

California Fleet Electrification Supplement

Information to help fleets across the state electrify Class 3-8 vehicles

Section 1

Electric medium- and heavy-duty vehicle landscape.

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Connecting with fleet electrification resources.

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Obtaining funds for electric vehicles and charging infrastructure.

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Establishing electric vehicle maintenance protocols.

This supplement is a statefocused addendum to Environmental Defense Fund's <u>Fleet Electrification Solutions</u> <u>Center</u> — a comprehensive guide for medium- and heavyduty vehicle electrification that provides fleets with information to assist with successful adoption of electric Class 3-8 vehicles.

Section 1: Electric medium- and heavyduty vehicle landscape

Electric medium- and heavy-duty vehicles currently have a higher upfront cost than diesel models, but cost differences for most electric models, even without financial assistance (e.g. state grants or utility incentives), can be paid back via operating savings over a vehicle's life. The upfront cost of these vehicles is <u>forecasted</u> to continue dropping.

Due to California's favorable electric vehicle and infrastructure incentives and a requirement that all medium- and heavyduty vehicles on the road be electric by 2045 everywhere feasible, tens of thousands have already or will soon be deployed across the state.

There's been an <u>8500% increase</u> in the number of electric medium- and

heavy-duty vehicle commitments and deployments since 2017, and a <u>625%</u> <u>increase</u> in the number of zero-emission truck models available since 2019.

While medium- and heavy-duty vehicles make up just 6% of vehicles on the road, they produce 72% of health-harming nitrogen oxide emissions and 21% of greenhouse gas emissions from the onroad transportation sector.

According to the American Lung

Association, electrifying all forms of onroad transportation in California will avoid or prevent \$22 billion in health costs, 1,900 premature deaths, 26,300 asthma attacks and 122,000 lost workdays by 2050.



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These resources will help fleets identify what's possible right now and to set priorities that will determine which vehicles and routes to electrify first.

Section 2: Connecting with fleet electrification resources

Support from non-profits and governments

The following list can help fleets deepen their understanding of these solutions. Please note this is not a comprehensive list.

Fleet Electrification Solutions Center

An Environmental Defense Fund dashboard that guides fleets through the process of electrifying Class 3-8 vehicles.

CALSTART Infrastructure Insite

A CALSTART tool that takes the user through the infrastructure development process, recommends the appropriate equipment and provides cost and time estimates.

Corporate Electric Vehicle Alliance

A collaborative group of larger companies focused on accelerating the transition to electric vehicles. It supports companies in making and achieving bold commitments to fleet electrification.

EnergIIZE Commercial Vehicles

A CALSTART and California Energy

Commission initiative that provides free technical support to help commercial fleets develop EV charging plans. Contact (877) 367-4493 or infrastructure@calstart. org.

Transforming Trucks Transforming Communities

A CALSTART and California Climate Investments website for fleets interested in electric truck adoption, including stories from fleet owners and drivers who have already adopted electric trucks.

ZEV Truckstop

A California Air Resources Board website with information about California's air and climate pollution goals and regulations, as well as the incentives that can help fleets make the transition.

Clean Cities Coalition

A U.S. Department of Energy initiative that works with fleets to implement electric vehicles and fuel-saving strategies. Coalition groups in the following areas can be contacted using the following information.

East Bay Clean Cities

Richard Battersby 510-615-5856 | RBattersby@oaklandca.gov

<u>Silicon Valley Clean Cities</u> Margo Sidener

Margo Sidener 408-998-5865 | margo@lungsrus.org

San Francisco Clean Cities

Nicole Appenzeller 415-355-3784 | nicole.appenzeller@sfgov.org

Central Coast Clean Cities

Alex Economou 805-979-8333 | economoua@sbcapcd.org

Coachella Valley Region Clean Cities Sharon Barone 760-343-3456 x1229 sbarone@sunline.org

Long Beach Clean Cities

Dean Tedtaotao 626-458-1711 | dtedtaot@dpw.lacounty.gov

Los Angeles Clean Cities Paul Cobian

213-847-5182 | paul.cobian@lacity.org

Sacramento Clean Cities

Gina O'Neal 916-622-8433 | goneal@airquality.org

San Diego Regional Clean Cities 858- 428-1071 mehul.kamran@energycenter.org

San Joaquin Valley Clean Cities Alley Moyers 661-847-9756 alleyprojectcleanair@gmail.com

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Support from Utilities

If your utility isn't listed, contact them to see if they offer technical support. A map of utilities can be found <u>here</u>.

LA Dept. of Water and Power

Provides free technical assistance to help fleets develop EV charging plans required for deployment of LADWPfunded DC Fast charging stations. Contact <u>pluginla@ladwp.com</u> for assistance.

MCE

Provides free technical assistance and an EV charging expert and electrician to make your project a reality. Fill out <u>this form</u> to be contacted.

Pacific Gas & Electric EV Fleet Program

Provides free technical assistance to help fleets understand incentives and rebates, site design and permitting, construction and activation, maintenance and upgrades. Fill out <u>this form</u> to be contacted.

Palo Alto Municipal Utility

Provides free technical assistance to support owners and managers of small to medium businesses navigate the process of installing EV charging infrastructure. Either email <u>EVadvisor@cityofpaloalto.org</u> or <u>enroll online</u>.

Peninsula Clean Energy

Provides fleets free technical assistance to build out EV projects. Fill out <u>this form</u> to be contacted.

San Diego Gas & Electric Power Your Drive for Fleets

Provides free technical assistance to help fleet owners and operators reduce operating costs, eliminate emissions and simplify vehicle maintenance by transitioning to electric vehicles.

Support from private companies

The following links contain private companies that can offer technical support. Please note that this is not a comprehensive list.

<u>Consulting firms and fleet-related service</u> providers

California Governor's Office of Business provides a list of over 20 firms and providers that may be helpful resources for those making the transition to zeroemission fleets.

Approved vehicle dealerships

May provide fleets with support for vehicle financing, infrastructure and utility collaboration.

PG&E EV Fleet Program Approved Vendor List

A list of 16 companies that support fleet charging and are approved by PG&E for participation in its program.

Approved vehicle manufacturers

May provide fleets with support for vehicle financing, infrastructure and utility collaboration.



The following state, air quality management district and utility funding sources may be accessible to fleets in California.

Section 3: Obtaining funds for electric vehicles and charging infrastructure

Vehicle incentives

State Programs

Air Quality Management District Programs

These grants are issued locally by some air quality management districts, with priority given to fleets operating in disadvantaged communities. Please contact your <u>local air</u> <u>district</u> for the most updated information on funding availability, project eligibility, applications and application selection timeline.

Utility Programs

<u>Hybrid and Zero-Emission Truck and Bus</u> <u>Voucher Incentive Projects</u>

\$45,000 to \$150,000 for Class 3-8 zeroemission vehicles. Fleets with 10 or fewer vehicles operating in disadvantaged communities may receive an additional 15 percent on their incentives.

HVIP Innovative Small e-Fleet Pilot

A segment of the HVIP program specifically reserved for fleets with 20 or fewer trucks and an annual revenue of less than \$15 million. Provides between \$90,000 and \$240,000 for Class 3-8 zeroemission vehicles.

Voucher Incentive Program

Up to \$410,000 for Class 4-8 zeroemission vehicles for fleets with 10 or fewer vehicles with Engine Model Years 2009 or earlier.

VW Environmental Mitigation Trust Funding

Covers 75% of project costs, up to \$200,000 for Class 8 Freight Trucks (including drayage trucks, waste haulers, dump trucks and concrete mixers).

Carl Moyer Program

Up to \$200,000 or 95% of eligible costs are available for replacement of diesel on- and off-road vehicles, agricultural equipment and marine vessels and equipment with zero-emission trucks.

Goods Movement Program

Up to \$200,000 for replacement of freighthauling diesel trucks with zero-emission trucks.

Pacific Gas & Electric EV Fleet Program

\$3,000 to \$9,000 per Class 3-8 electric vehicle. Businesses must acquire and deploy a minimum of two medium- or heavy-duty electric fleet vehicles by 2024.

Sacramento Municipal Utility District

\$5,000 to \$15,000 for zero-emission Class 2b-8 vehicles.



EnergIIZE EV Fast Track Program

Covers 50% of project costs, up to \$500,000 for installation of electric charging ports. Eligible fleets must either possess a commercial battery electric vehicle registered with the state of California or a medium- or heavy-duty electric vehicle purchase order.

EnergIIZE EV Jumpstart Program:

Covers 75% of project costs, up to \$750,000 for installation of electric charging ports. Eligible fleets must either operate in a disadvantaged or low-income community, be a small business, or be owned by those with a minority status.

Anaheim Public Utilities Up to \$1,000 for Level 2 charging port.

<u>Colton Municipal Utility</u> Up to \$500 per Level 2 charging port.

<u>Glendale Water & Power</u> Up to \$6,000 per Level 2 charging port.

Imperial Irrigation District \$500 per Level 2 charging port up to \$5,000 per business.

LA Dept. of Water and Power Commercial EV Charging Station Rebate Program Up to \$125,000 per DC fast charging port.

Lodi Municipal Utility \$3,000 per Level 2 charging port and \$3,000 for installation. **MCE EV Charging**

\$3,000 per Level 2 charging port for 2-20 ports (up to \$60,000) per business site.

Modesto Irrigation District

Up to \$500 per Level 2 charging port.

Pacific Gas & Electric EV Fleet Program

Provides \$15,000 to \$42,000 for DC fast and level 2 charging ports, with incentive not to exceed 50% of equipment.

Peninsula Clean Energy

\$4,000 per Level 2 charging port per business site up to \$80,000 per property.

Rancho Cucamonga Municipal Utility

\$5,000 per Level 2 or DC fast charging port up to \$10,000 per business.

<u>Redding Electric Utility Charger Rebate</u> <u>Program</u>

Up to \$6,000 per DC fast charging port, up to 5 chargers per business.

Roseville Municipal Utility \$4,500 per Level 2 charging port.

Sacramento Municipal Utility District

\$4,500 per Level 2 charging port and up to \$15,000 for DC fast charging ports.

<u>Silicon Valley Power</u> \$1,000 - \$5,000 per Level 2 charging port.

<u>Ukiah Municipal Utility</u> \$4,000 per Level 2 charging port.

Financing Incentives

Electric Vehicle Charging Station Financing Program

Up to \$500,000 loans for the design, development, purchase and installation of EV charging ports at small business locations in California. **Truck Loan Assistance**

Works with lenders around the state to offer more favorable terms to small business (10 or fewer heavy-duty vehicles and fewer than 100 employees) than these businesses would likely otherwise qualify for.

Section 4: Establishing electric vehicle maintenance protocols

While various EV mechanics exist throughout California, some may not to have the facilities required for servicing electric medium- and heavy-duty vehicles. To ensure maintenance capacity, fleets that want to electrify should either ensure sufficient facilities exist, establish maintenance in sales contracts, pay existing maintenance staff to be trained in EV-specific maintenance, such as high voltage systems safety and servicing and electric vehicle components operation and diagnosis, or hire staff who have learned these skills. The following resources offer EV-specific maintenance training:

Advanced Transportation and Logistics

Offers electric vehicle maintenance programs at 14 community colleges across the Bay Area. Staff who are currently employed at electric vehicle maintenance locations may be interested in working for fleets that are transitioning to electric vehicles.

Tesla START

Evergreen College Valley College has been chosen as the first school in California for Tesla START, the Silicon Valley company's 12 week electric vehicle service program.

TÜV SÜD

Offers online courses on safe handling of high voltage systems.

Universal Technical Institute

Recently added electric vehicle technician training to its auto mechanic career college curriculum at its three campuses in North Natomas, Long Beach and Rancho Cucamonga.