



Executive Summary

\$6M at a \$30M Post-Money Valuation.

The Problem: Strategic & Environmental Chokepoints

The global transition to advanced electronics, electric vehicles, and national defense systems is paralyzed by a dual crisis:

- Mineral Sovereignty: 90% of refined rare earth elements (REEs) are controlled by foreign entities. Traditional mining requires multi-year permitting and billions in capital expenditure, leaving the domestic supply chain deeply vulnerable.
- The Waste Liability: U.S. utilities and industrial companies are burdened by billions of waste (Coal Fly Ash, E-Waste, and Red Mud). These materials are multi-billion-dollar hazardous liabilities currently leaching into the environment.

The Mission: Securing Domestic Sovereignty

C2RE is a technology licensing company transforming toxic waste into Rare Earth "artificial ore" through industrial remediation. We provide a multi-year year shortcut to a domestic supply chain, enabling a self-reliant American manufacturing base for defense, aerospace, and semiconductor industries.

The Technology: "Modular Biological Refineries"

C2RE is developing a proprietary, multi-stage bio-chemical platform that replaces extreme heat and toxic acids with natural biological processes. Our closed-loop model ensures we capture value at every link of production:

- Stage 1: "Pre flight Assay": Proprietary diagnostics "fingerprint" feedstock composition to algorithmically map microbial extraction parameters before processing. AI powered genetic control
- Stage 2: Bio-Leaching: Microbial (fungi/yeast) consortia in massive off the shelf fermentation tanks naturally secrete acids to strip metals into a liquid solution at near ambient temperatures.
- Stage 3: Precision Recovery: On-site, targeted chemical precipitation from bio-leaching fluid combined with waste (coal ash, ewaste, red mud, mine tailings) results in **Metal Salts** tailored perfectly to midstream separations buyer specifications.

The Market: Tri-Sector Universal Platform

C2RE is a universal engine driving three multi-billion-dollar markets:

- Coal Fly Ash (Utility & Environment): A volume-driven market anchored by federal EPA remediation mandates for legacy ash ponds.
- E-Waste (Technology & Urban Mining): A high-concentration market for the recovery of Gold, Silver, Palladium, etc. from printed circuit boards.
- Red Mud / Sludge (Defense & Semiconductors): A strategic market for Gallium and Scandium, essential for 5G/6G hardware, AI chips, and high-performance alloys.

Competitive Defense in Layers

- Economic Inversion: While traditional miners pay to dig, C2RE partners can be paid to take the feedstock via remediation fees, creating a structurally near-negative cost basis.
- Recipe Lock: Our microbial strains and batch-tuning data are proprietary data assets; competitors cannot replicate our yields without the C2RE biological "software". We scale the biology, not the machinery
- Speed to Market: By co-locating at existing brownfield sites using modular hardware, C2RE reaches operational status in months rather than a decade of mining red tape.

Use of Proceeds

- Use of \$6M Capital: 45% (\$2.7M) for Industrial Scale-Up to TRL 7; 30% (\$1.8M) for IP Portfolio & Recipe Optimization; 25% (\$1.5M) for Strategic BD & Regional Hub Partnerships.