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

Investment proposal:
Production of electric bus

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Production of electric bus

Economic impact:

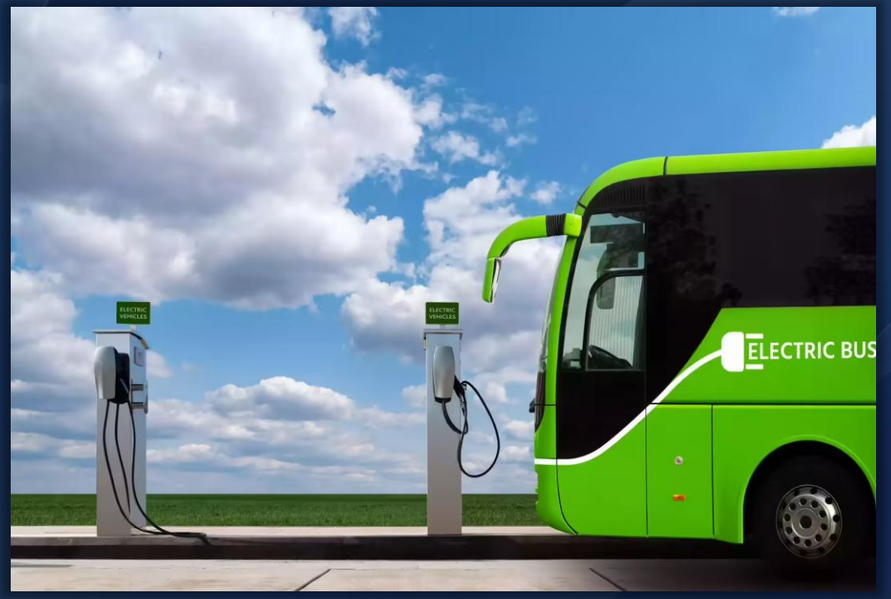
- Job creation: 400+ (manufacturing, engineering, logistics.
- Annual income: ~ $ 300 million (1,000 × $300,000).
- Additional industrial development: the emergence of new enterprises in such areas as battery, metal, electronics.
- Domestic production reduces dependence on the import of electric buses.

Social impact:

- Transportation cheapness: the cost of operating electric buses is 40% cheaper (~0.3 $ for 1 km vs 0.5 $in diesel).
- Noise reduction: electric motors operate without noise.

Location of the project

Syrdarya region	
Size	4 276 km²
Population	930 thsnd



Project description:

1. Production capacity is 1 thousand pieces of electric bus annually.

2. These buses offer zero-emission transportation, contributing to cleaner air in urban areas, and often have lower operating costs due to reduced maintenance and fuel expenses.

3. Syrdarya region is convenient in terms of resources and logistics.

4. The main goal of the project is to produce high – quality electric bus to meet the demand of domestic and international markets.

Economic indicators:

Financing: 250 mln USD

Area: 3 hectares

Revenue: $300 million/year

ROI: 20,5%

NPV: ~ $65,5 million

IRR: ~21,6%

Production indicators:

Annual production: 1 000 pieces

Domestic market: 500 pieces

Export: 500 pieces

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Processing chain & product yield

Key production stages

1. Chassis and body assembly:

Chassis line: The chassis, which forms the structural foundation of the bus, is assembled on a dedicated line.

Body construction: Panels are added to the chassis to shape the bus body.

2. Component integration:

Battery pack installation: The battery pack, often located on the roof or under the floor, is carefully integrated and connected to the bus's electrical system.

Electric motor installation: The electric motor, which provides propulsion, is installed and connected to the drivetrain.

Wiring and systems integration: A complex network of wiring harnesses, control units, and other components are installed to manage the electric systems.

3. Final Assembly and customization:

Interior fit-out: Seats, dashboards, and other interior elements are installed.

Exterior finishing: Windows, doors, and exterior panels are fitted, and the bus is painted.

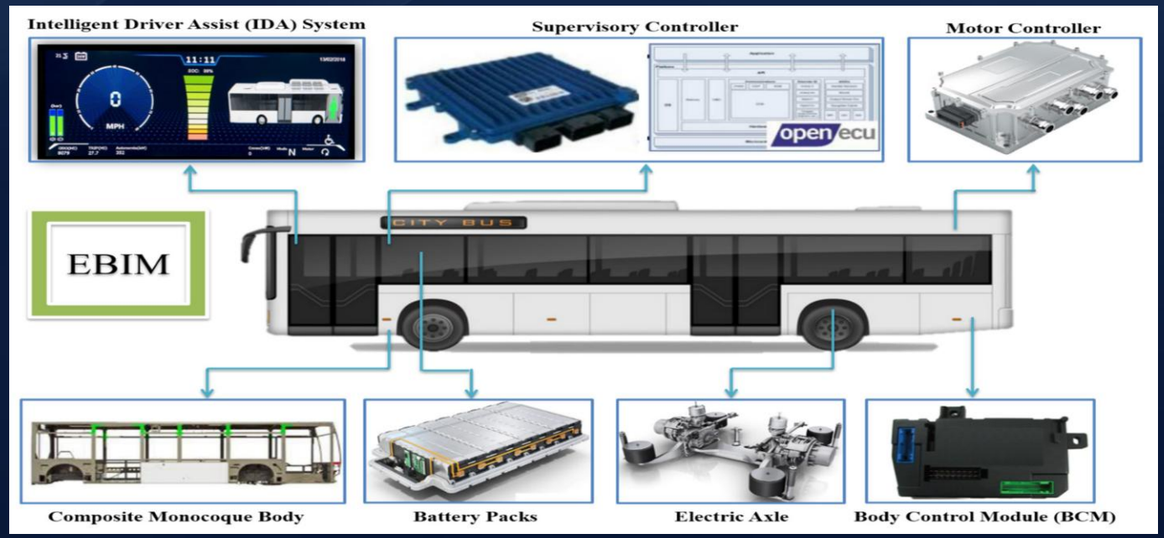
4. Testing and quality control:

Software programming: The bus's control systems and software are programmed to ensure proper functionality.

Performance testing: The bus undergoes rigorous testing to evaluate its performance, including range, charging speed, and overall efficiency.

Key considerations in electric bus manufacturing

	Feature	Description
1	**Specialized facilities:**	Electric bus manufacturing often requires dedicated facilities with specialized assembly lines and testing areas.
2	**Safety:**	High-voltage systems and components require strict safety protocols and procedures.
3	**Sustainability:**	Efforts are being made to incorporate sustainable practices, such as using recycled materials and optimizing energy consumption during manufacturing.
4	**Modular design:**	Some manufacturers utilize modular designs to facilitate easier maintenance, upgrades, and potential future retrofits.
5	**Digitalization:**	Digital technologies are increasingly being used to optimize production processes, improve efficiency, and enhance quality control.



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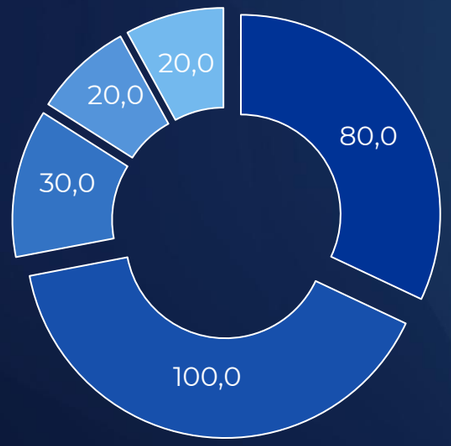
Project expenses

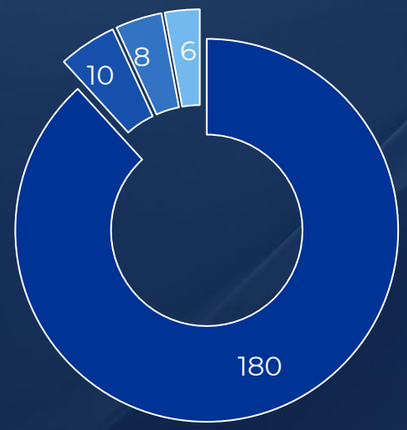
Initial Investment (CAPEX) *(mln dollar)*



Total CAPEX: **$250 mln**

- Construction
- Technological equipments
- R&D center
- Logistics and infrastructure
- Others

Operating Costs (OPEX) *(mln dollar)*



Total OPEX: **$204 mln**

- Raw materials
- Labor
- Utilities
- Marketing / logistics

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

Product	Volume	Price	Revenue ($)
Electric bus	1,000 pieces	$300 000/pcs	300,000,000
TOTAL			**300 000 000**

Annual EBITDA:
= $300 mln - $204 mln - $36,5 mln =
$59,5 mln

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

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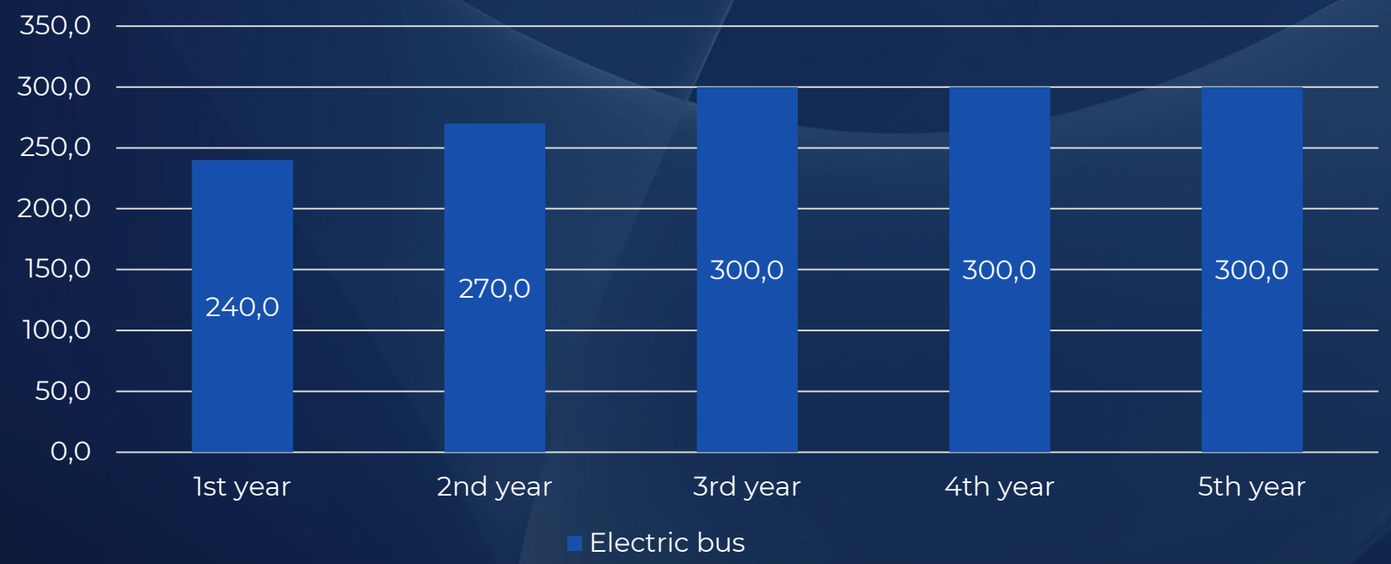
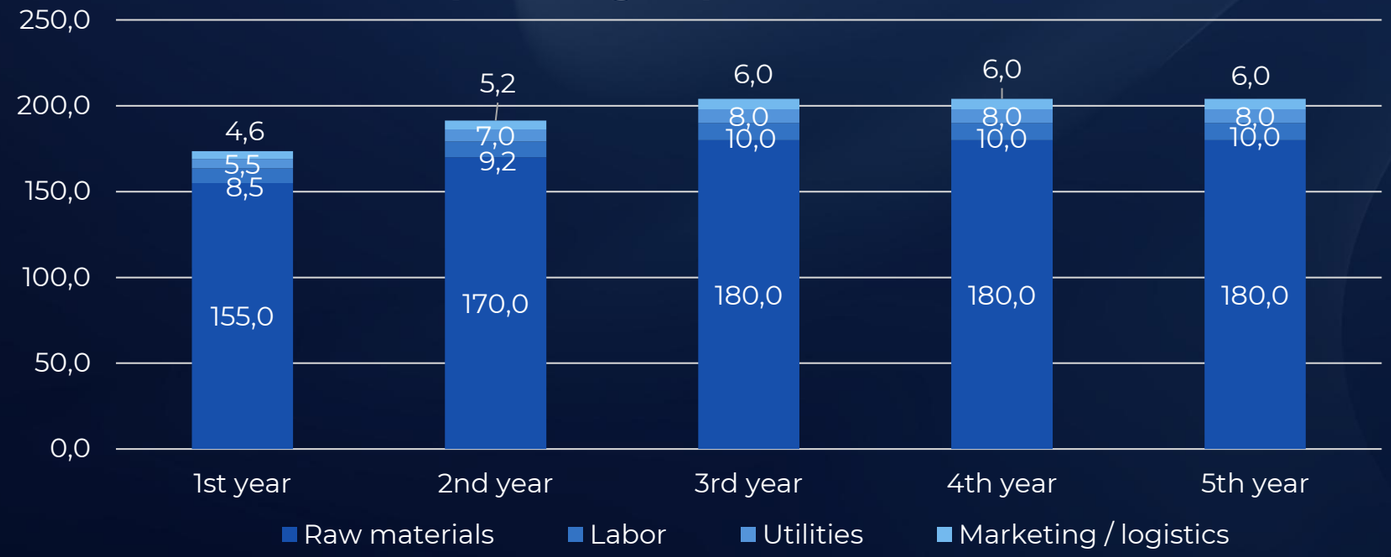
Financial indicators

(5-year projection)

Revenues *(mln dollars)*



Operating expenses *(mln dollars)*



Revenues increase steadily from $66,4M in year 1 to $96M in year 5.

Total **expenses** rise moderately from $173,6M to $204M, with raw materials the largest cost component. The controlled growth in costs reflects operational efficiency and economies of scale.

Net profit grows from approximately $33,4M to over $59,5M over 5 years. Despite rising taxes and expenses, profitability improves due to stronger revenue and efficient cost management.

NPV (10% discount rate):

NPV = -250 + 33,4 + 44,2 + 59,5 + 59,5 + 59,5 + 59,5 = 65,5 (Highly favorable!)

IRR (Internal rate of return): **≈ 21,6%**

Payback period (PP):

=Payback = **5-6 years**

Profitability index (PI):

=PI = 315,5 / 250 = **1.26**