



CASE STUDY | PROPANE OPPORTUNITY

Propane Powers the Electric School Bus Revolution

How grid delays are creating a significant, near-term propane sales opportunity in the school bus sector

The Opportunity for Propane Suppliers

The electric vehicle transition doesn't have to be a threat to the propane industry. It can be a growth driver. The federal Clean School Bus Program has already awarded 8,500 electric school buses across the country. Yet a critical bottleneck is emerging: utility grid connections to vehicle depots can take three years or more to complete. That gap between bus delivery and grid availability must be filled, and propane is filling it.

Off-grid electric vehicle chargers powered by propane are stepping in as the essential bridge technology. These units operate independently of the utility grid, delivering reliable, high-volume charging for electric school bus fleets from day one. For propane distributors, this means a new, recurring, high-volume sales channel with customers who have predictable, year-round energy needs.

Understanding the Propane Volumes

The propane consumption associated with off-grid EV charging is substantial. Each electric school bus carries roughly a 190 kWh battery. Charging a single bus from 20% to full each night consumes approximately 150 kWh. Over the course of a year, that one bus alone requires more than 27 MWh of energy, translating to nearly 4,000 gallons of propane annually. Scale that across a fleet of even modest size and the volumes become significant very quickly.

A small school district running eight electric buses would require approximately 32,000 gallons of propane per year just for overnight charging. Larger districts operating hundreds of buses represent multi-million-gallon annual accounts.

Real-World Example: Los Angeles School District

One of the nation's largest school districts in Los Angeles illustrates the scale of this opportunity. The district transports more than 50,000 students daily using a fleet of 180 electric school buses. Because the utility grid connection to their depot is years away, the district relies entirely on 25 propane-powered off-grid EV chargers, each unit capable of simultaneously charging eight buses.

The result: 5,000 MWh of off-grid electricity generated every year, powered by over 700,000 gallons of propane. That is a single customer, in a single city. As electric school bus adoption accelerates nationwide, opportunities like this are multiplying across every state.

Metric	Value	Unit
Number of Electric Buses	180	
Nightly Recharge per Vehicle	152	kWh
Total Charging Power	4	MW
Nightly Energy Produced	27	MWh
Annual Energy Produced	5,000	MWh
Annual Propane Use	700,000	Gallons

What This Means for Your Business

Electric school buses are already on the road, and more are arriving every month. School districts are contractually obligated to charge and operate them, grid or no grid. Propane-powered off-grid chargers are not a temporary workaround; they are an engineered solution that will be in active use for years as grid infrastructure catches up.

Beyond school buses, the same dynamic applies to transit buses, last-mile delivery fleets, terminal tractors, and drayage trucks, all early adopters of EV technology, all facing identical grid connection delays. Propane distributors who establish relationships in this market now are positioning themselves at the center of the EV transition rather than on the sidelines.

The message is clear: the move to electric vehicles can be another propane demand. For forward-looking propane suppliers, it may be one of the most significant new market opportunities in decades.