



MAERSK

ELECTRIC TRUCK PILOT BUSINESS PLAN

[Organisation Name],

[Business Address]

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1. Executive Summary:

- High Quality: Clearly states location, scope, investment, and strategic rationale.
- Adequate: States high-level intent but lacks timing, volume, or financial headline.
- Unsatisfactory: Generic or missing overview of project and rationale.

Example – High Quality Answer: *This business case proposes the deployment of 5 battery electric heavy-duty trucks for urban deliveries from Maersk's Rotterdam depot to last-mile hubs across the Randstad. It is expected to reduce 210 tonnes of CO₂e per year and break even within 5 years. The deployment supports Maersk's ESG targets and responds to customer demand for zero-emission transport.*

2. Project Overview - Objectives and Scope

- High Quality: Clear description of scope boundaries, fleet size, locations, and delivery period.
- Adequate: Mentions truck numbers and sites but lacks clarity on boundaries or time frame.
- Unsatisfactory: Unclear what's in/out of scope or when it happens.

Example – High Quality Answer: *Scope includes 5 EV trucks, 3 dual-port 150kW chargers, and a 400 kVA depot power upgrade. Operations cover daily urban deliveries within a 150 km radius of Rotterdam. The investment horizon is 6 years, with all infrastructure owned and trucks leased through an OEM.*

3. Operational Assumptions

- High Quality: Detailed route, dwell, payload, shift model, terrain, and frequency assumptions.
- Adequate: Some operational details but lacks dwell or scheduling logic.
- Unsatisfactory: Only general route info or speculative payloads.

Example – High Quality Answer: *Trucks operate 2 × 8-hour shifts per day, covering 180 km per vehicle. The average payload is 11,500 kg. Dwell time at depot: 8 hrs overnight + 2 hrs midday. Terrain is flat; energy efficiency estimated at 1.1 kWh/km. All routes validated using the Route Analysis Template.*

4. Financial Model Inputs

- High Quality: All cost drivers (CAPEX, OPEX, diesel baseline, electricity rates) sourced and documented.
- Adequate: Basic CAPEX and diesel inputs, missing energy or maintenance details.
- Unsatisfactory: Incomplete or unclear input assumptions.

Smart Freight Centre-aligned structure:

- Investment Costs (vehicle + charging infrastructure)
- Business Costs (insurance, tolls, taxes)
- Energy Costs (diesel vs electricity incl. losses)
- Private Charging OPEX (grid connection, maintenance)
- Maintenance & Driver Costs
- Overhead Costs (optional fixed % of operating cost)

Example – High Quality Answer:

- Vehicle CAPEX: €320,000 each (leased via OEM).
- Charger CAPEX: €45,000 per unit, including installation.
- Electricity: €0.18/kWh off-peak, €0.26/kWh peak.
- Diesel baseline: €1.65/litre.
- Maintenance: 20% lower than diesel.
- SFC-aligned TCO structure used to ensure consistency.

5. Total Cost of Ownership

- High Quality: Uses validated TCO tool, includes payback, NPV, sensitivity scenarios.
- Adequate: One TCO comparison, limited assumptions, no scenarios.
- Unsatisfactory: No TCO logic or only narrative comparison.

SFC Guidance:

- Present TCO in €/km or \$/mile format.
- Include ICE vs BEV comparison under multiple battery configurations.
- Run sensitivity analysis: energy price, utilization rate, subsidies.
- Ensure methodological consistency with SFC benchmark assumptions.

Example – High Quality Answer:

- *TCO over 6 years: €1.62/km (EV) vs. €1.71/km (diesel).*
- *NPV: €45,000 positive.*
- *Payback: Year 4. Sensitivity range: electricity ±20%, diesel ±15%.*
- *Cockpit and standardized TCO tool used; diesel benchmark based on Q2 2024 spot rates.*

6. Commercial Viability and Pricing

- High Quality: Revenue model, pricing assumptions, green premium logic, and customer anchors.
- Adequate: Some price sensitivity or unit revenue assumptions.
- Unsatisfactory: No pricing or unclear commercial pathway.

Example – High Quality Answer: *Pricing based on green premium of €0.08/km compared to standard rate. Customer Letter of Intent signed covering 60% of expected volume. Remaining capacity to be offered via spot market with sustainability certification (book & claim).*

7. Emissions Impact

- High Quality: CO₂e savings calculated with scope (1, 2, or 3) attribution.
- Adequate: Mentions emissions but no methodology or scope identified.
- Unsatisfactory: No reference to carbon or impact.

Smart Freight Centre-aligned estimation:

- Use Well-to-Wheel CO₂e methodology (not Tank-to-Wheel only).
- Emission Factors:
 - Diesel (g CO₂e/litre) – from GLEC v3.1
 - Electricity (g CO₂e/kWh) – from country-specific data (e.g. EcoTransIT)
- Reference ISO 14083 if applicable.

Example – High Quality Answer: *Estimated 210 tonnes of CO₂e savings annually. Calculated using GLEC v3.1 emission factors: 2.66 kg CO₂e/litre diesel vs. 360 g CO₂e/kWh electricity (Netherlands grid). All reductions classified as scope 3 with verified energy source and traceability protocol.*

8. Risk Assessment

- High Quality: Identifies major risks with mitigation and ROI impact.
- Adequate: Lists some risks, no mitigation.
- Unsatisfactory: No risk section or generic notes.

Example – High Quality Answer: *Risks: grid upgrade delay (6 months), OEM delivery uncertainty, and customer contract termination. Mitigations: battery buffer included in site design; OEM penalties clause; customer fallback volume from Contract Logistics. Scenario modelling shows IRR drops below threshold only if volume falls >30% and electricity exceeds €0.32/kWh.*

9. Incentives and Regulatory Support

- High Quality: Specific funding programs named, and eligibility confirmed.
- Adequate: Incentives mentioned but not secured or verified.
- Unsatisfactory: No funding or policy alignment.

Regulatory and compliance alignment:

- Identify BEV-specific road access limitations and over-weight exemptions.
- Flag upcoming ADR constraints (e.g., 2025 rules for hazardous transport).
- Clarify whether incentives are capped, time-bound, or quota-limited.
- Reference EAFO (EU) or national incentive registries where relevant.

Example – High Quality Answer: *Applying for Netherlands SEBA grant (€72k per truck). Depot energy upgrades are partially funded by local grid subsidy (Enexis). Depot exempts from road access restrictions; weight compliance validated. All documentation submitted; confirmation is expected within 30 days.*

10. Recommendation and Next Steps

- High Quality: Go/no-go logic clearly stated with next-phase actions.
- Adequate: Directional recommendation without handoff plan.
- Unsatisfactory: No recommendation or decision framing.

Example – High Quality Answer: *Recommendation: proceed with investment and submit IP to regional board for Q4 approval. Next steps: initiate OEM contracting, secure grid connection upgrade, and finalize customer service agreement. Kick-off planned for January 2026 with phased deployment.*