

Conscious Commerce Co.

<u>Team Member Name</u>	<u>Year</u>	<u>Major</u>
Anna Rose Dominic	2025	Human Resource Management
Kanak Bansal	2025	Human Resource Management
Manas Saurabh Mishra	2025	Human Resource Management
R Shweta	2025	Human Resource Management
Divisha Rastogi	2025	Human Resource Management

Advisor(s): Fr Kuruvilla Joseph Pandikattu SJ

Topic Title: Sustainable Last-mile Delivery Solutions: Reducing Packaging Waste and More

Audience: Board of directors of Amazon

Sustainable Development Goal

SDG# 12: "Ensure sustainable consumption and production patterns."

SDG# 09: "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation."

Executive Summary

Amazon's post-pandemic revenue surge to \$319.57 billion, marking a 35% year-on-year increase, has unfortunately paralleled a concerning spike in negative environmental impacts. Notably, there's been a 17% rise in annual carbon emissions, totaling around 60 million metric tonnes of CO2 equivalent, and a significant generation of over 600 million pounds of non-recyclable plastic packaging waste in the United States alone during 2020. These environmental externalities are primarily attributed to the company's vast transportation network, comprising over 100,000 delivery vehicles and various modes of shipping like air and sea. This underscores the pressing need for sustainable last-mile delivery solutions. Furthermore, shifting consumer sentiments reflect this urgency, with approximately 70% of European consumers prioritizing sustainable packaging, and 44% of global e-commerce customers altering their shopping habits due to sustainability concerns. Embracing sustainable practices not only aligns with evolving consumer expectations but also ensures regulatory compliance amidst tightening environmental regulations. It also enhances brand reputation, fosters customer loyalty, and promotes long-term business viability within a competitive and environmentally conscious market landscape.

To address these environmental challenges effectively and meet consumer expectations, Amazon must prioritize implementing sustainable last-mile delivery solutions. This involves investing in packaging materials with enhanced functionality and reduced environmental impact throughout their life cycle, such as recyclable or biodegradable options. The business model should integrate reverse logistics systems to collect and recycle packaging waste efficiently. Crucially, technology integration is paramount, including advancements in route optimization algorithms to minimize fuel consumption and emissions, along with tracking systems for eco-friendly packaging traceability. Offering pricing incentives and discounts for customers opting for sustainable delivery options can further incentivize eco-conscious behavior. Moreover, transitioning to electric and hybrid vehicles within the fleet is imperative to significantly reduce carbon emissions and the overall environmental footprint. By seamlessly integrating these solutions, Amazon can substantially enhance its sustainability practices, effectively reduce packaging waste, lower carbon emissions, and align with regulatory standards, all while exceeding consumer expectations for eco-friendly operations.