



Ministry of Investment,
industry and trade
of the Republic of Uzbekistan

Investment proposal: Gold mining and processing



World market and global trends:

Gold production and usage highlights:

1. Global gold mine production in 2024 reached approximately 3,600 metric tons. China remained the largest gold producer, accounting for around 10–11% of global output, followed by Australia and Russia.
2. Gold processing and refining capacity continued to expand in 2024, driven by increased demand for high-purity gold (99.99%) for investment, central banks, and high-tech industries. Asia accounted for more than 55% of global gold refining capacity, with China, India, and Switzerland playing key roles in refining and bullion trading.
3. Total gold demand in 2024 was estimated at around 4,400 tons, supported by: Jewelry manufacturing (≈45%) Investment demand (bars, coins, ETFs) (≈30%) Central bank purchases (≈20%) Industrial and technological applications (≈5%)
4. Central banks remained major buyers of gold, continuing a multi-year trend of reserve diversification. Emerging economies in Asia, the Middle East, and Eurasia significantly increased their gold reserves to reduce exposure to currency and geopolitical risks.
5. Gold's strategic role as a safe-haven asset strengthened amid global economic uncertainty, inflationary pressures, and geopolitical tensions. Gold prices remained resilient, supporting the economic viability of new mining and processing projects.
6. Technological advancements in gold processing include improved gravity separation, flotation, carbon-in-leach (CIL/CIP), pressure oxidation (POX), bio-oxidation, and enhanced cyanide detoxification systems, resulting in higher recovery rates and improved environmental performance.

Gold reserves and resources:

1. According to international geological assessments, global identified gold reserves are estimated at approximately 55,000 metric tons, while total gold resources (including undiscovered and inferred) exceed 120,000 metric tons.
2. Gold mine production has gradually shifted geographically over the past decades. While traditional producers remain important, output growth has increasingly come from Africa, Central Asia, and Latin America, supported by new discoveries and expanded processing capacity.
3. Africa's share of global gold production has increased significantly, with countries such as Ghana, the Democratic Republic of Congo, Mali, and Burkina Faso showing strong growth due to high-grade deposits and new investment inflows.
4. Central Asia has emerged as a strategically important gold-producing region, supported by large-scale deposits, improving infrastructure, and favorable investment frameworks. The region combines both primary gold mining and value-added processing potential.
5. Global gold mining capacity is projected to grow moderately over the medium term, reaching approximately 3,900–4,000 tons annually by 2028, with growth driven mainly by brownfield expansions and processing upgrades rather than large greenfield discoveries.
6. Environmental and ESG requirements are increasingly shaping gold project development.

Top 10 largest gold mines in the world:



Newmont



Barrick



AGNICO EAGLE

Agnico



Polus



AngloGold



Kingross



Gold Fields



Kirkland



Coeur



Endeavour



Gold mining and processing

Economic impact:

- Attraction of foreign investment: Total capital investment of about USD 570 million enhances investor confidence and supports inflows of foreign direct investment into the mining sector.
- Fiscal contributions: The project will provide significant tax, royalty, and customs revenues to the state and local budgets over the life of the mine.
- Local value creation: Development of local supply chains for construction, logistics, fuel, maintenance, and services.

Social impact:

- Employment creation: Direct employment for approximately 600–650 workers across mining, processing and etc.
- Skills development: On-the-job training and professional development programs enhance workforce skills in mining operations, safety, environmental management, and technical disciplines.

Location of the project



Project description:

The project involves the development of a large-scale open-pit gold mining and processing complex with an annual production capacity of 2,5 tonnes of gold per year. The project is designed as a fully integrated operation, covering mining, mineral processing, gold recovery, and supporting infrastructure.

Gold-bearing ore will be extracted using open-pit mining methods, followed by crushing, grinding, and processing through a Carbon-in-Leach (CIL) circuit. The processing plant will include primary and secondary crushing, leaching and adsorption, carbon elution and regeneration, electrowinning, and smelting to produce dore gold bars suitable for refining and export.

Economic indicators:



Financing: 489,7 mln USD



Area: 1 520 hectares



Revenue: \$362,5 million/year



ROI: 70,6%



NPV: ~ 682,6 million (10 years)



IRR: ~25,7%

Production indicators:



Gold:
2 500 kg

Proposed mining deposits

- **Karakalpakstan** (Qayraqtosh deposit)
- **Jizzakh Region** (Yolsoy deposits)
- **Bukhara Region** (Beltog deposit)
- **Tashkent Region** (Tolbuloq deposits)
- **Surkhandarya Region** (Yongokli, Qirgokli, deposits)



Mining and production process

Process

Result

Process

Result

Mining



Gold ore

Carbon adsorption (CIL)



Gold-loaded carbon

Primary crushing



Crushed ore

Elution and
regeneration



Gold solution +
regenerated carbon

Secondary crushing
and screening



Sized ore

Electrowinning



Gold sludge

Grinding



Pulp (ore + water)

Smelting



Dore gold bars

Flotation



Gold-bearing slurry

Packaging and
shipping



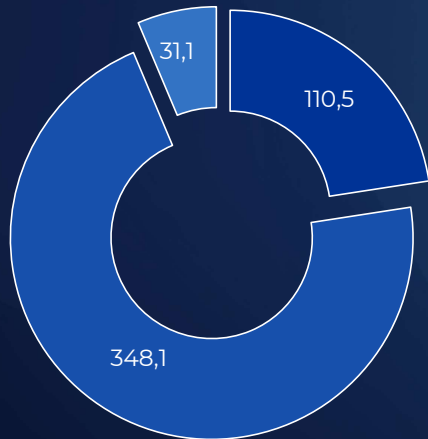
Export-ready gold



Project expenses

Initial Investment (CAPEX) (mln dollar)

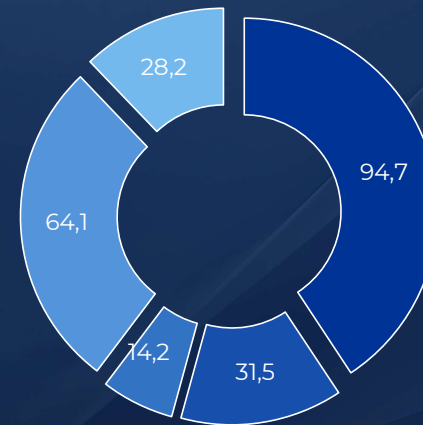
Total CAPEX: **\$489,7 mln**



- Land, construction and infrastructure
- Technological equipments
- Others

Operating Costs (OPEX) (mln dollar)

Total OPEX: **\$232,7 mln**



- Raw materials
- Labor
- Utilities
- Amortization
- Others

This financial overview outlines a comprehensive cost structure and strong profitability of the proposed copper mining and processing project. The breakdown includes both initial capital investment (CAPEX) and annual operating costs (OPEX), alongside projected revenue and profit estimates.

Revenue stream	Volume (kg/year)	Average price (per kg)	Annual revenue (million USD)
Gold	2 500	\$150 000	\$362,5
TOTAL	2 500		\$362,5

Annual EBITDA:

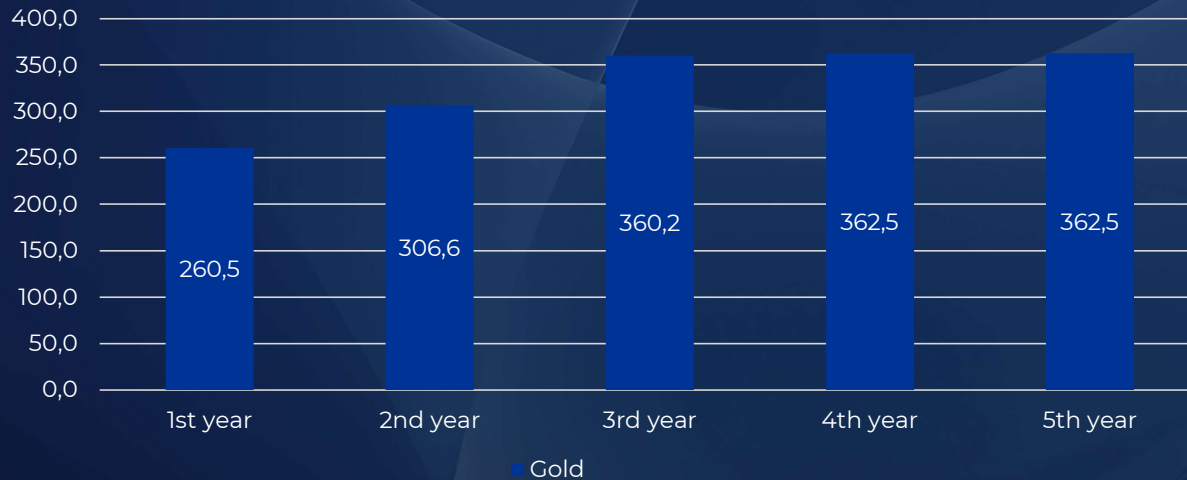
= \$362,5 mln - \$232,7 mln = **\$129,8 mln**

The project demonstrates high profitability, strong market demand, and a diversified product base, positioning it as a highly attractive investment opportunity.

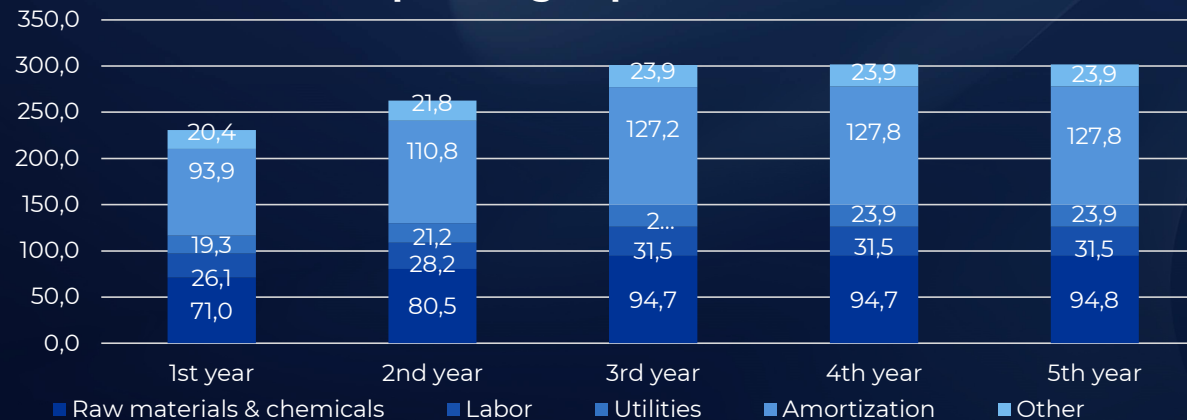


Financial indicators (5-year projection)

Revenues (mln dollars)



Operating expenses (mln dollars)



Breakeven:

Break-even point at full capacity 36,7%.

Total 10-year revenue:

\$3,0B after full CAPEX recovery in 4 years.

Cash Flow:

\$3,5B by year 10

Return on investment (ROI): 70,6

= $(CF/10/CAPEX)*100 = 3464/10/489*100 = 70,6$

NPV (5% discount rate):

= \$682,6 million (highly favorable!)

IRR (Internal rate of return): $\approx 25,7\%$

Payback period (PP):

= 49,7 months

Profitability index (PI): 2,4