

Driving Fleet Electrification: Frito-Lay



PepsiCo's Commitment to a Sustainable Future

As part of the company's industry leading sustainability goals, PepsiCo aims to achieve net-zero emissions by 2040 and, by 2030, reduce its absolute greenhouse gas emissions by more than 40% – including a 75% reduction from direct operations.

Frito-Lay North America, the \$23 billion convenient foods division of PepsiCo, supported this effort by embarking on a last-mile delivery fleet electrification project for its 45-vehicle distribution center in Manteca, California. This site serves as a major distribution hub for the region and is Frito-Lay's fourth distribution center fleet to be electrified.

With more than 85,000 transportation assets across its operating companies, fleet electrification is a key strategy to achieve these targets and minimize environmental impact.

Start With Your Essential Infrastructure Partner

Frito-Lay partnered with Pacific Gas and Electric Company (PG&E) Fleet Electrification Specialists and infrastructure project managers from the beginning of the project via the **EV Fleet Program** to support the design, installation, and construction of the Manteca project. Through the EV Fleet Program, Frito-Lay received financial incentives that helped reduce the overall project cost.

Working with PG&E early in the project enabled Frito-Lay to:

- Understand how much energy would be needed for the project
- Secure additional funding for infrastructure and utility upgrades
- Reduce charging costs by enrolling in PG&E's Business EV Rate,
 with potential savings of over \$19,000 per year for comparable operations

"At our Manteca, California, plant, we have reduced our greenhouse gas emissions by 91% from direct fleet operations, and we look forward to scaling that as we add electric vehicles throughout the country."

Dejan Antunovic

Electrification Program Manager PepsiCo



- Fleet electrification project initiated
- Analyzed current fleet operations including vehicle types, fuel consumption, and mileage data
- Preliminary planning and contracting
- Collaborated with PG&E and infrastructure providers
- Developed procurement strategy, evaluate vehicle model suitable for operations
- Began construction
- Placed vehicle orders

- Retrofitted existing Level 2 EV chargers to deploy an initial phase of 16 battery-electric vehicles
- Installed charging infrastructure
- Deployed charging stations and power upgrades
- Initial vehicles arrived, replacing a portion of the conventional fleet

Manteca site was energized and went online in early August 2023

Vehicle selection and procurement:

Manteca was one of PepsiCo's nationwide pilot sites for the Ford E-Transit delivery van. The pilot roll-out provided the drivers and fleet managers with early training and allowed site managers to test interoperability with various charging providers ahead of full-scale implementation.

Frito-Lay ultimately partnered with Ford Pro and Peterbilt to deploy a total of (25) Ford E-Transit vans and (7) Peterbilt 220EVs, which currently run daily routes at the Manteca site.

Charging infrastructure deployment:

Frito-Lay installed a network of charging stations including:

- (30) 19.2 kW Level 2 Chargers
- (1) 120 kW DCFC Level 3 Charger

Frito-Lay also retrofitted (16) existing Level 2 chargers in order to have the chargers ready and operable when vehicles arrived.

Key Takeaways

Collaborate with Partners Early

Frito-Lay engaged with PG&E as well as vehicle OEMs, equipment manufacturers, and local permitting agencies to fully understand the necessary steps in their electrification timeline.

Coordinating with electrification partners—including your local utility—as early as possible can ensure you right-size infrastructure and efficiently manage project costs from the start.

2 Consider Your Locations

Frito-Lay electrified two sites just 20 miles from each other, but differing geography and weather at each location means the vehicles and infrastructure performance varies.

Carefully assess the terrain and conditions of your specific sites and routes, which can impact range, charging, efficiency, and regenerative braking opportunities.

3 Identify Optimal Routes

Before planning began, Frito-Lay first assessed routes at the site-level. At Manteca, 91% of daily routes were below 95 miles, meaning almost all vehicles could complete their duty-cycle on one charge.

Electrifying sites with routes that are optimal for EVs can eliminate the need for off-site or en-route charging.

4 Build in Time to Test

The Frito-Lay team started with one portable EV charger and a Ford E-Transit demo van which they deployed on a real route, allowing their team to collect driver feedback, experiment with routes, and assess charging methods.

Build in ample time to thoroughly test and validate equipment and software, especially if working across multiple OEMs, to ensure interoperability before committing to site-wide implementation.

5 Empower Drivers with Training

Frito-Lay partnered with their vehicle manufacturers to provide comprehensive training programs ensuring drivers were well-equipped to operate and charge vehicles.

Connect with vehicle and equipment manufacturers as well as software providers to leverage employee training or maintenance programs they may offer.

PG&E's **EV Fleet Program** has helped fleets like PepsiCo and its subsidiaries save money and simplify electrification by offering comprehensive infrastructure support, infrastructure incentives, and charger rebates.

Prepare your fleet for electrification with the help of PG&E's EV Fleet program. Visit: pge.com/evfleet

