

Introduction of Carbon Analysis at JK Capital

While the pressure on companies around the world to accelerate their decarbonisation efforts gains traction every day, we, at JK Capital Management, have developed our proprietary approach to monitor, assess and evaluate the “carbon path” that our portfolio companies are taking. As a responsible investor, decarbonisation effort is one of the most critical elements for incorporating climate-related risks into our investment management strategies.

GHG Metrics and Characteristics

JK Capital adopts a proprietary Greenhouse gas (“GHG”) emissions analysis approach to systematically assess the carbon intensity and decarbonisation efforts of our portfolio companies. Quantitative data is obtained from public disclosures made by portfolio companies in their ESG or CSR reports, as well as from external data providers such as Bloomberg, MSCI, Morningstar and CDP. Qualitative assessments would also be conducted jointly by the investment team and ESG team to comprehensively examine the company’s decarbonisation efforts.

As recommended by the TCFD, we follow and monitor specific GHG emissions metrics. By incorporating factors such as portfolios’ AuM and investee companies’ capital structure into these metrics and by paying close attention to their trends, the investment team is able to evaluate the overall carbon exposure of our portfolios from different perspectives.

- **Total Carbon emissions:** The absolute GHG emissions associated with any specific portfolio, expressed in tons of CO₂ (tCO₂).
 - The absolute value of GHG emissions associated with any specific portfolio, measured in tons of CO₂.
- **Carbon Footprint:** The total carbon emissions of a portfolio normalised by its market value, expressed in tCO₂ / \$m invested.
 - The value of GHG emissions per million USD invested associated with any specific portfolio, measured in tons of CO₂ per million USD invested.
- **Weighted Average Carbon Intensity (WACI):** Portfolio’s exposure to companies’ GHG intensity, expressed in tCO₂ / \$m of revenue.
 - The weighted positioning of portfolios in terms of investee companies’ carbon intensity, measured in tons of CO₂ per million dollar of revenues.
- **Carbon Intensity:** The volume of GHG per million dollar revenues for any portfolios/securities, expressed in tCO₂ / \$m of revenue.
 - Portfolio level: The carbon efficiency of any given portfolio measured as the total attributable carbon emissions per attributable revenue, measured in tons of CO₂ per million dollar of revenues.
 - Security level: The carbon efficiency of individual portfolio company.

More details on the use of these metrics are provided in the appendix.

The charts in this document are for illustration only.

The information contained herein is issued by JK Capital Management Limited. To the best of its knowledge and belief, JK Capital Management Limited considers the information contained herein is accurate as at the date of publication. However, no warranty is given on the accuracy, adequacy or completeness of the information. Neither JK Capital Management Limited, nor its affiliates, directors and employees assumes any liabilities (including any third party liability) in respect of any errors or omissions on this report. Under no circumstances should this information or any part of it be copied, reproduced or redistributed.

Taking not only absolute emission but also our investment value and weighting of each stock into consideration, these four metrics are used by the portfolio managers as criteria for portfolio construction and bases for portfolio environmental impacts evaluation.

In addition, on a security level, the **Carbon Intensity** metric only takes into consideration absolute emissions and revenues of companies into account, enabling straightforward company comparisons.

A calculation of carbon-related metrics is conducted on a quarterly basis by the ESG team at JK Capital prior to the holding of any ESG Committee. Although the information regarding GHG emissions tends to be published on a yearly basis by corporates, the removal of existing holdings, the inclusion of new names and the re-allocation of stocks in any portfolio make these metrics subject to constant evolution, and therefore require close monitoring by the ESG team.

Portfolio Carbon Analysis

By leveraging on companies’ disclosures and on external data providers, we estimate our AuM covered in terms of GHG data (Scope 1 and Scope 2) for our respective strategies, as of October 2021, at around 90% for our China Equity strategy, 80% for our Asia Equity strategy and 85% for our Asia ex-Japan Fixed Income strategy (Sovereign excluded). While we adopt a “name-by-name” approach for our equity portfolios, we use a sector-country approach for our Fixed Income strategy to perform our analysis.

For instance, regarding carbon emissions, we classify our equity holdings under four groups:

- Intense: Companies emitting more than 1,000,000 tons of CO2 per year. These companies also tend to be the companies with the highest carbon intensity.
- Moderate: Companies emitting between 10,000 to 1,000,000 tons of CO2 per year.
- Low: Companies emitting less than 10,000 tons of CO2 per year
- “Foggy”: Companies without enough reliable emission data

Below is a display of our internal two first “buckets” analysis:

Equity Strategy: Carbon emission per company (in kt of CO2)

| | | thousand of tons of CO2 | | | | | |
|-------------------------|------------|-------------------------|----------|----------|----------|----------|-------|
| Internal Classification | Company | 2016 | 2017 | 2018 | 2019 | 2020 | Trend |
| Intense | Company 1 | | 3,700.00 | 3,678.00 | 3,978.60 | 5,085.31 | |
| | Company 2 | 1,798.70 | 1,796.30 | 1,997.90 | 1,901.70 | 2,010.00 | |
| | Company 3 | | | 2,032.18 | 2,070.79 | 2,009.37 | |
| | Company 4 | 1,392.00 | 1,392.00 | 1,414.00 | 1,522.00 | 1,508.00 | |
| | Company 5 | 986.83 | 1,211.57 | 1,277.44 | 1,117.12 | 1,169.84 | |
| | Company 6 | 1,271.00 | 1,114.00 | 981.00 | 912.00 | 790.00 | |
| Moderate | Company 7 | | | | 146.53 | 154.21 | |
| | Company 8 | 51.27 | 50.45 | 47.17 | 48.90 | 40.20 | |
| | Company 9 | 22.67 | 38.52 | 31.69 | 36.71 | | |
| | Company 10 | | | | | 23.06 | |
| | Company 11 | 10.79 | 23.64 | 24.94 | 25.66 | 21.51 | |
| | Company 12 | 10.63 | 10.37 | 10.46 | 14.04 | 15.84 | |
| | Company 13 | | | 8.55 | 10.06 | 9.59 | |

The charts in this document are for illustration only.

The information contained herein is issued by JK Capital Management Limited. To the best of its knowledge and belief, JK Capital Management Limited considers the information contained herein is accurate as at the date of publication. However, no warranty is given on the accuracy, adequacy or completeness of the information. Neither JK Capital Management Limited, nor its affiliates, directors and employees assumes any liabilities (including any third party liability) in respect of any errors or omissions on this report. Under no circumstances should this information or any part of it be copied, reproduced or redistributed.

Equity Strategy: Carbon intensity per company (in kt of CO₂ / \$m of revenues)

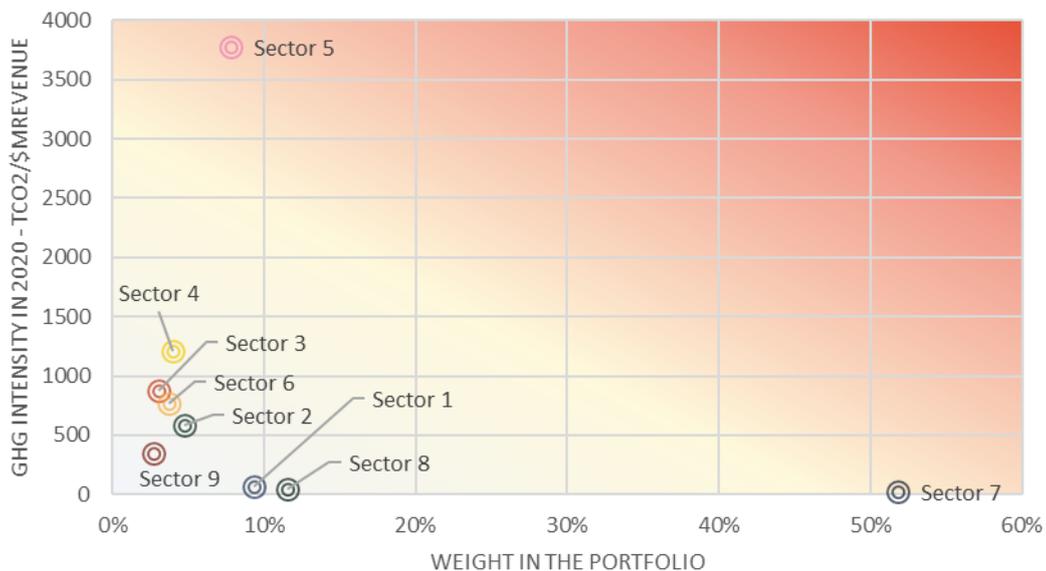
| | | thousand of tons of CO ₂ / \$Mln or revenues | | | | | |
|-------------------------|------------|---|------|------|------|------|-------|
| Internal Classification | | 2016 | 2017 | 2018 | 2019 | 2020 | Trend |
| Intense | Company 1 | | 1.96 | 1.80 | 1.92 | 2.12 | |
| | Company 2 | 0.20 | 0.18 | 0.17 | 0.15 | 0.14 | |
| | Company 3 | | | 0.24 | 0.24 | 0.24 | |
| | Company 4 | 1.14 | 1.03 | 0.98 | 0.98 | 0.89 | |
| | Company 5 | 0.43 | 0.45 | 0.40 | 0.34 | 0.35 | |
| | Company 6 | 0.29 | 0.25 | 0.20 | | 0.17 | |
| Moderate | Company 7 | | | | 0.02 | 0.02 | |
| | Company 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Company 9 | 0.06 | 0.09 | 0.07 | 0.07 | - | |
| | Company 10 | | | | | 0.05 | |
| | Company 11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | |
| | Company 12 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | |
| | Company 13 | | | 0.00 | 0.00 | 0.00 | |

Depending upon their level of carbon intensity, a specific course of action might be taken by the investment team during the engagement process with individual portfolio companies. Combining with additional information such as product mix, companies’ decarbonisation targets, regulatory requirement and national net-zero plan, JK Capital adopts a tailored engagement strategy to facilitate effective communication.

In particular, we pay more attention to companies in the “high” carbon intensity group and those associated with sectors or regions that are currently under heavy environmental regulatory scrutiny. This analysis enables the portfolio managers to better understand both the operational and ESG performances of the company, as well as the company’s outlook.

Another tool provided to the portfolio managers is the graphical illustration of all security weightings in perspective of their respective GHG intensity (in tCO₂/\$m of revenues) or, in the case of our fixed income strategy an analysis by country weighting and by sector weighting.

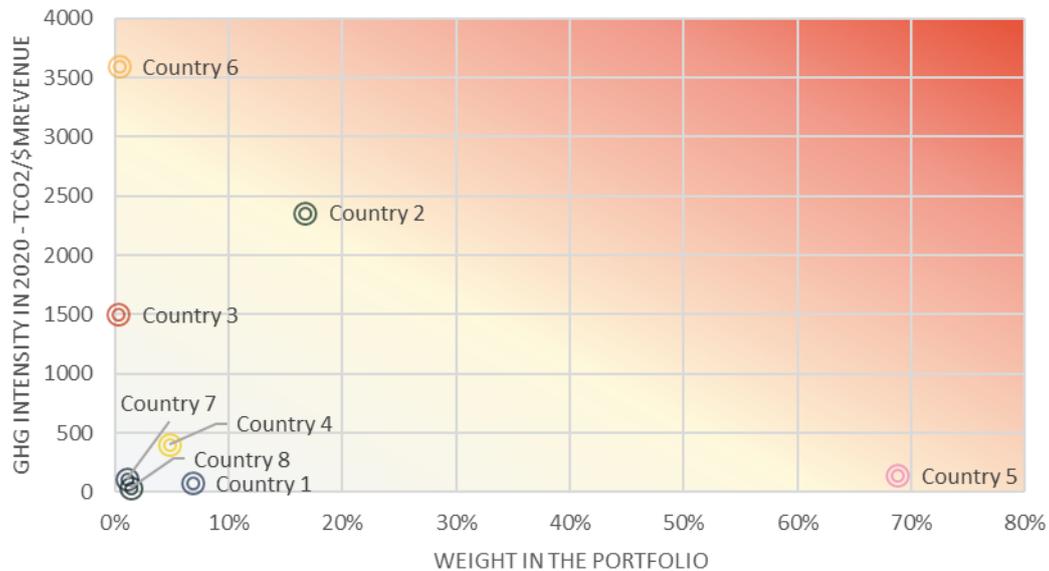
GHG Intensity vs weight in the fixed income strategy (per sector)



The charts in this document are for illustration only.

The information contained herein is issued by JK Capital Management Limited. To the best of its knowledge and belief, JK Capital Management Limited considers the information contained herein is accurate as at the date of publication. However, no warranty is given on the accuracy, adequacy or completeness of the information. Neither JK Capital Management Limited, nor its affiliates, directors and employees assumes any liabilities (including any third party liability) in respect of any errors or omissions on this report. Under no circumstances should this information or any part of it be copied, reproduced or redistributed.

GHG Intensity vs weight in the fixed income strategy (per country)



The series of analyses and illustrations above enable portfolio managers to identify the main carbon footprint contributors of the portfolios.

Combining this micro-approach with portfolio-level metrics fosters a comprehensive understanding of the carbon-related risks attached to our respective strategies and provides an in-depth analysis that allows us to scale our engagement with our investee companies.

Engagement and Stewardship

Engagement with companies has always been a critical part of the investment process at JK Capital. We actively engage with companies on the topic of carbon emissions using the results of our proprietary analysis. During the over 1,000 meetings we have with companies annually, the following list of sample carbon-related questions are often brought up alongside more in-depth follow-up questions:

- What is the company’s strategy, targets and timeline towards achieving net-zero?
- What measures is the company currently implementing to reduce carbon emissions? What are the expected outcomes of those measures?
- How is the company planning to reduce its energy intensity and carbon intensity?
- How have extreme climate events impacted the company’s operation in terms of financial performance? What measures the company is currently taking to mitigate the impacts?
- How have current environmental regulatory/carbon reduction targets impacted the company’s operations in terms of production capacity and financial performance? What measures is the company currently taking to address this issue?
- How has the company’s supply chain been impacted by climate events/environmental requirements? What measures is the company currently taking to address this issue?
- Based on the company’s current product/service offering, how does the company see itself benefiting/impacted in the long-term from/by climate change? What are the risks and opportunities the company is seeing in the long-term?

The charts in this document are for illustration only.

The information contained herein is issued by JK Capital Management Limited. To the best of its knowledge and belief, JK Capital Management Limited considers the information contained herein is accurate as at the date of publication. However, no warranty is given on the accuracy, adequacy or completeness of the information. Neither JK Capital Management Limited, nor its affiliates, directors and employees assumes any liabilities (including any third party liability) in respect of any errors or omissions on this report. Under no circumstances should this information or any part of it be copied, reproduced or redistributed.

- What are the company's views on the latest decarbonisation efforts of its peers?
- What is the company currently doing to prepare for carbon trading?

We share on a regular basis our internal research on various ESG topics including carbon intensity with our portfolio companies as a way to facilitate discussion and relationships. These engagements provide us with the opportunity to obtain a much deeper understanding of portfolio companies' decarbonisation efforts, which further enables us to integrate this information into our investment decision-making process.

Conclusion

Similar to our strong stance on other ESG topics, JK Capital deploys strong efforts to invest in companies with *best-effort* environmental performance (as opposed to *best-in-class*) and to help portfolio companies improve their carbon intensity performance. With the global megatrend of achieving net-zero, we strongly believe that companies with lower carbon intensity compared to their peers, or showing the willingness to adopt the best market practices have a head-start advantage in improving their production process and resulting profitability. Investing in such companies helps us deliver superior returns to our investors.

The charts in this document are for illustration only.

The information contained herein is issued by JK Capital Management Limited. To the best of its knowledge and belief, JK Capital Management Limited considers the information contained herein is accurate as at the date of publication. However, no warranty is given on the accuracy, adequacy or completeness of the information. Neither JK Capital Management Limited, nor its affiliates, directors and employees assumes any liabilities (including any third party liability) in respect of any errors or omissions on this report. Under no circumstances should this information or any part of it be copied, reproduced or redistributed.

Appendix

Illustration of GHG metrics applications

a. Companies characteristics

| Companies under consideration | Scope 1 & 2 (in tons of CO2) | Revenue (in USD Mn) | Market Cap (in USD Mn) | GHG/Revenue (in tons of CO2 / USD Mn Revenues) | Comment |
|-------------------------------|------------------------------|---------------------|------------------------|--|-----------------------------------|
| Company A | 10,000 | 100 | 15,000 | 100.0 | Company with high GHG Intensity |
| Company B | 4,500 | 100 | 2,000 | 45.0 | Company with medium GHG Intensity |
| Company C | 100 | 100 | 2,000 | 1.0 | Company with low GHG Intensity |

b. Total Carbon Emissions and Carbon Footprint

Hypothetical portfolios

| Allocation in USD Mn | Portfolio 1 | Portfolio 2 | Comment |
|----------------------------------|-------------|-------------|---|
| Investment in Company A | 5 | 10 | Although both portfolios have the same AuM, all companies are equally weighted in Portfolio 1 (33.3% per stock) while Portfolio 2 has 66.6% invested into company A and 33.3% into Company C. It is worth noting Company A has a higher market capitalization than Companies B and C. |
| Investment in Company B | 5 | 0 | |
| Investment in Company C | 5 | 5 | |
| AuM of the portfolio (in Mn USD) | 15 | 15 | |

Calculation of Total Carbon Emissions

| Total Carbon Emissions in tons of CO2 | Portfolio 1 | Portfolio 2 | Comment |
|---|-------------|-------------|--|
| $\sum_n^i \frac{\text{current value of investment}_i}{\text{Issuer's market capitalization}_i} * \text{scope 1\&2}_i$ | 14.8 | 6.9 | Based on the ownership approach, the Total Carbon Emissions of Portfolio 1 higher than Portfolio 2 |

Calculation of Carbon Footprint

| Total Carbon Footprint in tons of CO2 / USD Mn invested | Portfolio 1 | Portfolio 2 | Comment |
|--|-------------|-------------|---|
| $\frac{\sum_n^i \frac{\text{current value of investment}_i}{\text{Issuer's market capitalization}_i} * \text{scope 1\&2}_i}{\text{current portfolio value}}$ | 1.0 | 0.5 | Based on the ownership approach, Portfolio 2 is less carbon intensive than Portfolio 1. |

The charts in this document are for illustration only.

The information contained herein is issued by JK Capital Management Limited. To the best of its knowledge and belief, JK Capital Management Limited considers the information contained herein is accurate as at the date of publication. However, no warranty is given on the accuracy, adequacy or completeness of the information. Neither JK Capital Management Limited, nor its affiliates, directors and employees assumes any liabilities (including any third party liability) in respect of any errors or omissions on this report. Under no circumstances should this information or any part of it be copied, reproduced or redistributed.

Calculation of WACI (Weighted Average Carbon Intensity) and Carbon Intensity

Example 1

Hypothetical portfolios

| Allocation in USD Mln | Portfolio 1 | Portfolio 2 | Comment |
|-----------------------------------|-------------|-------------|---|
| Investment in Company A | 5 | 10 | All companies are equally weighted in Portfolio 1 (33.3% per stock) while Portfolio 2 has 66.6% invested into company A and 33.3% into Company C. |
| Investment in Company B | 5 | 0 | |
| Investment in Company C | 5 | 5 | |
| AuM of the portfolio (in Mln USD) | 15 | 15 | |

Calculation of WACI

| WACI (in tons of CO2 / USD Mln invested) | Portfolio 1 | Portfolio 2 | Comment |
|--|-------------|-------------|--|
| $\sum_n^i \frac{\text{current value of investment}_i}{\text{current portfolio value}} * \frac{\text{scope 1\&2}_i}{\text{Company's revenues}_i}$ | 48.7 | 67.0 | Based on a weighted average approach, Portfolio 2 is more carbon intensive than Portfolio 1. |

Calculation of Carbon Intensity

| Carbon Intensity (in tons of CO2 / USD Mln invested) | Portfolio 1 | Portfolio 2 | Comment |
|---|-------------|-------------|---|
| $\frac{\sum_i \text{current value of investment}_i * \text{scope 1\&2}_i}{\sum_n \text{Issuer's market capitalization}_i} * \frac{\sum_i \text{current value of investment}_i * \text{Company's revenues}_i}{\sum_n \text{Issuer's market capitalization}_i}$ | 27.8 | 21.8 | Based on the ownership approach, Portfolio 2 is less carbon intensive than Portfolio 1. |
| \sum of GHG (based on ownership approach - in tons of CO2) | 14.8 | 6.9 | Based on the ownership approach, Portfolio 1 is more exposed to carbon than Portfolio 2 |
| \sum of Revenues (based on ownership approach - in USD Mln) | 0.5 | 0.3 | Based on the ownership approach, Portfolio 1 is more exposed to revenues than Portfolio 2 |

The charts in this document are for illustration only.

The information contained herein is issued by JK Capital Management Limited. To the best of its knowledge and belief, JK Capital Management Limited considers the information contained herein is accurate as at the date of publication. However, no warranty is given on the accuracy, adequacy or completeness of the information. Neither JK Capital Management Limited, nor its affiliates, directors and employees assumes any liabilities (including any third party liability) in respect of any errors or omissions on this report. Under no circumstances should this information or any part of it be copied, reproduced or redistributed.

Example 2

Hypothetical portfolios

| Allocation in USD Mln | Portfolio 1 | Portfolio 2 | Comment |
|-----------------------------------|-------------|-------------|--|
| Investment in Company A | 0 | 20 | Portfolio 1 is only invested into Company B, while Portfolio 2 is invested into Company A and C. |
| Investment in Company B | 45 | 0 | |
| Investment in Company C | 0 | 25 | |
| AuM of the portfolio (in Mln USD) | 45 | 45 | |

Calculation of WACI

| WACI (in tons of CO2 / USD Mln invested) | Portfolio 1 | Portfolio 2 | Comment |
|--|-------------|-------------|---|
| $\sum_n^i \frac{\text{current value of investment}_i}{\text{current portfolio value}} * \frac{\text{scope 1\&2}_i}{\text{Company's revenues}_i}$ | 45.0 | 45.0 | Based on a weighted average approach, both Portfolios have the same carbon intensity. |

Calculation of Carbon Intensity

| Carbon Intensity (in tons of CO2 / USD Mln invested) | Portfolio 1 | Portfolio 2 | Comment |
|---|-------------|-------------|---|
| $\frac{\sum_i \text{current value of investment}_i * \text{scope 1\&2}_i}{\sum_n^i \text{current value of investment}_i * \text{Company's revenues}_i}$ | 45.0 | 10.5 | Based on the ownership approach, Portfolio 2 is less carbon intensive than Portfolio 1. |
| \sum of GHG (based on ownership approach - in tons of CO2) | 101.3 | 14.6 | Based on the ownership approach, Portfolio 1 is more exposed to carbon than Portfolio 2 |
| \sum of Revenues (based on ownership approach - in USD Mln) | 2.25 | 1.38 | Based on the ownership approach, Portfolio 1 is more exposed to revenues than Portfolio 2 |

The charts in this document are for illustration only.

The information contained herein is issued by JK Capital Management Limited. To the best of its knowledge and belief, JK Capital Management Limited considers the information contained herein is accurate as at the date of publication. However, no warranty is given on the accuracy, adequacy or completeness of the information. Neither JK Capital Management Limited, nor its affiliates, directors and employees assumes any liabilities (including any third party liability) in respect of any errors or omissions on this report. Under no circumstances should this information or any part of it be copied, reproduced or redistributed.