Efficiency and Sustainability Applied to Logistics: Electromobility in freight transport

CASE OF EXCELLENCE: LZN LOGISTICA

Sustainability and Electrification in the Supply Chain: LZN's Logistics Transformation.

1. PROJECT SCOPE

Focused on inbound supply chain operations, involving collection/transfer and transfers/deliveries. The scope covers the replacement of combustion road vehicles with 100% electric trucks, with the aim of improving logistics efficiency and reducing greenhouse gas (GHG) emissions, mainly CO2, in break bulk (LTL) and full truck load (FTL) transportation operations. The transportation service category (CST-1) selected includes supply transfers, involving the study of the economic, social and environmental feasibility of adopting electric vehicles.

2. BEST PRACTICE

Implementation of a cargo consolidation center in an urban area, use of alternative propulsion systems and use of cleaner energy sources.

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3. OBJECTIVE

Reduce net CO2 emissions in supply collection and transfer operations and improve the efficiency of logistics operations.

4. KEY INDICATOR

Amount of CO2 emitted before and after the implementation of electric vehicles, energy consumption and reduction in distances traveled with the adoption of Transit Point.

6. RESULTS

After 24 months of operation, the results show that LZN Logistica has managed to reduce net CO2 emissions by 57.14%, totaling a reduction of 733,312.36 kg of CO2 after discounting the biogenic fraction. In addition, operational efficiency was improved, with an increase in the number of trips and kilometers traveled, without significantly expanding the fleet.





ACHIEVEMENTS

LZN has replaced internal combustion vehicles with 100% electric vehicles in its collection and transfer operations in the São Paulo and Campinas regions.

A load consolidation center was created in São Paulo to facilitate the recharging operation of the electric trucks and reduce the distances traveled.

