CASE OF EXCELLENCE: ZERO CARBON

zero carbon logistics

Eliminating carbon dioxide emissions by using electric vans for physical distribution

1. PROJECT SCOPE

Zero Carbon Logistics is dedicated to developping its operations in a sustainable way. Thus, it conducted the shift of a light commercial vehicle powered by fossil fuels for an electric van. This vehicle has been used for many purposes, such as collection and delivery service in urban areas.

The project scope is the sector of physical distribution (outbound), and more specifically a transportation service category called secondary delivery distribution.

2. BEST PRACTICE

Use of alternative propulsion systems and use of cleaner energy sources: use of an 100% electric light commercial vehicle (van).

3. OBJECTIVE

Serve our clients with maximum productive efficiency and minimal GHG emissions during operations.

4. KEY INDICATOR

GHG Protocol's calculation tool was used to quantify the mass of CO2 that would be emitted, in addition to route and vehicle displacement control.

5. ACHIEVEMENTS

Adoption of the best practice at the Paraupebas branch.

Shift in the LTL (less than truckload) freight modality by using the electric vehicle, more specifically for collections and deliveries.

Full truck load was avoided and the remaining capacity was used to serve different clients at the same time.

6. RESULTS

Savings of 100% in costs when comparing the vehicle powered by different fuel sources to the electric vehicle powered by solar energy, and of over 30% taking fossil fuel consumption costs into account. Besides, a reduction of 100% in CO2 emissions in comparison to conventional vehicles and of 83,71% in comparison to electric vehicles charged with conventional energy.