



**Environmental
Defense
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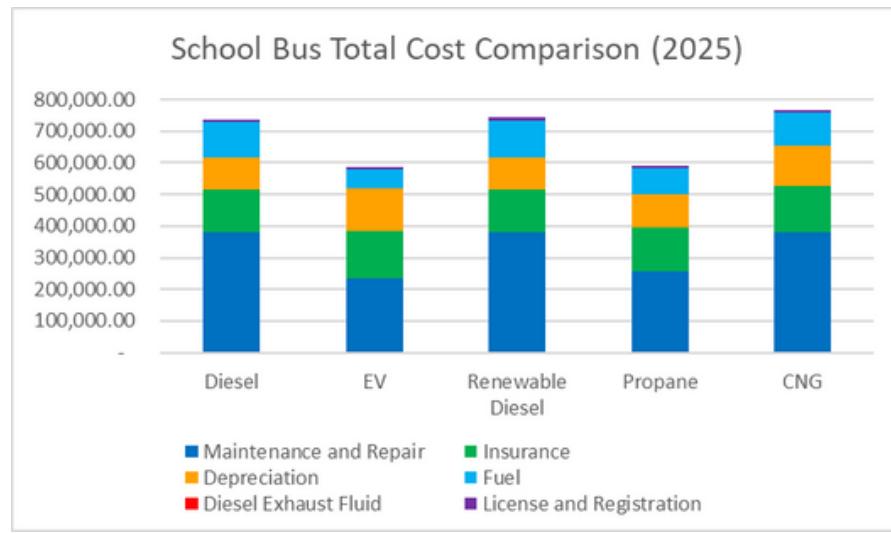
ELECTRIC SCHOOL BUSES: GOOD FOR THE ENVIRONMENT AND THE BOTTOM LINE



GREEN POWER MOTOR COMPANY

Each day, 500,000 Florida children ride on 18,000 school buses — most of them still using dirty diesel fuel and emitting harmful pollution into our communities. Diesel dominates the current fleet, with a few compressed natural gas (CNG) and propane-fueled models on the road. Transitioning to all electric school bus fleets would reap significant economic and community benefits. Electric school buses are cost competitive with dirty alternatives, and although upfront costs are higher for electric versions, operational savings result in a favorable total cost of ownership (TCO). Electric school buses don't require oil changes, have fewer moving parts, and the cost of electricity to fuel them is cheaper than diesel - all leading to considerable cost savings over the life of an electric school bus.

This informational sheet compares the TCO among diesel, renewable diesel, CNG, propane, and electric school buses. The TCO sums all costs of a vehicle over its lifetime, including purchase price and resale, fueling infrastructure, lifetime fueling, and maintenance costs.



Fuel Price Assumptions: Diesel = \$3.56/gal, Electric = \$0.15/kWh, RD100 = \$3.56/gal¹,
Propane = \$1.34/DGE, CNG = \$2.52 DGE

¹ The U.S. Department of Energy suggests using similar price data for renewable diesel and diesel fuel due to current lack of price transparency and production differences. RD100 prices reflected in this document are likely slightly lower than the actual national average.

ELECTRIC BUSES ARE CHEAPER OVER THEIR LIFETIME

As shown in the chart above, electric school buses have the highest vehicle purchase price and charging station cost (reflected in the depreciation cost (reflected in the depreciation cost)). However, electric school buses have the lowest fuel and maintenance costs, which makes up for the upfront cost. Summing these values provide the total cost of ownership over the lifetime of each vehicle: \$737,344 for diesel, \$765,164 for CNG, \$590,123 for propane, \$624,826 for renewable diesel, compared to \$585,453 for electric. Thanks to the better fuel efficiency (22.5 miles per diesel gallon equivalent [mpdge] compared to the average fossil fuel-powered school bus of 7 mpdge) as well as lower maintenance and fuel costs, a 2025 model electric school bus is the least expensive option compared to its fossil fuel powered counterparts.

CLEANER AIR

Electric school buses are the only option on the market with zero tailpipe emissions. Fossil fuel-powered school bus exhaust contains greenhouse gas pollution harmful to the environment, like carbon dioxide, as well as particulates and carcinogens that directly harm our youth, who have developing lungs, and other sensitive members of our society, like the elderly or those with preexisting health conditions.

EVERY PENNY COUNTS

Over a 15-year lifetime, electric school buses are the most economical compared to various fossil fuel-powered school buses. School buses are prime candidates for electrification because more driving means more savings. With a driving average of 180 days per year (5 days of operation per week) at an average of just over 60 miles of daily range, the upfront cost of switching to electric can be recouped in five years. With federal and state funding sources, savings can be realized even more quickly.

Thanks to better fuel efficiency and lower maintenance costs, a 2025 model electric school bus is less expensive than its fossil fuel-powered counterparts.

FOR STRONGER COMMUNITIES

Beyond the economic advantages, the transition to electric school buses represents a strategic investment in energy security and community resilience. By reducing dependence on volatile foreign fuel markets and utilizing domestically produced electricity, school districts can better predict and control long-term operational costs. The electrification of school buses extends benefits far beyond daily transportation, contributing to economic resilience, stable energy systems, and community development.



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