



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

Investment proposal: Production of synthetic fibers

Production of synthetic fibers

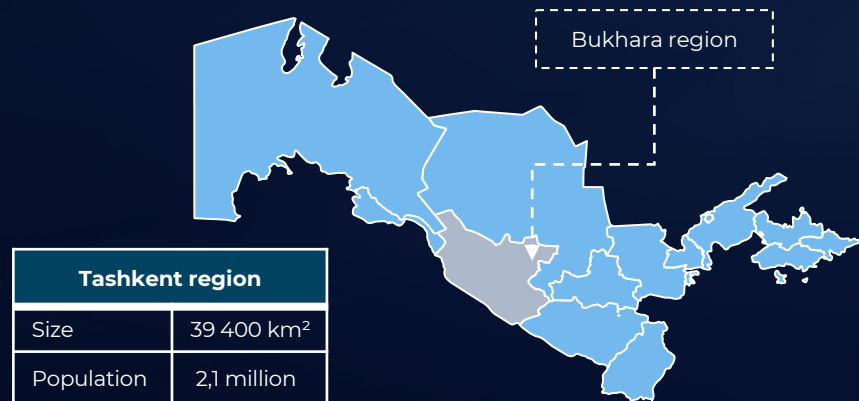
Economic impact:

- **Import Substitution:** Reduces reliance on imported synthetic fibers by supplying local and regional manufacturers.
- **Export Potential:** Enables exports to neighboring countries and EU textile markets, boosting foreign exchange earnings.
- **Industrial Growth:** Strengthens Uzbekistan's position in the textile and synthetic materials sectors.

Social impact:

1. Creation of 800 direct jobs and ~2,500 indirect jobs.
2. Skill development in modern polymer/fiber technology.
3. Regional industrialization of Bukhara region.
4. Contribution to women employment in textile cluster.

Location of the project



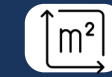
Project description:

The project involves the establishment of a synthetic fiber manufacturing facility in Bukhara, Uzbekistan, with a total investment of \$118 million. The plant will produce 120,000 tons of high-quality synthetic fibers annually, primarily serving the textile and industrial sectors. The facility will utilize automated production lines and comply with international quality standards. The project aims to reduce imports, support local manufacturing, create employment, and position Uzbekistan as a competitive player in the regional synthetic materials market.

Economic indicators:



Financing: 118 million USD



Area: 15 hectares



Revenue: \$142 million/year



ROI: 22%



NPV: ~ \$94 million



IRR: ~19,7%

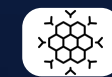
Production indicators:



Polyester staple fiber (PSF):
60,000 tons/year



Polyester filament yarn (PFY):
40,000 tons/year



Non-woven synthetic fiber :
20,000 tons/year



Total annual capacity: 120,000 tons

Synthetic fibers products processing chain & product yield

Key production stages

1. Raw Material Preparation

- Receipt and preprocessing of polymers (e.g., PET, nylon, PP).
- Blending with additives for strength, flexibility, or color.

2. Polymer Melting & Extrusion

- Polymers are melted and extruded through spinnerets to form filaments.

3. Fiber Spinning

- Continuous filaments are cooled and solidified.
- Mechanical drawing increases fiber strength and orientation.

4. Crimping & Cutting (for Staple Fibers)

- Fibers are textured or crimped and cut into specific lengths.

5. Heat Setting & Finishing

- Fibers undergo thermal or chemical finishing to improve quality and stability.

6. Quality Control & Testing

- Every batch is tested for tensile strength, uniformity, and dyeability.

7. Packaging & Storage

- Finished fibers are packed in bales or spools and stored for shipment.

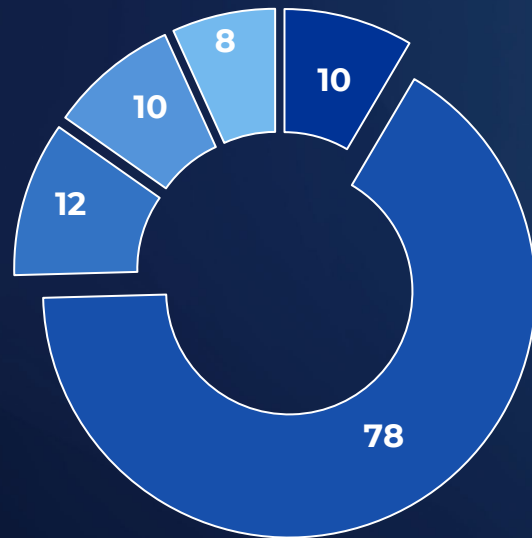
Product yield breakdown

	Product type	Volume(tons)	Price(\$/t)	Revenue (\$ mln)
1	Polyester Staple Fiber	51,000	1,250	63,8
2	Polyester Filament Yarn	34,000	1,400	47,6
3	Nonwoven Fibers (Spunbond/Geotextile)	17,000	1,800	30,6
4	Total	102,000	-	142



Project expenses

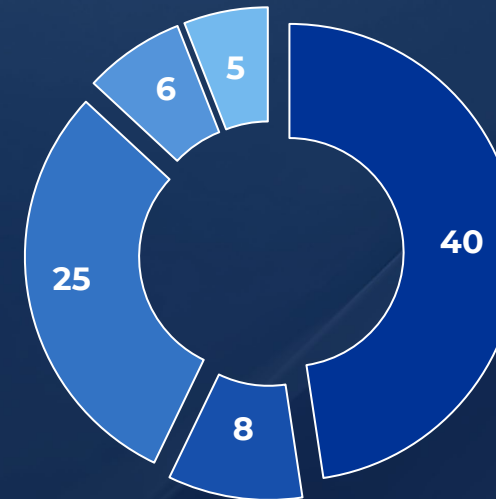
Initial Investment (CAPEX) (mln dollar)



Total CAPEX: **\$118 mln**

- Land & Infrastructure:
- Plant & Machinery
- Utilities (power, gas, water)
- Engineering, Installation & Training:
- Other (licenses, design, contingency):

Operating Costs (OPEX) (mln dollar)



Total OPEX: **\$84 mln**

- Raw materials (PTA, MEG, additives)
- Utilities (energy, gas, water)
- Labor & HR:
- Logistics & packaging
- Other (admin, maintenance, insurance)

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

Product	Volume(tons)	Price (\$)	Revenue (\$)
Polyester Staple Fiber	51,000	\$1,250	63,8 mln
Polyester Filament Yarn	34,000	\$1,400	47,6 mln
Nonwoven Fibers (Spunbond/Geotextile)	17,000	\$1,800	30,6 mln
TOTAL	102,000		142 million

Annual EBITDA:

$$= \$142 \text{ mln} - \$84 \text{ mln} - 5 \text{ mln} =$$

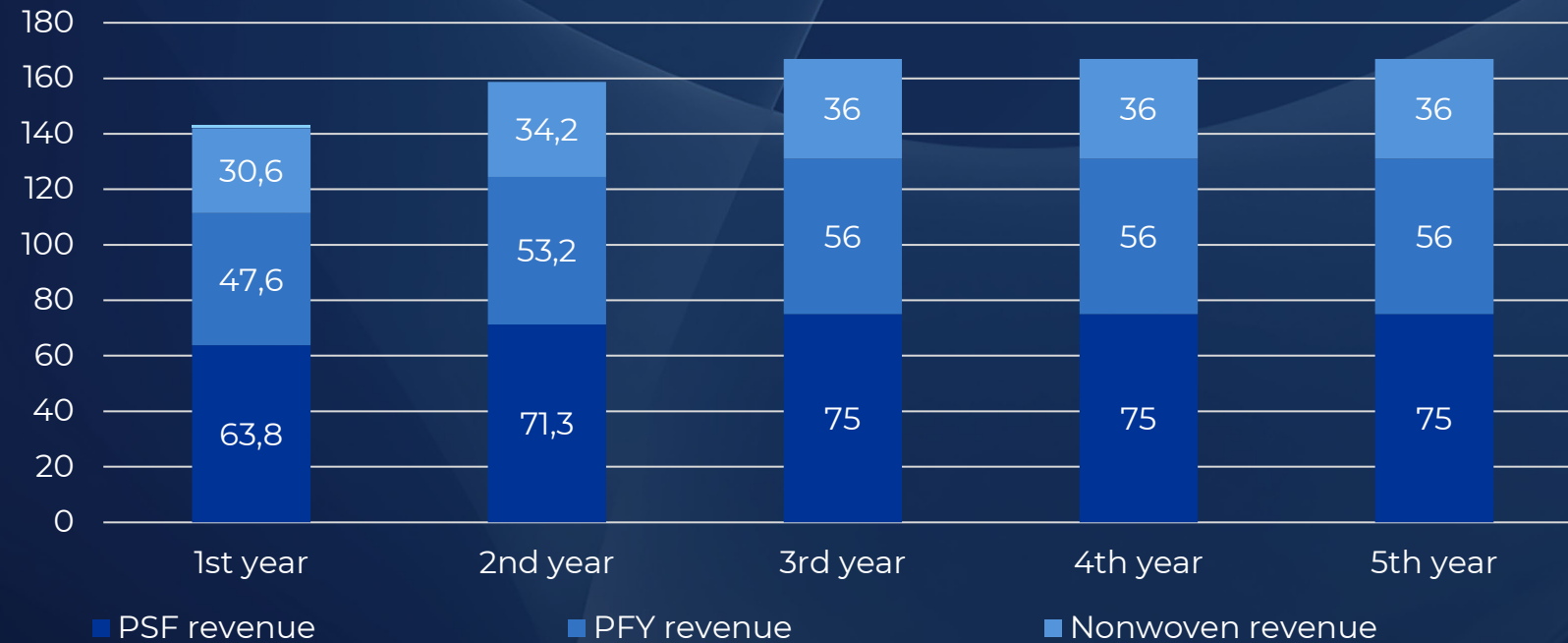
\$53 mln

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

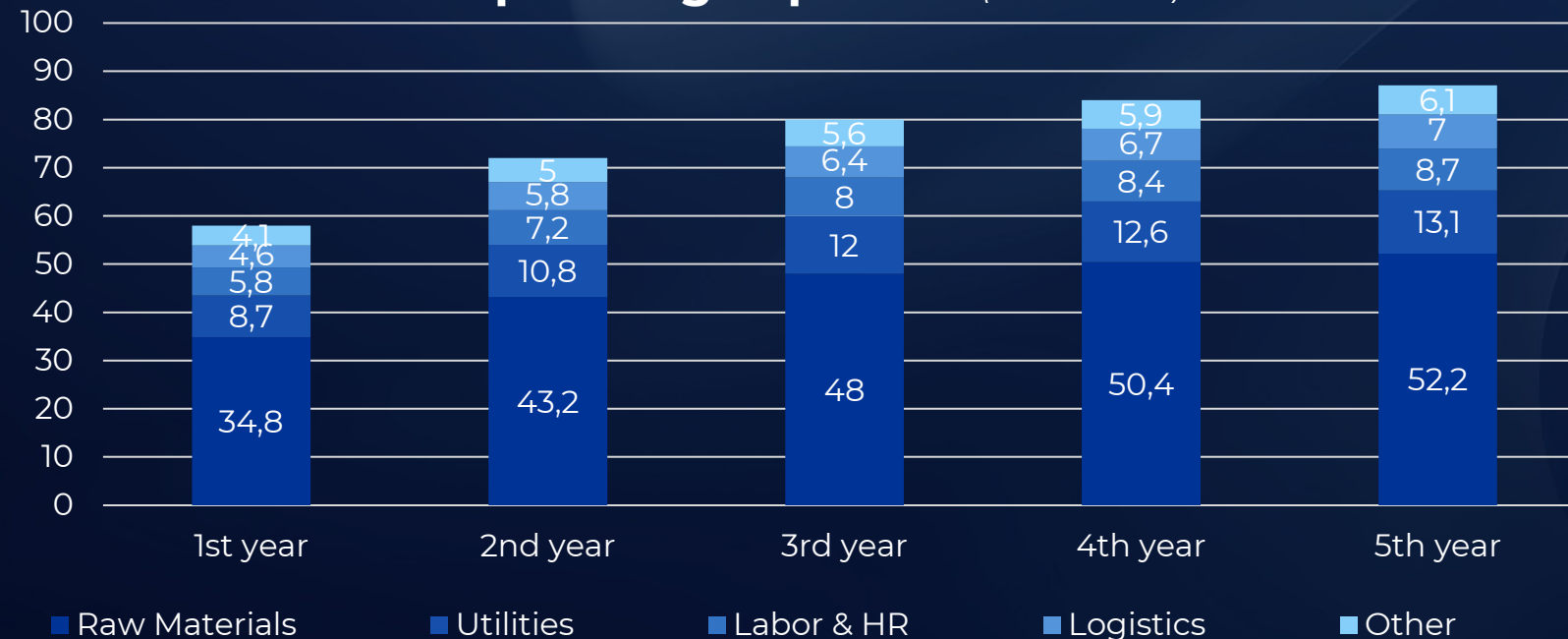
Financial indicators

(5-year projection)

Revenues (mln dollars)



Operating expenses (mln dollars)



Breakeven: Achieved in year 4,2

Total 5-year cash flow: \$415,5M

EBITDA growth:

5% CAGR, reaching \$89,9M by Year 5.

NPV (10% discount rate):

NPV= **\$94 mln** (Highly favorable!)

IRR (Internal rate of return): **≈ 19,8%**

Payback period (PP):

= 4-5 years

Profitability index (PI):

$= (\text{NPV} + \text{CAPEX}) / \text{CAPEX} = (\$94 + \$118) / \$118 =$
1,8