



**Investment proposal:
Establishment of valuable orchards+drying/juice/concentrate plants
(grapes, apricots, peaches, figs)**



Establishment of valuable orchards+drying/juice/concentrate plants (grapes, apricots, peaches, figs)

Economic impact:

- Import substitution: Reduces reliance on imported juices and concentrates.
- Export earnings: Generates over USD 25 million/year in foreign exchange.
- Agro-industrial diversification: Boosts non-cotton agriculture in Kashkadarya.
- Regional development: Strengthens logistics and cold-chain infrastructure.

Social impact:

- Job creation: Over 600 direct and 1,500 indirect employment opportunities.
- Rural income growth: Contract farming model benefits 400+ local households.
- Skill transfer: Training in orchard management and food technology.
- Sustainability: Promotes eco-friendly and water-efficient farming methods.

Location of the project



Kashkadarya region	
Size	28 570 km ²
Population	3,7 million



Project description:

- 1. Integrated value chain:** Combines high-yield fruit orchards with advanced processing and export operations.
- 2. Sustainable agriculture:** Uses drip irrigation and renewable-powered dryers.
- 3. Export-oriented production:** Target markets include EU, GCC, and China.
- 4. Local cluster development:** Enhances regional fruit value chains and smallholder integration.
- 5. Technological innovation:** Implements precision agriculture, automated grading, and IoT-based quality monitoring to maximize efficiency and product consistency.

Economic indicators:

-  **Financing:** 85 mln USD
-  **Area:** 4 000 hectares
-  **Revenue:** \$37,4 mln/year
-  **PP:** 5 years
-  **NPV:** ~ \$42 mln
-  **IRR:** ~18,5 %

Production indicators:

-  **Grapes:** 25 000 tons/year
-  **Apricots:** 20 000 tons/year
-  **Peaches:** 15 000 tons/year
-  **Figs:** 10 000 tons/year
-  **Total annual output:** 70 000 tons/year



Fruit products processing chain & product yield

Key production stages

1. Orchard establishment & cultivation

- Land preparation, soil enrichment, and planting of high-yield varieties (grape, apricot, peach, fig).
- Installation of drip irrigation and fertigation systems.
- Continuous agro-monitoring through drones and IoT sensors for yield optimization.

2. Harvesting & primary handling

- Mechanized and manual harvesting to ensure fruit quality.
- Sorting, washing, and grading of fruits at on-site collection centers.
- Cold-chain logistics to minimize post-harvest losses.

3. Processing & transformation

- Drying: Solar-assisted and mechanical dehydration systems for raisins, apricots, and figs.
- Juice & Concentrate Production: Crushing, pulping, pasteurization, evaporation, and aseptic filling lines.
- By-product utilization: Seeds and peels used for natural oils, pectin, or animal feed.

4. Packaging & storage

- Vacuum and nitrogen-sealed packaging for dried fruits.

Product yield breakdown

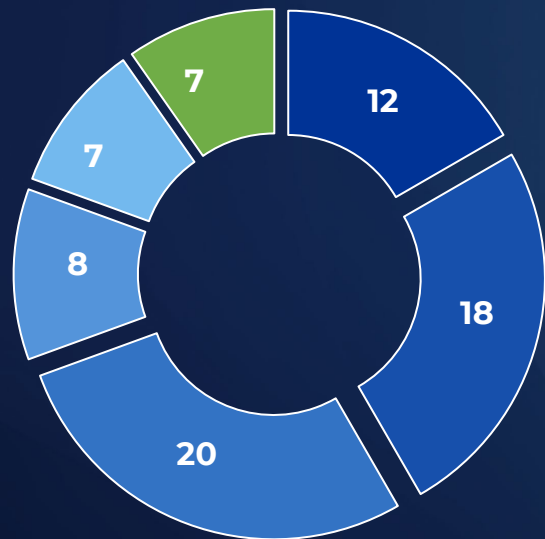
	Products	Fresh yield (tons/ha)	Processing output	Conversion yield	Final product (t/year)
1	Grapes	25	Raisins/juice	25%	6 250
2	Apricots	20	Dried/puree	30%	6 000
3	Peaches	16	Juice	35%	5 250
4	Figs	11	Dried	40%	4 400
	Total			100%	21 900 tons/year





Project expenses

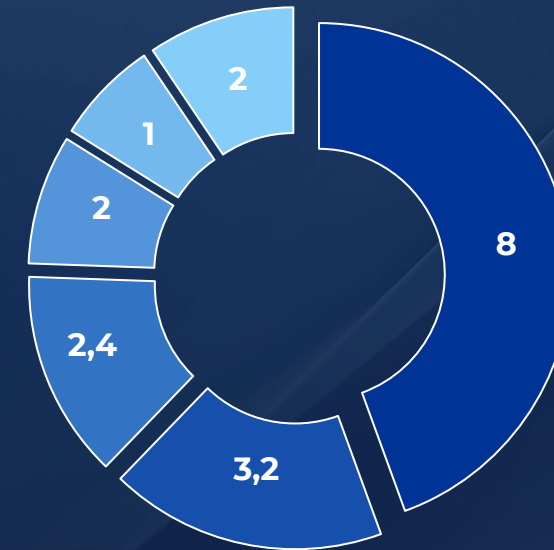
Initial Investment (CAPEX) (mln dollar)



Total CAPEX: **\$85 mln**

- Land preparation & irrigation system
- Orchard development
- Processing complex
- Cold storage & logistics hub
- Packaging & auxiliary infrastructure
- Working capital & contingencies

Operating Costs (OPEX) (mln dollar)



Total OPEX: **\$18 mln**

- Raw materials
- Labor & social costs
- Energy & utilities
- Maintenance & repair
- Transportation & logistics
- Administrative & marketing

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

Product	Annual volume (tons/year)	Price(\$/tons)	Revenue (\$M)
Raisins & grape juice	6 250	1 550	12
Dried apricots & puree	6 000	1 800	10
Peach juice & concentrate	5 250	1 350	8
Dried figs & concentrate	4 400	2 000	7,4
TOTAL	21 900 tons/year	-	37,4 mln (\$)

Annual EBITDA:

$$= \$37,4 \text{ mln} - \$18 \text{ mln} - 0,4 =$$

\$19 mln

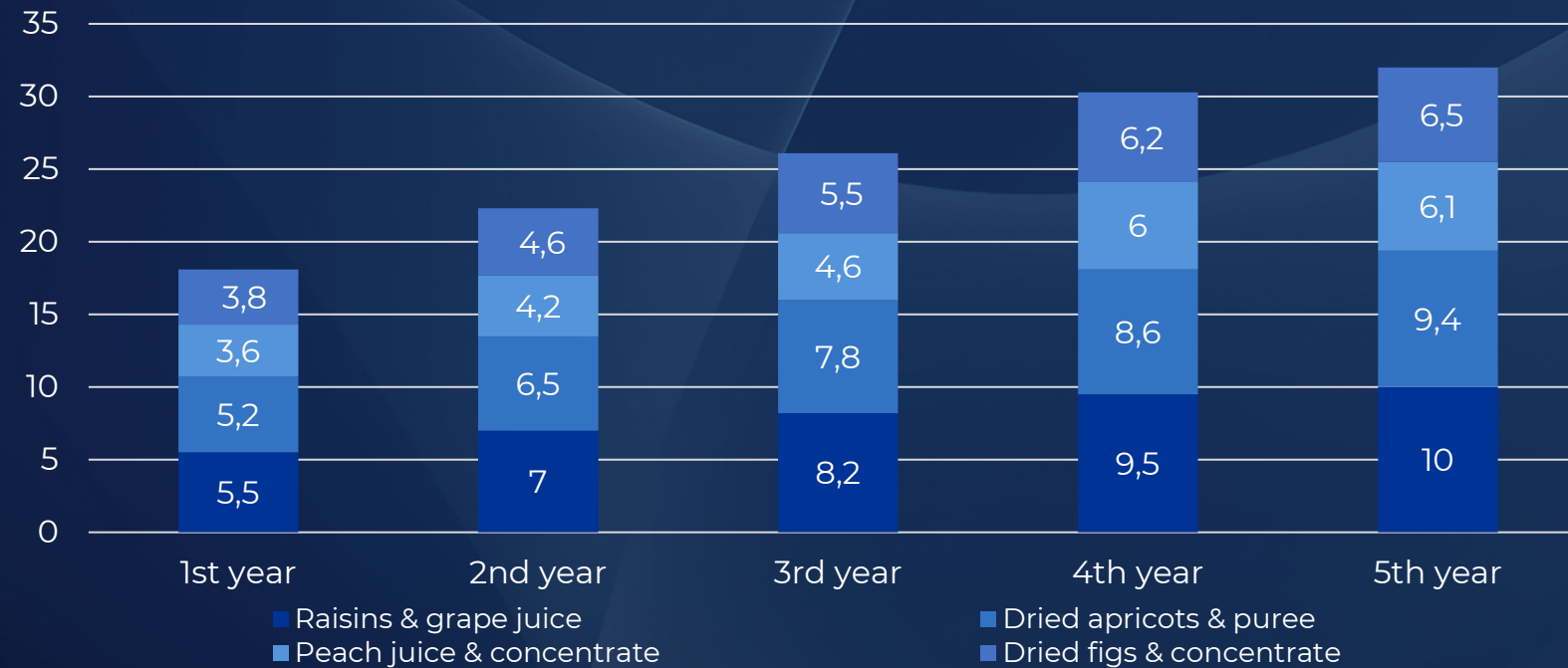
The project's strong profitability forecast is underpinned by efficient operations and high market demand, positioning it as a highly attractive investment.



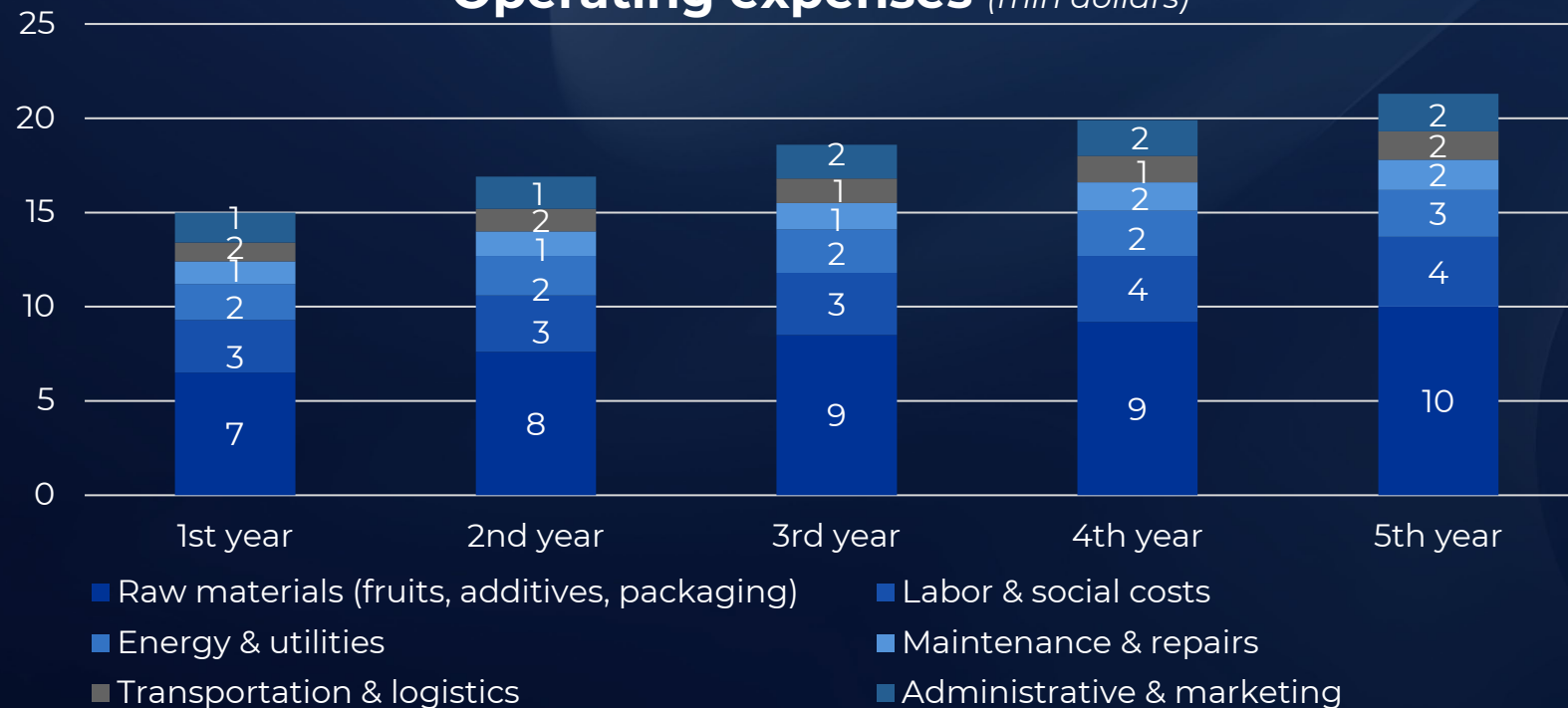
Financial indicators

(5-year projection)

Revenues (mln dollars)



Operating expenses (mln dollars)



Breakeven: Achieved in year 4

Total 5-year revenues: \$128,8M

EBITDA growth: ~19% CAGR, reaching \$21,8 M by Year 5.

NPV (10% discount rate):

NPV= **\$42 mln** (Highly favorable!)

IRR (Internal rate of return): **~ 18,5%**

Payback period (PP):

= 5 years

Profitability index (PI):

$= (\text{NPV} + \text{CAPEX}) / \text{CAPEX} = (\$42 + \$85) / \$85 = 1,49$