

CASE OF EXCELLENCE: LZN



Consolidation of sustainability in logistics by using electric trucks for supplying inputs and raw materials

1. PROJECT SCOPE

The operation is focused on the inbound phase of the supply chain, and was divided in collections and transfers through road transport.

These two operations happen all over the national territory, using various types of vehicle. They always have the same destination: the distribution center in Sorocaba, SP. At this place, the segregation and consolidation of cargo is carried out. It's also the departure point of deliveries and transfers that go directly to clients' factories as a part of supply transfer.

2. BEST PRACTICES

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

3. OBJECTIVE

Reducing greenhouse gases emissions, focusing on CO2 coming from freight road vehicles used in the supply chain.

4. KEY INDICATORS

Number of vehicles/ operations, total distance travelled (km), amount of fossil fuel consumed (l) and GHG emissions - CO2 (kg).

5. ACHIEVEMENTS

LZN selected the operations of collection/transfer (less than truck load – LTL) and transfer/delivery (full truck load – FTL), for a specific client, in order to be part of the project of implementing 100% electric vehicles, with zero CO2 emissions at the end of supply transfer (CTS-1).

6. RESULTS

The company reduced its annual distance travelled by 195,113 km, while keeping the same amount of collections and deliveries. Its total annual emissions were of 142,026.46 kg of CO2, which is equivalent to 120,266.20 kg of CO2 after the deduction of the biogenic fraction (ethanol and biodiesel) is taken into account. As a result, net emissions related to the operations of collection and transfer fell by 51,3%.