

## Oreigin Consulting

| <u>Team Member Name</u> | <u>Year</u> | <u>Major</u>      |
|-------------------------|-------------|-------------------|
| Charles Daine           | Sophomore   | Political Science |
| Haley Logsdon           | Freshman    | Political Science |
| Jessica Dunham          | Sophomore   | Health Sciences   |
| Sophie Collia           | Sophomore   | Biology           |
| Isabel Slattery         | Sophomore   | Political Science |

**Advisor(s):** Liana Howe

**Topic Title:** Glencore: Tailings Storage Facilities recycling and waste management.

**Audience:** Glencore Board of Directors

### Sustainable Development Goal

SDG #12: Ensure sustainable consumption and production patterns

SDG #15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

### Executive Summary

Glencore currently runs mining operations in over thirty countries worldwide, producing and marketing over sixty commodities necessary for our lives in the modern world. With thousands of employees and facilities, Glencore has the resources to lead the mining sector to new, more prosperous heights. But right now, the practice of using dangerous Tailings Storage Facilities (TSFs) threatens not only the ethicality of Glencore's business practices but also Glencore's bottom line. With hundreds of TSF failures since their invention, and thousands more leaking damaging chemicals into communities and ecosystems globally, these TSFs must be phased out of Glencore's current business model.

We propose using the waste in these facilities to create new commodities: recycled construction materials. The construction materials can be sold in bulk across the world, diminishing the need for TSFs alongside the need to spend significant resources on their upkeep. These construction materials can also be kept internally and produced into goods such as concrete, bricks, and ceramics, creating new, greener, marketing opportunities for Glencore. These solutions will not only make Glencore a more ethical and responsible world leader in mining but also make Glencore significantly more profit every year.