



## **State of Wyoming – Energy Matching Funds Proposal**

### **Wyoming CORE (Carbon Ore Rare Earth) Mine Project**

**Project Applicant:** Ramaco Resources, Inc. and its wholly owned subsidiary Ramaco Carbon, LLC.

**Qualifications:** Ramaco, a leader in metallurgical coal mining operations, stands at the forefront of pioneering carbon ore-to-products research, with a state-of-the-art research park and the adjacent 16,000-acre Brook Mine property located north of Sheridan, Wyoming. In May 2023, Ramaco announced a discovery of an unconventional rare earth element (REE) deposit at the Brook Mine property.

Ramaco’s many collaborative efforts with universities and Department of Energy (“DOE”) affiliated national laboratories, coupled with a robust portfolio of patented intellectual property, underscore its innovation leadership in identifying new, innovative uses for coal.

Ramaco has secured mining permits for ~5,000 out of the 16,000-acre Brook Mine and has actively engaged with the DOE’s associated National Energy Technology Laboratory (“NETL”) to assess the geology and its geochemical origins. Ramaco seeks to extract valuable rare earth elements (“REE”) and other critical minerals from the Brook Mine carbonaceous ore deposits, which has been called one of the largest unconventional deposits of REEs in the world by NETL. The Fluor Corporation indicates that the Brook Mine would be the only primary source mine for Scandium (Sc), Gallium (Ga), and Germanium (Ge), in the world.

**Project Summary & Outcomes:** Ramaco seeks support from the Wyoming Energy Authority’s Energy Matching Funds (WEA/EMF) program to develop, mine, design, construct, and equip a facility deploying innovative technologies to produce concentrated mixed rare earth oxides and other critical minerals from Wyoming’s abundant coal resources. The planned facility is a 20,000 sq ft enclosed structure located on Ramaco’s owned I-2 (industrial) zoned property with initial construction beginning in 2025 and expanding to full commercial scale is reached and demonstration operations have been validated. The facility will deploy advanced, energy efficient technologies to convert carbon ores through beneficiation and hydrometallurgy to produce mixed REOs and separated oxides. Due to the unique chemical composition of the input feedstock and the processed feedstock from the Facility, Ramaco does not have a one-to-one comparison with competitors in this market.

**Energy Matching Funds Request:** \$9,998,310

**Benefits to the Public/State of Wyoming:** The project will create high-tech employment opportunities for over 100 new permanent employees and up to 400 construction jobs. This will attract skilled workers to the region creating opportunities with advanced skill training; maximize Wyoming’s leadership as a national energy producer; creating a new value proposition for coal in addition to power generation and steel manufacturing, and enter the market as a direct supplier of domestically sourced critical minerals to address our urgent national needs. The global demand for REEs is rapidly growing and Wyoming is uniquely positioned to seize this opportunity.