

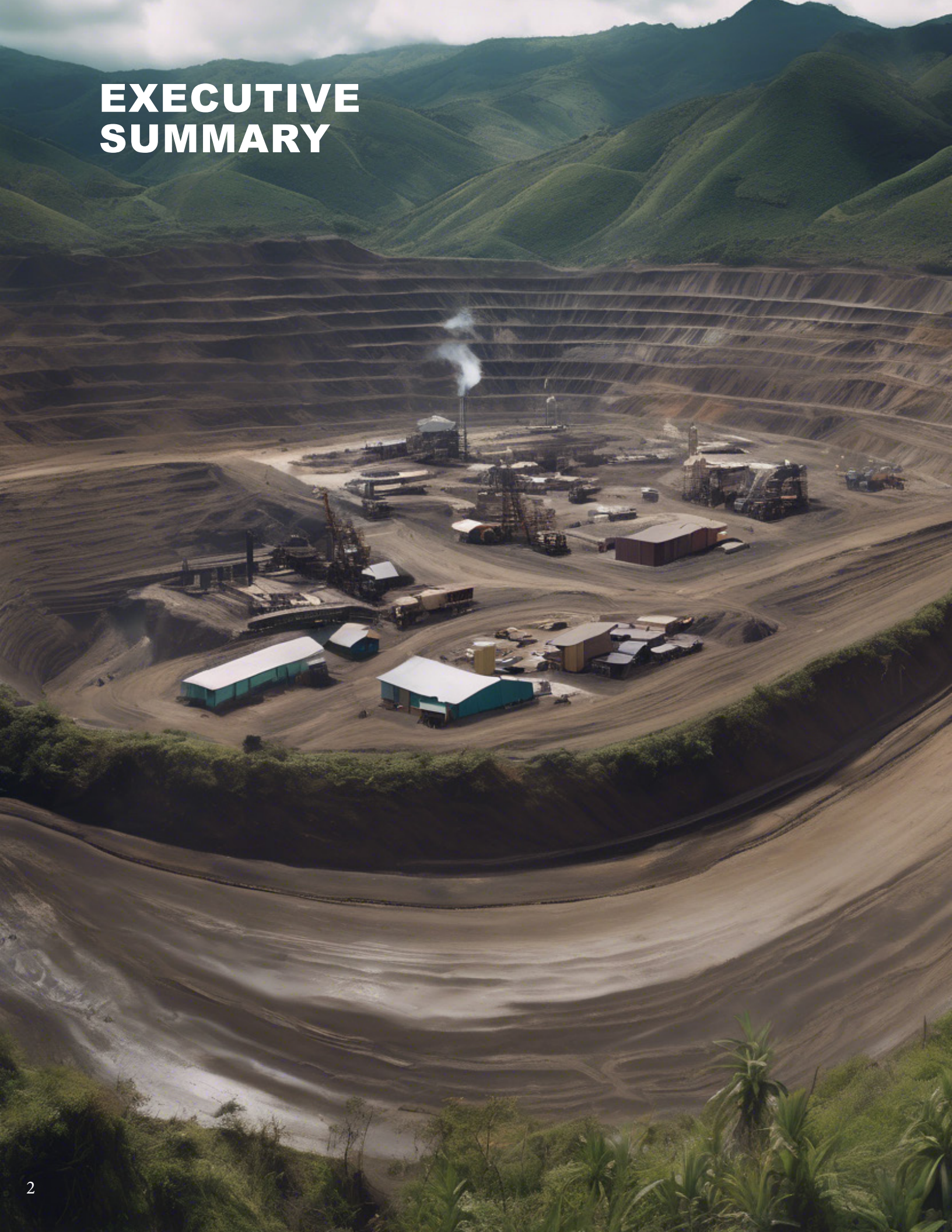


**\$250 MILLION  
INVESTMENT IN  
ORGANIC GOLD MINING  
IN ECUADOR**

[www.geodynsolutions.com](http://www.geodynsolutions.com)



# EXECUTIVE SUMMARY







Executive Summary Geodyn Solutions proposes a \$250 million investment to develop a sustainable gold mining project in Ecuador, leveraging the country's 26.28-tonne gold reserve and high global demand for responsibly sourced gold. 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, providing 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 Ecuador's gold extraction strategy while integrating modern sustainable mining practices for long-term profitability.



# INVESTMENT OVERVIEW

**TOTAL INVESTMENT:**

\$250 MILLION (INCLUDING \$50 MILLION FOR POWER GENERATION AND \$30 MILLION CONTINGENCY FUND)

**PROJECT DURATION:**

10 YEARS (5 YEARS OF PEAK PRODUCTION)

**MINEABLE RESERVE ESTIMATE:**

10+ MILLION OUNCES OF GOLD

**TECHNOLOGY:**

ORGANIC LEACHING, BIO-MINING,  
MICROBIAL-ASSISTED EXTRACTION

**ANNUAL PRODUCTION TARGET:**

500,000 OUNCES OF GOLD

**POWER SUPPLY:**

30 MW MOBILE POWER GENERATOR WITH  
ORC POWER UNITS





# CAPITAL EXPENDITURE

## (CAPEX)

### **EXPLORATION & GEOLOGICAL SURVEYS:**

\$30 MILLION

### **ADVANCED 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:**

\$20 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 BREAKDOWN:**

- Labor & Workforce: \$25 million
- Energy Costs (Mobile Power & ORC Supply): \$15 million
- Mining & Processing Operations: \$40 million
- Logistics & Transportation: \$10 million
- Equipment Maintenance & Depreciation: \$10 million
- Environmental Compliance & Waste Management: \$5 million
- Total Annual OPEX: \$105 million

### **REVENUE PROJECTIONS:**

- Average Gold Price: \$1,800 per ounce
- Annual Production: 500,000 ounces
- Annual Revenue: \$900 million (500,000 ounces x \$1,800/oz)
- Projected ROI: 25-30% per annum
- Payback Period: 3-4 years
- 10-Year Net Profit Projection: \$5+ billion





# JOB CREATION & SOCIOECONOMIC IMPACT

- **DIRECT JOBS CREATED:** 2,000 (ENGINEERS, GEOLOGISTS, PLANT OPERATORS, ENVIRONMENTAL SCIENTISTS, LOGISTICS PERSONNEL)
- **INDIRECT JOBS CREATED:** 6,000 (SUPPLY CHAIN, LOCAL BUSINESSES, SERVICES, LOGISTICS)
- **TRAINING & UPSKILLING PROGRAMS:** PARTNERSHIP WITH ECUADORIAN UNIVERSITIES FOR WORKFORCE DEVELOPMENT
- **COMMUNITY INVESTMENT:** \$10 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.



# ENVIRONMENTAL BENEFITS & SUSTAINABILITY MEASURES



## ORGANIC & ECO-FRIENDLY MINING TECHNIQUES

- Use of bio-leaching microbes to extract gold with minimal chemical impact.
- Avoidance of toxic reagents like cyanide and mercury.
- 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.





## **STRATEGIC PARTNERSHIPS & GOVERNMENT ENGAGEMENT**

- Collaboration with the Ecuadorian Government & National Mining Authorities to streamline permits and operations.
- Engagement with global gold refiners and financial institutions for offtake agreements.
- Partnerships with international organizations for green certification and investment grants.



This investment will establish Geodyn Solutions as a pioneer in sustainable gold mining, tapping into Ecuador's rich gold reserves with an environmentally responsible approach. By using organic and eco-friendly extraction methods, the project ensures long-term environmental responsibility while achieving strong financial returns and strategic market positioning.



# NEXT STEPS

**CONDUCT FEASIBILITY STUDY AND  
FINALIZE ENVIRONMENTAL IMPACT  
ASSESSMENTS.**

**SECURE NECESSARY PERMITS AND  
GOVERNMENT APPROVALS.**

**BEGIN PHASED DEVELOPMENT  
WITH EXPLORATION AND  
INFRASTRUCTURE SETUP.**

**ESTABLISH INITIAL PILOT  
PRODUCTION AND EXPAND TO  
FULL-SCALE OPERATIONS WITHIN  
THREE YEARS.**

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*Geodyn Solutions is poised to lead the next generation of  
responsible gold mining in Ecuador.*





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