



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

Investment proposal: Production of sanitary ware (sinks, toilets, shower cabins)



Production of sanitary ware (sinks, toilets, shower cabins)

Economic impact:

- Import substitution: Reduction of sanitary ware imports, strengthening the domestic industrial base.
- Export potential: Annual revenues of up to USD 33.4 million, with growing opportunities in Central Asia, CIS, and Middle Eastern markets.
- Job creation in supply chains: Demand for raw materials, packaging, transport, and logistics services will stimulate related industries.

Social impact:

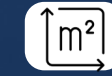
1. Employment generation: Creation of over 350 direct jobs and additional indirect jobs in logistics, construction, and services.
2. Sustainable development: Environmentally responsible production processes with energy-efficient equipment and water recycling..



Economic indicators:



Financing: 35 million USD



Area: 6 hectares



Revenue: \$33,4 million/year



ROI: 28 %



NPV: ~ \$10 million



IRR: ~18%

Production indicators:



Toilets (WC sets):
200 000 units



Sinks (wash basins):
150 000 units



Shower cabins:
50 000 units



Bidets & urinals:
30 000 units



Mixers, taps & sanitary fittings:
70 000 units

Location of the project



Project description:

The project involves the establishment of a modern production facility for sanitary ware (toilets, sinks, shower cabins, bidets, urinals, taps, and fittings) on a 6-hectare site. With a total investment of USD 35 million, the plant will operate at an annual capacity of 500,000 units, targeting both the domestic and export markets.

The production line will be equipped with advanced technologies to ensure high product quality, compliance with international standards (ISO, CE), and eco-friendly operations.



Processing chain & product yield

Key production stages

1. Raw Material Preparation

- Process: Procurement and storage of quartz sand, clay, kaolin, glaze, plastics, and metal components.
- Preparation of raw mix (batching and blending).

2. Forming & Molding

- Pressure casting or pressing for toilets, sinks, and bidets.
- Vacuum forming and assembly for shower cabins.
- Use of metal molds for dimensional accuracy.

3. Drying & Firing

- Controlled drying to avoid deformation.
- High-temperature firing (up to 1200 °C) for ceramics.

4. Glazing & Surface Treatment

- Application of glaze for strength, water resistance, and aesthetics.
- For shower cabins – glass tempering and hydrophobic coating.

5. Assembly & Finishing

- Installation of fittings (mixers, valves, taps).
- Polishing and surface finishing.

6. Quality Control & Certification

- Inspection of dimensions, leakage resistance, and mechanical strength.
- Compliance with international standards (ISO, CE).

Product yield breakdown

(from 1 ton input chemicals)

| Product | Yield | Key composition | Final product composition | Next process |
|-------------------------------------|------------|---|--|--|
| Toilets (WC sets), Bidets & urinals | 470–500 kg | Clay, kaolin, feldspar, water, glaze additives | Dense ceramic body after firing; glazed surface; heavy, durable | Forming → Drying → Firing → Glazing → Packaging |
| Sinks (wash basins) | 200–240 kg | Same ceramic mix + glaze | Smooth, load-bearing ceramic basins; glazed finish | Forming → Drying → Firing → Glazing → Packaging |
| Shower cabins (glass/frames) | 110–140 kg | Glass cullet (tempered), aluminum/plastic profiles, seals | Tempered glass panels + frame assemblies; lightweight compared to ceramics | Glass cutting → Tempering → Frame assembly → Packaging |
| Process losses & other | 80–120 kg | Trimmings, dust, rejects, water loss during drying | Ceramic scraps and dust; some recyclable into raw mix or used for secondary products | Reprocessing |





Project expenses

Initial Investment (CAPEX) (mln dollar)

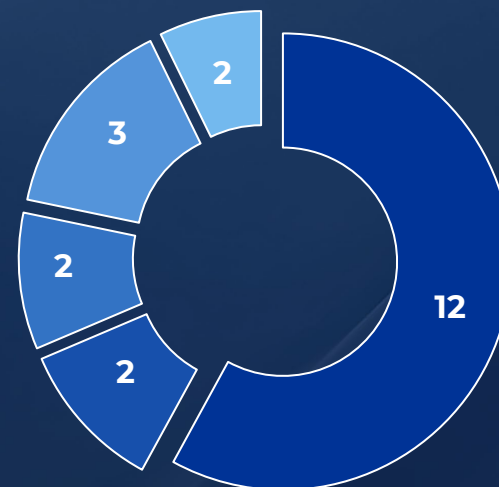
Total CAPEX: **\$35 mln**



- Land and construction
- Technological equipments
- Infrastructura and transportation
- Licenses & certification
- Others

Operating Costs (OPEX) (mln dollar)

Total OPEX: **\$21 mln**



- Raw materials
- Labor
- Utilities
- Logistics and maintenance
- Marketing

This financial overview outlines a comprehensive cost structure and strong profitability of the proposed plumbing products 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) |
|----------------------------------|----------------------|----------------------|
| Toilets (WC sets) | 200 000 units | 12,0 |
| Sinks (wash basins) | 150 000 units | 7,5 |
| Shower cabins | 50 000 units | 5,0 |
| Bidets & urinals | 30 000 units | 2,4 |
| Mixers, taps & sanitary fittings | 70 000 units | 6,5 |
| TOTAL | 500 000 units | 33,4 |

Annual EBITDA:

$$= \$33,4 \text{ mln} - \$21,0 \text{ mln} - \$1,7 \text{ mln}$$

$$= \mathbf{\$10,7 \text{ mln}}$$

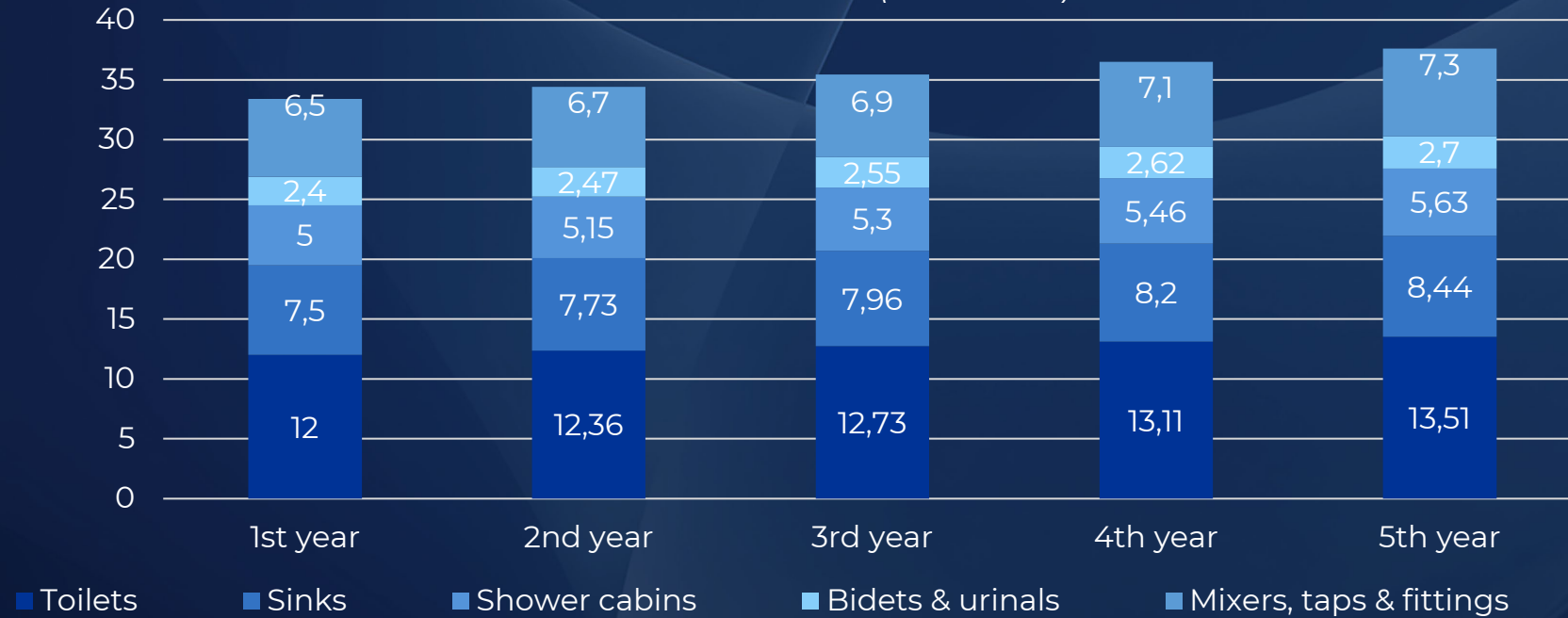
The project's strong profitability forecast is underpinned by efficient operations and high market demand, positioning it as a highly attractive investment.



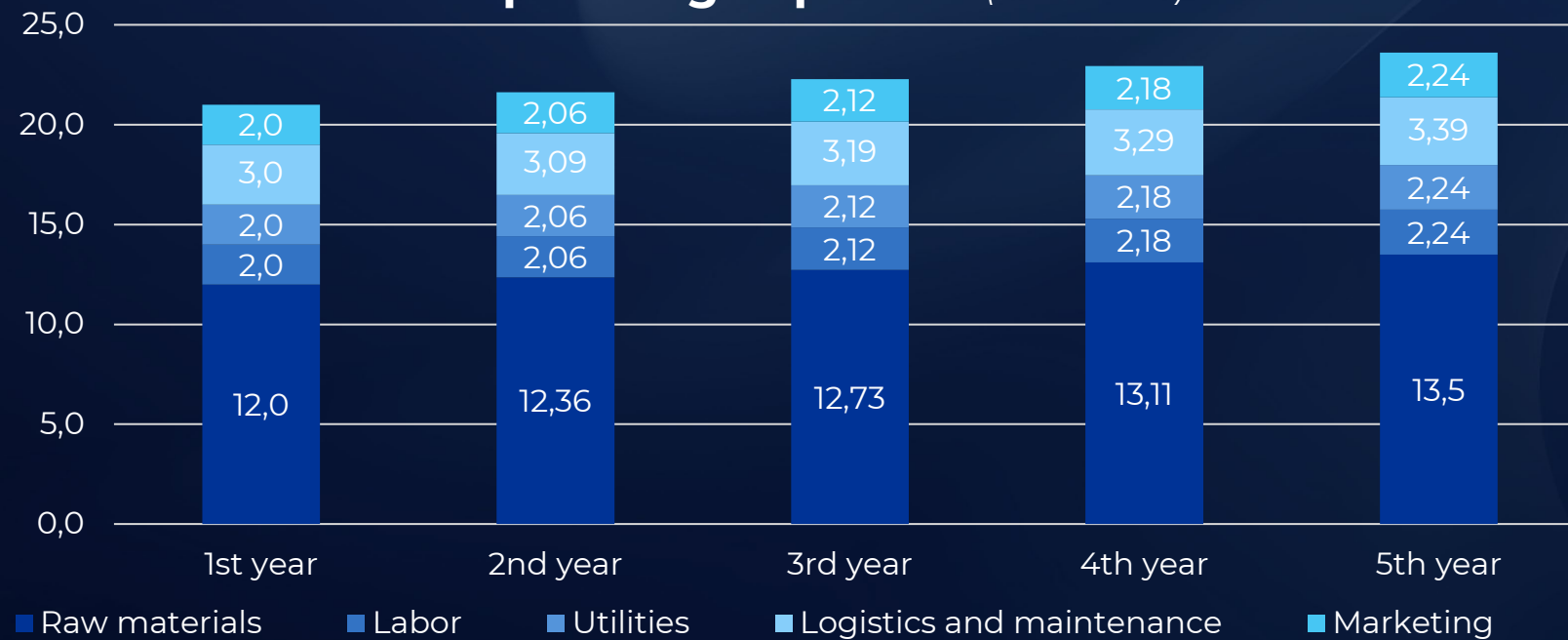
Financial indicators

(5-year projection)

Revenues (mln dollars)



Operating expenses (mln dollars)



Total 10-year cash flow:

\$115M after full CAPEX recovery

EBITDA growth:

3% CAGR, reaching \$11,6M by Year 5.

NPV (12% discount rate):

NPV= **\$10 million** (Highly favorable!)

IRR (Internal rate of return): **≈ 18%**

Payback period (PP):

= **5 years**

Profitability index (PI):

$= (\text{NPV} + \text{CAPEX}) / \text{CAPEX} = (\$10\text{M} + \$35\text{M}) / \$35\text{M} = \mathbf{1,28}$