

CASE OF EXCELLENCE: DOW QUÍMICA



Leveraging logistical sustainability with the use of electric trucks for Dow Química customers in partnership with EBMAC® Transportes e Logística.

1. PROJECT SCOPE

The Dow Química project, in partnership with EBMAC® Transportes, was developed to optimize the distribution of packaged products and liquid bulk to customers in the Greater São Paulo region, departing from the Jacareí (SP) plant.

The operation uses semi-light trucks, with a gross weight of between 3.5 and 6 tons, and covers a distance of around 120 km per trip, with an average occupancy of 1.7 tons per vehicle. The project was planned to make 109 trips over six months, covering a total of 13,189 km.

3. OBJECTIVE

Reduce scope 3 CO₂e emissions by serving clients who also have emission reduction targets.

4. KEY INDICATOR

Reduction of CO₂e emissions, monitored through the Fourkites system for routes and the Electric Vehicle Operation and Travel Control Sheet.

6. RESULTS

A 74% reduction in CO₂e emissions and an energy saving of 16% compared to the diesel vehicle. However, the energy cost was 16% higher, due to the cost of electricity. The good practice promoted logistical sustainability, demonstrating a positive impact on operations.

2. BEST PRACTICE

Use of cleaner and renewable energy sources, replacement of diesel-powered vehicles with 100% electric trucks.

5. ACHIEVEMENTS

Replacement of a diesel vehicle with a JAC Motors iEV1200T electric truck, with an estimated range of 220 km, for the transportation of cargo within a radius of up to 100 km from the point of origin.

It considered the night-time charging infrastructure and aligned the sustainability strategy between Dow, EBMAC® and its customers.