First State Investments

Colonial First State Global Asset Management

CARBON FOOTPRINT DASHBOARD EXPLAINER

We believe that climate change is a significant investment issue now and into the future. Understanding how an investment manager is incorporating climate change in their investment decision-making, ownership practices and advocacy is important information for clients and other stakeholders.

We provide a climate change statement on our website which is consistent with the Task-force for Climate Related Financial Disclosure's (TCFD's) recommendations.

In addition, each of our investment teams provides a climate change statement articulating the approach they take to managing climate change risks and opportunities. This disclosure sits alongside information on how they consider environmental, social and corporate governance issues more broadly.

With these climate change statements we also provide interactive carbon footprint reports for each listed equity team and the organisation as a whole. This document provides information on what these footprints show and don't show.

In previous years we have discussed the benefits and issues associated with carbon footprinting. Please see our 2016 RI Report for full details. Notwithstanding these issues, carbon footprinting is an important lens for considering portfolio exposure to greenhouse gas emissions when considered in context with other metrics.

Some of the issues we raised in our 2016 report which is important to be mindful of includes:

- Data quality and availability issues, around 50% of emissions are estimates as not all companies report
- Dividing Emissions by Sales is often not the best intensity measure (see below) but has been recommended by the Task Force for Climate Related Financial Disclosures
- Transition and stranded asset risks are not captured in carbon footprints
- Other risks including physical risks are not captured in carbon footprints.

We will continue to improve our climate change, carbon and ESG disclosure and welcome any feedback or suggestions.

967	1,015	88,314M	90,955M
Companies	Covered	$	Covered

Coverage

Our interactive footprint reports the emissions of the companies we invest in at a team level. This means we add the holdings in all the team's portfolios and compare them to the sum of their respective benchmarks.

The coverage numbers show what proportion of companies held by the team have available carbon data from MSCI. This is presented as both the number of companies and dollars invested.

3,683,789 tCO2e	-48.1%
Weighted Ave Emissions (Scope 1+2)	Diff Weighted Ave Emissions vs Benchmark (Aggregated)
372.2 tCO2e	-18.8%
Weighted Ave Intensity (Scope 1+2/$m Sales)	Diff Weighted Ave Intensity vs Benchmark (Aggregated)

Weighted average emissions and emissions intensity

Rather than disclose a straight average we use a weighted average based on the size of our holding in each company.

The weighted average is of each company's greenhouse gas emissions (scope 1 and 2[1]).

We compare this to the weighted average emissions for the companies in the aggregated benchmark.

Intensity normalises company emissions for size by dividing emissions by $ sales, which means larger companies (with more emissions) can be compared to smaller companies. It should show which company is more efficient. We have concerns around using sales because other factors like currency or commodity prices can have a large effect on dollars of sales with no effect on emissions. However, this method has been recommended by the TCFD[2] and we support increased comparability of investor reporting. Over time we will include additional measures to supplement emissions intensity.

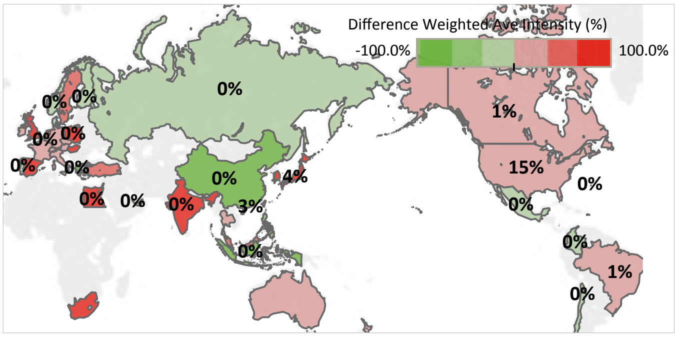
[1] Scope 1: All direct GHG emissions. Direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity. Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat or steam. [2] TCFD, page 43 https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Annex-062817.pdf

3.2

Ave Fossil Fuel Comp per Portfolio

Fossil Fuel Companies

This indicator shows the average number of fossil fuel companies (as defined by MSCI) per portfolio. This includes companies who mine fossil fuels as well as generators of fossil based energy sources as well as other users of fossil fuels.

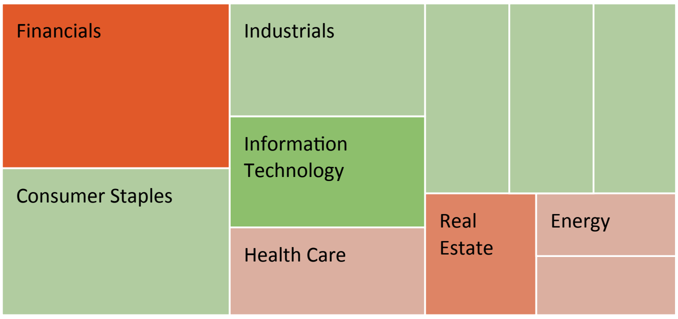


Difference in emissions intensity by country

In the map, the colour of each country shows the difference between weighted average emissions intensity (as defined above) for the team vs the aggregated benchmark. If a team has 100% more emissions it will appear dark red, while 100% less will show dark green.

Numbers which appear over the country show the % dollar exposure the team has to each country.

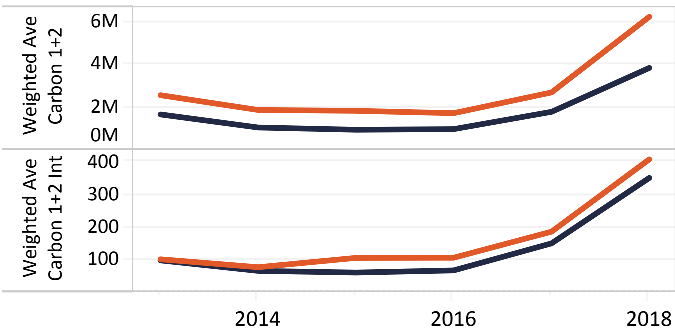
Clicking on a country filters the rest of the dashboard to only show companies from that country. Hovering over a country reveals more information.



Difference in emissions intensity by sector

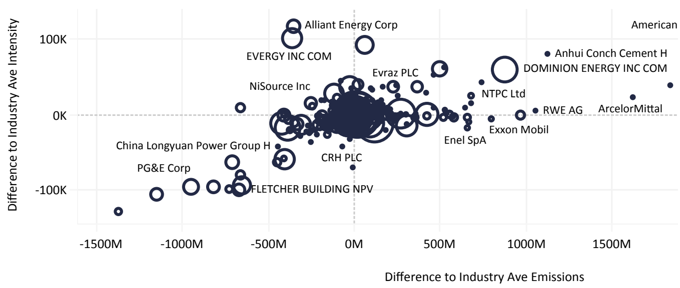
Similar to the country map, this chart shows the difference in weighted average emissions intensity between the team's holdings and the benchmark by sector. The colour of each rectangle shows this difference. The size of the rectangle shows the percentage exposure of the team to each sector.

Clicking on a sector filters the rest of the dashboard to only show companies from that country. Hovering over a sector reveals more information.



Emissions and emissions intensity through time

The chart shows weighted average emissions for the team (blue line) vs the aggregated benchmark (orange line) for the last five years. This is provided for both total emissions and emissions intensity because both measures need to fall over time to meet the Paris Climate Change Agreement targets.



Company scatter plot

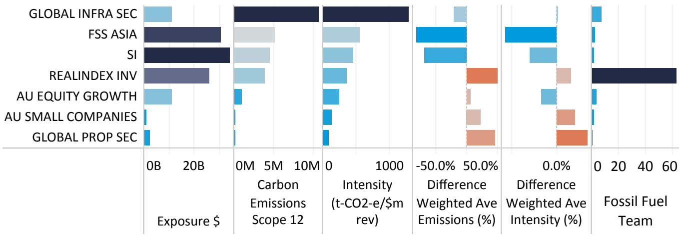
The scatter plot shows the difference between each company held by the team and the industry average for the company. The x-axis shows this for total emissions while the y-axis shows this for emissions intensity. Companies to the bottom left perform better on these measures than companies to the top right.

The size of the circle is proportionate to the $ exposure to the company for all portfolios.

Selecting a group of companies filters the rest of the dashboard to only show those companies. Hovering over a company reveals more information.

Source: MSCI / CFSGAM June 2018. For illustrative purposes only.

[2] TCFD, page 43 https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Annex-062817.pdf



Top emissions table

For the dashboard which covers all teams (available with our climate change statement) the table shows a break down of measures for each team including:

- Total assets under management
- Weighted average emissions for the team
- Weighted average emissions intensity for the team
- The difference between each teams weighted average and their benchmark for both measures
- The average number of fossil fuel companies held in each portfolio.

For the individual investment team reports (available in each listed equity team's profile page) the table shows information for the ten largest contributors to the team's weighted average emissions. The table shows:

- $ Exposure across all portfolios
- Total carbon emissions (scope 1 & 2)
- What contribution these emissions make to the weighted average for the team
- The company's emissions intensity
- What contribution the emissions makes to the weighted average intensity for the team
- The difference between the company's emissions intensity and the industry average.

[2] Scope 1: All direct GHG emissions. Direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity. Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat or steam.