# Re-Mining: Sustainable Metal Extraction

## May 2024

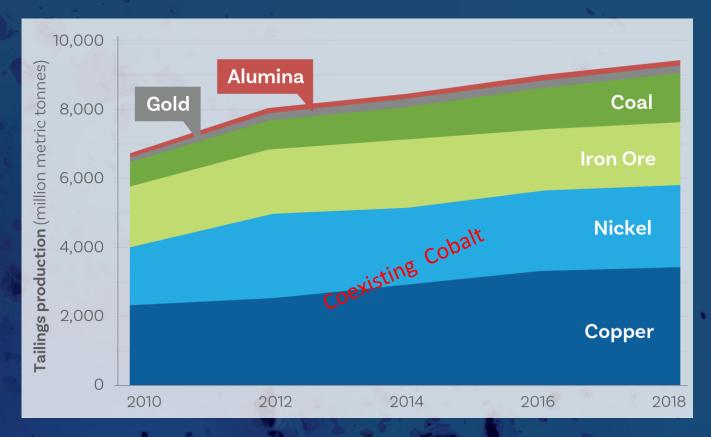




### The Opportunity

#### Annual tailings by commodity

- 3.4 billion tonnes wastes annually from copper extraction (2018).
- Declining grades driving waste volumes.
- Coexisting metals end up in waste as much as 0.1 % Co could be present in an average Cu or Ni deposit



Source: International Council on Mining and Metals; Roadmap for Tailings Reduction, 2022

#### The Challenges

Scale of liability for environmental bonds prohibitive for junior re-miners.

- Regulatory frameworks have not kept up with modern desire to re-mine waste, especially at abandoned sites
- Low grades traditional economic models don't work (green premiums)
- Challenging metallurgy