

LAUSD Is Ready for

ZERO-EMISSIONS

Greening and Climate Resilience Committee
March 15, 2023



Los Angeles County Electric Truck & Bus Coalition

A commitment across environmental, labor, and community partners to accelerate a just zero-emissions transportation system in Los Angeles County and beyond.





Why electric school buses?

making combustion history

Combustion-Fueled Buses Are Unhealthy for Kids

Los Angeles suffers from some of the worst air quality in the nation.

Pollution *inside* school buses up to 10x higher than outside.

Air pollution associated with reduced lung development in children, reduced cognitive function, increased school absences, and reduced economic and health outcomes throughout life.



The Technology Is Ready



- **23+ Models Available in California**
- **Successfully Operating in 38 States**
- **Range Meets Most Needs Today and Rapidly Improving:**
 - The average school bus travels 12,000 miles/yr, which is easily met by current range (up to 210 miles per charge).
 - With DC fast charging, buses can charge completely in between duty cycles.
 - Longer ranges with each new generation.
- **Electric School Buses Are Renewable Energy Resources:**
 - With large batteries that remain parked for long and predictable periods of time, electric buses are grid resources

Electric School Bus Funding at Historic Highs

There is more electric school bus funding than ever before, and LAUSD is not receiving a fair share.

- **Federal:** \$5 billion
- **California:** \$2+ billion
- **Utility Infrastructure Funding:**
 - LADWP has discretionary funds to support fleet electrification
 - Southern California Edison pays for upgrades to depots in its territory

LAUSD needs a comprehensive plan to be competitive for these funds.

Peer School Districts are All-In on Electric

- **New York:**
 - 100% of new purchases must be ZE by 2027
 - 100% ZE by 2035
- **Connecticut:**
 - 100% of school buses in environmental justice communities must be ZE by 2030
 - 100% ZE by 2040
- **Maryland:**
 - 100% of new school buses must be ZE by 2025
 - Montgomery County Public Schools:
 - i. 326 Electric Buses by 2025 with VGI
 - ii. **100% ZE for all 1,400 buses over 12 years, without any additional cost over diesel.**



Montgomery County Public Schools has the largest electric school bus fleet in the nation.

The Economics of Zero-Emissions Work

Electric school buses can achieve cost parity with combustion fuels, when accounting for “total cost of ownership (TCO)” savings.

Fuel &
maintenance
savings:
\$4,000-\$11,000 per
bus, per year.

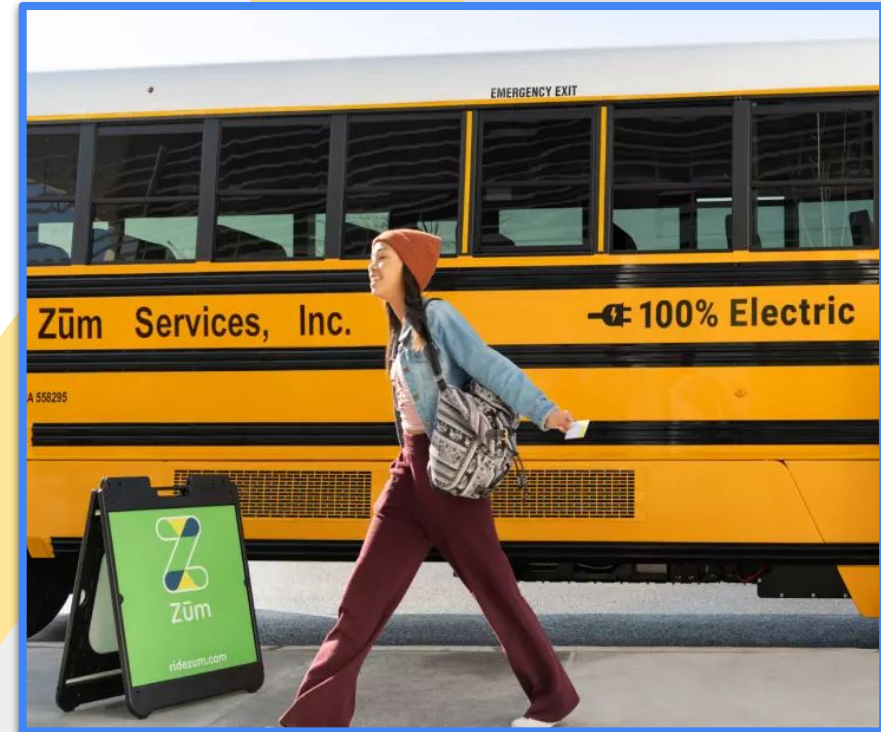
Grant funding:
utility programs,
LCFS revenues, and
other grants
improve economics
for CA fleets.

More price drops
as more buses
built and battery
costs decline.

Transportation Contractors Are Zero-Emission Partners

Transportation service contractors are financing and enabling the electrification transition:

- Turn-key models
- Electrify fleets at cost parity with combustion
- **Montgomery County, MD:**
 - **Electrify 1,400 buses at cost parity with diesel in 12 years (i.e., 2035) via transportation contractor.**
- Zum promises electric fleet by 2025.
- First Student was acquired by EQT Infrastructure and now offers turnkey electrification.



Why do we need policy commitments today?



Getting to 100% electric requires new ways of approaching transportation, energy, and financing.

Proactive policies can build the regional economy, while improving LAUSD economics and student health.

Zero-Emissions Can Create Career Pathways for Los Angeles

A man with short dark hair, safety glasses, and visible tattoos on his face and neck is wearing a light blue polo shirt. He is looking slightly to the right. The background is a blurred industrial setting with blue and yellow equipment.

LA Metro's investment in 100% fleet-electrification will create and sustain 5870 direct jobs and 4410 indirect jobs.



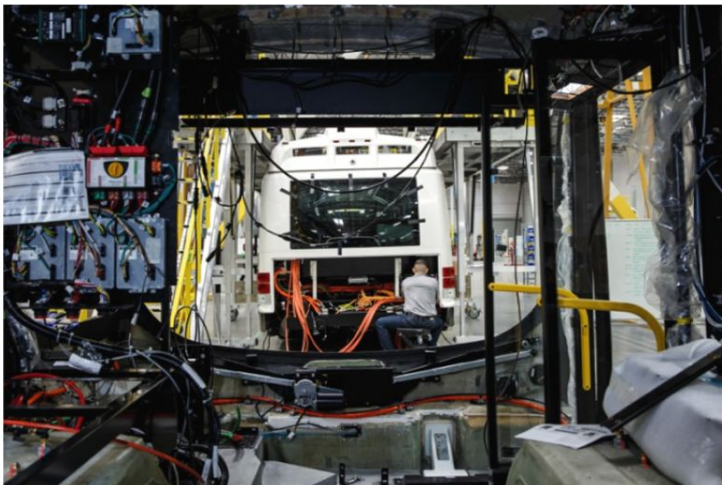
In Southern California, the EV industry employs 119,200 workers.

EV workers make an average annual wage of \$80,900, well above the average annual wage across all industries (\$60,400).

Growth in Good EV-Sector Jobs is Shaped by Policy

BUSINESS

Unionizing L.A. bus workers and their CEO come together over fighting climate change



Proterra workers assemble an electric bus in their City of Industry plant. (Marcus Yam / Los Angeles Times)

By SAM DEAN | STAFF WRITER NOV. 19, 2019 | 5 AM

Blanchard Pinto, a supervisor on Proterra's electric bus assembly line in City of Industry, had never considered joining a union in his nine years with the company.



**JOBS TO
MOVE AMERICA**

PUBLIC GOODS FOR THE MOST PUBLIC GOOD

Getting to Zero

LAUSD's Nuts & Volts Strategy



Elements of a Winning Electric Bus Strategy

Zero-Emission Commitments

- 100% zero-emission school bus fleet by 2035.
- January 1, 2024, all new buses purchased by the District will be zero-emissions.
- January 1, 2024, all new and renegotiated contracts for transportation service, as well as any exercised options, will include clear zero-emission targets and commit to transition to 100% zero-emission bus operations by 2035

Zero-Emission Planning

The Transportation Services Division, Facilities Department, and new Sustainability Office will jointly develop and present a plan to the LAUSD Board by January 1, 2024 that includes:

- A transition plan to achieve a 100% zero-emission school bus fleet by 2035, with interim targets
- A whole-fleet infrastructure plan
- A report on new procurement and financial models
- A lifecycle cost analysis
- Necessary staffing levels and resources

Elements of a Winning Electric Bus Strategy

Zero-Emission Jobs

- Use the U.S. Employment Plan to evaluate and score bids to prioritize school bus contracts and school transportation service contracts for bidders.
- Require 25% of electricians who construct and install electric bus charging infrastructure hold an EVITP certification, to ensure charging infrastructure is installed safely and meets all code requirements

Zero-Emission Partnerships

- Formalize a long-term partnership with LADWP and other relevant regional agencies and utilities.
- Work with funding agencies, state leaders, and the federal government on proactive and equitable electrification strategies.

THANK YOU

