





Geodyn Solutions proposes a \$250 million investment to develop a sustainable rare earth element (REE) mining project in the Sierra de Bahoruco, Pedernales Province, Dominican Republic. This project will utilize cutting-edge organic mining technologies, ensuring minimal environmental impact while maximizing economic returns. Additionally, the project includes a \$50 million investment in a 30 MW mobile power generation system utilizing Organic Rankine Cycle (ORC) power units to provide reliable, sustainable energy for mining operations. A \$30 million contingent fee is allocated to address unforeseen costs, ensuring project resilience and operational flexibility. This investment aligns with global trends in clean energy and critical mineral independence, providing a high return on investment (ROI) and establishing Geodyn Solutions as a leader in responsible rare earth extraction.





CAPITAL EXPENDITURE

(CAPEX)

EXPLORATION & GEOLOGICAL SURVEYS
\$20 MILLION

MINING EQUIPMENT & ORGANIC PROCESSING PLANT **\$80 MILLION**

INFRASTRUCTURE (ROADS, POWER, WATER)
\$40 MILLION

RESEARCH & DEVELOPMENT FOR SUSTAINABLE EXTRACTION \$20 MILLION

REGULATORY COMPLIANCE & LICENSING \$10 MILLION

ENVIRONMENTAL PROTECTION & REFORESTATION PROGRAMS
\$10 MILLION

30 MW MOBILE POWER GENERATOR WITH ORC UNITS **\$50 MILLION**

CONTINGENT FEE FOR UNFORESEEN COSTS

\$30 MILLION

TOTAL CAPEX
\$250 MILLION



OPERATIONAL COSTS (OPEX) & REVENUE PROJECTIONS

ANNUAL OPEX

\$70 MILLION (INCLUSIVE OF LABOR, ENERGY, LOGISTICS, MAINTENANCE, AND ENVIRONMENTAL PROTECTION)

AVERAGE RARE EARTH OXIDE PRICE \$10,000 PER METRIC TON

ANNUAL REVENUE

\$150 MILLION (15,000 METRIC TONS X \$10,000/TON)

PROJECTED ROI

18-20% PER ANNUM

PAYBACK PERIOD

5-6 YEARS

10-YEAR NET PROFIT PROJECTION

\$900 MILLION



JOB CREATION & SOCIOECONOMIC IMPACT

DIRECT JOBS CREATED:

1,500 (ENGINEERS, GEOLOGISTS, PLANT OPERATORS, ENVIRONMENTAL SCIENTISTS, LOGISTICS PERSONNEL)

INDIRECT JOBS CREATED:

5,000 (SUPPLY CHAIN, LOCAL BUSINESSES, SERVICES, LOGISTICS)

TRAINING & UPSKILLING

PROGRAMS: PARTNERSHIP WITH LOCAL UNIVERSITIES FOR WORKFORCE DEVELOPMENT

COMMUNITY INVESTMENT:

\$5 MILLION ALLOCATED FOR EDUCATION, HEALTHCARE, AND CLEAN WATER PROJECTS



POWER SUPPLY & SUSTAINABILITY STRATEGY

30 MW MOBILE POWER GENERATOR WITH ORC TECHNOLOGY

- Provides efficient, reliable, and mobile power to support mining and processing operations.
- Uses **Organic Rankine Cycle (ORC) units**, improving energy efficiency and reducing carbon footprint.
- Ensures **continuous power supply**, reducing dependence on external power sources.

RENEWABLE & HYBRID ENERGY INTEGRATION

- Solar & Wind Feasibility Study to further offset energy costs and environmental impact.
- Battery Storage Systems to enhance energy security and efficiency.

ENERGY EFFICIENCY MEASURES

- Use of high-efficiency electric mining equipment.
- Adoption of smart-grid technologies to optimize energy use.
- Water recycling and low-energy bio-mining technologies.

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ENVIRONMENTAL BENEFITS & SUSTAINABILITY MEASURES



ORGANIC & ECO-FRIENDLY MINING TECHNIQUES

- Use of bio-leaching microbes to extract REEs with minimal chemical impact.
- Avoidance of toxic reagents like sulfuric acid and cyanide.
- Reduced water usage through closed-loop water recycling systems.

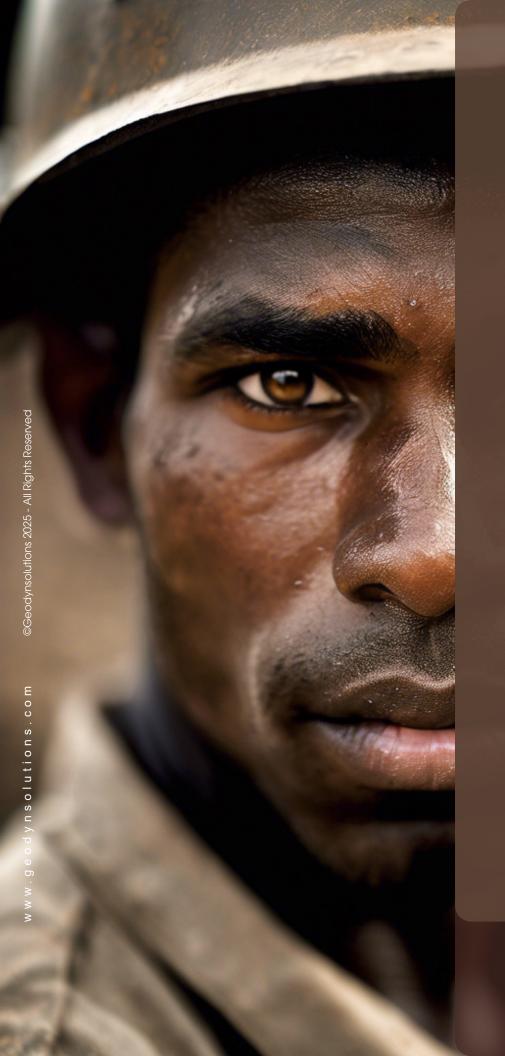
REFORESTATION & LAND RESTORATION

- Active restoration of mined areas with native tree species.
- Carbon sequestration programs to offset emissions.

WASTE MANAGEMENT & CIRCULAR ECONOMY

- Recycling of process tailings for secondary mineral recovery.
- Safe disposal and management of residual materials.





This investment will establish Geodyn Solutions as a pioneer in sustainable rare earth mining, tapping into one of the most promising untapped REE reserves in the Western Hemisphere. By using organic and eco-friendly extraction methods, the project ensures longterm environmental responsibility while achieving strong financial returns and strategic market positioning.



NEXT STEPS

- 1. CONDUCT FEASIBILITY STUDY AND FINALIZE ENVIRONMENTAL IMPACT ASSESSMENTS.
- 2. SECURE NECESSARY PERMITS AND GOVERNMENT APPROVALS.
- 3. BEGIN PHASED DEVELOPMENT WITH EXPLORATION AND INFRASTRUCTURE SETUP.
- 4. ESTABLISH INITIAL PILOT PRODUCTION AND EXPAND TO FULL-SCALE OPERATIONS WITHIN THREE YEARS.





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