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MARKET SNAPSHOT

May 2025

Index Carbon Analysis: FTSE100

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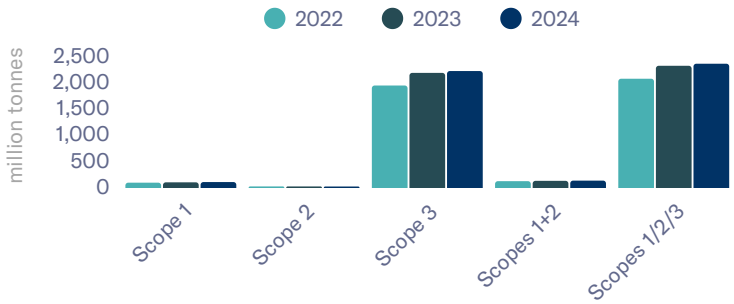
KEY FINDINGS

- Scope 1&2 emissions remained flat on 2023 levels
- Top 5 emitters represent ~75% of index emissions (~16% of market cap)
- Index faces 68% potential carbon liability under IPCC Net Zero scenario by 2050

ⓘ This series examines the carbon footprint of major indices, revealing key sector patterns, company-level drivers, and potential carbon liabilities under different climate scenarios.

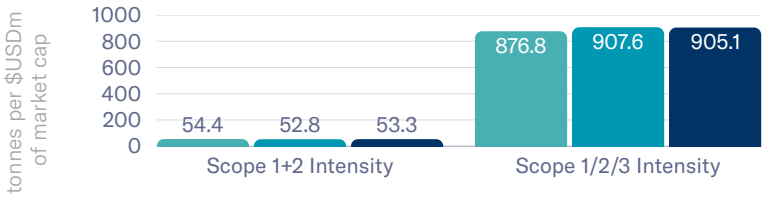
Emissions

FTSE100 companies' Scope 1 and 2 carbon output were flat in 2024, though an increase from 2022. Supply chain emissions (Scope 3) experienced an uptick from 2023 to 2024, continuing the rise seen in 2022.



Emissions Intensity

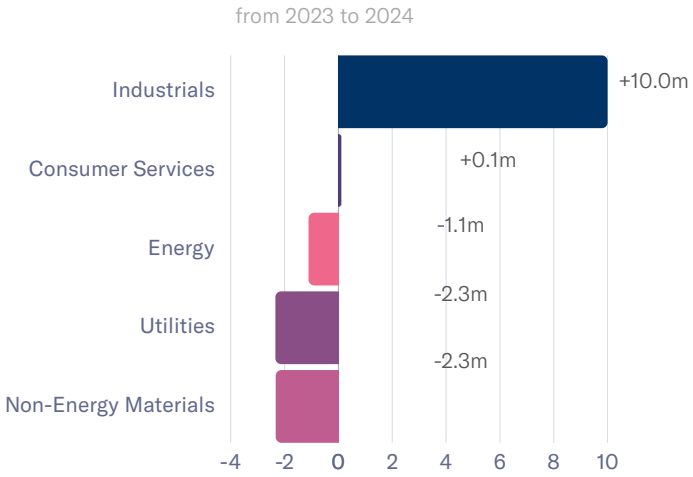
Scope 1 and 2 intensity remained steady, as did Scope 1/2/3 - though still elevated from 2022 levels.



Sectors: Biggest Movers in Total Emissions

Analysis of Scope 1 and 2 emissions reveals a significant increase in the Industrials sector. This increase is primarily due to the post-COVID resurgence in travel, particularly through EasyJet and International Airlines Group. The tourism theme also applies to the Consumer Services sector which saw slight increases in emissions from InterContinental and Compass Group.

Mondi Group saw a continued reduction in emissions (Non-Energy Materials sector), with Energy and Utilities following suit - albeit from a high base.



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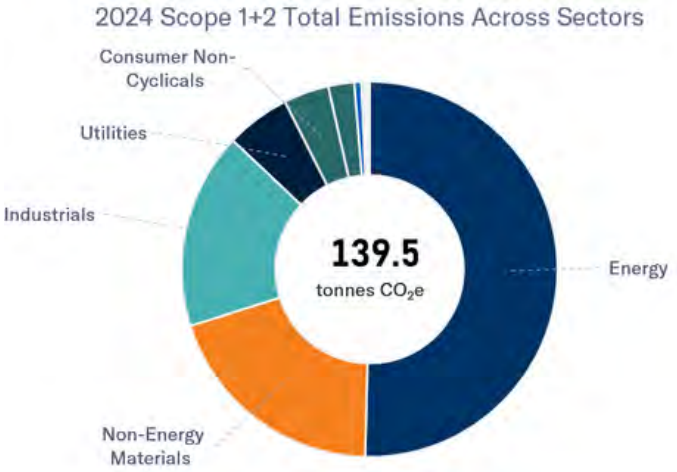
Total Emissions Across Sectors

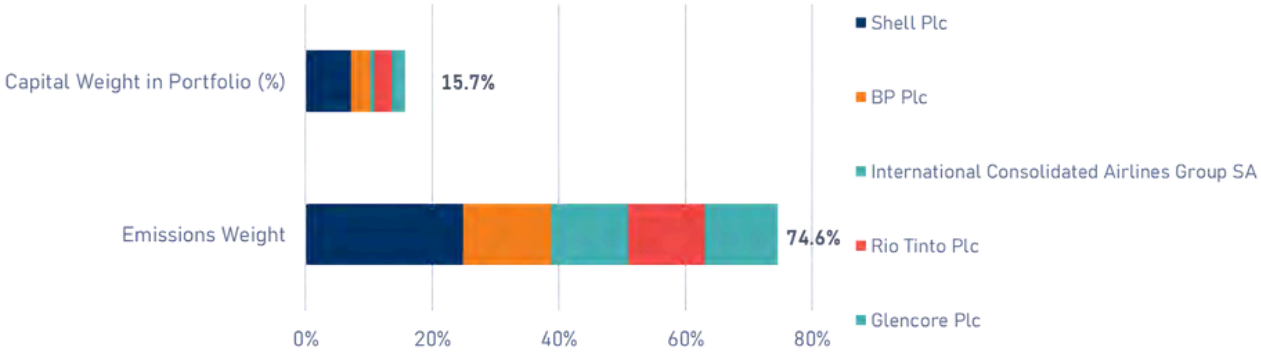
Energy, Non-Energy Materials, and Industrials account for the majority of Scope 1 and 2 emissions, collectively making up 87% of the index total.



Capital vs Emissions Weight of Top 5 Emitters

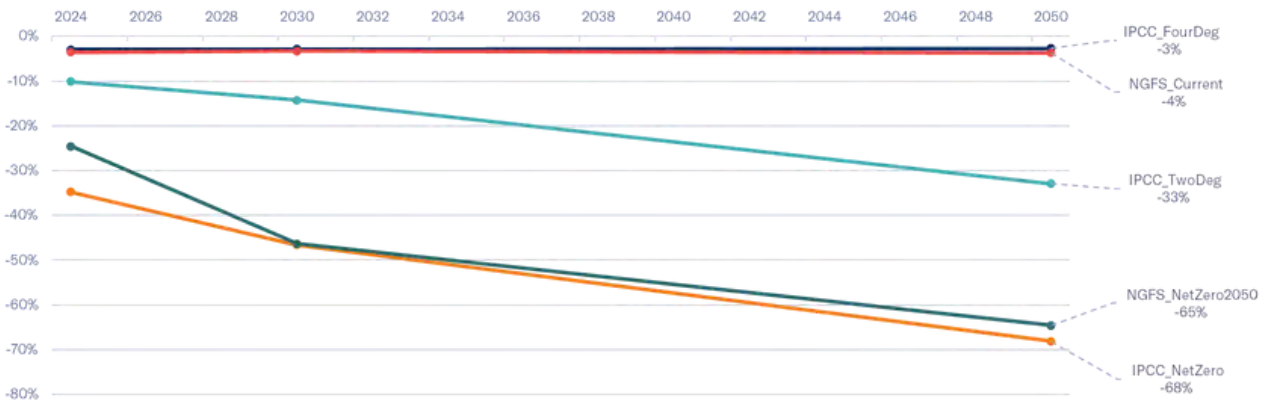
Scopes 1 and 2 (2024)

Of the 100 constituents in the index, ~75% of total emissions come from just five companies, representing ~16% of the index by capital weight.



Potential Carbon Liability (PCL)

Across the index, we observe a potential carbon liability (PCL) of up to 68% under the IPCC Net Zero scenario in 2050, with limited potential loss under the IPCC Four Degree and NGFS Current Policies scenarios. The IPCC Two Degree scenario holds some exposure, with a 14% PCL in 2030 and 33% in 2050.



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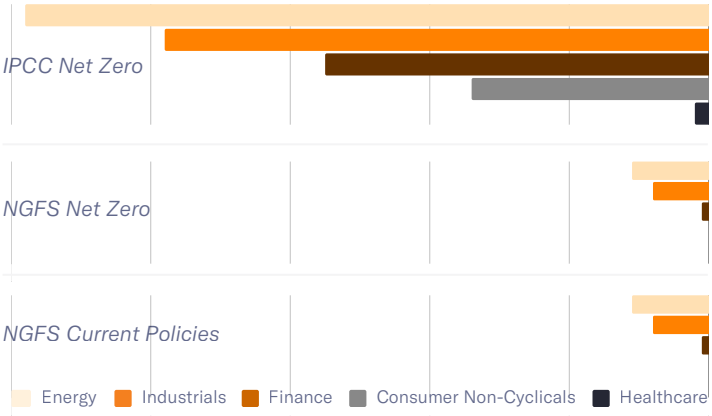
Total Emissions Across Sectors

Scope 1+2 (2024)

As expected, the high-emitting companies flow through to carbon risk, with energy and industrials generally the largest contributors of PCL across scenarios.



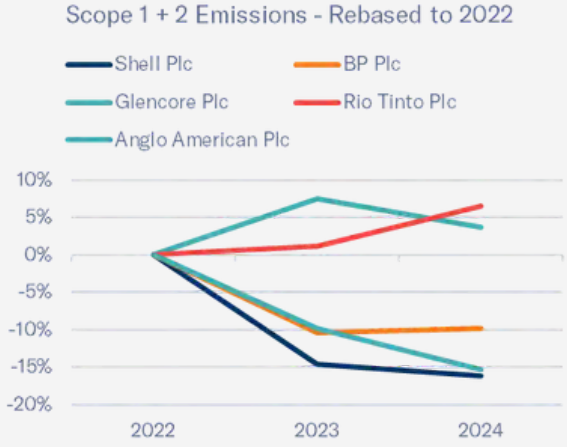
Messaging vs Metrics: Analysis of the FTSE100 Resource Giants

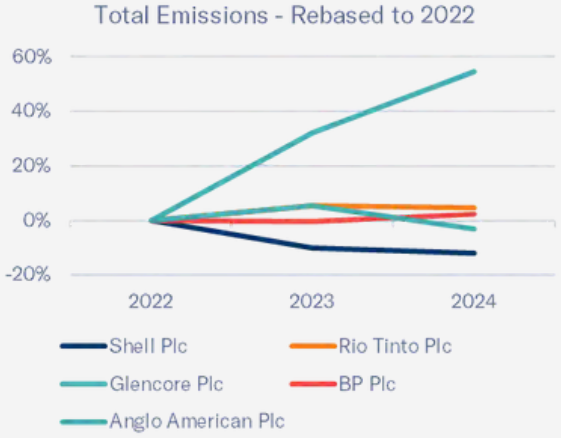
While not renowned for being an 'energy heavy' index due to its sector diversification, the FTSE100 does include many of the legacy oil and gas giants: Shell, BP, Rio Tinto, Anglo American, and Glencore. Although a number of these companies are making moves into low carbon technologies, the majority of their activities are still fossil fuel related. As such, their corporate positioning has been defensive. For instance, Shell's 'Make the Future' campaign, and BP popularising the term 'carbon footprint' to shift responsibility off extractors to individuals. The Russia-Ukraine war has also allowed them to emphasise their role in 'energy security' and 'reliable supply'.

Examining these companies through both Scope 1 & 2 and total emissions reveals varied trajectories from 2022 to 2024. Shell (-16%), BP (-10%), and Anglo American (-15%) demonstrate year-on-year reductions in operational emissions. Meanwhile, Rio Tinto and Glencore continue to increase emissions, with Glencore showing a notable divergence from the pack in the trajectory of its total emissions over this period.

This divergence highlights the strategic positioning within the fossil fuel value chain, with some companies beginning meaningful transitions while others double down on extraction-focused business models. This contrast was particularly evident in 2024, when Glencore ran advertisements in Australia explicitly promoting coal's role in electricity generation.

For investors, these patterns translate to markedly different transition risk profiles. While emissions reductions might impact short-term profits, the financial risks of maintaining carbon-intensive operations will likely result in significant longer-term losses as climate policies tighten globally.





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Methodology notes: Our machine learning models achieve strong accuracy across all scopes, with WMAPE (Weighted Average Median Absolute Percentage Error) ranging from 15.3% to 18.1%.

For detailed methodology and validation metrics, read our white paper: emmi.io/newsroom/white-paper-nov-2024

This analysis applies to the current STI constituents, using market values as of each year-end to determine index weightings.

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About Emmi Solutions

Emmi is 'your net-zero investor toolkit' – we provide financed emissions data and climate risk analysis across all major public and private asset classes. These support climate-related reporting, and analysis that feeds into investment management processes.

We use a combination of reported emissions, proprietary machine-learning models and algorithms to do this. Our tools translate emissions into financial implications, based on climate and pricing scenarios. This gives our clients actionable insights about their carbon exposure.

This diagnostics 'toolkit' is backed by our team of climate and finance experts.

Emmi believes that a low carbon economy is possible, and that properly incentivising and mobilising capital is the fastest and most cost-effective way to reach Net Zero and beyond.

Incorporating the cost of carbon into every decision will enable the finance sector, and its customers, to efficiently allocate resources towards this goal, which will accelerate decarbonisation.

To achieve this, and to meet regulatory requirements, there is a need for a broad spectrum of quality carbon emissions data and climate risk analysis. We have built Emmi to solve that problem.