



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

Investment proposal: Production of printing ink



Production of printing ink

Economic and social impact:

- Reduces import dependence and enhances national industrial competitiveness.
- Creates 120 jobs directly and over 300 indirect jobs in logistics and supply chains.
- Encourages innovation in packaging and printing industries.
- Supports sustainable and eco-friendly industrial growth.

Market justification

Growing demand for packaging inks due to the rapid expansion of the food, beverage, and FMCG industries.

Domestic substitution potential – currently, over 70% of printing inks are imported.

Increasing use of eco-friendly and low-VOC inks.

Location of the project



Kharezm region	
Size	6 050 km ²
Population	4,2 million



Project description:

The project aims to establish a manufacturing facility for high-quality printing inks, serving domestic and export markets.

Products include offset printing ink, flexographic ink, gravure ink, and screen-printing ink — used in packaging, publishing, and textile industries.

The plant will use environmentally safe pigments, resins, and solvents, aligning with international standards (ISO 2846-1, EN 1230-2).

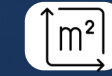
Raw materials:

- Pigments (organic and inorganic)
- Resins (alkyd, acrylic, phenolic)
- Solvents (mineral oils, alcohols, esters)
- Additives (driers, surfactants, stabilizers)
- Packaging materials (metal cans, drums, labels)

Economic indicators:



Financing: 16 million USD



Area: 2 hectares



Revenue: \$13,6 million/year



ROI: 26,4 %

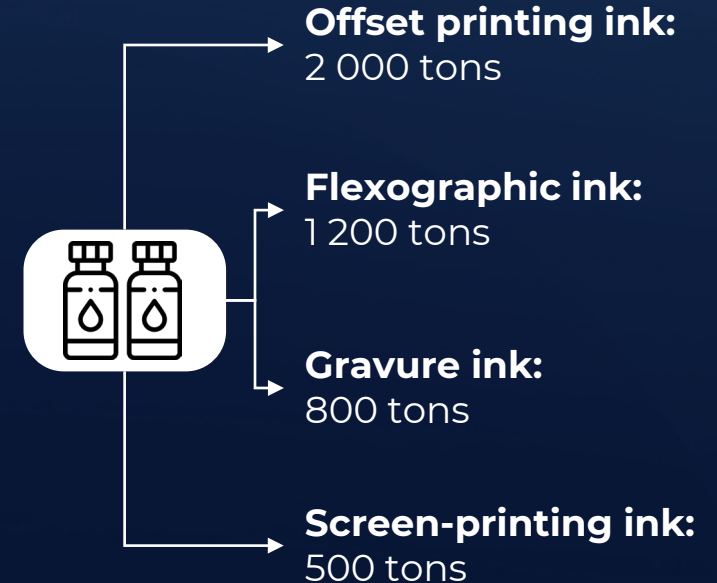


NPV: \$26,3 million (10 years)



IRR: ~20%

Production indicators:





Processing chain & product yield

Key production stages

1. Raw material preparation

Weighing, filtering, and mixing.

2. Premixing and dispersion

High-speed mixing to achieve pigment dispersion.

3. Grinding/milling

Using bead mills or three-roll mills for fine texture.

4. Color adjustment

Shade correction and quality control.

5. Filtration and homogenization

Removal of impurities and final blending.

6. Packaging

Automated filling into containers and labeling.

7. Quality testing

Viscosity, color strength, gloss, and adhesion.

Product yield breakdown

Product	Volume(tons)	Main applications (uses)	Raw materials / sources
Offset printing ink	2 000 tons	Used for printing books, magazines, packaging, labels	Pigments, resins, mineral oils, solvents, additives
Flexographic ink	1 200 tons	Used for flexible packaging, plastic bags, labels	Pigments, binders, water or solvent-based vehicles
Gravure ink	800 tons	Used for high-volume printing on films, wallpapers	Pigments, resins, organic solvents, plasticizers
Screen-printing ink	500 tons	Used for textiles, ceramics, posters, electronics	Pigments, polymer resins, solvents, UV-curable materials
TOTAL	4 500 tons		





Project expenses

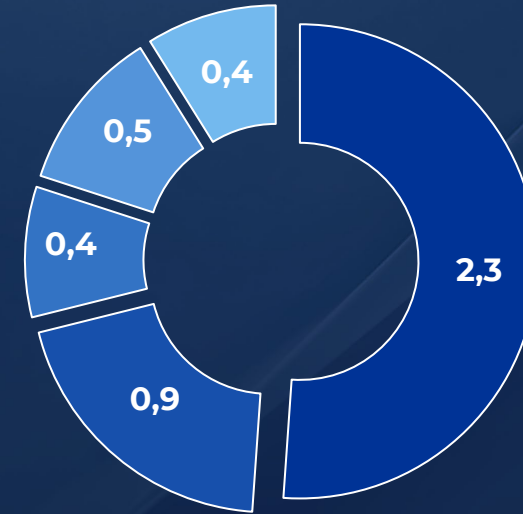
Initial Investment (CAPEX) (mln dollar)



Total CAPEX: **\$16 mln**

- Land & civil works
- Equipment & machinery
- Utilities and infrastructure
- Laboratory & Storage
- Other

Operating Costs (OPEX) (mln dollar)



Total OPEX: **\$4,5 mln**

- Raw materials
- Labor
- Utilities & maintenance
- Laboratory & waste treatment
- Sales & distribution

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

Product	Capacity	Amount (million USD)
Offset printing ink	2 000 tons	5,6
Flexographic ink	1 200 tons	3,8
Gravure ink	800 tons	2,4
Screen-printing ink	500 tons	1,8
TOTAL		13,6

Annual EBITDA:

= \$13,6 mln - \$4,5 mln = **\$9,1 mln**

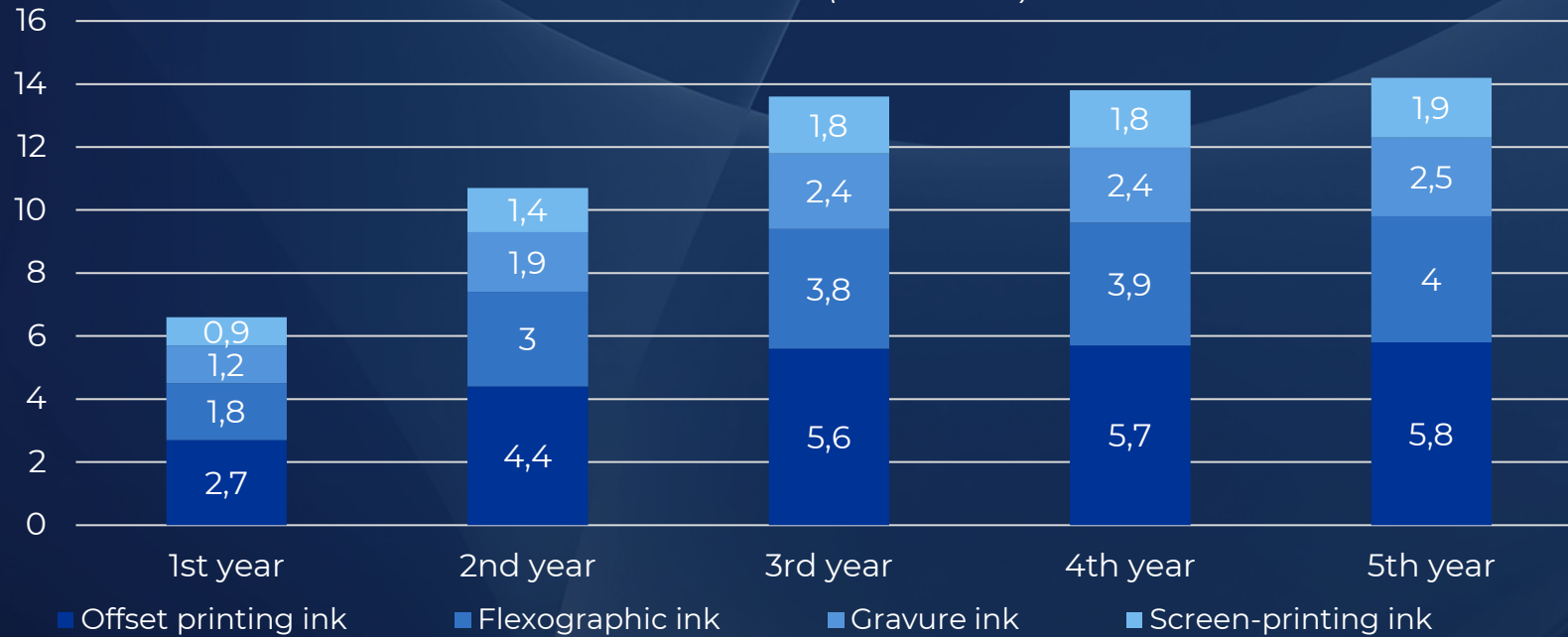
The project's strong profitability forecast is underpinned by efficient operations and high market demand, positioning it as a highly attractive investment.



Financial indicators

(5-year projection)

Revenues (mln dollars)



Operating expenses (mln dollars)



Total 10-year cash flow:

\$42,3M after full CAPEX recovery

NPV (12% discount rate):

NPV= **\$26,3 million** (Highly favorable!)

IRR (Internal rate of return): **≈ 20%**

Payback period (PP):

= **3,3 years**

Profitability index (PI):

$= (\text{NPV} + \text{CAPEX}) / \text{CAPEX} = (\$26,3\text{M} + \$16\text{M}) / \$16\text{M} = \mathbf{2,64}$

Return on investment (ROI):

= **26,4** (10 years)