



Background

According to the California Air Resources Board (CARB), in 2018 the transportation sector accounted for the largest portion of total statewide greenhouse gas (GHG) emissions (39 percent), and the medium- and heavy-duty truck and bus sector accounted for 23 percent of those emissions.¹

Companies in California whose primary function is to sell or transport goods to and from warehouses, distribution centers, import/export facilities, manufacturing complexes, retail centers, and to end-use customers, are well positioned to benefit from significant total cost of ownership savings by electrifying their fleet.

Distribution and delivery fleets have large and diverse fleet operations that can take advantage of the growing number of electric vehicle and equipment product offerings from leading OEMs, while meeting corporate sustainability goals, and getting ahead of looming regulations, such as California's proposed zero emission transport refrigeration unit (TRU) regulation, which could go into effect in 2025.

¹California Greenhouse Gas Emission Inventory—2018 edition, California Air Resources Board: <https://ww2.arb.ca.gov/ghg-inventory-data>

PepsiCo continues leadership in sustainability as Frito-Lay Modesto becomes next testing ground for electric technology

PepsiCo Commits to Reduce Absolute GHG Emissions

As part of a company-wide commitment towards sustainability, PepsiCo aims to reduce its greenhouse gas emissions by 20% by 2030. With more than 70,000 vehicles and other assets, the company's private fleet presents a significant opportunity to reduce harmful emissions.

PepsiCo deployed its first electric vehicles in 2010 with nearly 300 electric box trucks. To date, the trucks have been driven 15 million miles, and consumed less than one-third the equivalent amount of energy than their diesel counterparts. This reduced energy need resulted in significant cost savings in fuel price and reduced emissions.

Frito-Lay Modesto, Showcase for Sustainability

To further its sustainability goal, Frito-Lay, a subsidiary of PepsiCo, is completely replacing all existing diesel-powered freight equipment with zero-emission and near zero-emission technologies at its Modesto facility. The 500,000-square-foot central California manufacturing facility is one of the largest in the US, and one of the first major corporate warehouses to venture into zero-emission technology.

The Frito-Lay freight sustainability project is part of the California Climate Investment; and is a collaboration with the San Joaquin Valley Air Pollution District, and other community partners, to improve air quality for residents and surrounding areas.

By the end of 2020, Frito-Lay plans to deploy a variety of electric vehicles and technologies at the Modesto facility, including:

- 15 heavy-duty Tesla battery electric tractors
- 12 Crown battery electric forklifts

"We hope this work will become an operating model for all of our facilities across the US, and that we act as the catalyst to accelerate adoption of alternative fuel vehicles across the industry."

Michael O'Connell, Vice President of Service and Distribution, PepsiCo

- 6 Peterbilt 220EV battery electric box trucks
- 3 BYD 8Y battery electric yard tractors
- 2.7 megawatt-hours of on-site battery storage
- 1 megawatt solar carport with 14 employee electric vehicle charging station

Utilities are a Critical Partner

One of the biggest challenges PepsiCo, and other fleets face, is the unknown of electric vehicles and how to prepare the right amount of energy needed. PepsiCo worked closely with local utilities early on in the Modesto project to understand a number of unknowns including how the grid operates, how much energy is needed for the planned project, and how to best install charging equipment to fit this need.

More Opportunities for Electrification

PepsiCo continues to explore and identify opportunities for EV deployment at facilities across California, including Hayward, Riverside, Sacramento, Fresno, and Torrance. With 93% of delivery tractors averaging 100 miles or less per day, the company has the potential to convert up to 5,000 Class 6 delivery trucks and Class 8 OTR tractors to electric. One of the first steps in each of these proposed projects is connecting with the local utility to understand the site's electrical potential.

Interested in taking advantage of PG&E's EV Fleet program? Visit: pge.com/evfleet

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