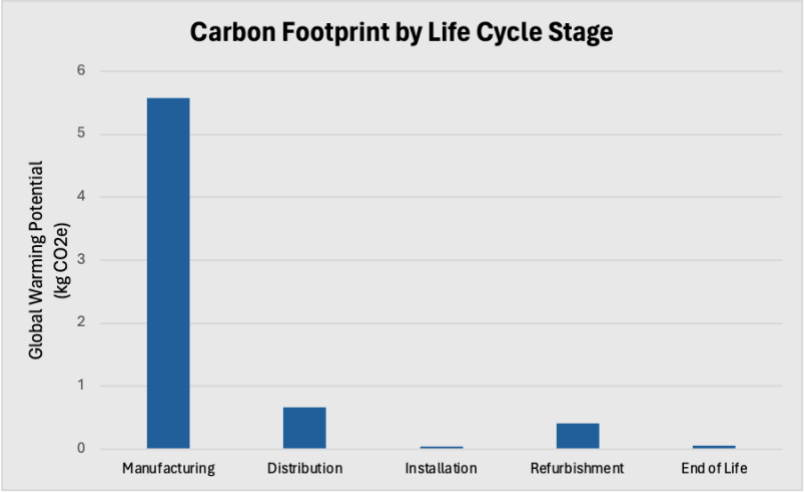
EMERALD CARPETS MATRIX 3184
LIFE CYCLE ASSESSMENT OVERVIEW

A comprehensive cradle-to-grave Life Cycle Assessment (LCA) study conducted by Emerald Carpets covering the Matrix 3184 product shows that the refurbishment processes implemented triple the product's lifetime on average, helping to avoid upstream carbon emissions.

A Life Cycle Assessment is an important tool in assessing the environmental impact of a product throughout the entire lifecycle, from raw material extraction to the product's final disposal. With this knowledge, Emerald Carpets is better equipped to address the most impactful materials and processes within the value chain, ultimately leading to an increasingly environmentally responsible product.

PRODUCT LIFECYCLE

Unlike most trade show carpet that is used for just one single show or event, Emerald Carpets offers a unique rental and refurbishment program that allows the carpet to be used multiple times. Based on the data used in the study, **the average use for one square meter of carpet is 3.02 but it can be used up to as many as 8 times.** In the average lifetime scenario after the initial manufacturing of the product, it is shipped back to Emerald twice for refurbishment and distributed, installed, and used roughly 3 times.



74%

Of Matrix 3184 Sold is Returned and Refurbished

2.23

kg CO2e per meter squared

ENVIRONMENTAL IMPACTS

Roughly 83% of the total lifecycle carbon footprint of 6.72 kg CO2e of carpet occurs in the initial manufacturing stage. However, by extending the product's life through the refurbishment process, the impact from manufacturing is avoided for future reuse of the carpet. The refurbishment stage includes cleaning, shipping, electricity, and repair of the carpet. Yet, **refurbishment still only accounts for 6% of the total carbon emissions**, thus showing clear carbon savings by avoiding the manufacturing stage twice on average. When considering the roughly 3 uses of one square meter of carpet, the carbon footprint for one square meter of carpet is then lowered to just 2.23 kg CO2e.