paykel Healthcare Corporation	0.01 %	0.01 %	1	0.00 %	71	0.00 %	96 / 189	CDP
Fleury SA	0.00 %	0.00 %	0	0.00 %	36	0.00 %	18 / 189	CDP
Fresenius Medical Care AG	0.05 %	0.05 %	13	0.01 %	71	0.04 %	94 / 189	TC
Fresenius SE & Co KGaA	0.07 %	0.07 %	23	0.01 %	69	0.08 %	89 / 189	TC
Genmab AS	0.03 %	0.03 %	0	0.00 %	88	0.00 %	139 / 189	TC
Getinge AB	0.01 %	0.01 %	3	0.00 %	76	0.01 %	110 / 189	CDP
Gilead Sciences Inc	0.24 %	0.24 %	16	0.01 %	37	0.11 %	20 / 189	PRE
GlaxoSmithKline	0.22 %	0.22 %	41	0.03 %	80	0.12 %	125 / 189	AR*
Glenmark Pharmaceuticals Ltd	0.00 %	0.00 %	0	0.00 %	52	0.00 %	34 / 189	PRE
Grifols SA	0.03 %	0.04 %	4	0.00 %	81	0.01 %	128 / 189	CDP
Guangzhou Baiyunshan Pharmaceutical	0.00 %	0.00 %	0	0.00 %	64	0.00 %	57 / 189	TC
H Lundbeck A/S	0.01 %	0.01 %	0	0.00 %	42	0.00 %	22 / 189	CDP
Hanmi Pharm Co Ltd	0.01 %	0.01 %	0	0.00 %	65	0.00 %	77 / 189	TC
Hanmi Science Co Ltd	0.00 %	0.00 %	0	0.00 %	61	0.00 %	51 / 189	TC
HCA Healthcare Inc	0.05 %	0.05 %	43	0.03 %	89	0.11 %	144 / 189	TC
Healthscope Ltd	0.01 %	0.01 %	2	0.00 %	102	0.00 %	155 / 189	ENV*
Hikma Pharmaceuticals	0.01 %	0.01 %	1	0.00 %	92	0.00 %	147 / 189	ENV*
Hisamitsu Pharmaceutical Co	0.01 %	0.01 %	1	0.00 %	73	0.00 %	103 / 189	TC
Hologic Inc	0.02 %	0.02 %	2	0.00 %	66	0.01 %	83 / 189	CDP
Hoya Corp	0.05 %	0.05 %	8	0.01 %	161	0.01 %	177 / 189	PRE
Humana Inc	0.08 %	0.08 %	4	0.00 %	5	0.22 %	2 / 189	CDP
IDEXX Laboratories Inc	0.03 %	0.03 %	2	0.00 %	72	0.01 %	101 / 189	TC
IHH Healthcare Bhd	0.01 %	0.01 %	1	0.00 %	89	0.00 %	142 / 189	TC
Illumina Inc	0.07 %	0.07 %	2	0.00 %	68	0.01 %	86 / 189	CDP*
Incyte Corp	0.05 %	0.05 %	1	0.00 %	65	0.00 %	68 / 189	TC
Intuitive Surgical Inc	0.09 %	0.09 %	3	0.00 %	84	0.01 %	134 / 189	TC
Ipsen	0.01 %	0.01 %	0	0.00 %	45	0.00 %	26 / 189	CDP
IQVIA Holdings Inc	0.03 %	0.03 %	3	0.00 %	76	0.01 %	113 / 189	PRE
Jazz Pharmaceuticals plc	0.02 %	0.02 %	1	0.00 %	65	0.00 %	70 / 189	TC
Johnson & Johnson	0.81 %	0.80 %	68	0.04 %	66	0.25 %	81 / 189	CDP*
Kaken Pharmaceutical	0.00 %	0.00 %	1	0.00 %	77	0.00 %	118 / 189	TC
Kalbe Farma Tbk PT	0.01 %	0.01 %	4	0.00 %	407	0.00 %	187 / 189	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%) [*]	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Kissei Pharmaceutical Co	0.00 %	0.00 %	0	0.00 %	82	0.00 %	129 / 189	AR
Kyorin Holdings Inc	0.00 %	0.00 %	0	0.00 %	61	0.00 %	46 / 189	AR*
Kyowa Hakko Kogyo Co	0.01 %	0.01 %	4	0.00 %	214	0.00 %	181 / 189	ENV
Lab Corp of America Hldgs	0.04 %	0.04 %	10	0.01 %	74	0.03 %	107 / 189	TC
Life Healthcare Group Holdings Ltd.	0.01 %	0.01 %	3	0.00 %	202	0.00 %	179 / 189	CDP
Lilly Eli & Co	0.19 %	0.19 %	32	0.02 %	117	0.06 %	166 / 189	CDP
Livzon Pharmaceutical Group Inc	0.00 %	0.00 %	0	0.00 %	65	0.00 %	79 / 189	TC
Lonza AG	0.04 %	0.04 %	15	0.01 %	252	0.01 %	182 / 189	CDP
Lupin Ltd	0.01 %	0.01 %	1	0.00 %	106	0.00 %	158 / 189	PRE
Luye Pharma Group Ltd	0.00 %	0.00 %	0	0.00 %	65	0.00 %	78 / 189	TC
M3 Inc	0.01 %	0.01 %	0	0.00 %	32	0.00 %	15 / 189	TC
Mallinckrodt plc	0.01 %	0.01 %	3	0.00 %	69	0.01 %	88 / 189	TC
McKesson Corp	0.08 %	0.07 %	50	0.03 %	21	0.65 %	9 / 189	ENV
Mediclinic International PLC	0.01 %	0.01 %	2	0.00 %	106	0.00 %	157 / 189	CDP
Medipal Holdings Co	0.01 %	0.01 %	14	0.01 %	71	0.05 %	92 / 189	TC
Medtronic plc	0.25 %	0.24 %	26	0.02 %	73	0.08 %	106 / 189	CDP
Merck & Co Inc	0.40 %	0.40 %	39	0.03 %	68	0.14 %	87 / 189	CDP
MERCK KGaA	0.03 %	0.03 %	9	0.01 %	134	0.01 %	170 / 189	CDP
Mettler-Toledo Intl	0.04 %	0.04 %	3	0.00 %	73	0.01 %	104 / 189	CDP
Miraca Holdings Inc	0.01 %	0.01 %	2	0.00 %	84	0.00 %	133 / 189	TC
Mitsubishi Tanabe Pharma Corp	0.01 %	0.01 %	1	0.00 %	75	0.00 %	109 / 189	ENV*
Mochida Pharmaceutical Co	0.00 %	0.00 %	0	0.00 %	77	0.00 %	119 / 189	TC
Mylan NV	0.04 %	0.04 %	11	0.01 %	65	0.04 %	73 / 189	TC
Netcare Ltd	0.01 %	0.01 %	6	0.00 %	185	0.01 %	178 / 189	CDP
Nihon Kohden Corp	0.00 %	0.00 %	1	0.00 %	80	0.00 %	126 / 189	CDP
Nippon Shinyaku Co	0.01 %	0.01 %	1	0.00 %	122	0.00 %	167 / 189	TC
Nipro Corp	0.00 %	0.00 %	4	0.00 %	154	0.00 %	176 / 189	TC
NMC Health PLC	0.00 %	0.01 %	0	0.00 %	82	0.00 %	130 / 189	AR*
Novartis AG ADR	0.46 %	0.46 %	40	0.03 %	64	0.15 %	55 / 189	OTH
Novo Nordisk AS	0.19 %	0.19 %	8	0.01 %	47	0.04 %	28 / 189	CDP
OBI Pharma Inc	0.00 %	0.00 %	0	0.00 %	65	0.00 %	80 / 189	TC
Odontoprev S.A.	0.00 %	0.00 %	0	0.00 %	39	0.00 %	21 / 189	TC
Olympus Corporation	0.02 %	0.02 %	5	0.00 %	72	0.02 %	99 / 189	CDP
Ono Pharmaceutical Co	0.02 %	0.02 %	1	0.00 %	60	0.00 %	45 / 189	OTH
Orion OYJ	0.01 %	0.01 %	1	0.00 %	75	0.00 %	108 / 189	ENV
Orpea	0.01 %	0.01 %	2	0.00 %	72	0.01 %	98 / 189	AR



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Otsuka Holdings Co Ltd	0.04 %	0.04 %	16	0.01 %	136	0.02 %	172 / 189	PRE
Patterson Cos Inc	0.01 %	0.01 %	4	0.00 %	78	0.01 %	121 / 189	TC
Peptidream Inc	0.01 %	0.01 %	0	0.00 %	95	0.00 %	153 / 189	TC
Perrigo Company plc	0.03 %	0.03 %	6	0.00 %	81	0.02 %	127 / 189	ENV*
Pfizer Inc	0.49 %	0.48 %	58	0.04 %	78	0.18 %	124 / 189	CDP
Piramal Enterprises Ltd	0.01 %	0.01 %	1	0.00 %	206	0.00 %	180 / 189	CDP
QIAGEN AG	0.01 %	0.02 %	1	0.00 %	84	0.00 %	131 / 189	TC
Qualicorp S.A.	0.00 %	0.01 %	0	0.00 %	17	0.00 %	7 / 189	TC
Quest Diagnostics	0.03 %	0.03 %	6	0.00 %	57	0.03 %	40 / 189	CDP
Ramsay Health Care Ltd	0.01 %	0.01 %	3	0.00 %	63	0.01 %	54 / 189	PRE
Recordati SpA Ord	0.01 %	0.01 %	1	0.00 %	65	0.00 %	75 / 189	TC
Regeneron Pharmaceuticals Inc	0.08 %	0.08 %	2	0.00 %	44	0.01 %	25 / 189	CDP
ResMed Inc	0.02 %	0.02 %	1	0.00 %	58	0.01 %	41 / 189	PRE
Richter Gedeon	0.01 %	0.01 %	1	0.00 %	64	0.00 %	59 / 189	TC
Roche Hldgs AG Br	0.42 %	0.42 %	29	0.02 %	48	0.15 %	30 / 189	CDP
Rohto Pharmaceutical Co	0.01 %	0.01 %	1	0.00 %	100	0.00 %	154 / 189	TC
Ryman Healthcare Group Ltd	0.01 %	0.01 %	0	0.00 %	116	0.00 %	164 / 189	TC
Samsung BioLogics Co Ltd	0.01 %	0.01 %	0	0.00 %	76	0.00 %	111 / 189	TC
Sanofi	0.25 %	0.25 %	26	0.02 %	56	0.11 %	37 / 189	CDP
Santen Pharmaceutical Co	0.01 %	0.01 %	1	0.00 %	76	0.00 %	117 / 189	TC
Sartorius AG	0.01 %	0.01 %	1	0.00 %	71	0.00 %	97 / 189	AR*
Sartorius Stedim Biotech	0.00 %	0.00 %	0	0.00 %	73	0.00 %	105 / 189	AR
Sawai Pharmaceutical Co	0.00 %	0.00 %	1	0.00 %	110	0.00 %	161 / 189	CDP
Schein Henry Inc	0.03 %	0.03 %	11	0.01 %	64	0.04 %	58 / 189	TC
Shandong Weigao Group Medical Polymer	0.00 %	0.00 %	0	0.00 %	84	0.00 %	135 / 189	TC
Shanghai Fosun Pharmaceutical Group Co.	0.00 %	0.00 %	1	0.00 %	268	0.00 %	183 / 189	PRE
Shanghai Pharmaceuticals Holding Co Ltd	0.00 %	0.00 %	3	0.00 %	62	0.01 %	52 / 189	TC
Shionogi & Co	0.04 %	0.04 %	2	0.00 %	84	0.01 %	132 / 189	CDP
Shire Plc	0.10 %	0.10 %	8	0.01 %	50	0.04 %	33 / 189	CDP
Sihuan Pharmaceutical Holdings Group Ltd	0.00 %	0.00 %	0	0.00 %	65	0.00 %	67 / 189	TC
Sino Biopharmaceutical Ltd.	0.01 %	0.01 %	1	0.00 %	65	0.00 %	71 / 189	TC
Sinopharm Group Co. Ltd. - H Shares	0.01 %	0.01 %	12	0.01 %	61	0.05 %	47 / 189	TC
Smith & Nephew	0.04 %	0.04 %	6	0.00 %	88	0.02 %	141 / 189	AR
Sonic Healthcare Ltd	0.02 %	0.02 %	2	0.00 %	46	0.01 %	27 / 189	ENV
Sonova Holding AG	0.02 %	0.02 %	1	0.00 %	61	0.00 %	50 / 189	CDP
Straumann AG Reg	0.01 %	0.01 %	1	0.00 %	102	0.00 %	156 / 189	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Stryker Corp	0.11 %	0.11 %	9	0.01 %	58	0.04 %	42 / 189	CDP
Sumitomo Dainippon Pharma Co Ltd	0.00 %	0.00 %	1	0.00 %	64	0.00 %	56 / 189	CDP
Sun Pharmaceutical Industries Ltd	0.02 %	0.02 %	2	0.00 %	66	0.01 %	82 / 189	PRE
Suzuken Co Ltd	0.01 %	0.01 %	13	0.01 %	71	0.04 %	95 / 189	TC
Sysmex Corp	0.02 %	0.02 %	1	0.00 %	49	0.00 %	31 / 189	CDP
Taisho Pharmaceutical Holdings Co Ltd	0.01 %	0.01 %	1	0.00 %	76	0.00 %	114 / 189	TC
Takeda Pharmaceutical Co Ltd	0.10 %	0.10 %	13	0.01 %	71	0.04 %	93 / 189	CDP
Terumo Corp	0.03 %	0.03 %	5	0.00 %	126	0.01 %	168 / 189	CDP
Teva Pharmaceutical Industries	0.03 %	0.04 %	21	0.01 %	78	0.06 %	123 / 189	CDP
Thermo Fisher Scientific	0.17 %	0.17 %	19	0.01 %	72	0.06 %	100 / 189	CDP
Torrent Pharmaceuticals Ltd	0.00 %	0.00 %	0	0.00 %	76	0.00 %	115 / 189	TC
Tsumura & Co	0.01 %	0.01 %	2	0.00 %	153	0.00 %	175 / 189	CDP
UCB SA	0.02 %	0.02 %	2	0.00 %	44	0.01 %	24 / 189	CDP
Unitedhealth Group Inc	0.43 %	0.43 %	44	0.03 %	17	0.72 %	6 / 189	CDP*
Universal Health Services	0.02 %	0.02 %	11	0.01 %	89	0.03 %	143 / 189	TC
Valeant Pharmaceuticals International Inc.	0.01 %	0.01 %	20	0.01 %	146	0.03 %	174 / 189	CDP
Varian Medical Systems Inc	0.02 %	0.02 %	3	0.00 %	60	0.01 %	43 / 189	CDP
Vertex Pharmaceuticals Inc	0.09 %	0.09 %	2	0.00 %	85	0.01 %	136 / 189	TC
Vifor Pharma Group	0.01 %	0.01 %	1	0.00 %	25	0.01 %	10 / 189	CDP
Waters Corp	0.03 %	0.03 %	2	0.00 %	70	0.01 %	90 / 189	CDP
William Demant Hldg	0.01 %	0.01 %	1	0.00 %	49	0.00 %	32 / 189	CDP
Yuhan Corp	0.00 %	0.00 %	1	0.00 %	67	0.00 %	85 / 189	TC
Zimmer Biomet Holdings Inc	0.05 %	0.05 %	8	0.01 %	78	0.03 %	122 / 189	OTH
Zoetis Inc	0.07 %	0.07 %	5	0.00 %	65	0.02 %	74 / 189	TC
Industrials	11.11 %	11.08 %	13,474	8.76 %	286	5.45 %		
3M Co	0.28 %	0.28 %	153	0.10 %	366	0.02 %	392 / 494	CDP
ABB India Ltd	0.00 %	0.00 %	1	0.00 %	306	0.00 %	370 / 494	PRE
ABB Ltd	0.11 %	0.11 %	83	0.05 %	193	0.07 %	287 / 494	CDP
Abertis Infraestructuras SA	0.03 %	0.03 %	3	0.00 %	60	0.01 %	62 / 494	CDP
Aboitiz Equity Ventures Inc	0.01 %	0.01 %	75	0.05 %	5,299	-0.04 %	492 / 494	AR*
ACS Actividades de Construcción y	0.02 %	0.02 %	55	0.04 %	142	0.07 %	222 / 494	ENV*
Acuity Brands Inc	0.02 %	0.02 %	8	0.01 %	194	0.01 %	288 / 494	TC
Adani Enterprises Ltd	0.00 %	0.00 %	38	0.02 %	1,874	-0.02 %	478 / 494	PRE
Adani Ports and Special Economic Zone	0.01 %	0.01 %	Page 95 ¹	0.00 %	110	0.00 %	171 / 494	TC
Adecco Group AG	0.03 %	0.03 %		3	0.00 %	9	0.09 %	2 / 494



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
ADP Promesses	0.01 %	0.01 %	1	0.00 %	63	0.00 %	68 / 494	CDP
Aena SA	0.03 %	0.03 %	3	0.00 %	138	0.00 %	215 / 494	PRE
AerCap Holdings NV	0.02 %	0.02 %	3	0.00 %	46	0.02 %	43 / 494	TC
Aeroflot PJSC	0.00 %	0.00 %	52	0.03 %	1,297	-0.02 %	452 / 494	CDP
Aggreko	0.01 %	0.01 %	1	0.00 %	42	0.01 %	38 / 494	TC
Aica Kogyo Co	0.00 %	0.00 %	3	0.00 %	282	0.00 %	354 / 494	TC
Air Arabia	0.00 %	0.00 %	11	0.01 %	1,452	-0.00 %	461 / 494	TC
Air China Ltd	0.00 %	0.00 %	32	0.02 %	1,398	-0.01 %	458 / 494	TC
Air New Zealand Ltd	0.00 %	0.00 %	28	0.02 %	1,324	-0.01 %	455 / 494	ENV*
AirAsia Group	0.00 %	0.00 %	17	0.01 %	1,705	-0.01 %	473 / 494	PRE
Airbus SE	0.12 %	0.12 %	54	0.04 %	74	0.17 %	85 / 494	CDP
Airports of Thailand PCL	0.02 %	0.02 %	1	0.00 %	100	0.00 %	157 / 494	TC
Alaska Air Group Inc	0.01 %	0.01 %	24	0.02 %	1,157	-0.01 %	443 / 494	PRE
Alfa Laval AB	0.02 %	0.02 %	8	0.01 %	190	0.01 %	284 / 494	CDP
Alfa SA	0.01 %	0.01 %	106	0.07 %	832	-0.03 %	435 / 494	ENV*
Allegion plc	0.02 %	0.02 %	2	0.00 %	76	0.01 %	87 / 494	TC
Alliance Global Group Inc	0.00 %	0.00 %	3	0.00 %	189	0.00 %	283 / 494	TC
ALS Ltd	0.01 %	0.01 %	0	0.00 %	40	0.00 %	35 / 494	TC
Alstom	0.02 %	0.01 %	12	0.01 %	183	0.01 %	272 / 494	AR*
Amada Co	0.01 %	0.01 %	7	0.00 %	254	0.00 %	340 / 494	TC
American Airlines Group Inc.	0.01 %	0.01 %	200	0.13 %	1,399	-0.09 %	459 / 494	CDP
AMETEK Inc	0.03 %	0.03 %	10	0.01 %	189	0.01 %	282 / 494	TC
ANA HOLDINGS INC	0.01 %	0.01 %	81	0.05 %	1,356	-0.04 %	457 / 494	CDP*
Andritz AG	0.01 %	0.01 %	12	0.01 %	189	0.01 %	280 / 494	AR*
AP Moller - Maersk AS	0.05 %	0.05 %	343	0.22 %	1,302	-0.15 %	453 / 494	CDP
Arabtec Holding	0.00 %	0.00 %	2	0.00 %	111	0.00 %	178 / 494	TC
Arconic Inc	0.02 %	0.02 %	80	0.05 %	511	-0.01 %	414 / 494	CDP
Asahi Glass Co	0.02 %	0.02 %	162	0.11 %	1,169	-0.07 %	445 / 494	CDP
Aselsan SA	0.00 %	0.00 %	0	0.00 %	81	0.00 %	96 / 494	CDP
Ashok Leyland Ltd	0.01 %	0.01 %	3	0.00 %	174	0.00 %	266 / 494	TC
Ashtead Group	0.03 %	0.03 %	5	0.00 %	116	0.01 %	186 / 494	AR*
Assa Abloy B	0.05 %	0.05 %	24	0.02 %	244	0.01 %	333 / 494	CDP
Atlantia SpA	0.04 %	0.04 %	5	0.00 %	78	0.01 %	91 / 494	CDP
Atlas Copco AB	0.09 %	0.09 %	22	0.01 %	160	0.02 %	245 / 494	CDP
Auckland Intl Airport Ltd	0.01 %	0.01 %	0	0.00 %	61	0.00 %	64 / 494	CDP
Aurizon Holdings Limited	0.02 %	0.02 %	20	0.01 %	630	-0.00 %	424 / 494	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
AviChina Industry & Technology Co. Ltd. - H	0.00 %	0.00 %	3	0.00 %	97	0.01 %	145 / 494	TC
Babcock Intl Group	0.01 %	0.01 %	2	0.00 %	58	0.01 %	59 / 494	AR*
BAE Systems Plc	0.06 %	0.06 %	40	0.03 %	107	0.08 %	168 / 494	CDP
Bangkok Expressway & Metro PCL	0.00 %	0.00 %	0	0.00 %	125	0.00 %	200 / 494	TC
Barloworld Ltd	0.00 %	0.00 %	6	0.00 %	97	0.01 %	146 / 494	OTH*
Beijing Capital International Airport Co. Ltd. -	0.00 %	0.01 %	1	0.00 %	94	0.00 %	134 / 494	TC
Beijing Enterprises Holdings Ltd.	0.01 %	0.01 %	26	0.02 %	616	-0.00 %	422 / 494	ENV*
Berli Jucker PCL	0.00 %	0.00 %	2	0.00 %	173	0.00 %	262 / 494	TC
Bharat Electronics Ltd	0.00 %	0.00 %	0	0.00 %	66	0.00 %	75 / 494	PRE
Bharat Heavy Electricals Ltd	0.00 %	0.00 %	4	0.00 %	348	0.00 %	386 / 494	PRE
BIC	0.01 %	0.01 %	4	0.00 %	228	0.00 %	326 / 494	CDP
Bidvest Group	0.01 %	0.01 %	16	0.01 %	274	0.01 %	349 / 494	AR*
BOC Aviation Ltd	0.00 %	0.00 %	0	0.00 %	46	0.00 %	41 / 494	TC
Boeing Co	0.33 %	0.32 %	92	0.06 %	72	0.30 %	83 / 494	OTH
Bollore Investissement	0.01 %	0.01 %	7	0.00 %	123	0.01 %	197 / 494	AR
Boskalis Westminster Group	0.01 %	0.01 %	15	0.01 %	615	-0.00 %	421 / 494	ENV*
Bouygues	0.02 %	0.02 %	45	0.03 %	165	0.05 %	252 / 494	CDP
Bpost NV-SA	0.01 %	0.01 %	1	0.00 %	61	0.00 %	63 / 494	CDP
Brambles Industries Ltd	0.03 %	0.03 %	3	0.00 %	47	0.02 %	45 / 494	CDP
Brenntag AG	0.02 %	0.02 %	10	0.01 %	63	0.04 %	66 / 494	TC
BTS Group Holdings PCL	0.00 %	0.00 %	0	0.00 %	87	0.00 %	110 / 494	TC
Budimex SA B	0.00 %	0.00 %	1	0.00 %	119	0.00 %	191 / 494	PRE
Bunzl	0.02 %	0.02 %	5	0.00 %	30	0.04 %	21 / 494	CDP
Bureau Veritas SA	0.02 %	0.02 %	2	0.00 %	39	0.01 %	32 / 494	CDP
Canadian National Railways	0.14 %	0.14 %	100	0.06 %	770	-0.03 %	431 / 494	CDP
Canadian Pacific Railway Ltd	0.06 %	0.06 %	54	0.03 %	797	-0.02 %	432 / 494	CDP
Capita Group	0.01 %	0.01 %	3	0.00 %	30	0.03 %	20 / 494	ENV*
CAR Inc	0.00 %	0.00 %	0	0.00 %	51	0.00 %	52 / 494	TC
Caterpillar Inc	0.16 %	0.16 %	104	0.07 %	196	0.08 %	294 / 494	ENV*
Cathay Pacific Airways Ltd.	0.00 %	0.00 %	68	0.04 %	1,913	-0.03 %	480 / 494	CDP
CCR S.A.	0.01 %	0.01 %	1	0.00 %	65	0.01 %	72 / 494	CDP
Central Japan Railway Co	0.07 %	0.07 %	31	0.02 %	199	0.02 %	299 / 494	AR*
CG Power and Industrial Solutions Ltd	0.00 %	0.00 %	1	0.00 %	153	0.00 %	237 / 494	PRE
CH Robinson Worldwide Inc	0.02 %	0.02 %	17	0.01 %	88	0.04 %	113 / 494	TC
China Airlines Co	0.00 %	0.00 %	58	0.04 %	2,048	-0.03 %	483 / 494	ENV*
China Communications Construction Co.	0.01 %	0.01 %	28	0.02 %	173	0.03 %	261 / 494	AR*



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
China Conch Venture Holdings Ltd	0.01 %	0.01 %	1	0.00 %	293	0.00 %	363 / 494	TC
China Eastern Airlines Corp Ltd	0.00 %	0.00 %	21	0.01 %	1,579	-0.01 %	469 / 494	PRE
China Everbright International Ltd.	0.01 %	0.01 %	52	0.03 %	3,703	-0.03 %	490 / 494	ENV*
China International Marine Containers	0.00 %	0.00 %	3	0.00 %	216	0.00 %	314 / 494	TC
China Merchants Port Holdings Co Ltd	0.01 %	0.01 %	1	0.00 %	94	0.00 %	140 / 494	TC
China Minsheng Financial Holding	0.00 %	0.00 %	0	0.00 %	15	0.00 %	6 / 494	TC
China Railway Construction Corp Ltd	0.01 %	0.01 %	16	0.01 %	110	0.03 %	176 / 494	TC
China Railway Group Ltd	0.01 %	0.01 %	18	0.01 %	110	0.03 %	175 / 494	TC
China Southern Airlines Co Ltd	0.00 %	0.00 %	40	0.03 %	1,785	-0.02 %	477 / 494	ENV*
China State Construction International	0.01 %	0.01 %	15	0.01 %	466	-0.00 %	406 / 494	CDP
Chiyoda Corp	0.00 %	0.00 %	3	0.00 %	70	0.01 %	80 / 494	TC
CIMIC Group Ltd	0.01 %	0.01 %	14	0.01 %	420	0.00 %	399 / 494	ENV*
Cintas Corp	0.03 %	0.03 %	6	0.00 %	122	0.01 %	194 / 494	TC
CITIC Limited	0.02 %	0.02 %	123	0.08 %	1,217	-0.05 %	447 / 494	TC
CJ Corp	0.00 %	0.00 %	61	0.04 %	504	-0.01 %	411 / 494	TC
CJ Korea Express Corp	0.00 %	0.00 %	17	0.01 %	732	-0.00 %	428 / 494	TC
CK Hutchison Holding Ltd	0.08 %	0.08 %	22	0.01 %	65	0.08 %	71 / 494	TC
CNH Industrial NV	0.03 %	0.03 %	34	0.02 %	138	0.05 %	214 / 494	CDP
Cobham	0.01 %	0.01 %	4	0.00 %	97	0.01 %	144 / 494	CDP
ComfortDelGro Corp Ltd	0.01 %	0.01 %	24	0.02 %	607	-0.00 %	419 / 494	ENV*
Comsys Holdings Corp	0.01 %	0.01 %	3	0.00 %	114	0.01 %	181 / 494	TC
Container Corp Of India	0.00 %	0.00 %	0	0.00 %	110	0.00 %	170 / 494	TC
COSCO SHIPPING Development Co. Ltd.	0.00 %	0.00 %	0	0.00 %	94	0.00 %	128 / 494	ENV
COSCO SHIPPING Energy Transportation	0.00 %	0.00 %	8	0.00 %	1,576	-0.00 %	468 / 494	PRE
COSCO SHIPPING Holdings Co Ltd	0.00 %	0.00 %	29	0.02 %	1,251	-0.01 %	450 / 494	PRE
COSCO SHIPPING Ports Ltd	0.00 %	0.00 %	2	0.00 %	381	0.00 %	394 / 494	PRE
CRRC Corporation Limited	0.01 %	0.01 %	6	0.00 %	145	0.01 %	227 / 494	TC
CSSC Offshore and Marine Engineering	0.00 %	0.00 %	1	0.00 %	173	0.00 %	260 / 494	TC
CSX Corporation	0.11 %	0.11 %	91	0.06 %	606	-0.02 %	418 / 494	CDP
Cummins Inc	0.06 %	0.06 %	37	0.02 %	158	0.04 %	241 / 494	CDP
Cummins India Ltd	0.00 %	0.00 %	1	0.00 %	321	0.00 %	378 / 494	TC
Daelim Industrial Co	0.00 %	0.00 %	8	0.01 %	85	0.02 %	106 / 494	PRE
Daewoo Engineering & Construction	0.00 %	0.00 %	4	0.00 %	70	0.01 %	81 / 494	CDP
Dai Nippon Printing Co	0.02 %	0.02 %	31	0.02 %	236	0.02 %	330 / 494	CDP
Daifuku Co	0.01 %	0.01 %	8	0.01 %	324	0.00 %	380 / 494	OTH
Daikin Industries	0.06 %	0.06 %	55	0.04 %	288	0.02 %	359 / 494	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Danaher Corp	0.12 %	0.12 %	18	0.01 %	85	0.05 %	107 / 494	TC
Dassault Aviation	0.01 %	0.01 %	1	0.00 %	93	0.00 %	125 / 494	AR
Dazhong Transportation (Group) Co Ltd	0.00 %	0.00 %	0	0.00 %	102	0.00 %	163 / 494	TC
DCC	0.02 %	0.02 %	6	0.00 %	30	0.05 %	22 / 494	CDP
Deere & Co	0.09 %	0.09 %	75	0.05 %	195	0.06 %	291 / 494	CDP
Delta Air Lines	0.02 %	0.02 %	176	0.11 %	1,199	-0.07 %	446 / 494	CDP
Deutsche Lufthansa Reg	0.01 %	0.01 %	274	0.18 %	1,114	-0.11 %	441 / 494	CDP
Deutsche Post AG	0.10 %	0.10 %	113	0.07 %	161	0.13 %	248 / 494	CDP
DKSH Holding AG	0.01 %	0.01 %	2	0.00 %	29	0.02 %	17 / 494	TC
DMCI Holdings Inc	0.00 %	0.00 %	36	0.02 %	5,623	-0.02 %	493 / 494	AR*
DMG MORI SEIKI CO LTD	0.00 %	0.00 %	8	0.01 %	198	0.01 %	298 / 494	TC
Doosan Corp	0.00 %	0.00 %	15	0.01 %	161	0.02 %	247 / 494	ENV*
Doosan Heavy Indust &Construct	0.00 %	0.00 %	16	0.01 %	153	0.02 %	236 / 494	CDP
Doosan Infracore Co Ltd	0.00 %	0.00 %	9	0.01 %	186	0.01 %	277 / 494	PRE
Dover Corp	0.03 %	0.03 %	19	0.01 %	195	0.02 %	292 / 494	CDP*
Downer EDI Ltd	0.01 %	0.01 %	11	0.01 %	166	0.01 %	253 / 494	CDP
DP World Ltd.	0.01 %	0.01 %	1	0.00 %	94	0.00 %	132 / 494	TC
Dsv A/S	0.03 %	0.03 %	116	0.08 %	830	-0.04 %	434 / 494	CDP
Dun & Bradstreet Corp	0.01 %	0.01 %	1	0.00 %	27	0.01 %	13 / 494	TC
East Japan Railway Co	0.08 %	0.08 %	54	0.03 %	189	0.05 %	281 / 494	CDP
Easyjet	0.01 %	0.01 %	68	0.04 %	1,273	-0.03 %	451 / 494	AR
Eaton Corp plc	0.08 %	0.08 %	103	0.07 %	365	0.01 %	391 / 494	CDP
Ebara Corp	0.01 %	0.01 %	7	0.00 %	143	0.01 %	225 / 494	ENV*
Edenred	0.01 %	0.01 %	0	0.00 %	15	0.00 %	5 / 494	CDP
Eicher Motors Ltd	0.01 %	0.01 %	1	0.00 %	64	0.00 %	70 / 494	TC
Eiffage	0.02 %	0.02 %	14	0.01 %	82	0.04 %	98 / 494	ENV*
El sewedy Electric company	0.00 %	0.00 %	2	0.00 %	126	0.00 %	204 / 494	TC
Elbit Systems Ltd	0.01 %	0.01 %	2	0.00 %	80	0.01 %	94 / 494	PRE
Embraer S.A.	0.01 %	0.01 %	8	0.01 %	92	0.02 %	118 / 494	AR*
Emerson Electric Co	0.09 %	0.09 %	39	0.03 %	198	0.03 %	297 / 494	CDP*
Enka Insaat ve Sanayi AS	0.00 %	0.00 %	27	0.02 %	4,002	-0.02 %	491 / 494	TC
Equifax Inc	0.03 %	0.03 %	2	0.00 %	39	0.01 %	31 / 494	TC
EVA Airways Corp	0.00 %	0.00 %	42	0.03 %	1,218	-0.02 %	448 / 494	TC
Evergreen Marine Corp	0.00 %	0.00 %	43	0.03 %	1,606	-0.02 %	470 / 494	TC
Expeditors Intl of WA Inc	0.02 %	0.02 %	4	0.00 %	44	0.02 %	40 / 494	CDP
Experian Plc	0.04 %	0.04 %	2	0.00 %	31	0.01 %	24 / 494	CDP



Carbon Footprint

Company Breakdown

Portfolio

Company details	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Fanuc Co	0.09 %	0.09 %	11	0.01 %	177	0.01 %	271 / 494	TC
Far Eastern New Century Corporation	0.01 %	0.01 %	33	0.02 %	482	-0.00 %	407 / 494	ENV*
Fastenal Co	0.03 %	0.03 %	4	0.00 %	65	0.01 %	73 / 494	TC
FedEx Corp	0.13 %	0.13 %	285	0.19 %	507	-0.02 %	413 / 494	CDP
Ferguson PLC	0.04 %	0.04 %	13	0.01 %	48	0.07 %	49 / 494	CDP
Ferrovial SA	0.02 %	0.02 %	14	0.01 %	124	0.02 %	198 / 494	CDP
Flowserve Corp	0.01 %	0.01 %	9	0.01 %	154	0.01 %	238 / 494	PRE
Flughafen Zurich AG	0.01 %	0.01 %	1	0.00 %	73	0.00 %	84 / 494	AR
Fluor Corp	0.01 %	0.01 %	5	0.00 %	20	0.07 %	7 / 494	CDP
Fortive Corp	0.05 %	0.05 %	8	0.01 %	100	0.02 %	154 / 494	TC
Fortune Brands Home & Security Inc	0.02 %	0.02 %	16	0.01 %	221	0.01 %	319 / 494	TC
Fosun International Ltd.	0.01 %	0.01 %	2	0.00 %	52	0.01 %	53 / 494	TC
Fraport AG	0.01 %	0.01 %	2	0.00 %	147	0.00 %	231 / 494	CDP
Fuji Electric Co Ltd	0.01 %	0.01 %	19	0.01 %	297	0.01 %	366 / 494	CDP
Fujikura	0.01 %	0.01 %	14	0.01 %	207	0.01 %	305 / 494	CDP*
Fukuyama Transporting Co	0.00 %	0.00 %	4	0.00 %	291	0.00 %	361 / 494	TC
Furukawa Electric Co	0.01 %	0.01 %	24	0.02 %	314	0.01 %	374 / 494	CDP
G4S Plc	0.01 %	0.01 %	9	0.01 %	63	0.04 %	67 / 494	OTH
Gamuda Bhd	0.01 %	0.01 %	1	0.00 %	99	0.00 %	152 / 494	TC
GEA AG	0.02 %	0.02 %	6	0.00 %	103	0.01 %	165 / 494	CDP
Geberit AG Reg	0.04 %	0.04 %	13	0.01 %	325	0.00 %	381 / 494	CDP
General Dynamics	0.12 %	0.12 %	39	0.03 %	101	0.09 %	159 / 494	PRE
General Electric Co	0.49 %	0.48 %	276	0.18 %	156	0.33 %	240 / 494	CDP*
Glory	0.00 %	0.00 %	3	0.00 %	161	0.00 %	249 / 494	CDP
GMR Infrastructure Ltd	0.00 %	0.00 %	67	0.04 %	6,946	-0.04 %	494 / 494	ENV
Grainger W.W. Inc	0.02 %	0.02 %	5	0.00 %	36	0.03 %	28 / 494	CDP
Grindrod Ltd	0.00 %	0.00 %	5	0.00 %	927	-0.00 %	437 / 494	CDP
Groupe Eurotunnel SE	0.01 %	0.01 %	1	0.00 %	71	0.00 %	82 / 494	CDP
Grupo Aeromexico SAB de CV	0.00 %	0.00 %	30	0.02 %	1,477	-0.01 %	463 / 494	TC
Grupo Aeroportuario del Centro Norte, S.A.	0.00 %	0.00 %	1	0.00 %	155	0.00 %	239 / 494	ENV*
Grupo Aeroportuario del Pacifico, S.A.B. de	0.01 %	0.01 %	1	0.00 %	94	0.00 %	136 / 494	TC
Grupo Aeroportuario del Sureste SAB de CV	0.01 %	0.01 %	1	0.00 %	94	0.00 %	133 / 494	TC
Grupo Carso SAB de CV	0.00 %	0.00 %	2	0.00 %	122	0.00 %	196 / 494	TC
GS Engineering & Construction Corp	0.00 %	0.00 %	7	0.00 %	84	0.02 %	102 / 494	PRE
GS Yuasa Corp	0.00 %	0.00 %	11	0.01 %	292	0.00 %	362 / 494	CDP*
Guangshen Railway Co Ltd	0.00 %	0.00 %	1	0.00 %	192	0.00 %	286 / 494	ENV*



Carbon Footprint

Company Breakdown

Portfolio

Company details	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Haitian International Holdings Ltd.	0.00 %	0.00 %	1	0.00 %	222	0.00 %	320 / 494	TC
Han Wha Co	0.00 %	0.01 %	15	0.01 %	41	0.10 %	37 / 494	PRE
Hankyu Hanshin Holdings	0.02 %	0.02 %	15	0.01 %	228	0.01 %	327 / 494	AR*
Hanwha Techwin Co Ltd	0.00 %	0.00 %	2	0.00 %	78	0.01 %	90 / 494	PRE
HAP Seng Consolidated Bhd	0.00 %	0.00 %	2	0.00 %	361	0.00 %	390 / 494	TC
Havells India Ltd	0.00 %	0.00 %	1	0.00 %	208	0.00 %	307 / 494	ENV*
Hino Motors	0.01 %	0.01 %	7	0.00 %	85	0.02 %	104 / 494	CDP
Hitachi Construction Machinery	0.01 %	0.01 %	7	0.00 %	196	0.01 %	295 / 494	CDP
Hitachi Transport System	0.00 %	0.00 %	8	0.01 %	309	0.00 %	372 / 494	TC
HOCHTIEF AG	0.01 %	0.01 %	14	0.01 %	143	0.02 %	224 / 494	CDP
Honeywell Intl Inc	0.25 %	0.25 %	119	0.08 %	212	0.08 %	312 / 494	CDP
Hopewell Highway Infrastructure Ltd.	0.00 %	0.00 %	0	0.00 %	208	0.00 %	306 / 494	ENV*
Hopewell Holdings Ltd.	0.01 %	0.01 %	0	0.00 %	231	0.00 %	328 / 494	ENV*
HOSHIZAKI ELECTRIC CO LTD	0.01 %	0.01 %	5	0.00 %	191	0.00 %	285 / 494	TC
Howden Joinery Group PLC	0.01 %	0.01 %	2	0.00 %	98	0.01 %	150 / 494	AR
Hunt J.B. Transport Services	0.02 %	0.02 %	34	0.02 %	462	-0.00 %	405 / 494	PRE
Hutchison Port Holdings Trust	0.01 %	0.00 %	1	0.00 %	94	0.00 %	135 / 494	TC
Hyundai Dev Co	0.00 %	0.00 %	7	0.00 %	161	0.01 %	246 / 494	TC
Hyundai Eng & Const Co	0.01 %	0.01 %	18	0.01 %	115	0.03 %	184 / 494	CDP
Hyundai Glovis Co Ltd	0.01 %	0.01 %	38	0.02 %	409	0.00 %	398 / 494	CDP
Hyundai Heavy Industries Co	0.01 %	0.01 %	68	0.04 %	235	0.04 %	329 / 494	PRE
Hyundai Mipo Dockyard	0.00 %	0.00 %	3	0.00 %	121	0.01 %	193 / 494	TC
IHI Corp	0.01 %	0.01 %	25	0.02 %	197	0.02 %	296 / 494	CDP
IHS Markit Ltd	0.04 %	0.04 %	1	0.00 %	29	0.01 %	16 / 494	CDP
IJM Corp Bhd	0.01 %	0.01 %	4	0.00 %	323	0.00 %	379 / 494	TC
Illinois Tool Works Inc	0.10 %	0.10 %	30	0.02 %	177	0.03 %	270 / 494	ENV*
IMI	0.01 %	0.01 %	5	0.00 %	152	0.01 %	234 / 494	CDP
Industries Qatar	0.01 %	0.01 %	30	0.02 %	2,380	-0.02 %	485 / 494	TC
Ingersoll-Rand Plc	0.05 %	0.05 %	38	0.02 %	194	0.03 %	290 / 494	CDP
InterGlobe Aviation Ltd	0.00 %	0.00 %	5	0.00 %	1,718	-0.00 %	475 / 494	TC
International Consolidated Airlines Group SA	0.02 %	0.02 %	260	0.17 %	1,455	-0.12 %	462 / 494	CDP
International Container Terminal Services Inc	0.01 %	0.01 %	2	0.00 %	238	0.00 %	331 / 494	TC
Intertek Group PLC	0.02 %	0.02 %	4	0.00 %	78	0.01 %	89 / 494	CDP
ISS A/S	0.02 %	0.02 %	5	0.00 %	28	0.04 %	14 / 494	CDP
Itochu Corp	0.05 %	0.05 %	178	0.12 %	402	0.01 %	396 / 494	TC
Jacobs Engineering Group Inc	0.02 %	0.02 %	6	0.00 %	37	0.04 %	30 / 494	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Japan Airlines Co Ltd	0.01 %	0.01 %	54	0.04 %	1,169	-0.02 %	444 / 494	AR*
Japan Airport Terminal Co	0.00 %	0.00 %	1	0.00 %	110	0.00 %	177 / 494	TC
Japan Steel Works	0.00 %	0.00 %	13	0.01 %	658	-0.00 %	425 / 494	AR*
Jardine Matheson Hldgs Ltd	0.03 %	0.03 %	13	0.01 %	84	0.04 %	103 / 494	TC
Jardine Strategic Hldgs	0.02 %	0.02 %	6	0.00 %	89	0.02 %	115 / 494	TC
Jasa Marga PT	0.00 %	0.00 %	1	0.00 %	102	0.00 %	162 / 494	TC
JG Summit Holdings Inc	0.01 %	0.01 %	22	0.01 %	765	-0.01 %	430 / 494	TC
JGC Corp	0.01 %	0.01 %	9	0.01 %	121	0.02 %	192 / 494	PRE
Jiangsu Expressway Co Ltd	0.00 %	0.00 %	0	0.00 %	93	0.00 %	121 / 494	TC
Johnson Controls International plc	0.09 %	0.09 %	148	0.10 %	289	0.05 %	360 / 494	CDP
Johnson Electric Holdings Ltd.	0.00 %	0.00 %	2	0.00 %	224	0.00 %	321 / 494	TC
JTEKT Corp	0.01 %	0.01 %	28	0.02 %	308	0.01 %	371 / 494	CDP
Kajima Corp	0.02 %	0.02 %	13	0.01 %	81	0.04 %	95 / 494	CDP*
Kamigumi Co	0.01 %	0.01 %	5	0.00 %	277	0.00 %	351 / 494	TC
Kandenko Co	0.00 %	0.00 %	1	0.00 %	40	0.01 %	36 / 494	TC
Kansas City Southern Inc	0.03 %	0.03 %	25	0.02 %	750	-0.01 %	429 / 494	PRE
KAP Industrial Holdings	0.00 %	0.00 %	6	0.00 %	797	-0.00 %	433 / 494	PRE
Kawasaki Heavy Industries	0.01 %	0.01 %	25	0.02 %	177	0.02 %	268 / 494	CDP
Kawasaki Kisen Kaisha	0.00 %	0.00 %	205	0.13 %	1,883	-0.10 %	479 / 494	CDP
KCC CORP	0.00 %	0.00 %	19	0.01 %	833	-0.01 %	436 / 494	PRE
Keihan Electric Railway Co	0.01 %	0.01 %	5	0.00 %	164	0.00 %	250 / 494	TC
Keikyu Corp	0.01 %	0.01 %	5	0.00 %	186	0.00 %	278 / 494	TC
Keio Corp	0.01 %	0.01 %	6	0.00 %	171	0.01 %	258 / 494	TC
Keisei Electric Railway Co	0.01 %	0.01 %	4	0.00 %	200	0.00 %	301 / 494	TC
KEPCO Plant Service & Engineering Co Ltd	0.00 %	0.00 %	0	0.00 %	29	0.00 %	19 / 494	TC
Keppel Corp Ltd	0.02 %	0.02 %	23	0.02 %	424	0.00 %	400 / 494	ENV*
Kerry Logistics Network Ltd	0.00 %	0.00 %	1	0.00 %	98	0.00 %	148 / 494	TC
Kinden Corp	0.00 %	0.00 %	4	0.00 %	129	0.01 %	205 / 494	TC
Kingspan Group Plc	0.01 %	0.01 %	6	0.00 %	139	0.01 %	218 / 494	CDP
Kintetsu Group Holdings Co Ltd	0.02 %	0.02 %	14	0.01 %	124	0.02 %	199 / 494	CDP
KION Group AG	0.02 %	0.02 %	4	0.00 %	75	0.01 %	86 / 494	TC
Koc Holding	0.01 %	0.01 %	16	0.01 %	251	0.01 %	336 / 494	AR*
Komatsu	0.06 %	0.06 %	35	0.02 %	196	0.03 %	293 / 494	CDP
Kone Corp B	0.05 %	0.05 %	28	0.02 %	281	0.01 %	353 / 494	CDP
Koninklijke Philips Electronics NV (Royal	0.09 %	0.09 %	40	0.03 %	105	0.08 %	166 / 494	CDP
Korea Aerospace Industries Ltd	0.01 %	0.01 %	2	0.00 %	91	0.01 %	117 / 494	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Korean Air Lines Co	0.00 %	0.00 %	120	0.08 %	1,715	-0.06 %	474 / 494	PRE
Kubota Corp	0.05 %	0.05 %	50	0.03 %	265	0.02 %	344 / 494	CDP
KUEHNE & NAGEL INTL AG-REG	0.02 %	0.02 %	6	0.00 %	57	0.02 %	58 / 494	CDP
Kurita Water Industries	0.01 %	0.01 %	7	0.00 %	355	0.00 %	388 / 494	CDP
Kyudenko Corp	0.00 %	0.00 %	2	0.00 %	129	0.00 %	206 / 494	TC
Kyushu Railway Company	0.01 %	0.01 %	4	0.00 %	111	0.01 %	180 / 494	TC
L3 Technologies, Inc	0.03 %	0.03 %	12	0.01 %	80	0.03 %	93 / 494	TC
Larsen & Toubro Ltd	0.01 %	0.01 %	4	0.00 %	94	0.01 %	127 / 494	CDP*
LATAM Airlines Group S.A.	0.01 %	0.01 %	116	0.08 %	1,524	-0.05 %	467 / 494	ENV*
Legrand Promesses	0.04 %	0.04 %	10	0.01 %	126	0.02 %	202 / 494	CDP
Leonardo S.p.a.	0.02 %	0.02 %	15	0.01 %	118	0.03 %	190 / 494	CDP
LG Corp	0.01 %	0.01 %	39	0.03 %	585	-0.01 %	417 / 494	CDP
LG Hausys Ltd	0.00 %	0.00 %	5	0.00 %	209	0.00 %	310 / 494	CDP
LIXIL Group Corporation	0.02 %	0.02 %	41	0.03 %	253	0.02 %	338 / 494	CDP
Localiza Rent A Car	0.01 %	0.01 %	0	0.00 %	36	0.00 %	29 / 494	TC
Lockheed Martin	0.18 %	0.18 %	40	0.03 %	69	0.14 %	77 / 494	OTH
LS Corp	0.00 %	0.00 %	13	0.01 %	194	0.01 %	289 / 494	TC
LT Group Inc.	0.00 %	0.00 %	0	0.00 %	100	0.00 %	155 / 494	TC
Mabuchi Motor Co	0.01 %	0.01 %	5	0.00 %	316	0.00 %	376 / 494	PRE
Macquarie Altas Roads Limited	0.01 %	0.01 %	0	0.00 %	94	0.00 %	141 / 494	TC
Maeda Corp	0.00 %	0.00 %	4	0.00 %	131	0.01 %	207 / 494	TC
Maeda Road Construction Co	0.00 %	0.00 %	5	0.00 %	315	0.00 %	375 / 494	TC
Makita Corp	0.02 %	0.02 %	5	0.00 %	142	0.01 %	221 / 494	ENV*
Malaysia Airports Holdings Bhd	0.00 %	0.00 %	4	0.00 %	495	-0.00 %	410 / 494	ENV*
MAN SE	0.01 %	0.01 %	5	0.00 %	93	0.01 %	122 / 494	ENV
ManpowerGroup	0.02 %	0.02 %	2	0.00 %	6	0.08 %	1 / 494	CDP
Marubeni Corp	0.02 %	0.02 %	290	0.19 %	449	-0.00 %	404 / 494	PRE
Masco Corp	0.03 %	0.03 %	16	0.01 %	158	0.02 %	242 / 494	CDP
Meggitt	0.01 %		4	0.00 %	104	0.01 %	N / A	CDP
Melrose Industries PLC	0.01 %	0.01 %	3	0.00 %	184	0.00 %	274 / 494	AR*
Metallurgical Corporation of China Ltd	0.00 %	0.00 %	5	0.00 %	138	0.01 %	216 / 494	TC
Metso Oyj	0.01 %	0.01 %	6	0.00 %	184	0.01 %	273 / 494	CDP
Minebea Mitsumi Co	0.02 %	0.02 %	19	0.01 %	306	0.01 %	369 / 494	ENV*
MISC Bhd	0.01 %	0.01 %	28	0.02 %	2,683	-0.02 %	486 / 494	PRE
Misumi Group Inc	0.02 %	0.02 %	5	0.00 %	209	0.00 %	308 / 494	TC
Mitsubishi Corp	0.07 %	0.07 %	151	0.10 %	263	0.07 %	341 / 494	PRE



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Mitsubishi Electric Corp	0.07 %	0.07 %	66	0.04 %	159	0.08 %	244 / 494	CDP
Mitsubishi Heavy Industries	0.03 %	0.03 %	61	0.04 %	174	0.06 %	264 / 494	CDP
Mitsubishi Logistics Corp	0.00 %	0.00 %	2	0.00 %	102	0.00 %	161 / 494	ENV*
Mitsui & Co	0.06 %	0.06 %	282	0.18 %	619	-0.05 %	423 / 494	TC
Mitsui E&S Holding	0.00 %	0.00 %	13	0.01 %	174	0.01 %	265 / 494	AR*
Mitsui OSK Lines Ltd	0.01 %	0.01 %	308	0.20 %	1,925	-0.15 %	481 / 494	CDP
Miura Co	0.00 %	0.00 %	2	0.00 %	268	0.00 %	346 / 494	TC
MMC Corp Bhd	0.00 %	0.00 %	0	0.00 %	101	0.00 %	160 / 494	TC
Monotaro Co Ltd	0.00 %	0.00 %	0	0.00 %	83	0.00 %	101 / 494	TC
MTR Corporation Ltd.	0.02 %	0.02 %	7	0.00 %	344	0.00 %	384 / 494	CDP
MTU Aero Engines AG	0.02 %	0.02 %	4	0.00 %	50	0.02 %	51 / 494	CDP
Nabtesco Corp	0.01 %	0.01 %	5	0.00 %	184	0.00 %	275 / 494	CDP
Nagase & Co	0.00 %	0.00 %	28	0.02 %	440	-0.00 %	402 / 494	TC
Nagoya Railroad Co	0.01 %	0.01 %	12	0.01 %	199	0.01 %	300 / 494	TC
Nankai Electric Railway	0.01 %	0.01 %	4	0.00 %	205	0.00 %	304 / 494	ENV*
NGK Insulators	0.01 %	0.01 %	14	0.01 %	385	0.00 %	395 / 494	ENV*
Nidec Corp	0.07 %	0.07 %	32	0.02 %	336	0.01 %	382 / 494	CDP
Nielsen Holdings plc	0.03 %	0.03 %	1	0.00 %	14	0.02 %	4 / 494	ENV*
Nippo Corporation	0.00 %	0.00 %	4	0.00 %	215	0.00 %	313 / 494	TC
Nippon Express Co	0.01 %	0.01 %	20	0.01 %	145	0.03 %	228 / 494	ENV*
Nippon Yusen KK	0.01 %	0.01 %	353	0.23 %	1,656	-0.17 %	472 / 494	CDP
Nishi-Nippon Railroad Co	0.00 %	0.00 %	5	0.00 %	152	0.01 %	235 / 494	TC
Nisshinbo Holdings Inc	0.00 %	0.00 %	16	0.01 %	342	0.00 %	383 / 494	CDP
Norfolk Southern Corp	0.09 %	0.09 %	98	0.06 %	693	-0.02 %	426 / 494	CDP
Northrop Grumman Corp	0.11 %	0.11 %	21	0.01 %	66	0.08 %	74 / 494	CDP
NSK	0.01 %	0.01 %	33	0.02 %	403	0.00 %	397 / 494	CDP
NTN Corp	0.00 %	0.00 %	17	0.01 %	309	0.00 %	373 / 494	CDP
NWS Holdings Ltd.	0.01 %	0.01 %	4	0.00 %	226	0.00 %	325 / 494	ENV*
Obayashi Corp	0.02 %	0.02 %	16	0.01 %	93	0.04 %	124 / 494	CDP
Odakyu Electric Railway Co	0.01 %	0.01 %	7	0.00 %	166	0.01 %	254 / 494	TC
Okuma Corp	0.00 %	0.00 %	4	0.00 %	225	0.00 %	324 / 494	PRE
Orient Overseas (International) Ltd.	0.00 %	0.00 %	32	0.02 %	1,303	-0.01 %	454 / 494	ENV
OSG Corp	0.00 %	0.00 %	2	0.00 %	224	0.00 %	322 / 494	PRE
OSRAM Licht AG	0.01 %	0.01 %	10	0.01 %	250	0.01 %	335 / 494	AR
PACCAR Inc	0.06 %	0.06 %	20	0.01 %	83	0.05 %	99 / 494	PRE
Park 24 Co	0.01 %	0.01 %	1	0.00 %	55	0.00 %	56 / 494	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Parker-Hannifin Corp	0.05 %	0.05 %	41	0.03 %	279	0.02 %	352 / 494	OTH
Pentair PLC	0.03 %	0.03 %	14	0.01 %	219	0.01 %	316 / 494	TC
PERSOL HOLDINGS CO LTD	0.01 %	0.01 %	1	0.00 %	31	0.01 %	25 / 494	TC
Philips lighting	0.01 %	0.01 %	8	0.01 %	146	0.01 %	229 / 494	CDP
Pilot Group Holding Corp	0.00 %	0.00 %	1	0.00 %	117	0.00 %	189 / 494	TC
POSCO DAEWOO Co	0.00 %	0.00 %	7	0.00 %	93	0.02 %	123 / 494	TC
Promotora y Operadora de Infraestructura	0.01 %	0.01 %	0	0.00 %	115	0.00 %	183 / 494	TC
Prysmian SpA	0.02 %	0.02 %	50	0.03 %	435	0.00 %	401 / 494	ENV
Qantas Airways Ltd	0.01 %	0.01 %	110	0.07 %	1,437	-0.05 %	460 / 494	ENV*
Randstad NV	0.02 %	0.02 %	2	0.00 %	11	0.05 %	3 / 494	AR*
RATIONAL AG	0.01 %	0.01 %	0	0.00 %	136	0.00 %	212 / 494	TC
Raytheon Co	0.13 %	0.12 %	16	0.01 %	47	0.09 %	44 / 494	CDP
Recruit Holdings Co Ltd	0.06 %	0.06 %	6	0.00 %	48	0.03 %	48 / 494	PRE
Rentokil Initial	0.02 %	0.02 %	6	0.00 %	147	0.01 %	230 / 494	CDP
Republic Services Inc	0.03 %	0.03 %	254	0.17 %	2,792	-0.14 %	487 / 494	CDP
Reunert Ltd	0.00 %	0.00 %	1	0.00 %	176	0.00 %	267 / 494	CDP
Rexel SA	0.01 %	0.01 %	5	0.00 %	25	0.05 %	9 / 494	AR*
Robert Half Intl Inc	0.01 %	0.01 %	2	0.00 %	26	0.02 %	11 / 494	TC
Rockwell Automation Inc	0.05 %	0.05 %	7	0.00 %	87	0.02 %	109 / 494	CDP
Rockwell Collins	0.05 %	0.05 %	4	0.00 %	54	0.02 %	55 / 494	CDP
Rolls-Royce Holdings Plc	0.04 %	0.04 %	21	0.01 %	83	0.06 %	100 / 494	CDP
Roper Technologies, Inc	0.06 %	0.06 %	5	0.00 %	99	0.01 %	151 / 494	TC
Royal Mail plc	0.01 %	0.01 %	14	0.01 %	88	0.04 %	112 / 494	CDP
Rumo Logistica S.A.	0.01 %	0.01 %	14	0.01 %	1,041	-0.01 %	439 / 494	ENV*
Ryanair Holdings Plc	0.01 %	0.00 %	16	0.01 %	1,780	-0.01 %	476 / 494	AR*
S-1 Corporation	0.00 %	0.00 %	1	0.00 %	49	0.00 %	50 / 494	TC
SAAB AB B	0.00 %	0.00 %	1	0.00 %	40	0.00 %	33 / 494	CDP
SAGEM SA Prf	0.07 %	0.07 %	12	0.01 %	69	0.04 %	79 / 494	CDP
Saint-Gobain, Cie de	0.07 %	0.07 %	260	0.17 %	486	-0.02 %	408 / 494	CDP
Samsung C&T Corp.	0.02 %	0.02 %	6	0.00 %	48	0.03 %	47 / 494	CDP
Samsung Engineering Co Ltd	0.00 %	0.00 %	6	0.00 %	88	0.02 %	111 / 494	CDP
Samsung Heavy Industries	0.01 %	0.01 %	12	0.01 %	140	0.02 %	219 / 494	CDP
Sandvik AB	0.04 %	0.04 %	31	0.02 %	271	0.01 %	348 / 494	CDP
Sankyu Inc	0.01 %	0.00 %	49	0.03 %	1,107	-0.02 %	440 / 494	TC
Sanwa Holdings Corp	0.01 %	0.01 %	14	0.01 %	442	-0.00 %	403 / 494	TC
SATS Ltd	0.00 %	0.00 %	1	0.00 %	110	0.00 %	173 / 494	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Schindler-Hldg AG Br	0.03 %	0.03 %	22	0.01 %	286	0.01 %	356 / 494	CDP
Schneider Electric SE	0.11 %	0.11 %	35	0.02 %	102	0.08 %	164 / 494	CDP
Secom Co	0.03 %	0.03 %	2	0.00 %	24	0.02 %	8 / 494	CDP
Securitas AB B	0.01 %	0.01 %	3	0.00 %	26	0.03 %	10 / 494	CDP
Seek Ltd	0.01 %	0.01 %	0	0.00 %	27	0.00 %	12 / 494	PRE
Seibu holding Inc	0.01 %	0.01 %	6	0.00 %	173	0.01 %	263 / 494	TC
Seino Holdings Co Ltd	0.00 %	0.00 %	10	0.01 %	253	0.00 %	339 / 494	TC
Sembcorp Industries	0.00 %	0.00 %	153	0.10 %	3,650	-0.09 %	489 / 494	CDP
Sembcorp Marine Ltd	0.00 %	0.00 %	2	0.00 %	142	0.00 %	223 / 494	AR*
Sensata Technologies Holding plc	0.02 %	0.02 %	5	0.00 %	117	0.01 %	188 / 494	CDP
SGS AG	0.03 %	0.03 %	5	0.00 %	86	0.01 %	108 / 494	CDP
Shanghai Electric Group Co Ltd	0.00 %	0.00 %	2	0.00 %	148	0.00 %	232 / 494	TC
Shanghai Industrial Holdings Ltd.	0.00 %	0.00 %	2	0.00 %	117	0.00 %	187 / 494	TC
Shanghai Mechanical & Electrical Industry	0.00 %	0.00 %	2	0.00 %	295	0.00 %	364 / 494	TC
Shanghai Zhenhua Heavy Industry Co Ltd	0.00 %	0.00 %	3	0.00 %	298	0.00 %	367 / 494	TC
Shenzhen Expressway Co Ltd	0.00 %	0.00 %	0	0.00 %	82	0.00 %	97 / 494	TC
Shenzhen International Holdings Ltd	0.00 %	0.00 %	1	0.00 %	126	0.00 %	203 / 494	TC
Shikun & Binui Ltd.	0.00 %	0.00 %	2	0.00 %	265	0.00 %	345 / 494	ENV*
Shimizu Corp	0.01 %	0.01 %	11	0.01 %	89	0.03 %	116 / 494	CDP
Shun Tak Holdings Ltd.	0.00 %	0.00 %	6	0.00 %	1,335	-0.00 %	456 / 494	PRE
SIA Engineering Co	0.00 %	0.00 %	0	0.00 %	110	0.00 %	172 / 494	TC
Siemens AG	0.24 %	0.25 %	98	0.06 %	93	0.24 %	120 / 494	CDP
Siemens Gamesa Renewable Energy SA	0.01 %	0.01 %	2	0.00 %	85	0.01 %	105 / 494	CDP
Siemens India Ltd	0.00 %	0.00 %	1	0.00 %	94	0.00 %	130 / 494	TC
Sime Darby Bhd	0.02 %	0.02 %	35	0.02 %	493	-0.00 %	409 / 494	ENV*
Singapore Airlines	0.01 %	0.01 %	108	0.07 %	1,928	-0.05 %	482 / 494	ENV*
Singapore Post Ltd	0.00 %	0.00 %	1	0.00 %	100	0.00 %	158 / 494	TC
Singapore Technologies Engineering Ltd	0.01 %	0.01 %	2	0.00 %	67	0.01 %	76 / 494	CDP
Sinopec Engineering Group Ltd	0.00 %	0.00 %	1	0.00 %	52	0.01 %	54 / 494	TC
Sinotrans Ltd. - H Shares	0.00 %	0.00 %	2	0.00 %	64	0.01 %	69 / 494	AR*
Sinotruck (Hong Kong) Ltd.	0.00 %	0.00 %	1	0.00 %	69	0.00 %	78 / 494	TC
SK Holdings Co Ltd	0.02 %	0.02 %	1	0.00 %	28	0.00 %	15 / 494	CDP
SK Networks Co Ltd	0.00 %	0.00 %	8	0.01 %	59	0.03 %	61 / 494	TC
Skanska AB	0.02 %	0.02 %	18	0.01 %	89	0.05 %	114 / 494	CDP
SKF AB	0.02 %	0.02 %	28	0.02 %	283	0.01 %	355 / 494	AR
SM Investments Corp	0.02 %	0.02 %	6	0.00 %	148	0.01 %	233 / 494	ENV*



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
SMC Corp	0.05 %	0.05 %	12	0.01 %	296	0.00 %	365 / 494	TC
Smiths Group	0.02 %	0.02 %	5	0.00 %	98	0.01 %	147 / 494	CDP
Snap On Inc	0.02 %	0.02 %	15	0.01 %	356	0.00 %	389 / 494	TC
SNC - Lavalin Group Inc	0.02 %	0.02 %	4	0.00 %	48	0.02 %	46 / 494	PRE
Sohgo Security Services Co	0.01 %	0.01 %	1	0.00 %	33	0.01 %	26 / 494	CDP
Sojitz Corp	0.01 %	0.01 %	45	0.03 %	249	0.02 %	334 / 494	ENV
Sotetsu Holdings Inc	0.00 %	0.00 %	3	0.00 %	144	0.00 %	226 / 494	TC
Southwest Airlines Co	0.02 %	0.02 %	89	0.06 %	1,244	-0.04 %	449 / 494	CDP
Spirax-Sarco Engineering	0.01 %	0.01 %	2	0.00 %	166	0.00 %	256 / 494	CDP
Stanley Black & Decker	0.05 %	0.05 %	45	0.03 %	276	0.02 %	350 / 494	CDP
Stericycle Inc	0.01 %	0.01 %	14	0.01 %	286	0.00 %	358 / 494	TC
Sulzer AG Ptg	0.00 %	0.00 %	2	0.00 %	135	0.00 %	211 / 494	ENV*
Sumitomo Corp	0.04 %	0.04 %	11	0.01 %	30	0.10 %	23 / 494	ENV*
Sumitomo Heavy Industries	0.01 %	0.01 %	18	0.01 %	270	0.01 %	347 / 494	CDP
Sydney Airport	0.01 %	0.01 %	1	0.00 %	139	0.00 %	217 / 494	ENV*
Tadano Corp	0.00 %	0.00 %	7	0.00 %	347	0.00 %	385 / 494	TC
Taisei Corp	0.03 %	0.03 %	14	0.01 %	94	0.03 %	129 / 494	CDP
Taiwan Glass Ind Corp	0.00 %	0.00 %	6	0.00 %	610	-0.00 %	420 / 494	TC
Taiwan Secom Co	0.00 %	0.00 %	0	0.00 %	34	0.00 %	27 / 494	TC
TAV Havalimanlari Holdings AS	0.00 %	0.00 %	1	0.00 %	110	0.00 %	174 / 494	CDP
Teco Electric & Machinery Co Ltd	0.00 %	0.00 %	4	0.00 %	220	0.00 %	317 / 494	PRE
Teleperformance	0.02 %	0.02 %	3	0.00 %	56	0.01 %	57 / 494	ENV*
Textron Inc	0.03 %	0.03 %	31	0.02 %	186	0.03 %	276 / 494	CDP
Thai Airways International PCL	0.00 %	0.00 %	51	0.03 %	1,516	-0.02 %	466 / 494	ENV
Thales	0.03 %	0.03 %	7	0.00 %	61	0.03 %	65 / 494	CDP
THK Co	0.01 %	0.01 %	8	0.00 %	372	0.00 %	393 / 494	CDP*
Tobu Railway Co	0.01 %	0.01 %	9	0.01 %	165	0.01 %	251 / 494	TC
Toda Corp	0.00 %	0.00 %	5	0.00 %	122	0.01 %	195 / 494	TC
Tokyu Corp	0.02 %	0.02 %	12	0.01 %	141	0.02 %	220 / 494	TC
Toppan Forms Co	0.00 %	0.00 %	2	0.00 %	159	0.00 %	243 / 494	AR*
Toppan Printing Co	0.01 %	0.01 %	30	0.02 %	265	0.01 %	343 / 494	CDP
Toshiba Corp	0.02 %	0.02 %	99	0.06 %	187	0.09 %	279 / 494	CDP
Toto	0.01 %	0.01 %	9	0.01 %	201	0.01 %	303 / 494	CDP
Toyota Tsusho Corp	0.02 %	0.02 %	131	0.09 %	252	0.06 %	337 / 494	TC
TransDigm Group	0.03 %	0.03 %	4	0.00 %	97	0.01 %	142 / 494	TC
Transurban Group NPV	0.04 %	0.04 %	2	0.00 %	116	0.00 %	185 / 494	ENV*



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Travis Perkins	0.01 %	0.01 %	7	0.00 %	58	0.03 %	60 / 494	AR
Trelleborg AB B	0.01 %	0.01 %	11	0.01 %	264	0.00 %	342 / 494	CDP
Turkiye Hava Yollari A O	0.00 %	0.00 %	83	0.05 %	1,477	-0.04 %	464 / 494	TC
Turkiye Sise Cam Fabrik	0.00 %	0.00 %	25	0.02 %	2,108	-0.01 %	484 / 494	CDP
U-Ming Marine Transport	0.00 %	0.00 %	4	0.00 %	3,028	-0.00 %	488 / 494	PRE
Union Pacific Corp	0.22 %	0.22 %	204	0.13 %	712	-0.05 %	427 / 494	CDP
United Continental Holding Inc	0.01 %	0.01 %	145	0.09 %	1,125	-0.06 %	442 / 494	CDP
United Parcel Service Inc	0.19 %	0.19 %	220	0.14 %	318	0.05 %	377 / 494	CDP
United Rentals Inc	0.03 %	0.03 %	4	0.00 %	46	0.02 %	42 / 494	TC
United Technologies Corp	0.20 %	0.20 %	96	0.06 %	125	0.16 %	201 / 494	CDP*
United Tractors Tbk PT	0.01 %	0.01 %	5	0.00 %	224	0.00 %	323 / 494	PRE
Ushio Inc	0.00 %	0.00 %	2	0.00 %	137	0.00 %	213 / 494	CDP
Verisk Analytics Inc	0.03 %	0.03 %	1	0.00 %	29	0.01 %	18 / 494	TC
Vestas Wind Systems AS	0.04 %	0.04 %	15	0.01 %	97	0.03 %	143 / 494	CDP
Vinci	0.10 %	0.10 %	53	0.03 %	114	0.10 %	182 / 494	CDP
Volvo AB	0.07 %	0.07 %	28	0.02 %	77	0.09 %	88 / 494	ENV
Wabtec	0.01 %	0.01 %	8	0.01 %	210	0.01 %	311 / 494	TC
Walsin Lihwa Corp	0.00 %	0.00 %	32	0.02 %	542	-0.00 %	416 / 494	PRE
Wan Hai Lines Ltd	0.00 %	0.00 %	15	0.01 %	1,606	-0.01 %	471 / 494	TC
Wartsila Oyj	0.02 %	0.03 %	5	0.00 %	93	0.01 %	119 / 494	CDP
Waste Connections, Inc.	0.04 %	0.04 %	14	0.01 %	286	0.00 %	357 / 494	TC
Waste Management Inc	0.08 %	0.08 %	289	0.19 %	1,482	-0.13 %	465 / 494	CDP
WEG SA	0.01 %	0.01 %	3	0.00 %	217	0.00 %	315 / 494	CDP
Weichai Power Co Ltd	0.01 %	0.00 %	10	0.01 %	240	0.01 %	332 / 494	TC
Weir Group	0.01 %	0.01 %	6	0.00 %	200	0.00 %	302 / 494	CDP
West Japan Railway	0.03 %	0.03 %	49	0.03 %	349	0.01 %	387 / 494	CDP
Westports Holdings Berhad	0.00 %	0.00 %	1	0.00 %	517	-0.00 %	415 / 494	ENV*
Xinjiang Goldwind Science & Technology Co	0.00 %	0.00 %	1	0.00 %	108	0.00 %	169 / 494	TC
Xylem Inc	0.03 %	0.03 %	7	0.00 %	132	0.01 %	208 / 494	CDP
Yamato Holdings Co Ltd	0.02 %	0.02 %	17	0.01 %	134	0.03 %	210 / 494	PRE
Yangzijiang Shipbuilding Hldgs Ltd	0.00 %	0.00 %	2	0.00 %	133	0.00 %	209 / 494	TC
Zardoya-Otis SA	0.00 %	0.00 %	1	0.00 %	301	0.00 %	368 / 494	TC
Zhejiang Expressway Co. Ltd. - H Shares	0.00 %	0.00 %	0	0.00 %	40	0.00 %	34 / 494	ENV*
Zhuzhou CRRC Times Electric Co Ltd - H	0.01 %	0.01 %	1	0.00 %	111	0.00 %	179 / 494	TC
Zodiac Aerospace	0.01 %	0.01 %	5	0.00 %	94	0.01 %	126 / 494	AR*
Zoomlion Heavy Industry Science and	0.00 %	0.00 %	1	0.00 %	166	0.00 %	255 / 494	TC



Carbon Footprint

Company Breakdown

Portfolio

Company details	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Information Technology	16.86 %	16.83 %	3,293	2.14 %	102	7.78 %		
58.Com Inc	0.00 %	0.00 %	0	0.00 %	27	0.00 %	67 / 280	TC
AAC Technologies Holdings Inc	0.03 %	0.03 %	4	0.00 %	219	0.00 %	246 / 280	PRE
Accenture plc	0.19 %	0.19 %	18	0.01 %	37	0.12 %	114 / 280	OTH
Acer Inc	0.00 %	0.00 %	1	0.00 %	15	0.03 %	3 / 280	ENV*
Activision Blizzard Inc	0.11 %	0.11 %	2	0.00 %	20	0.03 %	24 / 280	TC
Adobe Systems Inc	0.17 %	0.17 %	2	0.00 %	24	0.02 %	49 / 280	CDP*
Advanced Micro Devices	0.02 %	0.02 %	2	0.00 %	35	0.01 %	103 / 280	CDP
Advanced Semiconductor Engineering	0.02 %	0.02 %	25	0.02 %	263	0.01 %	248 / 280	CDP
Advantech Co Ltd	0.01 %	0.01 %	1	0.00 %	87	0.00 %	180 / 280	TC
Advantest Corp	0.01 %	0.01 %	2	0.00 %	108	0.00 %	196 / 280	CDP
Akamai Technologies Inc	0.02 %	0.02 %	2	0.00 %	72	0.01 %	168 / 280	CDP*
Alibaba Group Holding Ltd	0.11 %	0.11 %	1	0.00 %	32	0.01 %	91 / 280	TC
Alliance Data Systems Corp	0.02 %	0.02 %	2	0.00 %	23	0.02 %	39 / 280	CDP
Alphabet Inc	1.34 %	1.33 %	60	0.04 %	54	0.28 %	138 / 280	CDP
Alps Electric Co	0.01 %	0.01 %	8	0.01 %	114	0.02 %	201 / 280	AR*
Amadeus IT Group SA	0.06 %	0.06 %	2	0.00 %	29	0.02 %	77 / 280	TC
Amdocs Ltd	0.02 %	0.02 %	3	0.00 %	51	0.01 %	136 / 280	CDP
Amphenol Corp A	0.06 %	0.06 %	26	0.02 %	299	0.01 %	256 / 280	CDP
ams AG	0.01 %	0.01 %	1	0.00 %	122	0.00 %	206 / 280	CDP
Analog Devices Inc	0.07 %	0.07 %	5	0.00 %	100	0.01 %	190 / 280	OTH
ANSYS Inc	0.02 %	0.02 %	0	0.00 %	20	0.00 %	20 / 280	TC
Apple Inc.	1.86 %	1.85 %	91	0.06 %	31	0.79 %	86 / 280	CDP
Applied Materials Inc	0.13 %	0.13 %	11	0.01 %	71	0.04 %	166 / 280	CDP
Arista Networks Inc	0.02 %	0.02 %	0	0.00 %	29	0.00 %	80 / 280	TC
Arrow Electronics Inc	0.02 %	0.02 %	17	0.01 %	50	0.09 %	135 / 280	TC
ASM Pacific Technology Ltd.	0.01 %	0.01 %	2	0.00 %	109	0.00 %	197 / 280	TC
ASML Holding NV	0.12 %	0.12 %	5	0.00 %	72	0.02 %	167 / 280	CDP
Asseco Poland SA	0.00 %	0.00 %	1	0.00 %	23	0.01 %	42 / 280	TC
Asustek Computer Inc	0.01 %	0.01 %	11	0.01 %	58	0.05 %	144 / 280	CDP
AtoS SE	0.03 %	0.03 %	4	0.00 %	23	0.04 %	44 / 280	CDP
AU Optronics Corp	0.01 %	0.01 %	55	0.04 %	421	0.00 %	265 / 280	CDP
Auto Trader Group Plc	0.01 %	0.01 %	0	0.00 %	16	0.00 %	7 / 280	AR*
Autodesk Inc	0.05 %	0.05 %	0	0.00 %	15	0.01 %	2 / 280	CDP
Autohome Inc	0.00 %	0.00 %	0	0.00 %	27	0.00 %	55 / 280	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Automatic Data Processing	0.11 %	0.11 %	4	0.00 %	29	0.04 %	75 / 280	CDP*
Avnet Inc	0.01 %	0.01 %	11	0.01 %	33	0.09 %	93 / 280	PRE
Azbil Corp	0.01 %	0.01 %	3	0.00 %	134	0.00 %	212 / 280	CDP
Baidu.com ADR	0.04 %	0.04 %	1	0.00 %	27	0.01 %	60 / 280	TC
BlackBerry Limited	0.01 %	0.01 %	1	0.00 %	56	0.01 %	141 / 280	CDP
BOE Technology Group Co Ltd	0.00 %	0.00 %	0	0.00 %	64	0.00 %	156 / 280	PRE
Broadcom Inc	0.23 %	0.22 %	35	0.02 %	184	0.03 %	234 / 280	TC
Broadridge Financial Solutions Inc.	0.02 %	0.02 %	1	0.00 %	31	0.01 %	89 / 280	CDP
Brother Industries	0.01 %	0.01 %	12	0.01 %	177	0.01 %	233 / 280	CDP
BYD Electronic (International) Co. Ltd.	0.00 %	0.01 %	1	0.00 %	57	0.00 %	143 / 280	TC
CA Inc	0.02 %	0.02 %	1	0.00 %	36	0.01 %	106 / 280	CDP*
Canon Inc	0.08 %	0.08 %	42	0.03 %	131	0.06 %	211 / 280	CDP
Cap Gemini SE	0.04 %	0.04 %	5	0.00 %	27	0.05 %	69 / 280	OTH
Capcom	0.00 %	0.00 %	0	0.00 %	58	0.00 %	145 / 280	TC
Catcher Technology Co Ltd	0.02 %	0.02 %	23	0.01 %	684	-0.01 %	275 / 280	TC
CDK Global Inc	0.02 %	0.02 %	1	0.00 %	33	0.01 %	97 / 280	TC
CDW Corp/DE	0.02 %	0.02 %	5	0.00 %	29	0.05 %	72 / 280	TC
CGI Group Inc.	0.03 %	0.03 %	2	0.00 %	26	0.03 %	52 / 280	PRE
Check Point Software (US)	0.03 %	0.03 %	1	0.00 %	29	0.01 %	78 / 280	TC
Cheng Uei Precision Industry	0.00 %	0.00 %	4	0.00 %	108	0.01 %	195 / 280	ENV*
Chicony Electronics Co	0.00 %	0.00 %	2	0.00 %	61	0.01 %	152 / 280	CDP
CHINA RAILWAY SIGNAL & COM	0.00 %	0.00 %	1	0.00 %	68	0.00 %	163 / 280	TC
Cielo SA	0.02 %	0.02 %	0	0.00 %	16	0.01 %	6 / 280	CDP
Cisco Systems Inc	0.39 %	0.39 %	35	0.02 %	53	0.17 %	137 / 280	CDP
Citizen Watch Co Ltd	0.00 %	0.00 %	5	0.00 %	156	0.01 %	221 / 280	TC
Citrix Systems Inc	0.03 %	0.03 %	1	0.00 %	20	0.01 %	21 / 280	TC
Cognizant Tech Solutions Corp	0.10 %	0.10 %	7	0.00 %	38	0.05 %	115 / 280	CDP*
Colopl Inc	0.00 %	0.00 %	0	0.00 %	21	0.00 %	31 / 280	TC
Compal Electronics Inc	0.01 %	0.01 %	11	0.01 %	36	0.08 %	108 / 280	CDP
Computershare Ltd	0.01 %	0.01 %	0	0.00 %	18	0.01 %	17 / 280	TC
Constellation Software	0.02 %	0.02 %	1	0.00 %	40	0.01 %	121 / 280	TC
Corning Inc	0.06 %	0.06 %	39	0.03 %	295	0.01 %	255 / 280	PRE
CSRA Inc	0.01 %	0.01 %	2	0.00 %	33	0.01 %	98 / 280	TC
Dassault Systemes SA	0.03 %	0.03 %	1	0.00 %	27	0.01 %	70 / 280	AR*
Delta Electronic Ind	0.03 %	0.03 %	10	0.01 %	127	0.02 %	208 / 280	CDP
Delta Electronics Thai PCL	0.00 %	0.00 %	1	0.00 %	112	0.00 %	199 / 280	TC



Carbon Footprint

Company Breakdown

Portfolio

Company details	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Dena Co	0.01 %	0.01 %	0	0.00 %	36	0.00 %	105 / 280	TC
Disco Corp	0.01 %	0.01 %	1	0.00 %	125	0.00 %	207 / 280	CDP
DST Systems Inc	0.01 %	0.01 %	0	0.00 %	23	0.01 %	41 / 280	TC
DXC Technology Company	0.06 %	0.06 %	5	0.00 %	56	0.02 %	142 / 280	ENV
eBay Inc.	0.09 %	0.09 %	5	0.00 %	39	0.03 %	120 / 280	CDP
Electronic Arts	0.08 %	0.08 %	2	0.00 %	33	0.01 %	94 / 280	TC
EOH Holdings Ltd	0.00 %	0.00 %	0	0.00 %	37	0.00 %	112 / 280	AR
Epistar Corp	0.00 %	0.00 %	2	0.00 %	187	0.00 %	240 / 280	TC
Ericsson L.M. Telefonaktie	0.04 %	0.04 %	12	0.01 %	37	0.09 %	109 / 280	CDP
F5 Networks Inc	0.02 %	0.02 %	1	0.00 %	21	0.01 %	33 / 280	TC
Facebook Inc	0.92 %	0.92 %	12	0.01 %	37	0.08 %	111 / 280	ENV*
Fidelity National Information	0.07 %	0.07 %	3	0.00 %	24	0.04 %	50 / 280	TC
FIH Mobile Ltd	0.00 %	0.00 %	3	0.00 %	76	0.01 %	171 / 280	TC
Fiserv Inc	0.06 %	0.06 %	2	0.00 %	23	0.02 %	47 / 280	TC
FleetCor Technologies Inc	0.03 %	0.03 %	0	0.00 %	17	0.01 %	9 / 280	TC
Flex Ltd	0.02 %	0.02 %	31	0.02 %	101	0.07 %	192 / 280	CDP
Foxconn Technology Co Ltd	0.01 %	0.01 %	4	0.00 %	159	0.01 %	224 / 280	TC
Fujifilm Holdings Corp	0.03 %	0.03 %	32	0.02 %	164	0.03 %	228 / 280	CDP*
Fujitsu	0.03 %	0.03 %	29	0.02 %	63	0.11 %	153 / 280	CDP
Gartner Inc	0.02 %	0.02 %	2	0.00 %	76	0.01 %	172 / 280	TC
GCL-Poly Energy Holdings Ltd.	0.00 %	0.00 %	41	0.03 %	1,148	-0.02 %	279 / 280	PRE
Gemalto NV	0.01 %	0.01 %	4	0.00 %	88	0.01 %	182 / 280	CDP
Global Payments Inc	0.03 %	0.03 %	1	0.00 %	20	0.01 %	28 / 280	TC
Gmo Payment Gateway Inc	0.00 %	0.00 %	0	0.00 %	18	0.00 %	15 / 280	TC
Gree Inc	0.00 %	0.00 %	0	0.00 %	29	0.00 %	82 / 280	TC
GungHo Online Entertainment	0.00 %	0.00 %	0	0.00 %	20	0.00 %	25 / 280	TC
Halma	0.01 %	0.01 %	1	0.00 %	83	0.00 %	176 / 280	CDP
Hamamatsu Photonic	0.01 %	0.01 %	2	0.00 %	193	0.00 %	241 / 280	TC
Harris Corp	0.04 %	0.04 %	7	0.00 %	63	0.03 %	154 / 280	TC
HCL Technologies Ltd	0.02 %	0.02 %	1	0.00 %	55	0.01 %	140 / 280	ENV*
Hewlett Packard Enterprise Co	0.06 %	0.06 %	33	0.02 %	44	0.19 %	126 / 280	CDP
Hexagon AB	0.03 %	0.03 %	4	0.00 %	128	0.01 %	210 / 280	TC
Hirose Electric Co	0.01 %	0.01 %	2	0.00 %	160	0.00 %	226 / 280	CDP
Hitachi	0.08 %	0.07 %	173	0.11 %	176	0.17 %	231 / 280	CDP
Hitachi High-Technologies	0.01 %	0.01 %	1	0.00 %	49	0.01 %	133 / 280	CDP
Hitachi Kokusai Electric Inc	0.00 %	0.00 %	1	0.00 %	92	0.00 %	184 / 280	TC



Carbon Footprint

Company Breakdown

Portfolio

Company details	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Hon Hai Precision Industry Co Ltd	0.12 %	0.12 %	256	0.17 %	157	0.30 %	222 / 280	AR*
Horiba	0.01 %	0.00 %	2	0.00 %	75	0.00 %	170 / 280	PRE
HP Inc	0.08 %	0.08 %	33	0.02 %	47	0.18 %	129 / 280	CDP
HTC Corporation	0.00 %	0.00 %	2	0.00 %	70	0.01 %	164 / 280	PRE
IAC InterActiveCorp	0.02 %	0.02 %	2	0.00 %	58	0.01 %	146 / 280	TC
Ibiden Co	0.00 %	0.00 %	12	0.01 %	499	-0.00 %	268 / 280	CDP
Infineon Technologies AG	0.07 %	0.07 %	22	0.01 %	229	0.01 %	247 / 280	ENV*
Infosys Ltd	0.06 %	0.06 %	6	0.00 %	67	0.02 %	162 / 280	CDP*
Ingenico Group	0.01 %	0.01 %	0	0.00 %	14	0.01 %	1 / 280	CDP
Innolux Corp	0.01 %	0.01 %	55	0.04 %	509	-0.00 %	271 / 280	CDP
Intel Corp	0.41 %	0.41 %	108	0.07 %	127	0.17 %	209 / 280	CDP
Intl Business Machines Corp	0.29 %	0.29 %	41	0.03 %	39	0.27 %	118 / 280	CDP
Intuit Inc	0.08 %	0.08 %	1	0.00 %	18	0.02 %	16 / 280	CDP
Inventec Corp	0.01 %	0.01 %	7	0.00 %	42	0.04 %	123 / 280	CDP
Itochu Techno-Solutions Corp	0.00 %	0.00 %	2	0.00 %	100	0.00 %	189 / 280	TC
Jabil Inc	0.01 %	0.01 %	35	0.02 %	146	0.05 %	217 / 280	CDP
Japan Aviation Electronics	0.00 %	0.00 %	2	0.00 %	186	0.00 %	236 / 280	ENV*
Japan Display Inc	0.00 %	0.00 %	12	0.01 %	202	0.01 %	244 / 280	CDP
Juniper Networks Inc	0.02 %	0.02 %	4	0.00 %	55	0.02 %	139 / 280	CDP*
Just Eat Plc	0.01 %	0.01 %	0	0.00 %	17	0.00 %	13 / 280	CDP
Kakaku.com Inc	0.00 %	0.00 %	0	0.00 %	31	0.00 %	88 / 280	TC
Kakao Corp	0.01 %	0.01 %	0	0.00 %	27	0.00 %	57 / 280	TC
Keyence Corp	0.11 %	0.11 %	4	0.00 %	150	0.01 %	219 / 280	TC
Keysight Technologies Inc	0.02 %	0.02 %	2	0.00 %	61	0.01 %	150 / 280	ENV
Kingboard Chemical Holdings Ltd.	0.01 %	0.01 %	12	0.01 %	288	0.00 %	254 / 280	TC
Kingboard Laminates Holdings Ltd.	0.00 %	0.00 %	9	0.01 %	897	-0.00 %	278 / 280	TC
Kingsoft Corporation Ltd.	0.00 %	0.00 %	0	0.00 %	20	0.00 %	27 / 280	TC
KLA-Tencor Corporation	0.04 %	0.04 %	3	0.00 %	80	0.01 %	175 / 280	CDP*
Koei Tecmo Holdings Co Ltd	0.00 %	0.00 %	0	0.00 %	31	0.00 %	87 / 280	TC
Konami Holdings Cor	0.01 %	0.01 %	1	0.00 %	87	0.00 %	179 / 280	TC
KONICA MINOLTA INC	0.01 %	0.01 %	15	0.01 %	161	0.02 %	227 / 280	CDP
Kyocera Corp	0.04 %	0.04 %	51	0.03 %	405	0.00 %	264 / 280	OTH
Lam Research Corp	0.07 %	0.07 %	17	0.01 %	219	0.01 %	245 / 280	CDP*
Largan Precision Co Ltd	0.04 %	0.04 %	2	0.00 %	113	0.00 %	200 / 280	TC
Legend Holdings Corp.	0.00 %	0.00 %	17	0.01 %	177	0.02 %	232 / 280	TC
Lenovo Group Ltd.	0.01 %	0.01 %	14	0.01 %	38	0.09 %	116 / 280	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
LG Display Co Ltd	0.01 %	0.01 %	86	0.06 %	424	0.00 %	266 / 280	CDP
LINE Corp	0.00 %	0.00 %	0	0.00 %	27	0.00 %	56 / 280	TC
Lite-On Technology Corp	0.01 %	0.01 %	11	0.01 %	120	0.02 %	204 / 280	CDP
Logitech International SA	0.01 %	0.01 %	2	0.00 %	101	0.00 %	191 / 280	TC
Marvell Technology Group Ltd	0.02 %	0.02 %	3	0.00 %	97	0.01 %	186 / 280	CDP
Mastercard Inc	0.31 %	0.31 %	2	0.00 %	18	0.04 %	14 / 280	CDP
MAXIM INTEGRATED	0.03 %	0.03 %	9	0.01 %	326	0.00 %	257 / 280	PRE
Mediatek Inc	0.03 %	0.03 %	7	0.00 %	67	0.03 %	160 / 280	CDP
Mercadolibre inc	0.02 %	0.02 %	0	0.00 %	27	0.00 %	61 / 280	TC
Micro Focus International	0.03 %	0.03 %	0	0.00 %	21	0.00 %	30 / 280	CDP
Microchip Technology Inc	0.05 %	0.05 %	14	0.01 %	533	-0.00 %	273 / 280	CDP
Micron Technology Inc	0.10 %	0.10 %	75	0.05 %	464	-0.00 %	267 / 280	CDP
Microsoft Corp	1.29 %	1.28 %	54	0.04 %	50	0.28 %	134 / 280	OTH
Momo Inc ADR	0.00 %	0.00 %	0	0.00 %	27	0.00 %	68 / 280	TC
Motorola Solutions Inc	0.03 %	0.03 %	6	0.00 %	65	0.02 %	158 / 280	CDP
Mphasis Ltd	0.00 %	0.00 %	0	0.00 %	24	0.00 %	51 / 280	TC
Murata Manufacturing Co Ltd	0.06 %	0.06 %	28	0.02 %	272	0.01 %	251 / 280	CDP
Nanya Technology Corp	0.00 %	0.00 %	2	0.00 %	340	0.00 %	258 / 280	CDP
NAVER Corp	0.04 %	0.04 %	1	0.00 %	27	0.01 %	62 / 280	TC
NCR Corp	0.01 %	0.01 %	4	0.00 %	39	0.02 %	119 / 280	TC
NCsoft Corp	0.02 %	0.02 %	0	0.00 %	27	0.00 %	65 / 280	TC
NEC Corp	0.02 %	0.02 %	12	0.01 %	42	0.07 %	122 / 280	CDP
NetApp Inc	0.03 %	0.03 %	6	0.00 %	85	0.02 %	178 / 280	CDP
NetEase Inc ADR	0.01 %	0.01 %	0	0.00 %	35	0.00 %	104 / 280	TC
Netmarble Corp	0.01 %	0.01 %	0	0.00 %	20	0.00 %	26 / 280	TC
Nexon Co Ltd	0.01 %	0.01 %	0	0.00 %	20	0.00 %	22 / 280	TC
NHN Entertainment Corp	0.00 %	0.00 %	0	0.00 %	20	0.00 %	23 / 280	TC
Nice Ltd	0.01 %	0.01 %	0	0.00 %	29	0.00 %	74 / 280	TC
Nintendo Co Ltd	0.09 %	0.09 %	6	0.00 %	142	0.01 %	216 / 280	TC
Nippon Electric Glass	0.01 %	0.01 %	19	0.01 %	730	-0.00 %	276 / 280	PRE
Nokia OYJ	0.08 %	0.08 %	15	0.01 %	43	0.09 %	124 / 280	CDP
Nomura Research Institute Ltd	0.01 %	0.01 %	1	0.00 %	48	0.00 %	131 / 280	CDP
Novatek Microelectronics Corp	0.00 %	0.00 %	1	0.00 %	78	0.00 %	173 / 280	PRE
NS Solutions Corp	0.00 %	0.00 %	0	0.00 %	34	0.00 %	99 / 280	TC
NTT Data Communications Systems	0.02 %	0.02 %	2	0.00 %	33	0.02 %	96 / 280	TC
Nuance Communications Inc	0.01 %	0.01 %	1	0.00 %	21	0.01 %	32 / 280	TC



Carbon Footprint

Company Breakdown

Portfolio

Company details	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Nvidia Corp	0.23 %	0.23 %	2	0.00 %	29	0.02 %	79 / 280	CDP*
NXP Semiconductor NV	0.09 %	0.09 %	25	0.02 %	187	0.02 %	238 / 280	TC
Obic Business Consultants Ltd	0.00 %	0.00 %	0	0.00 %	23	0.00 %	46 / 280	TC
Obic Co Ltd	0.01 %	0.01 %	0	0.00 %	46	0.00 %	128 / 280	TC
Omron Corp	0.02 %	0.02 %	11	0.01 %	139	0.02 %	214 / 280	CDP
Oracle Corp	0.32 %	0.32 %	18	0.01 %	59	0.08 %	148 / 280	CDP
Oracle Corp Japan	0.01 %	0.01 %	0	0.00 %	35	0.00 %	102 / 280	TC
Oracle Financial Services Software Ltd	0.00 %	0.00 %	0	0.00 %	34	0.00 %	101 / 280	TC
Otsuka Corp	0.01 %	0.01 %	1	0.00 %	29	0.01 %	71 / 280	TC
Palo Alto Networks Inc.	0.03 %	0.03 %	0	0.00 %	21	0.00 %	35 / 280	TC
Paychex Inc	0.04 %	0.04 %	1	0.00 %	36	0.01 %	107 / 280	TC
PayPal Holdings Inc.	0.17 %	0.17 %	2	0.00 %	17	0.04 %	10 / 280	TC
Pegatron Corporation	0.01 %	0.01 %	25	0.02 %	66	0.09 %	159 / 280	PRE
Qorvo, Inc	0.02 %	0.02 %	2	0.00 %	70	0.01 %	165 / 280	TC
QUALCOMM Inc	0.18 %	0.18 %	14	0.01 %	44	0.08 %	125 / 280	ENV*
Quanta Computer	0.01 %	0.01 %	13	0.01 %	49	0.07 %	132 / 280	ENV*
Realtek Semiconductor Corp	0.00 %	0.00 %	3	0.00 %	187	0.00 %	239 / 280	TC
Red Hat Inc	0.05 %	0.05 %	1	0.00 %	22	0.01 %	38 / 280	TC
Renesas Electronics Corp	0.01 %	0.01 %	8	0.01 %	393	0.00 %	263 / 280	CDP
Ricoh Co	0.02 %	0.02 %	28	0.02 %	135	0.04 %	213 / 280	CDP
Rightmove Plc	0.01 %	0.01 %	0	0.00 %	16	0.00 %	5 / 280	CDP
Rohm Co Ltd	0.02 %	0.02 %	11	0.01 %	384	0.00 %	262 / 280	CDP
Sage Group	0.02 %	0.02 %	1	0.00 %	18	0.01 %	18 / 280	CDP
Salesforce.com	0.15 %	0.14 %	3	0.00 %	32	0.02 %	92 / 280	CDP
Samsung Electro-Mech Co	0.01 %	0.01 %	19	0.01 %	341	0.00 %	259 / 280	CDP*
Samsung Electronics Co	0.57 %	0.56 %	280	0.18 %	149	0.36 %	218 / 280	CDP
Samsung SDI Co	0.02 %	0.02 %	13	0.01 %	264	0.01 %	249 / 280	CDP
Samsung SDS Co Ltd	0.01 %	0.01 %	1	0.00 %	30	0.01 %	85 / 280	CDP*
SAP SE	0.23 %	0.23 %	10	0.01 %	38	0.07 %	117 / 280	CDP
SCREEN Holdings Co Ltd	0.01 %	0.01 %	2	0.00 %	116	0.00 %	202 / 280	CDP
SCSK Corp	0.00 %	0.00 %	0	0.00 %	37	0.00 %	113 / 280	CDP
Seagate Technology	0.02 %	0.02 %	29	0.02 %	194	0.02 %	242 / 280	CDP
Seiko Epson Corp	0.02 %	0.02 %	11	0.01 %	150	0.01 %	220 / 280	CDP
Semiconductor Manufacturing International	0.01 %	0.01 %	19	0.01 %	761	-0.01 %	277 / 280	PRE
ServiceNow Inc.	0.05 %	0.05 %	1	0.00 %	29	0.01 %	81 / 280	TC
Shimadzu Corp	0.01 %	0.01 %	3	0.00 %	96	0.01 %	185 / 280	ENV*



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Siliconware Precision Industries Co	0.01 %	0.01 %	7	0.00 %	285	0.00 %	252 / 280	CDP
Sina Corp (Caymans)	0.02 %	0.02 %	0	0.00 %	27	0.00 %	58 / 280	TC
SK Hynix Inc	0.09 %	0.09 %	77	0.05 %	500	-0.01 %	269 / 280	CDP
Skyworks Solutions Inc	0.04 %	0.04 %	9	0.01 %	197	0.01 %	243 / 280	TC
Sonda	0.00 %	0.00 %	0	0.00 %	26	0.00 %	53 / 280	TC
Splunk Inc.	0.02 %	0.02 %	0	0.00 %	23	0.00 %	40 / 280	TC
Square Enix Co Ltd	0.01 %	0.01 %	1	0.00 %	37	0.00 %	110 / 280	TC
STMicroelectronics NV	0.03 %	0.03 %	20	0.01 %	269	0.01 %	250 / 280	CDP
Sumco Corp	0.01 %	0.01 %	11	0.01 %	528	-0.00 %	272 / 280	ENV
Sunny Optical Technology (Group) Co. Ltd.	0.02 %	0.02 %	3	0.00 %	171	0.00 %	230 / 280	TC
Symantec Corp	0.05 %	0.05 %	3	0.00 %	64	0.01 %	155 / 280	CDP
Synnex Tech Intl Corp	0.00 %	0.00 %	8	0.01 %	61	0.03 %	151 / 280	TC
Synopsys Inc	0.03 %	0.03 %	1	0.00 %	23	0.01 %	48 / 280	TC
Taiwan Semiconductor Manufacturing Co	0.39 %	0.39 %	142	0.09 %	373	0.02 %	261 / 280	CDP
Taiyo Yuden Co	0.00 %	0.00 %	4	0.00 %	185	0.00 %	235 / 280	TC
Tata Consultancy Services Ltd	0.04 %	0.04 %	3	0.00 %	64	0.01 %	157 / 280	CDP*
TDK Corp	0.02 %	0.02 %	39	0.03 %	356	0.01 %	260 / 280	CDP
TE Connectivity Ltd.	0.07 %	0.07 %	20	0.01 %	121	0.03 %	205 / 280	CDP
Tech Mahindra Ltd	0.01 %	0.01 %	1	0.00 %	61	0.01 %	149 / 280	CDP
Temenos Group AG	0.01 %	0.01 %	0	0.00 %	23	0.00 %	43 / 280	TC
Tencent Holdings Ltd.	0.52 %	0.53 %	5	0.00 %	27	0.05 %	59 / 280	TC
Texas Instruments Inc	0.20 %	0.20 %	55	0.04 %	287	0.02 %	253 / 280	CDP
TIS Inc	0.01 %	0.01 %	1	0.00 %	34	0.01 %	100 / 280	TC
Tokyo Electron	0.06 %	0.05 %	6	0.00 %	87	0.01 %	181 / 280	CDP
Topcon Corp	0.00 %	0.00 %	1	0.00 %	106	0.00 %	193 / 280	PRE
Total System Services Inc	0.03 %	0.03 %	2	0.00 %	30	0.02 %	84 / 280	TC
Tower Semiconductor Ltd	0.01 %	0.01 %	3	0.00 %	187	0.00 %	237 / 280	TC
TPK Holding Co Ltd	0.00 %	0.00 %	4	0.00 %	158	0.00 %	223 / 280	CDP
Transcend information	0.00 %	0.00 %	1	0.00 %	91	0.00 %	183 / 280	TC
TravelSky Technology Ltd. - H Shares	0.01 %	0.01 %	0	0.00 %	29	0.00 %	76 / 280	TC
Trend Micro Inc	0.01 %	0.01 %	0	0.00 %	20	0.00 %	19 / 280	TC
Trimble Inc	0.02 %	0.02 %	3	0.00 %	83	0.01 %	177 / 280	TC
Twitter Inc	0.03 %	0.03 %	1	0.00 %	27	0.01 %	63 / 280	TC
Ubisoft Entertainment SA	0.01 %	0.01 %	1	0.00 %	73	0.00 %	169 / 280	AR*
Ulvac Inc	0.01 %	0.01 %	3	0.00 %	166	0.00 %	229 / 280	AR*
Unimicron Technology Corp	0.00 %	0.00 %	11	0.01 %	503	-0.00 %	270 / 280	PRE



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
United Internet AG Reg	0.02 %	0.02 %	1	0.00 %	30	0.01 %	83 / 280	TC
United Microelectronics Corp	0.01 %	0.01 %	33	0.02 %	549	-0.00 %	274 / 280	CDP
Vanguard International Semiconductor Co	0.00 %	0.00 %	7	0.00 %	1,175	-0.00 %	280 / 280	CDP
Venture Corp Ltd	0.01 %	0.01 %	3	0.00 %	99	0.01 %	187 / 280	TC
VeriSign Inc	0.02 %	0.02 %	0	0.00 %	29	0.00 %	73 / 280	TC
Visa Inc	0.45 %	0.45 %	3	0.00 %	16	0.05 %	8 / 280	CDP
Vmware Inc	0.02 %	0.02 %	0	0.00 %	20	0.00 %	29 / 280	CDP
VTech Holdings Ltd.	0.01 %	0.01 %	2	0.00 %	117	0.00 %	203 / 280	ENV*
WEIBO CORP ADR	0.00 %	0.00 %	0	0.00 %	27	0.00 %	54 / 280	TC
Western Digital Corp	0.06 %	0.06 %	27	0.02 %	159	0.03 %	225 / 280	CDP
Western Union Co	0.02 %	0.02 %	2	0.00 %	21	0.02 %	34 / 280	PRE
Wipro Ltd	0.01 %	0.01 %	2	0.00 %	79	0.01 %	174 / 280	CDP
Wirecard AG	0.02 %	0.02 %	0	0.00 %	17	0.00 %	12 / 280	TC
Wistron Corp	0.00 %	0.00 %	13	0.01 %	47	0.07 %	130 / 280	CDP
Workday Inc.	0.03 %	0.03 %	0	0.00 %	33	0.00 %	95 / 280	PRE
Worldpay Group Plc	0.02 %	0.02 %	1	0.00 %	15	0.02 %	4 / 280	CDP
Worldpay Inc	0.03 %	0.03 %	1	0.00 %	17	0.01 %	11 / 280	TC
Xero Ltd.	0.00 %	0.00 %	0	0.00 %	23	0.00 %	45 / 280	TC
Xerox Corp	0.02 %	0.02 %	9	0.01 %	67	0.03 %	161 / 280	CDP*
Xilinx Inc	0.04 %	0.04 %	3	0.00 %	100	0.01 %	188 / 280	CDP
Xinyi Solar Holdings Ltd	0.00 %	0.00 %	1	0.00 %	142	0.00 %	215 / 280	TC
Yahoo Japan Corp	0.01 %	0.01 %	0	0.00 %	32	0.00 %	90 / 280	TC
Yandex NV	0.02 %	0.02 %	0	0.00 %	27	0.00 %	64 / 280	TC
Yaskawa Electric Corp	0.02 %	0.02 %	4	0.00 %	112	0.01 %	198 / 280	TC
Yokogawa Electric Corp	0.01 %	0.01 %	4	0.00 %	108	0.01 %	194 / 280	CDP
ZTE Corp	0.01 %	0.01 %	2	0.00 %	45	0.01 %	127 / 280	ENV*
Materials	5.48 %	5.50 %	38,252	24.86 %	1,703	-19.71 %		
ACC Ltd	0.00 %	0.00 %	122	0.08 %	10,712	-0.08 %	286 / 292	CDP
Acerinox SA	0.00 %	0.00 %	34	0.02 %	1,040	-0.01 %	154 / 292	CDP
Adelaide Brighton Ltd	0.00 %	0.00 %	40	0.03 %	3,809	-0.02 %	243 / 292	AR*
AECI Ltd	0.00 %	0.00 %	10	0.01 %	634	-0.00 %	92 / 292	CDP
African Rainbow Minerals	0.00 %	0.00 %	8	0.01 %	2,534	-0.00 %	220 / 292	CDP
Agnico Eagle Mines Limited	0.02 %	0.02 %	12	0.01 %	408	0.00 %	48 / 292	CDP
Agrium Inc	0.03 %	0.03 %	78	0.05 %	401	0.00 %	45 / 292	PRE
Air Liquide	0.12 %	0.12 %	463	0.30 %	1,665	-0.22 %	192 / 292	CDP



Carbon Footprint

Company Breakdown

Portfolio

Company details	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Air Products & Chemicals Inc	0.08 %	0.07 %	542	0.35 %	4,251	-0.32 %	251 / 292	CDP*
Air Water Inc	0.01 %	0.01 %	32	0.02 %	637	-0.01 %	93 / 292	ENV*
Akzo Nobel NV	0.05 %	0.05 %	106	0.07 %	503	-0.01 %	62 / 292	CDP
Albemarle Corp	0.04 %	0.03 %	191	0.12 %	4,866	-0.11 %	258 / 292	ENV*
Alcoa Corp	0.02 %	0.02 %	499	0.32 %	3,748	-0.29 %	238 / 292	CDP
Alrosa PJSC	0.01 %	0.01 %	9	0.01 %	373	0.00 %	39 / 292	PRE
Alumina Ltd	0.01 %	0.01 %	88	0.06 %	4,377	-0.05 %	252 / 292	ENV*
Aluminum Corporation of China Ltd	0.01 %	0.01 %	94	0.06 %	1,495	-0.04 %	187 / 292	AR*
Ambuja Cements Ltd	0.01 %	0.01 %	105	0.07 %	12,095	-0.07 %	288 / 292	CDP
Amcor Ltd	0.03 %	0.03 %	59	0.04 %	479	-0.00 %	57 / 292	CDP
Angang Steel Co Ltd	0.00 %	0.00 %	73	0.05 %	4,236	-0.04 %	250 / 292	TC
Anglo American Platinum Ltd	0.00 %	0.00 %	24	0.02 %	1,794	-0.01 %	197 / 292	CDP
Anglo American Plc	0.05 %	0.05 %	276	0.18 %	1,143	-0.11 %	164 / 292	CDP
AngloGold Ashanti Ltd	0.01 %	0.01 %	74	0.05 %	1,274	-0.03 %	178 / 292	CDP
Anhui Conch Cement Co Ltd	0.01 %	0.01 %	300	0.19 %	10,411	-0.19 %	285 / 292	TC
Antofagasta Hldgs	0.01 %	0.01 %	19	0.01 %	1,041	-0.01 %	155 / 292	CDP
ArcelorMittal Inc	0.04 %	0.04 %	2,180	1.42 %	4,587	-1.28 %	254 / 292	CDP
Arkema	0.02 %	0.02 %	83	0.05 %	824	-0.03 %	122 / 292	CDP
Asahi Kasei Corporation	0.04 %	0.04 %	92	0.06 %	516	-0.01 %	65 / 292	CDP*
Ashland Global Holdings Inc	0.01 %	0.01 %	33	0.02 %	504	-0.00 %	63 / 292	CDP
Asia Cement Corp	0.00 %	0.00 %	169	0.11 %	9,049	-0.10 %	280 / 292	OTH*
Asian Paints Ltd	0.01 %	0.01 %	2	0.00 %	182	0.00 %	12 / 292	CDP*
Assore Limited	0.00 %	0.00 %	6	0.00 %	8,377	-0.00 %	278 / 292	ENV*
Avery Dennison Corp	0.02 %	0.02 %	26	0.02 %	302	0.01 %	32 / 292	CDP
Ball Corp	0.03 %	0.03 %	75	0.05 %	604	-0.01 %	84 / 292	CDP
Barrick Gold Corp	0.04 %	0.04 %	72	0.05 %	594	-0.01 %	81 / 292	CDP
BASF SE	0.22 %	0.22 %	551	0.36 %	619	-0.10 %	87 / 292	CDP
BBMG Corporation	0.00 %	0.00 %	38	0.02 %	3,323	-0.02 %	232 / 292	TC
Bemis Co Inc	0.01 %	0.01 %	24	0.02 %	422	0.00 %	49 / 292	OTH
BHP Billiton Ltd	0.23 %	0.23 %	377	0.24 %	932	-0.13 %	135 / 292	CDP
Bluescope Steel Ltd	0.01 %	0.01 %	210	0.14 %	2,388	-0.11 %	215 / 292	ENV*
Boliden AB	0.02 %	0.02 %	30	0.02 %	445	-0.00 %	51 / 292	CDP
Boral Ltd	0.01 %	0.01 %	82	0.05 %	1,943	-0.04 %	202 / 292	CDP
Bradespar SA	0.00 %	0.00 %	0	0.00 %	52	0.00 %	3 / 292	TC
Braskem SA	0.01 %	0.01 %	48	0.03 %	1,171	-0.02 %	167 / 292	CDP
Buzzi Unicem SpA	0.01 %	0.01 %	145	0.09 %	7,666	-0.09 %	275 / 292	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Castrol India Ltd	0.00 %	0.00 %	1	0.00 %	526	-0.00 %	69 / 292	TC
Celanese Corp A	0.03 %	0.03 %	66	0.04 %	862	-0.02 %	131 / 292	CDP
Cementos Argos SA	0.01 %	0.01 %	86	0.06 %	4,590	-0.05 %	255 / 292	CDP
Cemex Latam Holdings S.A.	0.00 %	0.00 %	25	0.02 %	4,417	-0.01 %	253 / 292	ENV
Cemex SA	0.03 %	0.03 %	1,054	0.69 %	5,281	-0.63 %	263 / 292	CDP*
CF Industries Holdings	0.02 %	0.02 %	305	0.20 %	5,835	-0.18 %	266 / 292	ENV*
China BlueChemical Ltd. - H Shares	0.00 %	0.00 %	9	0.01 %	1,183	-0.00 %	168 / 292	TC
China Molybdenum Co. Ltd.	0.01 %	0.01 %	6	0.00 %	3,965	-0.00 %	245 / 292	PRE
China National Building Material Co. Ltd. - H	0.01 %	0.00 %	827	0.54 %	6,520	-0.50 %	269 / 292	TC
China National Materials Co. Ltd. - H Shares	0.00 %	0.00 %	158	0.10 %	4,189	-0.09 %	249 / 292	TC
China Resources Cement Holdings Ltd.	0.00 %	0.00 %	114	0.07 %	8,893	-0.07 %	279 / 292	TC
China Steel Corp	0.02 %	0.02 %	351	0.23 %	3,503	-0.20 %	234 / 292	CDP
China Zhongwang Holdings Ltd.	0.00 %	0.00 %	5	0.00 %	626	-0.00 %	88 / 292	AR*
Christian Hansen Holding A/S	0.02 %	0.02 %	3	0.00 %	296	0.00 %	31 / 292	ENV*
Ciech SA	0.00 %	0.00 %	14	0.01 %	2,258	-0.01 %	210 / 292	PRE
Clariant AG Reg	0.02 %	0.02 %	24	0.02 %	339	0.00 %	35 / 292	CDP
Companhia Siderurgica Nacional	0.00 %	0.00 %	100	0.06 %	3,015	-0.06 %	229 / 292	OTH
Compania de Minas Buenaventura S.A.A.	0.01 %	0.01 %	5	0.00 %	458	-0.00 %	54 / 292	TC
Covestro AG	0.03 %	0.03 %	86	0.06 %	713	-0.02 %	103 / 292	ENV*
CRH Plc	0.07 %	0.07 %	603	0.39 %	1,451	-0.27 %	185 / 292	CDP
Croda Intl	0.01 %	0.01 %	9	0.01 %	376	0.00 %	40 / 292	CDP
CSG Holding Co Ltd	0.00 %	0.00 %	3	0.00 %	572	-0.00 %	76 / 292	TC
CSR Ltd	0.00 %	0.00 %	15	0.01 %	725	-0.00 %	105 / 292	ENV*
Daicel Chemical Industries Co	0.01 %	0.01 %	28	0.02 %	729	-0.01 %	106 / 292	ENV*
Daido Steel Co	0.00 %	0.00 %	37	0.02 %	980	-0.01 %	142 / 292	PRE
Denka Co Ltd	0.01 %	0.01 %	47	0.03 %	1,233	-0.02 %	175 / 292	CDP
DIC Corp	0.01 %	0.01 %	20	0.01 %	240	0.01 %	23 / 292	CDP
Dow Chemical	0.37 %	0.37 %	731	0.48 %	1,068	-0.28 %	156 / 292	CDP
DOWA Holdings Co Ltd	0.00 %	0.00 %	21	0.01 %	681	-0.00 %	99 / 292	ENV
DS Smith	0.02 %	0.01 %	57	0.04 %	835	-0.02 %	124 / 292	CDP
DuluxGroup Ltd	0.00 %	0.00 %	7	0.00 %	386	0.00 %	44 / 292	TC
Eastman Chemical Co	0.03 %	0.03 %	157	0.10 %	1,235	-0.07 %	176 / 292	CDP
Ecolab Inc	0.08 %	0.08 %	26	0.02 %	158	0.03 %	10 / 292	CDP
Empresas CMPC SA	0.01 %	0.01 %	151	0.10 %	4,872	-0.09 %	260 / 292	ENV*
EMS-Chemie Hldg AG	0.01 %	0.01 %	3	0.00 %	377	0.00 %	41 / 292	TC
Eregli Demir Celik	0.01 %	0.01 %	88	0.06 %	4,184	-0.05 %	248 / 292	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Eternal Chemical Co	0.00 %	0.00 %	5	0.00 %	407	0.00 %	47 / 292	TC
Evonik Industries	0.01 %	0.01 %	58	0.04 %	862	-0.02 %	130 / 292	CDP
Fauji Fertilizer Co Ltd	0.00 %	0.00 %	21	0.01 %	3,772	-0.01 %	240 / 292	ENV
Feng Hsin Iron & Steel Co	0.00 %	0.00 %	7	0.00 %	1,038	-0.00 %	152 / 292	TC
Fibria Celulose S.A.	0.01 %	0.01 %	89	0.06 %	5,250	-0.05 %	262 / 292	CDP
Fletcher Building Ltd	0.01 %	0.01 %	43	0.03 %	493	-0.00 %	60 / 292	CDP
FMC Corp	0.03 %	0.03 %	11	0.01 %	235	0.01 %	22 / 292	CDP
Formosa Chem & Fibre Co	0.02 %	0.02 %	260	0.17 %	3,203	-0.15 %	231 / 292	TC
Formosa Plastics Corp	0.03 %	0.03 %	129	0.08 %	2,161	-0.07 %	206 / 292	ENV*
Fortescue Metals Group	0.01 %	0.01 %	26	0.02 %	539	-0.00 %	71 / 292	CDP
FP Corp	0.00 %	0.00 %	3	0.00 %	336	0.00 %	34 / 292	CDP
Franco-Nevada Corp	0.03 %	0.03 %	0	0.00 %	15	0.00 %	1 / 292	TC
Freeport-McMoRan Inc	0.04 %	0.04 %	194	0.13 %	978	-0.07 %	141 / 292	CDP*
Fresnillo PLC	0.01 %	0.01 %	4	0.00 %	720	-0.00 %	104 / 292	CDP
Frutarom	0.01 %	0.01 %	1	0.00 %	144	0.00 %	7 / 292	TC
Fuchs Petrolub SE	0.01 %	0.01 %	14	0.01 %	526	-0.00 %	68 / 292	TC
Gerdau SA	0.01 %	0.01 %	105	0.07 %	1,216	-0.04 %	174 / 292	PRE
Givaudan AG	0.05 %	0.05 %	8	0.01 %	123	0.01 %	6 / 292	CDP
Glencore Plc	0.12 %	0.12 %	550	0.36 %	319	0.14 %	33 / 292	CDP
Godrej Industries Ltd	0.00 %	0.00 %	2	0.00 %	488	-0.00 %	59 / 292	CDP
Gold Fields Ltd	0.01 %	0.01 %	33	0.02 %	905	-0.01 %	133 / 292	CDP
Goldcorp Inc	0.03 %	0.03 %	20	0.01 %	384	0.00 %	43 / 292	CDP
Grasim Industries Ltd	0.01 %	0.01 %	53	0.03 %	1,515	-0.02 %	188 / 292	PRE
Grupa Azoty S.A.	0.00 %	0.00 %	26	0.02 %	1,682	-0.01 %	193 / 292	TC
Grupo Mexico SAB de CV	0.02 %	0.02 %	63	0.04 %	1,291	-0.03 %	180 / 292	ENV*
Hanwha Chemical Corp	0.01 %	0.01 %	61	0.04 %	1,084	-0.02 %	159 / 292	PRE
Harmony Gold Mining Co	0.00 %	0.00 %	40	0.03 %	2,931	-0.02 %	228 / 292	CDP
HeidelbergCement AG	0.04 %	0.04 %	1,024	0.67 %	5,726	-0.61 %	265 / 292	CDP
Hindalco Industries Ltd	0.01 %	0.01 %	158	0.10 %	2,350	-0.08 %	213 / 292	PRE
Hindustan Zinc Ltd	0.00 %	0.00 %	5	0.00 %	3,031	-0.00 %	230 / 292	CDP
Hitachi Chemical Co	0.01 %	0.01 %	9	0.01 %	362	0.00 %	38 / 292	CDP
Hitachi Metals	0.01 %	0.01 %	44	0.03 %	829	-0.01 %	123 / 292	ENV*
Huabao International Holdings Ltd.	0.00 %	0.00 %	0	0.00 %	214	0.00 %	20 / 292	TC
Huhtamaki Oyj	0.01 %	0.01 %	22	0.01 %	494	-0.00 %	61 / 292	CDP
Hyosung Corp	0.01 %	0.01 %	39	0.03 %	406	0.00 %	46 / 292	PRE
Hyundai Steel Co	0.01 %	0.01 %	291	0.19 %	2,547	-0.16 %	221 / 292	ENV*



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Iluka Resources Ltd	0.01 %	0.01 %	10	0.01 %	1,291	-0.00 %	181 / 292	AR*
Imerys	0.01 %	0.01 %	56	0.04 %	1,804	-0.03 %	198 / 292	CDP
Impala Platinum	0.00 %	0.00 %	60	0.04 %	2,070	-0.03 %	204 / 292	CDP
Incitec Pivot	0.01 %	0.01 %	55	0.04 %	1,646	-0.03 %	191 / 292	CDP
Indocement Tunggal Prakarsa Tbk PT	0.00 %	0.00 %	84	0.05 %	13,534	-0.05 %	290 / 292	ENV*
Indorama Ventures PCL	0.00 %	0.00 %	35	0.02 %	1,169	-0.01 %	166 / 292	CDP
Industrias CH	0.00 %	0.00 %	7	0.00 %	1,038	-0.00 %	153 / 292	TC
Industrias Penoles	0.01 %	0.01 %	16	0.01 %	817	-0.00 %	118 / 292	ENV*
Intl Flavors & Fragrances	0.03 %	0.03 %	8	0.01 %	178	0.01 %	11 / 292	CDP
Intl Paper Co	0.05 %	0.05 %	747	0.49 %	2,496	-0.40 %	218 / 292	CDP
Israel Chemical Corp	0.00 %	0.01 %	28	0.02 %	986	-0.01 %	144 / 292	CDP
Israel Corp	0.00 %	0.00 %	48	0.03 %	1,393	-0.02 %	183 / 292	TC
James Hardie Industries plc	0.01 %	0.01 %	10	0.01 %	457	-0.00 %	53 / 292	TC
Jastrzebska Spolka Weglowa SA	0.00 %	0.00 %	26	0.02 %	2,582	-0.01 %	222 / 292	TC
JFE Holdings Inc	0.02 %	0.02 %	1,075	0.70 %	3,663	-0.62 %	236 / 292	ENV
Jiangxi Copper Co Ltd	0.00 %	0.00 %	38	0.02 %	436	0.00 %	50 / 292	TC
Jindal Steel & Power Ltd	0.00 %	0.00 %	189	0.12 %	13,303	-0.12 %	289 / 292	ENV
Johnson, Matthey	0.02 %	0.02 %	48	0.03 %	247	0.02 %	26 / 292	CDP
JSR Corp	0.01 %	0.01 %	24	0.02 %	766	-0.01 %	112 / 292	CDP
JSW Steel Ltd	0.01 %	0.01 %	302	0.20 %	7,249	-0.18 %	273 / 292	ENV*
K+S AG	0.01 %	0.01 %	36	0.02 %	651	-0.01 %	95 / 292	AR*
Kaneka Corp	0.00 %	0.01 %	28	0.02 %	631	-0.01 %	91 / 292	ENV*
Kansai Nerolac Paints Ltd.	0.00 %	0.00 %	0	0.00 %	231	0.00 %	21 / 292	ENV
Kansai Paint Co	0.01 %	0.01 %	5	0.00 %	195	0.00 %	16 / 292	TC
KGHM Polska Miedz SA Br	0.01 %	0.01 %	54	0.04 %	1,114	-0.02 %	161 / 292	PRE
Klabin SA	0.01 %	0.01 %	11	0.01 %	642	-0.00 %	94 / 292	CDP
Kobe Steel	0.01 %	0.01 %	386	0.25 %	2,533	-0.21 %	219 / 292	PRE
Koninklijke DSM NV	0.03 %	0.03 %	72	0.05 %	602	-0.01 %	83 / 292	CDP
Korea Zinc Co	0.01 %	0.01 %	22	0.01 %	596	-0.00 %	82 / 292	TC
Kumba Iron Ore	0.00 %	0.00 %	4	0.00 %	662	-0.00 %	98 / 292	CDP
Kumho Petro Chemical Co Ltd	0.00 %	0.00 %	71	0.05 %	2,443	-0.04 %	217 / 292	CDP
Kuraray Co	0.02 %	0.02 %	52	0.03 %	819	-0.02 %	119 / 292	CDP
LafargeHolcim Ltd	0.06 %	0.06 %	2,530	1.64 %	8,311	-1.56 %	277 / 292	CDP
Lanxess AG	0.02 %	0.02 %	124	0.08 %	1,032	-0.05 %	149 / 292	CDP*
Lee & Man Paper Manufacturing Ltd.	0.00 %	0.00 %	11	0.01 %	1,031	-0.00 %	147 / 292	TC
LG Chem Ltd	0.04 %	0.04 %	134	0.09 %	792	-0.04 %	115 / 292	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Linde AG	0.09 %	0.09 %	483	0.31 %	1,818	-0.24 %	200 / 292	CDP*
Lintec Corp	0.00 %	0.00 %	5	0.00 %	384	0.00 %	42 / 292	TC
Lotte Chemical Corporation	0.01 %	0.01 %	55	0.04 %	769	-0.02 %	113 / 292	CDP
LOTTE Fine Chemicals Co	0.00 %	0.00 %	10	0.01 %	1,075	-0.00 %	158 / 292	ENV*
LyondellBasell Industries N.V.	0.07 %	0.07 %	409	0.27 %	1,191	-0.17 %	170 / 292	CDP
Maanshan Iron and Steel Co Ltd	0.00 %	0.00 %	124	0.08 %	6,780	-0.08 %	270 / 292	ENV*
Magnitogorsk Iron & Steel Works	0.00 %	0.00 %	61	0.04 %	7,879	-0.04 %	276 / 292	AR*
Martin Marietta Materials	0.03 %	0.03 %	90	0.06 %	1,687	-0.04 %	194 / 292	TC
Maruichi Steel Tube	0.00 %	0.00 %	11	0.01 %	1,208	-0.00 %	173 / 292	TC
Mexichem SAB de CV	0.01 %	0.01 %	19	0.01 %	561	-0.00 %	72 / 292	ENV*
Mitsubishi Chemical Holdings Corp	0.03 %	0.03 %	312	0.20 %	935	-0.11 %	136 / 292	CDP
Mitsubishi Gas Chemical Co	0.01 %	0.01 %	36	0.02 %	782	-0.01 %	114 / 292	PRE
Mitsubishi Materials Corp	0.01 %	0.01 %	232	0.15 %	1,698	-0.11 %	195 / 292	CDP
Mitsui Chemicals Inc	0.01 %	0.01 %	100	0.07 %	820	-0.03 %	120 / 292	CDP
Mitsui Mining & Smelting Co	0.01 %	0.01 %	28	0.02 %	583	-0.00 %	79 / 292	CDP
MMC Norilsk Nickel	0.02 %	0.02 %	64	0.04 %	1,872	-0.03 %	201 / 292	ENV*
Mondi Ltd	0.03 %	0.03 %	347	0.23 %	3,371	-0.20 %	233 / 292	CDP
Monsanto Co.	0.12 %	0.12 %	187	0.12 %	1,032	-0.07 %	148 / 292	CDP
Mosaic Co	0.02 %	0.02 %	104	0.07 %	1,027	-0.04 %	145 / 292	CDP
Nampak Ltd	0.00 %	0.00 %	11	0.01 %	837	-0.00 %	126 / 292	CDP
Nan Ya Plastics Corp	0.03 %	0.03 %	24	0.02 %	277	0.01 %	30 / 292	TC
Newcrest Mining Ltd	0.03 %	0.03 %	42	0.03 %	963	-0.01 %	139 / 292	CDP
Newmont Mining Corp	0.05 %	0.05 %	85	0.06 %	885	-0.03 %	132 / 292	CDP
Nine Dragons Paper (Holdings) Ltd.	0.01 %	0.01 %	26	0.02 %	1,118	-0.01 %	163 / 292	TC
Nippon Kayaku Co	0.01 %	0.01 %	4	0.00 %	244	0.00 %	24 / 292	CDP
Nippon Paint Holdings Co Ltd	0.01 %	0.01 %	4	0.00 %	147	0.01 %	8 / 292	PRE
Nippon Paper Industries Co Ltd	0.00 %	0.00 %	125	0.08 %	1,419	-0.06 %	184 / 292	ENV*
Nippon Shokubai Co Ltd	0.01 %	0.01 %	21	0.01 %	847	-0.01 %	128 / 292	ENV*
Nippon Steel & Sumitomo Metal Corp	0.04 %	0.04 %	1,542	1.00 %	3,753	-0.89 %	239 / 292	ENV*
Nissan Chemical Industries	0.01 %	0.01 %	9	0.01 %	563	-0.00 %	73 / 292	AR
Nisshin Steel Co Ltd	0.00 %	0.00 %	72	0.05 %	4,867	-0.04 %	259 / 292	TC
NITTO DENKO CORP	0.03 %	0.03 %	25	0.02 %	346	0.00 %	36 / 292	CDP
NMDC Ltd	0.00 %	0.00 %	1	0.00 %	263	0.00 %	28 / 292	PRE
NOF CORP	0.01 %	0.00 %	8	0.01 %	524	-0.00 %	67 / 292	TC
Norsk Hydro AS	0.02 %	0.02 %	152	0.10 %	1,730	-0.07 %	196 / 292	CDP
Northam Platinum Ltd	0.00 %	0.00 %	10	0.01 %	2,804	-0.01 %	227 / 292	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Novolipetsk Steel (GDR)	0.00 %	0.00 %	54	0.04 %	3,664	-0.03 %	237 / 292	TC
Novozymes AS B	0.03 %	0.03 %	12	0.01 %	571	-0.00 %	75 / 292	AR
Nucor Corp	0.04 %	0.04 %	239	0.16 %	1,038	-0.09 %	151 / 292	TC
Nufarm Limited	0.00 %	0.00 %	3	0.00 %	158	0.00 %	9 / 292	ENV*
Nutrien Ltd.	0.04 %	0.04 %	171	0.11 %	2,684	-0.09 %	225 / 292	CDP
OCI Company Ltd	0.00 %	0.00 %	39	0.03 %	1,494	-0.02 %	186 / 292	TC
OCI NV	0.01 %	0.01 %	35	0.02 %	2,665	-0.02 %	224 / 292	PRE
Oji Holdings Corp	0.01 %	0.01 %	145	0.09 %	1,159	-0.06 %	165 / 292	ENV*
Omnia Hldgs Ltd	0.00 %	0.00 %	6	0.00 %	457	-0.00 %	52 / 292	CDP
Orica Ltd	0.01 %	0.01 %	43	0.03 %	851	-0.01 %	129 / 292	ENV*
Oriental Union Chem Corp	0.00 %	0.00 %	5	0.00 %	654	-0.00 %	97 / 292	TC
Orora Limited	0.01 %	0.01 %	26	0.02 %	701	-0.01 %	101 / 292	AR*
OZ Minerals Limited	0.00 %	0.00 %	6	0.00 %	734	-0.00 %	108 / 292	AR*
Packaging Corp of America	0.02 %	0.02 %	78	0.05 %	968	-0.03 %	140 / 292	TC
Petkim AS	0.00 %	0.00 %	7	0.00 %	750	-0.00 %	109 / 292	TC
Petronas Chemicals Group Bhd	0.01 %	0.01 %	40	0.03 %	2,414	-0.02 %	216 / 292	AR*
PhosAgro PJSC	0.00 %	0.00 %	24	0.02 %	2,305	-0.01 %	212 / 292	AR*
Pidilite Industries Ltd	0.00 %	0.00 %	1	0.00 %	212	0.00 %	18 / 292	PRE
Polymetal International PLC	0.01 %	0.01 %	9	0.01 %	653	-0.00 %	96 / 292	CDP
POSCO	0.04 %	0.04 %	1,100	0.71 %	2,162	-0.57 %	207 / 292	CDP
PPG Industries Inc	0.06 %	0.06 %	57	0.04 %	271	0.02 %	29 / 292	CDP
Praxair Inc	0.09 %	0.09 %	390	0.25 %	2,589	-0.21 %	223 / 292	OTH
PTT Global Chemical PCL	0.01 %	0.01 %	61	0.04 %	984	-0.02 %	143 / 292	CDP
Randgold Resources Ltd	0.02 %	0.02 %	15	0.01 %	1,248	-0.01 %	177 / 292	CDP
Rengo Co	0.00 %	0.00 %	31	0.02 %	729	-0.01 %	107 / 292	CDP
Rio Tinto Ltd	0.18 %	0.18 %	553	0.36 %	1,281	-0.24 %	179 / 292	CDP
RPC Group	0.01 %	0.01 %	11	0.01 %	358	0.00 %	37 / 292	AR*
Sappi Ltd	0.01 %	0.01 %	265	0.17 %	3,964	-0.15 %	244 / 292	CDP
Sealed Air Corp	0.02 %	0.02 %	21	0.01 %	214	0.01 %	19 / 292	CDP
Semen Indonesia Persero Tbk PT	0.00 %	0.01 %	97	0.06 %	7,167	-0.06 %	272 / 292	PRE
Severstal PJSC	0.01 %	0.01 %	67	0.04 %	3,803	-0.04 %	242 / 292	TC
Shandong Chenming Paper Holdings Ltd	0.00 %	0.00 %	16	0.01 %	1,107	-0.01 %	160 / 292	TC
Sherwin-Williams Co	0.07 %	0.07 %	15	0.01 %	102	0.03 %	5 / 292	CDP
Shin-Etsu Chemical Co	0.08 %	0.08 %	139	0.09 %	1,118	-0.05 %	162 / 292	CDP
Shougang Fushan Resources Group Ltd	0.00 %	0.00 %	8	0.01 %	3,777	-0.00 %	241 / 292	TC
Showa Denko KK	0.01 %	0.01 %	62	0.04 %	821	-0.02 %	121 / 292	PRE



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Shree Cement Ltd	0.01 %	0.01 %	42	0.03 %	14,671	-0.03 %	291 / 292	CDP
Siam Cement Public Co.	0.03 %	0.03 %	329	0.21 %	2,788	-0.18 %	226 / 292	ENV*
Siam City Cement PCL	0.00 %	0.00 %	78	0.05 %	18,667	-0.05 %	292 / 292	ENV*
Sibanye Gold Limited	0.00 %	0.00 %	91	0.06 %	3,976	-0.05 %	246 / 292	CDP
Sika AG	0.04 %	0.04 %	37	0.02 %	537	-0.00 %	70 / 292	CDP
Sims Metal Management Ltd	0.00 %	0.00 %	3	0.00 %	93	0.01 %	4 / 292	ENV
Sinopec Shanghai Petrochemical Co Ltd	0.00 %	0.00 %	90	0.06 %	2,249	-0.05 %	209 / 292	AR*
SKC	0.00 %	0.00 %	2	0.00 %	187	0.00 %	13 / 292	TC
Smurfit Kappa Group PLC	0.02 %	0.02 %	162	0.11 %	1,308	-0.07 %	182 / 292	CDP
Solvay	0.02 %	0.02 %	186	0.12 %	1,592	-0.09 %	189 / 292	CDP
SOQUIMICH - Sociedad Quimica y Minera	0.01 %	0.01 %	6	0.00 %	580	-0.00 %	78 / 292	ENV
South32 Limited	0.03 %	0.03 %	575	0.37 %	7,505	-0.35 %	274 / 292	CDP
Southern Copper Corp	0.01 %	0.01 %	6	0.00 %	705	-0.00 %	102 / 292	PRE
Steel Authority of India Ltd	0.00 %	0.00 %	209	0.14 %	10,148	-0.13 %	283 / 292	ENV*
Stora Enso OYJ	0.02 %	0.02 %	232	0.15 %	2,107	-0.12 %	205 / 292	CDP
Sumitomo Chemical Co	0.02 %	0.02 %	138	0.09 %	697	-0.03 %	100 / 292	CDP
Sumitomo Metal Mining Co	0.02 %	0.02 %	56	0.04 %	797	-0.02 %	117 / 292	CDP
Sumitomo Osaka Cement Co	0.00 %	0.00 %	182	0.12 %	9,439	-0.11 %	281 / 292	TC
Suzano Papel e Celulose S.A.	0.00 %	0.01 %	7	0.00 %	480	-0.00 %	58 / 292	PRE
Symrise AG	0.02 %	0.02 %	8	0.01 %	188	0.01 %	14 / 292	CDP
Synthos SA	0.00 %	0.00 %	6	0.00 %	1,207	-0.00 %	172 / 292	CDP
Taiheiyo Cement Corp	0.01 %	0.02 %	566	0.37 %	7,041	-0.34 %	271 / 292	ENV*
Taiwan Cement Corp	0.01 %	0.01 %	352	0.23 %	9,900	-0.22 %	282 / 292	TC
Taiwan Fertilizer Co	0.00 %	0.00 %	7	0.00 %	1,611	-0.00 %	190 / 292	TC
Taiyo Nippon Sanso Corp	0.00 %	0.00 %	24	0.02 %	1,071	-0.01 %	157 / 292	ENV*
Tata Steel Ltd	0.01 %	0.01 %	257	0.17 %	4,884	-0.15 %	261 / 292	CDP*
Teck Resources Limited	0.02 %	0.02 %	53	0.03 %	628	-0.01 %	90 / 292	CDP
Teijin	0.01 %	0.01 %	36	0.02 %	477	-0.00 %	56 / 292	CDP
ThyssenKrupp AG	0.03 %	0.03 %	530	0.34 %	1,207	-0.22 %	171 / 292	CDP
Titan Cement Co	0.00 %	0.00 %	119	0.08 %	10,295	-0.07 %	284 / 292	AR
Toray Industries Inc	0.03 %	0.03 %	122	0.08 %	605	-0.02 %	85 / 292	CDP*
Tosoh Corp	0.01 %	0.01 %	63	0.04 %	935	-0.02 %	137 / 292	TC
Toyo Seikan Group Holdings Ltd	0.01 %	0.01 %	45	0.03 %	756	-0.01 %	110 / 292	CDP*
Toyobo Co	0.00 %	0.00 %	80	0.05 %	2,027	-0.04 %	203 / 292	CDP
Turquoise Hill Resources Ltd	0.01 %	0.01 %	4	0.00 %	573	-0.00 %	77 / 292	TC
Ube Industries	0.01 %	0.01 %	300	0.19 %	4,592	-0.18 %	256 / 292	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Ultratech Cement Ltd	0.01 %	0.01 %	177	0.12 %	11,698	-0.11 %	287 / 292	CDP
Umicore	0.02 %	0.02 %	29	0.02 %	210	0.02 %	17 / 292	AR*
United Company RUSAL Plc	0.00 %	0.00 %	73	0.05 %	5,416	-0.04 %	264 / 292	CDP
UPL Ltd	0.01 %	0.01 %	4	0.00 %	258	0.00 %	27 / 292	PRE
UPM-Kymmene Oyj	0.03 %	0.03 %	356	0.23 %	2,293	-0.19 %	211 / 292	CDP
Uralkaliy PJSC	0.00 %	0.00 %	3	0.00 %	1,029	-0.00 %	146 / 292	ENV
Usiminas SA	0.00 %	0.00 %	69	0.04 %	6,361	-0.04 %	268 / 292	PRE
Vale Indonesia Tbk	0.00 %	0.00 %	1	0.00 %	627	-0.00 %	89 / 292	TC
Vale S.A.	0.07 %	0.07 %	193	0.13 %	838	-0.06 %	127 / 292	CDP
Vedanta Ltd	0.02 %	0.02 %	355	0.23 %	6,213	-0.21 %	267 / 292	CDP
VOESTALPINE AG	0.01 %	0.01 %	225	0.15 %	2,374	-0.12 %	214 / 292	ENV*
Vulcan Materials Co	0.04 %	0.04 %	27	0.02 %	510	-0.00 %	64 / 292	TC
Wacker Chemie AG	0.01 %	0.00 %	22	0.01 %	835	-0.01 %	125 / 292	CDP
Westlake Chemical Corp	0.01 %	0.01 %	10	0.01 %	521	-0.00 %	66 / 292	TC
WestRock Co	0.03 %	0.03 %	177	0.11 %	908	-0.06 %	134 / 292	CDP
Wheaton Precious Metals Corp.	0.02 %	0.02 %	0	0.00 %	16	0.00 %	2 / 292	PRE
Yamato Kogyo Co	0.00 %	0.00 %	9	0.01 %	1,185	-0.00 %	169 / 292	TC
Yara International ASA	0.02 %	0.02 %	231	0.15 %	2,224	-0.12 %	208 / 292	CDP
Zeon Corp	0.00 %	0.00 %	12	0.01 %	613	-0.00 %	86 / 292	ENV*
Zhaojin Mining Industry Co. Ltd. - H Shares	0.00 %	0.00 %	2	0.00 %	474	-0.00 %	55 / 292	TC
Zijin Mining Group Co Ltd	0.00 %	0.00 %	16	0.01 %	564	-0.00 %	74 / 292	TC
Real Estate	3.06 %	3.05 %	617	0.40 %	142	0.85 %		
Aeon Mall Co Ltd	0.00 %	0.00 %	9	0.01 %	738	-0.00 %	178 / 180	ENV*
Agile Group Holdings Ltd	0.00 %	0.00 %	4	0.00 %	120	0.01 %	132 / 180	TC
Airport City Ltd	0.00 %	0.00 %	0	0.00 %	100	0.00 %	76 / 180	TC
ALDAR Properties	0.00 %	0.00 %	1	0.00 %	109	0.00 %	110 / 180	TC
Alexandria Real Estate Eqty	0.02 %	0.03 %	1	0.00 %	100	0.00 %	56 / 180	TC
Aloni Hetz Properties	0.00 %	0.00 %	0	0.00 %	89	0.00 %	30 / 180	TC
American Tower Corp A	0.13 %	0.13 %	9	0.01 %	107	0.02 %	98 / 180	PRE
AMOT Investment Ltd	0.00 %	0.00 %	0	0.00 %	100	0.00 %	80 / 180	TC
Ascendas REIT	0.01 %	0.01 %	1	0.00 %	148	0.00 %	150 / 180	ENV*
Attacq Ltd	0.00 %	0.00 %	2	0.00 %	1,969	-0.00 %	179 / 180	CDP
AvalonBay Communities Inc	0.06 %	0.06 %	2	0.00 %	60	0.01 %	15 / 180	CDP
Ayala Land Inc	0.01 %	0.01 %	2	0.00 %	135	0.00 %	143 / 180	CDP
Azrieli Group	0.00 %	0.00 %	0	0.00 %	100	0.00 %	45 / 180	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Barwa Real Estate	0.00 %	0.00 %	0	0.00 %	100	0.00 %	78 / 180	TC
Boston Properties Inc	0.04 %	0.04 %	5	0.00 %	129	0.01 %	141 / 180	ENV*
BR Malls Participacoes S.A.	0.01 %	0.01 %	1	0.00 %	250	0.00 %	166 / 180	PRE
British Land Co	0.02 %	0.02 %	1	0.00 %	87	0.00 %	29 / 180	CDP
Bumi Serpong Damai PT	0.00 %	0.00 %	0	0.00 %	100	0.00 %	47 / 180	TC
Capital & Counties Properties PLC	0.01 %	0.01 %	0	0.00 %	53	0.00 %	13 / 180	CDP
CapitaLand Commercial Trust	0.01 %	0.01 %	0	0.00 %	147	0.00 %	148 / 180	PRE
CapitaLand Ltd	0.02 %	0.02 %	6	0.00 %	190	0.01 %	157 / 180	ENV*
CapitaLand Mall Trust REIT	0.01 %	0.01 %	1	0.00 %	167	0.00 %	153 / 180	AR*
CBRE Group Inc.	0.03 %	0.03 %	3	0.00 %	19	0.04 %	2 / 180	CDP
Central Pattana PCL	0.01 %	0.01 %	2	0.00 %	350	0.00 %	173 / 180	AR*
Champion REIT	0.00 %	0.00 %	0	0.00 %	132	0.00 %	142 / 180	AR*
China Evergrande Group	0.02 %	0.02 %	10	0.01 %	100	0.02 %	62 / 180	TC
China Jinmao Holdings Group Ltd.	0.01 %	0.01 %	2	0.00 %	104	0.01 %	92 / 180	TC
China Oceanwide Holdings Ltd	0.00 %	0.00 %	0	0.00 %	100	0.00 %	41 / 180	TC
China Overseas Land & Investment Ltd.	0.03 %	0.03 %	9	0.01 %	81	0.02 %	24 / 180	ENV
China Resources Land Ltd.	0.02 %	0.02 %	8	0.01 %	101	0.02 %	87 / 180	TC
China South City Holdings Ltd.	0.00 %	0.00 %	0	0.00 %	124	0.00 %	138 / 180	TC
China Vanke Co Ltd	0.01 %	0.01 %	3	0.00 %	67	0.01 %	18 / 180	CDP
City Developments Ltd	0.01 %	0.01 %	4	0.00 %	211	0.00 %	160 / 180	ENV*
CK Asset Holdings Ltd	0.05 %	0.05 %	10	0.01 %	104	0.02 %	91 / 180	TC
Country Garden Holdings Co. Ltd.	0.02 %	0.02 %	8	0.01 %	101	0.02 %	86 / 180	TC
Crown Castle Intl Corp	0.09 %	0.09 %	2	0.00 %	32	0.01 %	5 / 180	TC
Daikyo Inc	0.00 %	0.00 %	1	0.00 %	117	0.00 %	125 / 180	TC
Daito Trust Construction Co	0.03 %	0.03 %	7	0.00 %	52	0.03 %	12 / 180	CDP
Daiwa House Industry Co	0.05 %	0.05 %	26	0.02 %	82	0.07 %	25 / 180	CDP
DAMAC Properties Dubai Co PJSC	0.00 %	0.00 %	1	0.00 %	100	0.00 %	49 / 180	TC
Derwent London Plc	0.01 %		0	0.00 %	47	0.00 %	N / A	CDP
Deutsche Wohnen AG BR	0.03 %	0.03 %	2	0.00 %	106	0.00 %	96 / 180	TC
Dexus	0.02 %	0.02 %	3	0.00 %	335	0.00 %	172 / 180	CDP
Digital Realty Trust	0.06 %	0.06 %	1	0.00 %	29	0.01 %	4 / 180	TC
DLF Ltd	0.00 %	0.00 %	0	0.00 %	97	0.00 %	36 / 180	PRE
Duke Realty Corp	0.02 %	0.02 %	1	0.00 %	100	0.00 %	50 / 180	TC
Emaar Malls Group	0.00 %	0.00 %	0	0.00 %	100	0.00 %	77 / 180	TC
Emaar Properties	0.02 %	0.02 %	3	0.00 %	100	0.01 %	65 / 180	TC
Emlak Konut Gayrimenkul Yatirim Ortakligi	0.00 %	0.00 %	1	0.00 %	100	0.00 %	61 / 180	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Equinix Inc	0.08 %	0.08 %	28	0.02 %	541	-0.00 %	176 / 180	CDP
Equity Residential	0.05 %	0.05 %	3	0.00 %	100	0.01 %	64 / 180	TC
Essex Property Trust	0.04 %	0.04 %	2	0.00 %	100	0.00 %	70 / 180	TC
Extra Space Storage Inc	0.02 %	0.02 %	1	0.00 %	100	0.00 %	73 / 180	TC
Fastighets AB Bald	0.01 %	0.01 %	1	0.00 %	100	0.00 %	74 / 180	TC
Federal Realty Inv't Trust	0.02 %	0.02 %	1	0.00 %	100	0.00 %	51 / 180	TC
Fibra Uno Administracion S.A. de C.V.	0.01 %	0.01 %	1	0.00 %	100	0.00 %	69 / 180	TC
Fonciere des Regions	0.01 %	0.01 %	1	0.00 %	117	0.00 %	123 / 180	TC
Fortress REIT Ltd.-B	0.01 %	0.01 %	0	0.00 %	108	0.00 %	106 / 180	TC
Frasers Property Limited	0.00 %	0.00 %	0	0.00 %	111	0.00 %	115 / 180	ENV*
Fullshare Holdings Ltd	0.01 %	0.01 %	0	0.00 %	117	0.00 %	128 / 180	TC
Gazit Globe 1982 Ltd	0.00 %	0.00 %	1	0.00 %	100	0.00 %	52 / 180	TC
Gecina	0.02 %	0.02 %	0	0.00 %	54	0.00 %	14 / 180	CDP
GGP Inc	0.03 %	0.03 %	6	0.00 %	267	0.00 %	167 / 180	CDP
Global Logistic Properties Ltd	0.02 %	0.02 %	1	0.00 %	99	0.00 %	38 / 180	TC
Goodman Group	0.03 %	0.03 %	1	0.00 %	92	0.00 %	33 / 180	TC
GPT Group	0.02 %	0.02 %	3	0.00 %	246	0.00 %	165 / 180	CDP
Great Eagle Holdings Ltd.	0.00 %	0.00 %	1	0.00 %	145	0.00 %	147 / 180	CDP
Greentown China Holdings Ltd.	0.00 %	0.00 %	2	0.00 %	99	0.00 %	39 / 180	TC
Growthpoint Properties	0.01 %	0.01 %	0	0.00 %	40	0.00 %	6 / 180	CDP*
Guangzhou R&F Properties Co Ltd - H	0.01 %	0.01 %	4	0.00 %	102	0.01 %	89 / 180	TC
Hammerson	0.01 %	0.01 %	1	0.00 %	138	0.00 %	144 / 180	CDP
Hang Lung Group Ltd.	0.01 %	0.01 %	9	0.01 %	546	-0.00 %	177 / 180	ENV*
Hang Lung Properties Ltd.	0.01 %	0.01 %	3	0.00 %	319	0.00 %	171 / 180	PRE
HCP Inc	0.03 %	0.03 %	7	0.00 %	219	0.00 %	161 / 180	CDP
Henderson Land Development Co. Ltd.	0.02 %	0.02 %	1	0.00 %	100	0.00 %	84 / 180	TC
Hong Kong Land Hldgs Ltd	0.02 %	0.02 %	1	0.00 %	100	0.00 %	67 / 180	TC
Hopson Development Holdings Ltd.	0.00 %	0.00 %	1	0.00 %	101	0.00 %	88 / 180	TC
Hospitality Properties Trust	0.01 %	0.01 %	3	0.00 %	100	0.01 %	58 / 180	TC
Host Hotels & Resorts Inc	0.03 %	0.03 %	9	0.01 %	116	0.02 %	122 / 180	CDP
Hulic Co Ltd (New)	0.01 %	0.01 %	1	0.00 %	92	0.00 %	35 / 180	TC
Hyprop Investments Ltd	0.00 %	0.00 %	1	0.00 %	292	0.00 %	168 / 180	CDP
Hysan Development Co. Ltd.	0.01 %	0.01 %	0	0.00 %	111	0.00 %	117 / 180	AR*
Icade	0.01 %	0.01 %	1	0.00 %	52	0.00 %	10 / 180	CDP
Intu Properties PLC	0.01 %	0.01 %	0	0.00 %	70	0.00 %	20 / 180	CDP
IOI Properties Group Bhd	0.00 %	0.00 %	0	0.00 %	108	0.00 %	108 / 180	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Iron Mountain Inc	0.02 %	0.02 %	6	0.00 %	126	0.01 %	140 / 180	CDP
JBG Smith Properties	0.01 %	0.01 %	1	0.00 %	117	0.00 %	126 / 180	TC
Kerry Properties Ltd.	0.01 %	0.01 %	1	0.00 %	104	0.00 %	93 / 180	ENV*
Kimco Realty Corp	0.02 %	0.02 %	1	0.00 %	67	0.00 %	19 / 180	CDP
Kiwi Property Group Limited	0.00 %	0.00 %	0	0.00 %	44	0.00 %	7 / 180	PRE
KLCC Property Holdings Bhd	0.00 %	0.00 %	0	0.00 %	100	0.00 %	40 / 180	TC
Klepierre	0.02 %	0.02 %	1	0.00 %	119	0.00 %	129 / 180	CDP
KWG Property Holding Ltd.	0.00 %	0.00 %	1	0.00 %	108	0.00 %	101 / 180	TC
Land and Houses PCL	0.00 %	0.00 %	1	0.00 %	120	0.00 %	134 / 180	TC
Land Securities Group PLC	0.02 %	0.02 %	1	0.00 %	83	0.00 %	26 / 180	CDP
LEG Immobilien AG	0.01 %	0.01 %	1	0.00 %	100	0.00 %	75 / 180	TC
Lend Lease Group	0.02 %	0.02 %	13	0.01 %	92	0.03 %	32 / 180	ENV
Leopalace 21 Corp	0.00 %	0.00 %	6	0.00 %	121	0.01 %	136 / 180	TC
Liberty Property Trust	0.01 %	0.01 %	3	0.00 %	308	0.00 %	170 / 180	PRE
Link REIT	0.04 %	0.04 %	2	0.00 %	180	0.00 %	154 / 180	PRE
Longfor Properties Co. Ltd.	0.01 %	0.01 %	3	0.00 %	100	0.01 %	63 / 180	TC
LSR Group OJSC	0.00 %	0.00 %	1	0.00 %	140	0.00 %	145 / 180	TC
Macerich Co	0.02 %	0.02 %	1	0.00 %	100	0.00 %	83 / 180	CDP
Megaworld Corp	0.00 %	0.00 %	0	0.00 %	99	0.00 %	37 / 180	TC
MELISRON Ltd.	0.00 %	0.00 %	0	0.00 %	100	0.00 %	81 / 180	TC
Merlin Properties Socimi SA	0.01 %	0.01 %	0	0.00 %	100	0.00 %	79 / 180	TC
Mid-America Apt Communities	0.03 %	0.03 %	2	0.00 %	100	0.00 %	68 / 180	TC
Mirvac Group	0.02 %	0.02 %	3	0.00 %	113	0.00 %	119 / 180	ENV*
Mitsubishi Estate Co	0.05 %	0.05 %	11	0.01 %	121	0.02 %	135 / 180	ENV*
Mitsui Fudosan Co	0.05 %	0.05 %	12	0.01 %	80	0.04 %	23 / 180	ENV*
Multiplan Empreendimentos Imobiliarios S.A.	0.00 %	0.00 %	0	0.00 %	100	0.00 %	48 / 180	TC
NEPI Rockcastle	0.01 %	0.01 %	0	0.00 %	100	0.00 %	46 / 180	TC
New World Development Co. Ltd.	0.02 %	0.02 %	11	0.01 %	188	0.01 %	156 / 180	PRE
Nomura Real Estate Holdings	0.01 %	0.01 %	4	0.00 %	117	0.01 %	124 / 180	TC
NTT Urban Development	0.00 %	0.00 %	1	0.00 %	109	0.00 %	109 / 180	CDP
Park Hotels & Resorts Inc	0.01 %	0.01 %	4	0.00 %	155	0.00 %	151 / 180	TC
Parque Arauco SA	0.00 %	0.00 %	0	0.00 %	111	0.00 %	116 / 180	ENV*
Poly Property Group Co. Ltd.	0.00 %	0.00 %	4	0.00 %	119	0.01 %	130 / 180	TC
ProLogis Inc	0.08 %	0.08 %	1	0.00 %	15	0.01 %	1 / 180	CDP
PSP Swiss Property AG	0.01 %	0.01 %	0	0.00 %	46	0.00 %	8 / 180	CDP
Public Storage	0.07 %	0.07 %	7	0.00 %	238	0.00 %	164 / 180	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Realty Income Corp	0.04 %	0.04 %	2	0.00 %	100	0.00 %	71 / 180	TC
RED STAR MACALLINE GROUP	0.00 %	0.00 %	0	0.00 %	75	0.00 %	21 / 180	TC
Redefine Properties Ltd	0.01 %	0.01 %	1	0.00 %	160	0.00 %	152 / 180	CDP
Regency Centers Corp	0.02 %	0.02 %	1	0.00 %	85	0.00 %	27 / 180	PRE
Relo Holdings Inc	0.01 %	0.01 %	3	0.00 %	224	0.00 %	163 / 180	TC
Renhe Commercial Holdings Co. Ltd.	0.00 %	0.00 %	0	0.00 %	61	0.00 %	17 / 180	TC
Resilient REIT Limited	0.01 %	0.01 %	0	0.00 %	108	0.00 %	107 / 180	TC
RioCan REIT	0.01 %	0.01 %	1	0.00 %	100	0.00 %	72 / 180	TC
Scentre Group	0.04 %	0.04 %	6	0.00 %	221	0.00 %	162 / 180	CDP
SEGRO Plc	0.02 %	0.02 %	0	0.00 %	79	0.00 %	22 / 180	CDP
Shanghai Jinqiao Export Processing Zone	0.00 %	0.00 %	0	0.00 %	100	0.00 %	82 / 180	TC
Shanghai Lujiazui Finance & Trade Zone	0.00 %	0.00 %	0	0.00 %	87	0.00 %	28 / 180	TC
Shenzhen Investment Ltd.	0.00 %	0.00 %	2	0.00 %	126	0.00 %	139 / 180	TC
Shimao Property Holdings Ltd.	0.01 %	0.01 %	5	0.00 %	107	0.01 %	99 / 180	TC
Shopping Centres Australasia Property	0.00 %	0.00 %	0	0.00 %	108	0.00 %	105 / 180	TC
Shui On Land Ltd.	0.00 %	0.00 %	2	0.00 %	114	0.00 %	121 / 180	AR*
Simon Property Group	0.12 %	0.11 %	6	0.00 %	91	0.02 %	31 / 180	CDP
Sino Land Co. Ltd.	0.01 %	0.01 %	2	0.00 %	206	0.00 %	159 / 180	TC
Sino-Ocean Group Holdings Ltd.	0.00 %	0.00 %	3	0.00 %	100	0.01 %	57 / 180	TC
SL Green Realty Corp	0.02 %	0.02 %	4	0.00 %	147	0.01 %	149 / 180	PRE
SM Prime Holdings Inc	0.01 %	0.01 %	3	0.00 %	395	0.00 %	175 / 180	CDP
SOHO China Ltd.	0.00 %	0.00 %	0	0.00 %	111	0.00 %	114 / 180	TC
Stockland	0.02 %	0.02 %	3	0.00 %	113	0.00 %	120 / 180	CDP
Sumitomo Realty & Dev Co	0.03 %	0.03 %	10	0.01 %	123	0.02 %	137 / 180	TC
Sun Hung Kai Properties Ltd.	0.05 %	0.05 %	8	0.00 %	101	0.02 %	85 / 180	TC
Sunac China Holdings Ltd	0.02 %	0.02 %	3	0.00 %	100	0.01 %	59 / 180	TC
Suntec Real Estate Investment Trust	0.01 %	0.01 %	0	0.00 %	100	0.00 %	60 / 180	TC
Swire Pacific Ltd.	0.01 %	0.01 %	106	0.07 %	2,066	-0.05 %	180 / 180	CDP
Swire Properties Ltd	0.01 %	0.01 %	1	0.00 %	142	0.00 %	146 / 180	ENV*
Swiss Prime Site AG	0.01 %	0.01 %	1	0.00 %	52	0.00 %	11 / 180	ENV
Talaat Moustafa Group Holding	0.00 %	0.00 %	0	0.00 %	106	0.00 %	95 / 180	TC
Tokyo Tatemono Co	0.01 %	0.01 %	3	0.00 %	100	0.01 %	66 / 180	TC
Tokyu Fudosan Holdings Corp	0.01 %	0.01 %	8	0.01 %	117	0.01 %	127 / 180	TC
UDR Inc	0.02 %	0.02 %	1	0.00 %	100	0.00 %	53 / 180	TC
UEM Sunrise Bhd	0.00 %	0.00 %	0	0.00 %	110	0.00 %	112 / 180	TC
Unibail - Rodamco	0.05 %	0.06 %	1	0.00 %	52	0.01 %	9 / 180	AR*



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
United Development	0.00 %	0.00 %	0	0.00 %	103	0.00 %	90 / 180	TC
UOL Group Limited	0.01 %	0.01 %	1	0.00 %	108	0.00 %	100 / 180	ENV*
Ventas Inc	0.05 %	0.05 %	10	0.01 %	199	0.01 %	158 / 180	CDP
VEREIT Inc	0.02 %	0.02 %	2	0.00 %	92	0.00 %	34 / 180	TC
Vicinity Centres	0.02 %	0.02 %	3	0.00 %	298	0.00 %	169 / 180	CDP
Vonovia SE	0.05 %	0.05 %	1	0.00 %	23	0.01 %	3 / 180	CDP
Vornado Realty Trust	0.03 %	0.03 %	6	0.00 %	184	0.01 %	155 / 180	ENV*
Weingarten Realty Investors	0.01 %	0.01 %	1	0.00 %	100	0.00 %	55 / 180	TC
Welltower Inc	0.06 %	0.06 %	4	0.00 %	61	0.01 %	16 / 180	CDP
Westfield Corporation	0.03 %	0.03 %	1	0.00 %	110	0.00 %	113 / 180	CDP
Weyerhaeuser Co	0.06 %	0.06 %	32	0.02 %	359	0.00 %	174 / 180	CDP
Wharf (Holdings) Ltd.	0.03 %	0.02 %	4	0.00 %	108	0.01 %	104 / 180	PRE
Wheelock and Co. Ltd.	0.01 %	0.01 %	5	0.00 %	110	0.01 %	111 / 180	TC
Wing Tai Hldgs Ltd	0.00 %	0.00 %	0	0.00 %	107	0.00 %	97 / 180	TC
Yanlord Land Group	0.00 %	0.00 %	2	0.00 %	100	0.00 %	54 / 180	TC
Yuexiu Property Co. Ltd.	0.00 %	0.00 %	3	0.00 %	108	0.01 %	102 / 180	TC
Telecommunication Services	3.15 %	3.17 %	1,000	0.65 %	78	3.10 %		
Alibaba Health Information Technology Ltd	0.00 %	0.00 %	0	0.00 %	32	0.00 %	12 / 94	TC
America Movil SAB de CV	0.06 %	0.06 %	68	0.04 %	208	0.05 %	90 / 94	PRE
AT&T Inc	0.56 %	0.55 %	182	0.12 %	78	0.55 %	61 / 94	CDP
Axiata Group Bhd	0.01 %	0.01 %	9	0.01 %	246	0.00 %	92 / 94	CDP
BCE Inc	0.03 %	0.03 %	3	0.00 %	33	0.02 %	32 / 94	CDP
BEZEQ ISRAELI TELECOM CORP	0.01 %	0.01 %	3	0.00 %	111	0.01 %	72 / 94	PRE
Bharti Airtel Ltd	0.02 %	0.02 %	2	0.00 %	37	0.02 %	38 / 94	TC
Bharti Infratel Ltd.	0.01 %	0.01 %	0	0.00 %	37	0.00 %	40 / 94	TC
BT Group	0.07 %	0.07 %	21	0.01 %	72	0.07 %	57 / 94	CDP
Cellnex Telecom S.A.	0.01 %	0.01 %	1	0.00 %	130	0.00 %	75 / 94	CDP
CenturyLink Inc	0.02 %	0.02 %	39	0.03 %	163	0.04 %	86 / 94	CDP
China Communications Services Corporation	0.00 %	0.00 %	2	0.00 %	32	0.02 %	24 / 94	TC
China Mobile Ltd.	0.12 %	0.12 %	70	0.05 %	185	0.06 %	89 / 94	CDP
China Telecom Corporation Ltd. - H Shares	0.02 %	0.02 %	4	0.00 %	32	0.03 %	22 / 94	TC
China Unicom (Hong Kong) Ltd.	0.02 %	0.02 %	4	0.00 %	32	0.03 %	21 / 94	TC
Chunghwa Telecom Co Ltd	0.03 %	0.03 %	8	0.01 %	158	0.01 %	85 / 94	PRE
Deutsche Telekom	0.14 %	0.14 %	54	0.04 %	71	0.18 %	56 / 94	CDP
Digi.com Bhd	0.01 %	0.01 %	1	0.00 %	122	0.00 %	74 / 94	ENV



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Elisa Corporation	0.01 %	0.01 %	1	0.00 %	67	0.01 %	55 / 94	CDP
Emirates Telecommunications Group	0.02 %	0.02 %	1	0.00 %	32	0.01 %	19 / 94	TC
Empresa Nacional de Telecomunicaciones	0.00 %	0.00 %	1	0.00 %	32	0.00 %	29 / 94	TC
Far Eastone Telecommunications Co	0.01 %	0.01 %	3	0.00 %	133	0.00 %	78 / 94	PRE
Global Telecom Holding	0.00 %	0.00 %	1	0.00 %	32	0.01 %	13 / 94	TC
Globe Telecom Inc	0.00 %	0.00 %	1	0.00 %	132	0.00 %	77 / 94	PRE
Hellenic Telecommunications Organization	0.01 %	0.01 %	3	0.00 %	103	0.01 %	69 / 94	CDP
Hutchison Telecommunications Hong Kong	0.00 %	0.00 %	0	0.00 %	32	0.00 %	16 / 94	TC
Idea Cellular Ltd	0.00 %	0.00 %	1	0.00 %	37	0.01 %	42 / 94	TC
ILIAS SA	0.01 %	0.01 %	1	0.00 %	16	0.01 %	3 / 94	PRE
Inmarsat	0.01 %	0.01 %	0	0.00 %	24	0.01 %	5 / 94	CDP*
Intouch Holdings PCL	0.01 %	0.01 %	0	0.00 %	32	0.00 %	31 / 94	TC
KDDI Corp	0.11 %	0.11 %	31	0.02 %	96	0.07 %	65 / 94	CDP
Koninklijke KPN NV	0.02 %	0.02 %	1	0.00 %	16	0.02 %	2 / 94	CDP
Level 3 Communications	0.04 %	0.04 %	11	0.01 %	110	0.02 %	71 / 94	CDP
LG Uplus Ltd	0.01 %	0.01 %	9	0.01 %	140	0.01 %	81 / 94	CDP
M1 Ltd	0.00 %	0.00 %	0	0.00 %	27	0.00 %	8 / 94	AR*
Magyar Telekom	0.00 %	0.00 %	0	0.00 %	35	0.00 %	37 / 94	ENV
Maxis Bhd	0.01 %	0.01 %	0	0.00 %	32	0.00 %	27 / 94	TC
MegaFon PJSC	0.00 %	0.00 %	0	0.00 %	27	0.00 %	7 / 94	PRE
Mobile TeleSystems PJSC	0.01 %	0.01 %	1	0.00 %	31	0.01 %	10 / 94	PRE
MTN Group Ltd	0.04 %	0.04 %	19	0.01 %	143	0.03 %	83 / 94	CDP
Nippon Tel & Tel Corp	0.07 %	0.07 %	36	0.02 %	95	0.08 %	64 / 94	CDP
NTT DOCOMO	0.07 %	0.07 %	5	0.00 %	34	0.04 %	33 / 94	CDP
O2 Czech Republic	0.00 %	0.00 %	0	0.00 %	32	0.00 %	15 / 94	TC
Ooredoo	0.00 %	0.00 %	1	0.00 %	32	0.01 %	18 / 94	TC
Orange	0.07 %	0.07 %	23	0.01 %	50	0.12 %	47 / 94	CDP
Orange Polska S.A.	0.00 %	0.00 %	4	0.00 %	213	0.00 %	91 / 94	AR*
PCCW Ltd.	0.01 %	0.01 %	1	0.00 %	31	0.01 %	11 / 94	TC
PLDT Inc	0.01 %	0.01 %	3	0.00 %	141	0.00 %	82 / 94	AR*
Proximus	0.01 %	0.01 %	1	0.00 %	35	0.01 %	36 / 94	CDP
Rogers Communications Inc	0.04 %	0.04 %	3	0.00 %	29	0.03 %	9 / 94	CDP
Rostelecom PJSC	0.00 %	0.00 %	7	0.00 %	348	0.00 %	93 / 94	CDP
SBA Communications Corp	0.04 %	0.04 %	1	0.00 %	32	0.01 %	25 / 94	TC
Singapore Telecommunications Ltd	0.05 %	0.05 %	5	0.00 %	79	0.02 %	62 / 94	CDP
Sistema FC PJSC	0.00 %	0.00 %	5	0.00 %	100	0.01 %	68 / 94	TC



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
SK Telecom Co Ltd	0.01 %	0.01 %	5	0.00 %	81	0.01 %	63 / 94	CDP
SoftBank Group Corp	0.16 %	0.16 %	30	0.02 %	42	0.19 %	44 / 94	TC
Spark New Zealand Ltd	0.01 %	0.01 %	1	0.00 %	24	0.01 %	6 / 94	CDP
Sprint Nextel Corp	0.01 %	0.01 %	4	0.00 %	62	0.02 %	51 / 94	CDP
Starhub	0.00 %	0.00 %	0	0.00 %	50	0.00 %	46 / 94	AR*
Swisscom AG ADR	0.03 %	0.03 %	1	0.00 %	14	0.02 %	1 / 94	CDP
T-Mobile US Inc	0.04 %	0.04 %	6	0.00 %	32	0.05 %	23 / 94	TC
Taiwan Mobile Co Ltd	0.01 %	0.01 %	2	0.00 %	99	0.01 %	67 / 94	CDP
Tata Communications Ltd	0.00 %	0.00 %	1	0.00 %	137	0.00 %	79 / 94	PRE
TDC A/S	0.01 %	0.01 %	2	0.00 %	38	0.01 %	43 / 94	CDP
Tele2 AB	0.01 %	0.01 %	2	0.00 %	73	0.01 %	58 / 94	PRE
Telecom Italia SpA	0.03 %	0.03 %	16	0.01 %	65	0.06 %	52 / 94	ENV*
Telefonica Brasil S.A.	0.01 %	0.02 %	8	0.01 %	152	0.01 %	84 / 94	PRE
Telefonica Deutschland Holding AG	0.01 %	0.01 %	2	0.00 %	76	0.01 %	60 / 94	ENV*
Telefonica SA	0.11 %	0.11 %	39	0.03 %	57	0.17 %	49 / 94	CDP
Telekom Austria AG	0.00 %	0.00 %	1	0.00 %	65	0.00 %	53 / 94	CDP
Telekom Malaysia Bhd	0.00 %	0.00 %	1	0.00 %	42	0.00 %	45 / 94	ENV*
Telekomunikasi Indonesia Tbk PT	0.04 %	0.04 %	2	0.00 %	32	0.02 %	20 / 94	TC
Telenor ASA	0.03 %	0.03 %	12	0.01 %	118	0.02 %	73 / 94	CDP
Telesites S.A.B. de C.V.	0.00 %	0.00 %	0	0.00 %	32	0.00 %	30 / 94	TC
Telia Company AB	0.03 %	0.03 %	5	0.00 %	59	0.02 %	50 / 94	CDP
Telkom South Africa Ltd	0.00 %	0.00 %	8	0.01 %	422	0.00 %	94 / 94	CDP
Telstra Corp Ltd	0.03 %	0.03 %	9	0.01 %	109	0.02 %	70 / 94	CDP
TELUS Corp	0.02 %	0.02 %	3	0.00 %	55	0.01 %	48 / 94	CDP
Tim Participacoes	0.01 %	0.01 %	1	0.00 %	22	0.01 %	4 / 94	CDP
Total Access Communication PCL	0.00 %	0.00 %	0	0.00 %	32	0.00 %	17 / 94	TC
Tower Bersama Infrastructure Tbk PT	0.00 %	0.00 %	0	0.00 %	32	0.00 %	14 / 94	TC
TPG Telecom Ltd	0.00 %	0.00 %	0	0.00 %	34	0.00 %	34 / 94	TC
True Corp PCL	0.00 %	0.00 %	3	0.00 %	171	0.00 %	87 / 94	CDP
Turk Telekomunikasyon AS	0.00 %	0.00 %	2	0.00 %	176	0.00 %	88 / 94	CDP
Turkcell Iletisim Hizmet AS	0.01 %	0.01 %	3	0.00 %	98	0.01 %	66 / 94	CDP
Verizon Communications Inc	0.47 %	0.46 %	119	0.08 %	66	0.44 %	54 / 94	CDP
Vocus Group Limited	0.00 %	0.00 %	0	0.00 %	34	0.00 %	35 / 94	TC
Vodacom Group Ltd	0.02 %	0.02 %	3	0.00 %	140	0.00 %	80 / 94	CDP
Vodafone Group	0.17 %	0.17 %	53	0.03 %	74	0.17 %	59 / 94	CDP
Vodafone Qatar	0.00 %	0.00 %	0	0.00 %	37	0.00 %	39 / 94	TC



Carbon Footprint

Company Breakdown

Portfolio

Company details	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
XL Axiata Tbk PT	0.00 %	0.00 %	0	0.00 %	32	0.00 %	26 / 94	TC
Utilities	3.12 %	3.12 %	47,393	30.80 %	3,085	-27.63 %		
A2A SpA	0.01 %	0.01 %	74	0.05 %	1,897	-0.04 %	72 / 158	CDP
Aboitiz Power Corp	0.00 %	0.00 %	37	0.02 %	6,505	-0.02 %	127 / 158	AR*
Acciona SA	0.01 %	0.00 %	14	0.01 %	305	0.00 %	26 / 158	CDP
AES Corp	0.02 %	0.02 %	1,312	0.85 %	6,645	-0.80 %	129 / 158	CDP*
AES Gener S.A.	0.00 %	0.00 %	121	0.08 %	11,669	-0.08 %	141 / 158	AR*
AES Tiete Energia S.A.	0.00 %	0.00 %	0	0.00 %	23	0.00 %	2 / 158	CDP
AGL Energy Ltd	0.03 %	0.03 %	803	0.52 %	7,517	-0.49 %	132 / 158	CDP
Aguas Andinas S.A.	0.00 %	0.00 %	1	0.00 %	199	0.00 %	12 / 158	ENV*
Alliant Energy Corp	0.02 %	0.02 %	400	0.26 %	8,611	-0.25 %	136 / 158	ENV*
Ameren Corp	0.03 %	0.03 %	521	0.34 %	5,908	-0.31 %	119 / 158	CDP
American Electric Power	0.08 %	0.08 %	2,053	1.33 %	8,786	-1.27 %	137 / 158	CDP
American Water Works Co Inc	0.03 %	0.03 %	12	0.01 %	249	0.01 %	19 / 158	CDP
APA Group	0.02 %	0.02 %	13	0.01 %	622	-0.00 %	45 / 158	CDP
AusNet Services Ltd	0.01 %	0.01 %	17	0.01 %	1,988	-0.01 %	76 / 158	PRE
Avangrid Inc	0.01 %	0.01 %	5	0.00 %	315	0.00 %	28 / 158	CDP
Beijing Enterprises Water Group Ltd.	0.01 %	0.01 %	2	0.00 %	130	0.00 %	9 / 158	TC
Beijing Jingneng Clean Energy Co Ltd	0.00 %	0.00 %	53	0.03 %	5,680	-0.03 %	114 / 158	AR*
Calpine Corporation	0.01 %	0.01 %	740	0.48 %	7,608	-0.45 %	133 / 158	AR*
Canadian Utilities Ltd A Nvtg	0.01 %	0.01 %	89	0.06 %	5,240	-0.05 %	110 / 158	ENV*
Centerpoint Energy Inc	0.03 %	0.03 %	70	0.05 %	658	-0.02 %	49 / 158	PRE
Centrica	0.03 %	0.03 %	172	0.11 %	340	0.03 %	30 / 158	CDP
CEZ-Ceske Energetice Zavody	0.01 %	0.01 %	167	0.11 %	4,897	-0.10 %	107 / 158	AR
CGN Power Ltd- H share	0.01 %	0.01 %	1	0.00 %	67	0.00 %	6 / 158	TC
China Gas Holdings Ltd.	0.01 %	0.01 %	9	0.01 %	632	-0.00 %	46 / 158	TC
China Longyuan Power Group Corporation	0.01 %	0.01 %	81	0.05 %	3,919	-0.05 %	95 / 158	AR*
China Power International Development Ltd.	0.00 %	0.00 %	347	0.23 %	20,232	-0.22 %	147 / 158	PRE
China Resources Gas Group Ltd.	0.01 %	0.01 %	9	0.01 %	419	0.00 %	35 / 158	TC
China Resources Power Holdings Co. Ltd.	0.01 %	0.01 %	994	0.65 %	21,189	-0.63 %	149 / 158	PRE
Chubu Electric Power Co	0.02 %	0.02 %	1,075	0.70 %	4,031	-0.62 %	97 / 158	AR*
Chugoku Electric Power Co Inc	0.01 %	0.01 %	495	0.32 %	5,076	-0.29 %	108 / 158	AR*
Cia Energetica de Minas Gerais	0.00 %	0.01 %	8	0.00 %	165	0.01 %	10 / 158	CDP
Cia Gas de Sao Paulo - COMGAS	0.00 %	0.00 %	3	0.00 %	543	-0.00 %	40 / 158	TC
Cia Saneamento Basico De Sp	0.01 %	0.01 %	10	0.01 %	490	-0.00 %	38 / 158	PRE



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Cia Transmissao Energia Electrica Paulista	0.00 %	0.00 %	0	0.00 %	27	0.00 %	3 / 158	PRE
CK Infrastructure Holdings Ltd	0.01 %	0.01 %	18	0.01 %	1,537	-0.01 %	69 / 158	TC
CLP Holdings Ltd.	0.04 %	0.04 %	573	0.37 %	6,055	-0.35 %	121 / 158	CDP
CMS Energy Corp	0.03 %	0.03 %	254	0.17 %	2,838	-0.14 %	83 / 158	CDP
COLBUN SA	0.00 %	0.00 %	37	0.02 %	4,476	-0.02 %	102 / 158	CDP
Companhia Paranaense de Energia	0.00 %	0.00 %	5	0.00 %	229	0.00 %	17 / 158	CDP
Consolidated Edison Inc	0.06 %	0.06 %	116	0.08 %	686	-0.03 %	50 / 158	ENV
Contact Energy Ltd	0.01 %	0.01 %	22	0.01 %	1,157	-0.01 %	65 / 158	AR*
CPFL Energia SA	0.01 %	0.01 %	5	0.00 %	195	0.00 %	11 / 158	CDP
Datang International Power Generation Co	0.00 %	0.00 %	312	0.20 %	21,076	-0.20 %	148 / 158	AR*
Dominion Energy Inc	0.11 %	0.11 %	612	0.40 %	3,667	-0.35 %	89 / 158	PRE
DTE Energy Co	0.04 %	0.04 %	661	0.43 %	4,380	-0.39 %	101 / 158	CDP
Duke Energy Corp	0.14 %	0.13 %	1,842	1.20 %	5,674	-1.11 %	113 / 158	CDP
E.ON Russia OJSC	0.00 %	0.00 %	148	0.10 %	38,521	-0.10 %	155 / 158	ENV*
E.ON SE	0.05 %	0.05 %	214	0.14 %	383	0.02 %	32 / 158	CDP
Edison Intl	0.06 %	0.06 %	47	0.03 %	287	0.02 %	25 / 158	PRE
EDP - Energias do Brasil SA	0.00 %	0.00 %	54	0.03 %	2,656	-0.03 %	82 / 158	CDP
Electric Power Development Co	0.01 %	0.01 %	993	0.65 %	14,060	-0.63 %	143 / 158	ENV
Electricite de France	0.01 %	0.01 %	161	0.10 %	976	-0.06 %	60 / 158	CDP
Electricity Generating PCL	0.00 %	0.00 %	216	0.14 %	44,433	-0.14 %	157 / 158	AR*
Eletrobras SA	0.01 %	0.01 %	89	0.06 %	880	-0.03 %	57 / 158	CDP*
Enagas SA	0.01 %	0.01 %	11	0.01 %	590	-0.00 %	42 / 158	OTH
Endesa SA	0.02 %	0.02 %	184	0.12 %	2,182	-0.10 %	77 / 158	CDP
Enea S.A.	0.00 %	0.00 %	126	0.08 %	5,703	-0.08 %	115 / 158	AR*
Enel Americas S.A.	0.01 %	0.01 %	88	0.06 %	1,835	-0.04 %	71 / 158	AR*
Enel Chile S.A.	0.00 %	0.01 %	36	0.02 %	1,971	-0.02 %	74 / 158	AR*
Enel Generacion Chile S.A.	0.01 %	0.01 %	38	0.02 %	2,967	-0.02 %	85 / 158	ENV*
Enel SpA	0.11 %	0.11 %	1,569	1.02 %	1,914	-0.79 %	73 / 158	CDP
Energias de Portugal SA	0.02 %	0.02 %	255	0.17 %	1,605	-0.12 %	70 / 158	CDP
Engie	0.06 %	0.06 %	1,611	1.05 %	2,269	-0.85 %	79 / 158	CDP
ENGIE Brasil Energia S.A.	0.01 %	0.00 %	33	0.02 %	4,031	-0.02 %	96 / 158	ENV*
ENN Energy Holdings Ltd	0.01 %	0.01 %	21	0.01 %	410	0.00 %	34 / 158	TC
Entergy Corp	0.03 %	0.03 %	647	0.42 %	4,230	-0.38 %	99 / 158	ENV*
Equatorial Energia S.A.	0.01 %	0.01 %	20	0.01 %	708	-0.01 %	52 / 158	TC
Eversource Energy	0.04 %	0.04 %	70	0.05 %	646	-0.01 %	48 / 158	CDP
Exelon Corp	0.08 %	0.08 %	320	0.21 %	717	-0.08 %	53 / 158	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Federal Grid Co Unified Energy System	0.00 %	0.00 %	3	0.00 %	218	0.00 %	13 / 158	TC
Federal Hydrogenerating Co (RusHydro)	0.00 %	0.00 %	137	0.09 %	7,731	-0.08 %	134 / 158	CDP
FirstEnergy Corp	0.03 %	0.03 %	1,285	0.84 %	6,250	-0.78 %	122 / 158	CDP
Fortis Inc	0.03 %	0.03 %	342	0.22 %	4,650	-0.20 %	104 / 158	TC
Fortum Oyj	0.02 %	0.02 %	176	0.11 %	6,388	-0.11 %	125 / 158	CDP
Gail India Ltd	0.01 %	0.01 %	15	0.01 %	602	-0.00 %	44 / 158	CDP
Gas Natural SDG SA	0.02 %	0.02 %	134	0.09 %	1,214	-0.06 %	66 / 158	CDP
Glow Energy	0.00 %	0.00 %	57	0.04 %	9,847	-0.04 %	138 / 158	AR*
Guangdong Investment Ltd.	0.01 %	0.01 %	33	0.02 %	4,038	-0.02 %	98 / 158	AR*
Hokkaido Electric Power Co	0.00 %	0.00 %	342	0.22 %	5,374	-0.20 %	111 / 158	AR*
Hokuriku Electric Power Co	0.00 %	0.00 %	292	0.19 %	6,409	-0.18 %	126 / 158	AR
Hong Kong and China Gas Co Ltd	0.04 %	0.04 %	20	0.01 %	640	-0.00 %	47 / 158	ENV*
Huadian Fuxin Energy Corp Ltd.	0.00 %	0.00 %	78	0.05 %	7,407	-0.05 %	131 / 158	AR*
Huadian Power International Corp Ltd	0.00 %	0.00 %	330	0.21 %	23,824	-0.21 %	151 / 158	ENV*
Huaneng Power International Inc	0.01 %	0.01 %	910	0.59 %	19,067	-0.58 %	145 / 158	ENV*
Huaneng Renewables Corp Ltd.	0.00 %	0.00 %	0	0.00 %	28	0.00 %	4 / 158	TC
Hydro One Limited	0.01 %	0.01 %	9	0.01 %	276	0.00 %	23 / 158	TC
Iberdrola SA	0.10 %	0.10 %	456	0.30 %	1,133	-0.18 %	64 / 158	CDP
Infraestructura Energetica Nova S.A.B. de C.	0.01 %	0.01 %	11	0.01 %	2,655	-0.01 %	81 / 158	ENV*
Innogy SE	0.01 %	0.01 %	49	0.03 %	316	0.01 %	29 / 158	AR*
Inter RAO OJSC	0.00 %	0.00 %	455	0.30 %	8,487	-0.28 %	135 / 158	AR*
Interconexion Electrica SA ESP	0.00 %	0.00 %	4	0.00 %	222	0.00 %	15 / 158	TC
JSW Energy Ltd	0.00 %	0.00 %	93	0.06 %	19,552	-0.06 %	146 / 158	AR*
Kansai Electric Power Co Inc	0.02 %	0.02 %	636	0.41 %	2,451	-0.34 %	80 / 158	CDP
Korea Elec Power Corp	0.02 %	0.02 %	1,722	1.12 %	5,921	-1.04 %	120 / 158	PRE
Korea Gas Corp	0.00 %	0.00 %	23	0.02 %	310	0.01 %	27 / 158	PRE
Kyushu Electric Power Co Inc	0.01 %	0.01 %	812	0.53 %	4,352	-0.47 %	100 / 158	AR
Manila Electric Co	0.00 %	0.00 %	4	0.00 %	222	0.00 %	14 / 158	TC
MDU Resources Group Inc	0.01 %	0.01 %	55	0.04 %	948	-0.02 %	59 / 158	AR*
Mercury NZ Limited	0.00 %	0.00 %	4	0.00 %	584	-0.00 %	41 / 158	AR*
Meridian Energy Ltd	0.01 %	0.01 %	1	0.00 %	95	0.00 %	8 / 158	TC
National Grid PLC	0.10 %	0.10 %	224	0.15 %	807	-0.07 %	56 / 158	CDP
NextEra Energy Inc	0.16 %	0.16 %	769	0.50 %	3,342	-0.43 %	87 / 158	ENV*
NHPC Ltd	0.00 %	0.00 %	0	0.00 %	32	0.00 %	5 / 158	TC
Nisource Inc	0.02 %	0.02 %	241	0.16 %	3,777	-0.14 %	90 / 158	OTH
NRG Energy	0.02 %	0.02 %	1,220	0.79 %	7,215	-0.75 %	130 / 158	CDP



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
NTPC Ltd	0.01 %	0.01 %	1,064	0.69 %	29,626	-0.68 %	154 / 158	ENV*
Orsted	0.02 %	0.02 %	39	0.03 %	904	-0.01 %	58 / 158	CDP
Osaka Gas Co	0.02 %	0.02 %	102	0.07 %	804	-0.03 %	54 / 158	CDP
Pennon Group	0.01 %	0.01 %	27	0.02 %	1,098	-0.01 %	63 / 158	CDP
Perusahaan Gas Negara PT	0.00 %	0.00 %	5	0.00 %	263	0.00 %	22 / 158	ENV*
Petronas Gas BHD	0.01 %	0.01 %	30	0.02 %	4,838	-0.02 %	105 / 158	AR*
PG&E Corporation	0.08 %	0.08 %	112	0.07 %	445	-0.00 %	36 / 158	CDP
Pinnacle West Capital (AZ)	0.02 %	0.02 %	193	0.13 %	3,859	-0.11 %	91 / 158	OTH
Polska Grupa Energetyczna SA	0.01 %	0.01 %	413	0.27 %	9,891	-0.26 %	139 / 158	AR
Power Assets Holdings Ltd	0.03 %	0.03 %	93	0.06 %	63,758	-0.06 %	158 / 158	AR*
Power Grid Corp of India Ltd	0.01 %	0.01 %	2	0.00 %	255	0.00 %	20 / 158	TC
PPL Corp	0.06 %	0.06 %	602	0.39 %	5,652	-0.36 %	112 / 158	PRE
Public Service Enterprise Grp	0.05 %	0.05 %	284	0.18 %	2,199	-0.15 %	78 / 158	CDP
Qatar Electricity & Water	0.00 %	0.00 %	11	0.01 %	3,587	-0.01 %	88 / 158	TC
Ratchaburi Electricity Generating Holding	0.00 %	0.00 %	114	0.07 %	13,071	-0.07 %	142 / 158	ENV*
Red Electrica Corporacion SA	0.02 %	0.02 %	11	0.01 %	469	-0.00 %	37 / 158	CDP
Reliance Infrastructure Ltd	0.00 %	0.00 %	52	0.03 %	3,205	-0.03 %	86 / 158	AR*
Rosseti PJSC	0.00 %	0.00 %	2	0.00 %	76	0.01 %	7 / 158	PRE
Rubis	0.01 %	0.01 %	13	0.01 %	398	0.00 %	33 / 158	AR*
RWE AG	0.03 %	0.03 %	2,342	1.52 %	3,884	-1.35 %	93 / 158	ENV*
SCANA Corp	0.01 %	0.01 %	284	0.18 %	5,214	-0.17 %	109 / 158	PRE
Scottish & Southern Energy	0.04 %	0.04 %	363	0.24 %	695	-0.09 %	51 / 158	CDP
Sempra Energy	0.07 %	0.07 %	105	0.07 %	805	-0.03 %	55 / 158	CDP
Severn Trent	0.02 %	0.02 %	9	0.01 %	277	0.00 %	24 / 158	CDP*
Shikoku Electric Power Co Inc	0.00 %	0.00 %	217	0.14 %	4,879	-0.13 %	106 / 158	AR
Southern Co	0.11 %	0.11 %	1,863	1.21 %	6,593	-1.13 %	128 / 158	ENV*
Suez SA	0.02 %	0.02 %	156	0.10 %	1,090	-0.06 %	62 / 158	CDP
Tata Power Co Ltd	0.00 %	0.00 %	282	0.18 %	10,645	-0.18 %	140 / 158	CDP
Tauron Polska Energia SA	0.00 %	0.00 %	147	0.10 %	4,574	-0.09 %	103 / 158	ENV
Tenaga Nasional Bhd	0.03 %	0.03 %	400	0.26 %	3,911	-0.23 %	94 / 158	ENV*
Terna SpA	0.02 %	0.02 %	23	0.01 %	1,048	-0.01 %	61 / 158	CDP
Toho Gas Co	0.01 %	0.01 %	15	0.01 %	347	0.00 %	31 / 158	PRE
Tohoku Electric Power Co	0.01 %	0.01 %	768	0.50 %	3,874	-0.44 %	92 / 158	OTH
Tokyo Electric Power Co. Holding Inc.	0.01 %	0.01 %	1,737	1.13 %	2,849	-0.96 %	84 / 158	CDP
Tokyo Gas Co	0.02 %	0.02 %	105	0.07 %	594	-0.02 %	43 / 158	ENV*
Towngas China Co. Ltd.	0.00 %	0.00 %	1	0.00 %	259	0.00 %	21 / 158	ENV*



Carbon Footprint

Company Breakdown

Portfolio

	Weighting		Carbon Apportioned		Carbon Intensity (tCO2e/£mn)	Carbon Footprint Contribution (%)*	Footprint Rank in Benchmark Sector **	Data Source ***
	Portfolio	Benchmark	Tonnes CO2e	% of Portfolio's Total Carbon Apportioned				
Company details								
Transmissora Alianca de Energia Eletrica	0.00 %	0.00 %	0	0.00 %	228	0.00 %	16 / 158	TC
Uniper SE	0.01 %	0.01 %	812	0.53 %	1,429	-0.37 %	68 / 158	ENV
United Utilities Group Plc	0.02 %	0.02 %	8	0.00 %	243	0.00 %	18 / 158	CDP*
Veolia Environnement	0.03 %	0.03 %	661	0.43 %	1,984	-0.33 %	75 / 158	CDP
WEC Energy Group Inc	0.05 %	0.05 %	667	0.43 %	6,262	-0.40 %	123 / 158	CDP
Xcel Energy Inc	0.06 %	0.06 %	1,008	0.65 %	6,368	-0.61 %	124 / 158	ENV*
YTL Corp Bhd	0.00 %	0.00 %	131	0.08 %	5,900	-0.08 %	118 / 158	TC
YTL Power International Bhd	0.00 %	0.00 %	66	0.04 %	5,892	-0.04 %	117 / 158	TC
Porfolio Total	100.00 %	99.86 %	153,850	100.00 %	439			

Note that the weighting for the benchmark will not always total 100% as the stocks shown are only for those held by the portfolio.

* The Carbon Footprint Contribution is the percentage decrease in performance between what the Carbon Footprint of the portfolio would be without the holding and what the Carbon Footprint is currently. This is a measurement of how much a specific holding reduces the carbon performance of the portfolio.

** Footprint rank in benchmark sector - A ranking of one indicates that the stock has the lowest carbon footprint among the stocks in the benchmark sector. An entry of N/A indicates that the stock is not a member of the benchmark.

*** Definitions of the Data Sources may be found in section 5 of this report.



Carbon Footprint

9 Next Steps

Make portfolio adjustments

- Reduce risk by rebalancing holdings to favour companies with greater carbon or environmental efficiency relative to sector peers.

Embed environmental analysis into your investment strategy

- Trucost provides standardised data on all companies across the investment universe to help identify carbon and environmental opportunities. We also have time series data and can customise research to meet your requirements.

Engage with companies

- The chart on page 8 shows companies with which you may choose to engage with to encourage them to disclose better environmental data, providing greater transparency for investors and setting them on the course to appropriate measurement and management of GHG emissions.

WHY CHOOSE TRUCOST DATA?

Standardised: company disclosed data is standardised to enable comparison between companies, funds, sectors and geographies.

Validated: company disclosed data is validated to resolve reporting errors.

Comprehensive: where companies do not measure or disclose data, Trucost 'fills the gaps' using its advanced environmental profiling model to provide complete data across the investment universe.

Proven: Trucost data has been used to analyse over \$2.7trillion AUM and drives \$583million in investment products that deliver financial performance with up to 50% reduced carbon intensity e.g. S&P US Carbon Efficient Index and the Legal and General Investment Management UK Carbon Optimised Index Fund.

"Trucost's global environmental impact data has enabled us to truly integrate climate change analysis into our investment process. The quantitative data is fed into our mainstream investment decision making process enabling risk management, portfolio footprinting, sector and stock level analysis and the simulation of climate change strategies across asset classes."

AXA Investment Managers

Communicate your footprint to stakeholders

- You may choose to communicate your footprint to stakeholders to demonstrate that you actively consider carbon exposure in your investments and provide transparency about the risk exposure or benefits of the fund.

Invest in carbon optimised funds

- Trucost's carbon and natural capital investment metrics drive investment indices and products from leading institutions that deliver financial performance alongside reduced environmental risk. Find out more at www.trucost.com/capital-markets/investment-products

CONTACT

UK (HEAD OFFICE)
T: +44 (0) 20 7160 9800
E: Trucostinfo@spglobal.com

Asia
E: Trucostasiapacific@spglobal.com

Europe
E: TrucostEMEA@spglobal.com

North America
T: +1 800 402 8774
E: Trucostnorthamerica@spglobal.com

South America
E: Trucostsouthamerica@spglobal.com

www.trucost.com

10 Legal Disclaimer

NOTICE

Copyright © 2018 S&P Trucost Limited ("Trucost"), an affiliate of S&P Dow Jones Indices LLC. All rights reserved. Trucost and EBoard are trademarks of Trucost. Redistribution or reproduction in whole or in part is prohibited without written permission. This document does not constitute an offer of services in jurisdictions where Trucost and its affiliates do not have the necessary licenses. All information provided by Trucost is impersonal and not tailored to the needs of any person, entity or group of persons.

DISCLAIMER

Copyright © 2018 S&P Trucost Limited ("Trucost"), an affiliate of S&P Dow Jones Indices LLC. All rights reserved. Trucost and EBoard are trademarks of Trucost.

This document does not constitute an offer of services in jurisdictions where Trucost and its affiliates do not have the necessary licenses. Trucost is not an investment advisor, and Trucost makes no representation regarding the advisability of investing in any investment fund or other investment vehicle. A decision to invest in any investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other investment product or vehicle.

The materials have been prepared solely for informational purposes only based upon information generally available to the public from sources believed to be reliable. No content contained in these materials (including credit-related analyses and data, research, valuation, models, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of Trucost. The Content shall not be used for any unlawful or unauthorized purposes. Trucost and its third-party data providers and licensors (collectively "Trucost Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. Trucost Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. TRUCOST PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall Trucost Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

The Content does not constitute or form part of any offer, invitation to sell, offer to subscribe for or to purchase any shares or other securities and must not be relied upon in connection with any contract relating to any such matter. 'Trucost' is the trading name of S&P Trucost Limited a limited company registered in England company number 3929223 whose registered office is at 20 Canada Square, London E14 5HL, UK.

CONFIDENTIALITY & COPYRIGHT

The information contained in this report is confidential and is submitted by Trucost on the understanding that it will be used only by your staff and consultants. Where consultants are [self] employed, the use of this information is restricted to use in relation to your business. In particular, the contents of this report may not be disclosed in whole or in part to any other party without the prior written consent of Trucost.