

# Bright Light Consulting

<u>Team Member Name</u>	<u>Year</u>	<u>Major</u>
Shorya Angrish	2025	MBA
Nicole Buckle	2025	MBA
Mark Roy	2025	MBA
Steven Regehr	2024	MBA

**Advisor(s):** Jaya Jayasuriya, Arly Akerstream

**Topic Title:** The Dark Side of Consumer Electronics, E-waste and the Right to Repair

**Audience:** Apple Inc. Board of Directors

## Sustainable Development Goal

**SDG 12:** Ensure sustainable consumption and production patterns.

**SDG 8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

## Executive Summary

Apple is the world's largest electronics company producing smartphones, computers, displays, watches, and other consumer electronics. While Apple has committed to many admirable environmental impact goals such as producing their products with recycled materials and reducing their carbon emissions footprint, more can be done to improve ethical and sustainable practices. Approximately 250,000 tonnes of electronic waste are exported illegally to Africa annually from developed countries, predominantly Europe and North America. Much of this waste is processed by untrained and ill-equipped workers, which often involves burning the remnants to separate the copper from the plastic insulation. This act causes the release of toxins that pollute the surrounding environments and threaten the health of workers. Apple's intent on constantly producing and selling hardware, while also gate keeping their technologies with predatory licensing agreements, warranty-voiding and other hidden barriers to "right to repair" for customers only serves to compound this problem.

Our recommendations will guide Apple to lead the consumer electronics industry to increase the useful lifespan of smartphones and computers from 2.5 to 5+ years. Apple must break down barriers to third-party repair by providing the tools, parts, and knowledge, and eliminate planned obsolescence. When a device reaches end-of-life, Apple can leverage their expertise learned from their materials recovery lab to disassemble and recertify working parts from old devices to supply the repair market with a source of cost-effective genuine parts. Remaining materials can be extracted and used to supply the production of new devices, especially for materials like titanium, cobalt, lithium, and gold. Our proposal will demonstrate that it is possible to grow sales and market penetration by making older generation Apple products readily available to developing countries and cost sensitive consumers. Additionally, there is growing legal pressure, especially in Europe, for technology companies to adopt right-to-repair, open standards, and require cross compatibility.

By investing in not only new electronics production, but also the reuse and recycling of electronic devices, Apple can improve the communities of Africa and other developing countries which are disproportionately affected by e-waste, providing them with safe working environments and stable jobs in electronics recycling. By embracing these ideals, Apple stands to grow consumer trust and demonstrate their commitments to sustainability and environmental stewardship.