



Charging Stations at Frito-Lay

This project was initiated as part of a corporate strategy that considers multiple possible routes to emissions reductions, including using alternative fuel sources such as electricity. Frito-Lay purchased its first electric trucks for its New York City operations to “make a statement in the largest city in the U.S.”

ELECTRIC VEHICLE CHARGING STATIONS:
35 AC Level 2 stations

LOCATION: Frito-Lay distribution centers in the Bronx, Albany, Rochester, Buffalo, and New Paltz

VENUE: Fleet, EVSE is used to charge their 35 electric delivery trucks

The electric vehicle (EV) charging stations were installed at Frito-Lay distribution centers in the Bronx, Albany, Rochester, Buffalo, and New Paltz. These stations are used to charge Frito-Lay’s fleet of 35 electric trucks overnight to allow zero-emission deliveries the next day. Frito-Lay’s use of these trucks and charging stations provides benefits to Frito-Lay as well as offers real-world operational data to assist with future deployments. “The introduction of these enhanced charging stations is a significant step forward for the Frito-Lay fleet as we continue on our sustainability journey,” said Mike O’Connell, senior director of fleet operations for Frito-Lay North America. “Not only will the stations benefit our operations in real time, they also allow the state of New York to gain a better understanding of the vehicles, providing the critical information needed for the State to continue to invest in this alternative vehicle technology.”

The stations are maintained by Frito-Lay, while the usage data is being collected and processed by Servidyne. While the stations use 220VAC power, similar to most commercial charging infrastructure, they operate at a higher rating to charge the large battery packs — ranging from 40 to 80 kilowatt-hours. The stations are exclusive to Frito-Lay trucks parked inside their gated lots; there are no access cards or payment systems required.

Use of the stations is high — each station is used on a daily basis to provide energy for the following work day. Frito-Lay expects its electric trucks will reduce fuel use by a total of 63,000 gallons and cut greenhouse gas emissions by more than 1 million pounds annually in New York State. Frito-Lay’s purchase and use of electric trucks in New York State was encouraged by ChargeNY and the Truck Voucher Incentive Program.

Lessons learned from this project include the strong influence of incentives to encourage fleets to try this technology and verify its viability before committing to a large investment. Originally, Frito-Lay was planning to use more electric trucks at fewer locations, but the company instead placed fewer trucks at more locations to optimize their use on key routes and avoid the costly electrical service upgrades required if more electric trucks were drawing power at the same time in one location. Several of the locations also installed an 110VAC plug to provide power to cab heaters that are used to pre-heat vehicles on cold days and extend vehicles’ range (by decreasing heater use during transit).



New York State has a goal of having over 3,000 public and workplace charging stations statewide by 2018 through ChargeNY. New York State Energy Research and Development Authority (NYSERDA) supports several charging station projects across the State.