



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

Investment proposal: Production of shock absorbers and interior panels

Production of shock absorbers and interior panels

Economic impact:

- Import substitution of automotive spare parts & components.
- Export potential to Central Asia and CIS (OEM suppliers).
- Strengthening of local automotive supply chain (GM Uzbekistan, BYD, MAN).

Social impact:

- Creation of ~150–180 new jobs (engineers, operators, logistics, sales staff).
- Skill development in automotive parts manufacturing.
- Support for localization programs in Uzbekistan's automotive industry.

Location of the project



| Andijan region | |
|----------------|-----------------------|
| Size | 4 300 km ² |
| Population | 3,5 million |




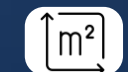



Project description:

The project aims to establish a modern automotive components plant producing shock absorbers and interior panels for passenger cars and light commercial vehicles.




The facility will include:

automated assembly lines,
metal processing and polymer molding sections,
surface finishing (painting, coating),
testing & R&D laboratory,
logistics and packaging units.

Economic indicators:

-  **Financing:** 18 million USD
-  **Area:** 5 hectares
-  **Revenue:** \$32 million/year
-  **ROI:** 70%
-  **NPV:** ~ \$14million
-  **IRR:** ~20%

Production indicators:

-  **Shock absorbers (passenger & light trucks):**
500 000 units
-  **Interior panels (dashboards, door panels, consoles):**
150 000 units
-  **Other components (clips, mounts, brackets):**
200 000 units

Processing chain & product yield

Key production stages

1. **Raw material procurement** (steel rods, polymers, adhesives, fabrics).
2. **Machining & forming** (cutting, welding, molding of shock absorber parts).
3. **Heat treatment & coating** (anti-rust and durability processing).
4. **Polymer injection & vacuum forming for interior panels.**
5. **Assembly of shock absorbers** (pistons, cylinders, seals).
6. **Quality testing** (strength, vibration, durability tests).
7. **Surface finishing** (painting, polishing, lamination).
8. **Packaging & distribution** (for OEMs and aftermarket).

Product yield breakdown

(from 1 ton input chemicals)

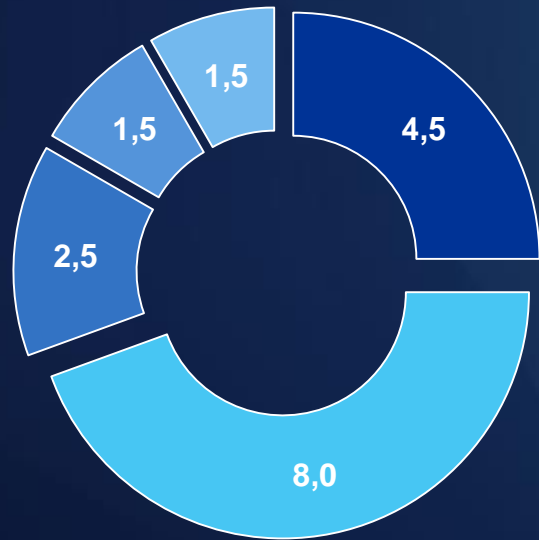
| Product | Yield | Key composition | Final product composition | Next process |
|---|------------|--|---|--|
| Shock absorbers | 520–560 kg | High-grade spring steel, piston rods, hydraulic oil, rubber seals | Assembled hydraulic/mechanical shock absorbers (OE and aftermarket quality) | Machining → Welding → Assembly → Testing → Packaging |
| Interior panels (dashboard, door trims, consoles) | 340–380 kg | Polypropylene (PP), ABS plastics, PU foam, reinforcing fillers, textiles | Molded & finished panels with soft-touch coatings, ready for vehicle assembly | Injection molding → Surface finishing → Assembly → Packaging |
| Other components (clips, mounts, brackets) | 40–60 kg | Steel, aluminum, reinforced plastics | Small structural parts for mounting interior panels and shock absorbers | Stamping → Molding → Packaging |
| Process losses & other | 20–40 kg | Scrap steel, polymer waste, machining dust, off-spec products | Recyclable metal scrap, plastic regrind, waste oils | Reprocessing/recycling |





Project expenses

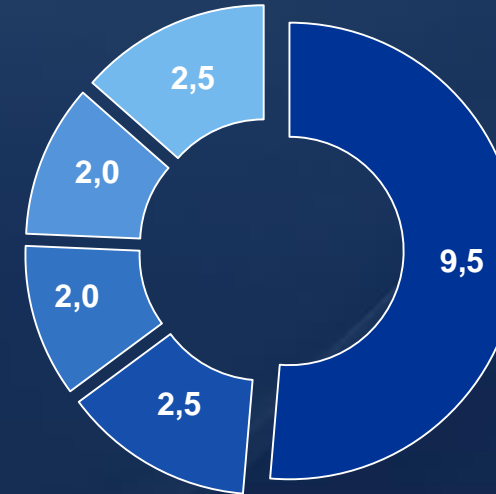
Initial Investment (CAPEX) (mln dollar)



Total CAPEX: **\$18 mln**

- Land and construction
- Technological equipments
- Infrastructura and transportation
- R&D & testing facility
- Others

Operating Costs (OPEX) (mln dollar)



Total OPEX: **\$18,5 mln**

- Raw materials
- Labor
- Utilities
- Logistics and maintenance
- Miscellaneous (R&D, admin, etc.)

This financial overview outlines a comprehensive cost structure and strong profitability of the shock absorbers and interior panels 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) |
|--|---------------|----------------------|
| Shock absorbers | 500 000 units | 18,0 |
| Interior panels (dashboards, door panels, consoles) | 150 000 units | 10,0 |
| Other components (clips, mounts, brackets) | 200 000 units | 4,0 |
| TOTAL | | 32,0 |

Annual EBITDA:

$$= \$32 \text{ mln} - \$18,5 \text{ mln} - \$1,8 \text{ mln} = \mathbf{\$11,7 \text{ mln}}$$

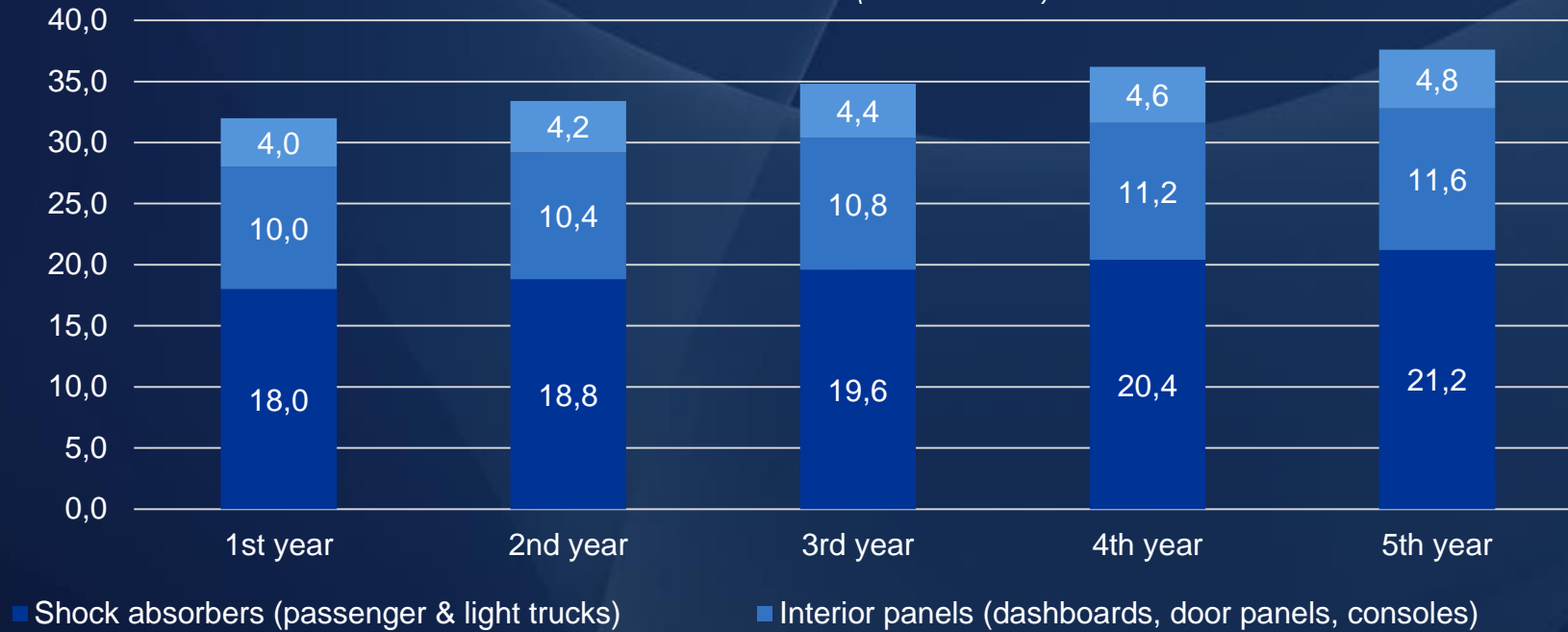
The project's strong profitability forecast is underpinned by efficient operations and high market demand, positioning it as a highly attractive investment.



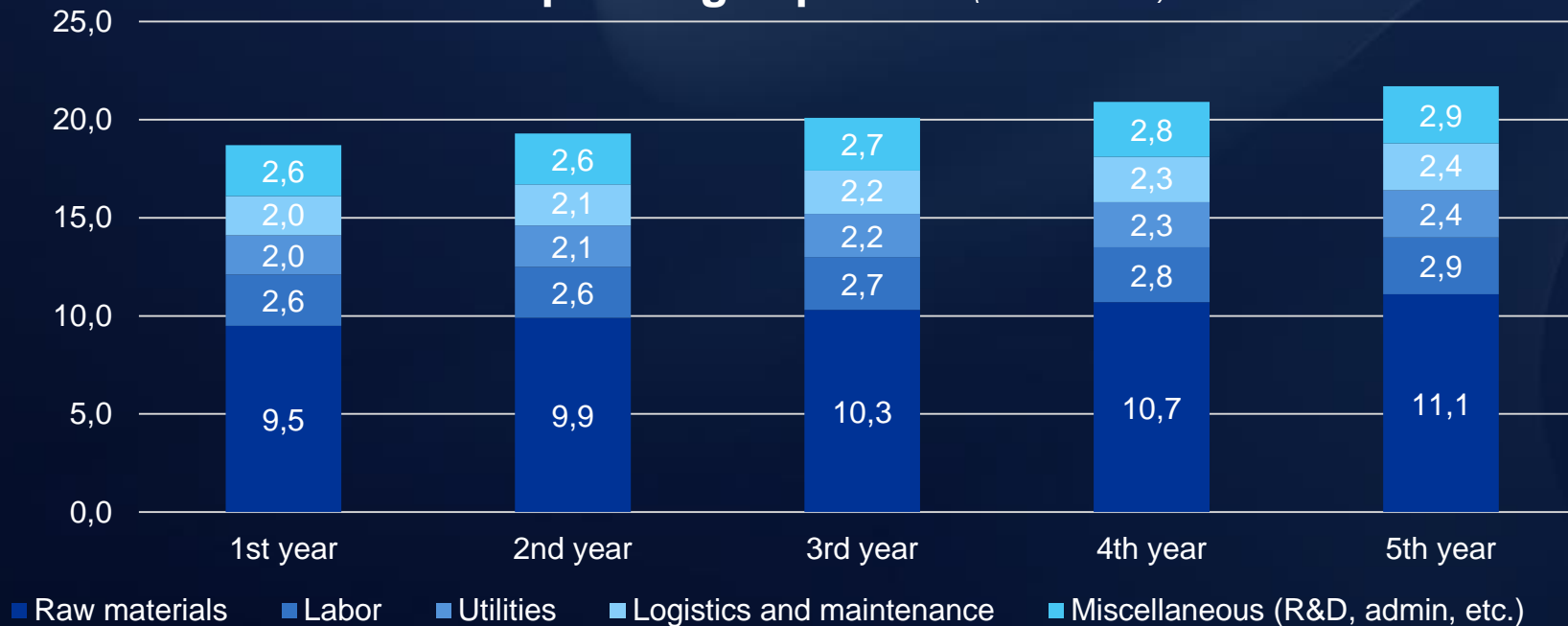
Financial indicators

(5-year projection)

Revenues (mln dollars)



Operating expenses (mln dollars)



Total 10-year cash flow:

\$95 after full CAPEX recovery

EBITDA growth:

5% CAGR, reaching \$12,5M by Year 5.

NPV (12% discount rate):

NPV= **\$14 million** (Highly favorable!)

IRR (Internal rate of return): ≈ 20%

Payback period (PP):

= 4,2 years

Profitability index (PI):

$= (\text{NPV} + \text{CAPEX}) / \text{CAPEX} = (\$14\text{M} + \$18\text{M}) / \$18\text{M} = 1,8$