



# **Investment proposal: Production of a copper mining and processing cluster**



# Production of a copper mining and processing cluster

## Economic impact:

- Import substitution – reduces Uzbekistan’s dependence on foreign copper.
- Export growth – copper cathodes supplied to global markets.
- Tax revenues – ~\$15M/year in taxes and royalties.
- Supply chain development – metallurgy, chemicals, energy

## Social impact:

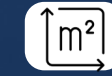
- Job creation – 1,200 direct jobs, 4,000 indirect.
- Regional development – infrastructure, schools, healthcare.
- Skills transfer – advanced mining & metallurgy training.
- Environmental initiatives – sulfur capture, green technologies.



## Economic indicators:



**Financing:** 150 mln USD



**Area:** 100 hectares



**Revenue (for 5 year):** \$2,159 million



**ROI:** 5 years



**NPV:** ~ \$110 million



**IRR:** ~20%

## Production indicators:



**Annual production:** 634,735 thousand tons



**Copper cathode:** 211,5 thousand tons



**Copper concentrate:** 94 thousand tons



**Sulfuric acid:** 329 thousand tons



**Precious metals:** 250 kg

## Project description:

1. Strategic mining and processing hub in Uzbekistan.
2. Vertical integration from ore to refined products.
3. Sustainable use of by-products (acid for fertilizers).
4. Long-term export orientation with global copper buyers.

## Location of the project



Ferghana region	
Size	15 250 km <sup>2</sup>
Population	3,1 mln



## Processing chain & product yield

### Key production stages

1. Ore Mining & Crushing – open-pit extraction, primary crusher.
2. Grinding & Flotation – concentrate production.
3. Smelting & Refining – matte → blister → cathode copper.
4. Electrolysis – production of high-purity cathode copper.
5. By-product Recovery – sulfuric acid, precious metals extraction.

### Product yield breakdown

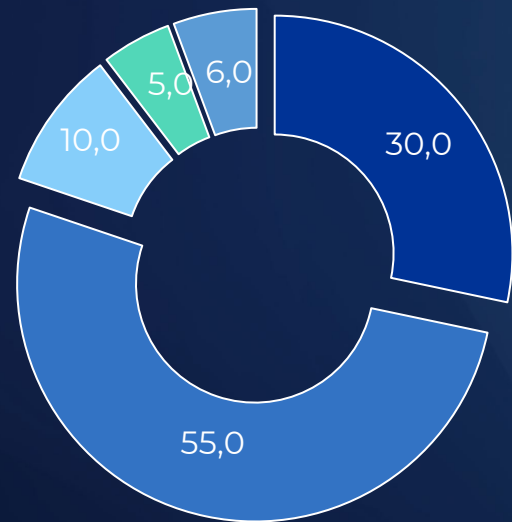
	Product	Annual volume	Avg. Market Price (USD)	Share of Revenue (%)
1	Copper Cathode (LME Grade A)	45 000 tons	8 500/ton	70
2	Sulfuric Acid (By-product)	70 000 tons	90/ ton	15
3	Precious Metals (Au/Ag recovery)	50 kg	60 000 kg	10
4	Copper Concentrate (Export surplus)	20 000 tons	2 000/ton	5





# Project expenses

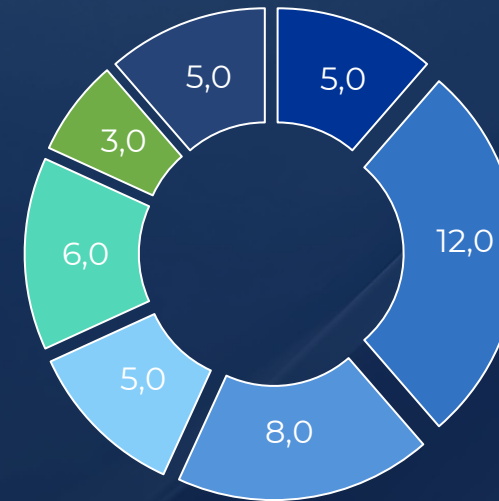
## Initial Investment (CAPEX) (mln dollar)



Total CAPEX: **\$106 mln**

- Mining infrastructure
- Processing plant
- Auxiliary facilities
- Environmental & waste management
- Working capital & other

## Operating Costs (OPEX) (mln dollar)



Total OPEX: **\$44 mln**

- Labor & HR
- Energy & fuel
- Reagents & consumables
- Maintenance & repairs
- Transport & logistics
- Admin, SG&A, insurance
- Taxes & royalties

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

Product	Volume	Price(\$)	Revenue (\$)
Copper Cathode (LME Grade A)	9 000 tons	8 500/ton	382 mln
Sulfuric Acid (By-product)	14 000 tons	90/ton	6,3 mln
Precious Metals (Au/Ag recovery)	10 kg	60 000/ kg	3 mln
Copper Concentrate (Export surplus)	600 tons	2 000/ton	40 mln
<b>TOTAL</b>			<b>431 800 000</b>

### Annual EBITDA:

$$= \$431,8\text{mln} - \$44\text{mln} - \$7\text{mln} =$$

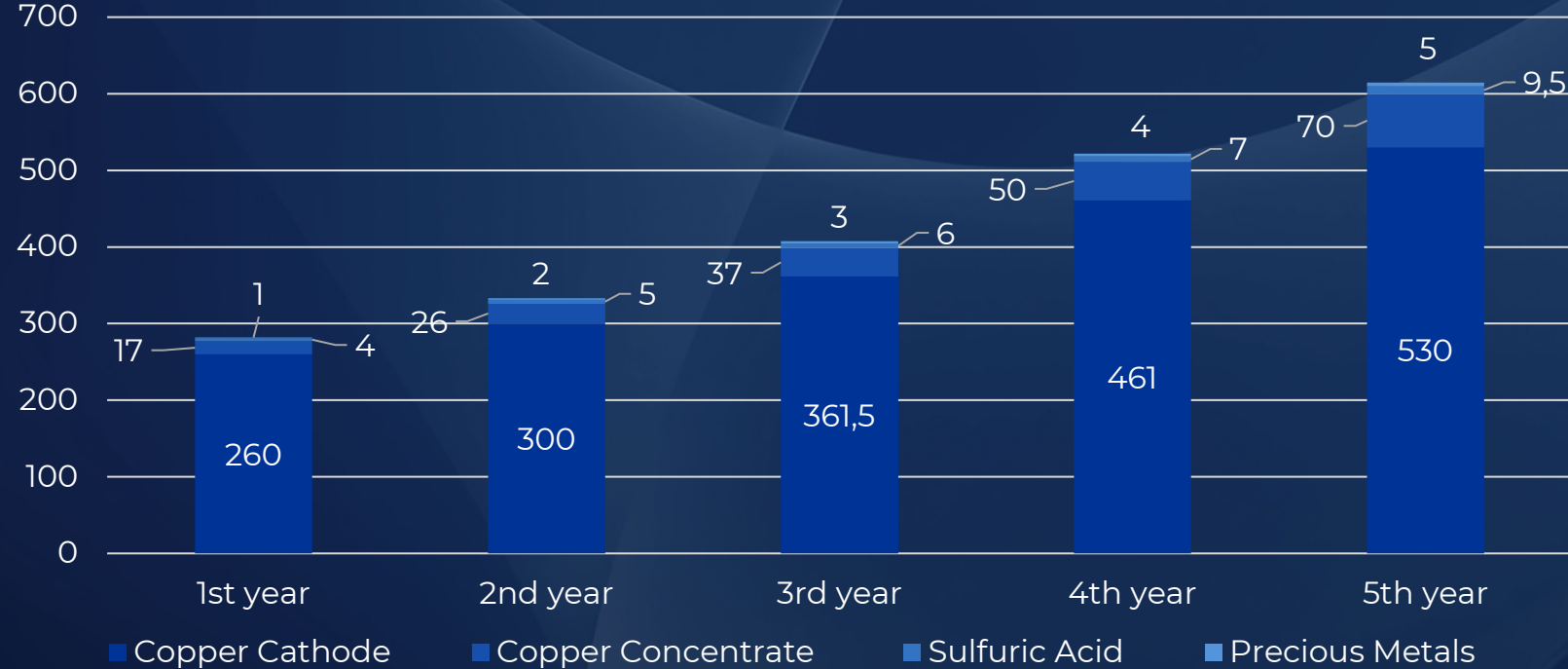
**\$387,8 mln**

The project's strong profitability forecast is underpinned by efficient operations and high market demand, positioning it as a highly attractive investment.



## Financial indicators (5-year projection)

### Revenues (mln dollars)



### Operating expenses (mln dollars)



### Financial indicators of the project

#### 1. Breakeven result

**CAPEX=\$106 M**

**2. NPV - \$110 million (at 10% discount rate)** The project is profitable (positive NPV).

#### 2. Internal rate of return (IRR)

**Value: 20%**

Exceeds typical real estate hurdle rates (~12-15%), indicating strong returns.

#### 3. Payback period - 5-6 years

Capital is recovered in ~3 years, aligning with mid-term real estate projects.

#### 4. Profitability Index (PI) - 1,73

For every \$1 invested, the project generates \$1,4 in value.

#### 5. Return on investment (ROI) – 81 %

High ROI reflects efficient capital utilization.