



Texas Fleet Electrification Supplement

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

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Electric medium- and heavy-duty vehicle landscape.

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This supplement is a state-focused addendum to Environmental Defense Fund's [Fleet Electrification Solutions Center](#) — a comprehensive guide for medium- and heavy-duty vehicle electrification — that provides fleets with information to assist with successful adoption of electric Class 3-8 vehicles.

Section 1:

Electric medium- and heavy-duty vehicle landscape

Electric medium- and heavy-duty vehicles currently have a higher upfront capital cost than diesel models, but some or most of the cost difference for many electric models, even without financial assistance (e.g. state and federal grants or utility incentives), can be paid back via savings on operations, maintenance and fuel over a vehicle's life. The upfront cost of these vehicles is [forecasted](#) to continue dropping due to technological advancements and [decreases in lithium-ion battery prices](#).

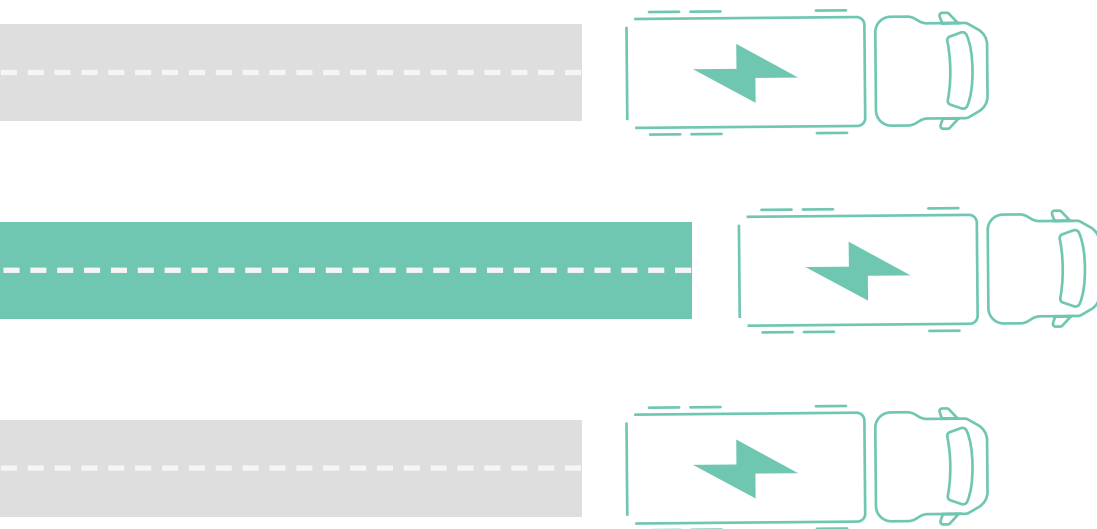
There's been an 8500% increase in the number of electric medium- and heavy-duty vehicle commitments and deployments since 2017, and a [625% increase](#) in the number of zero-emission truck models available since 2019.

At least [seven new models](#) are in development to be released in the coming

years, with some promising ranges up to 500 miles.

Medium- and heavy-duty vehicles [make up](#) roughly 4% of all vehicles in Texas, but they produce 90% of transportation-related nitrogen oxide emissions — emissions that contribute to poor air quality conditions that [cause](#) and [exacerbate](#) asthma, chronic obstructive pulmonary disease and stroke, disproportionately impacting low-income communities of color.

[According](#) to the American Lung Association, electrifying transportation in Texas will avoid or prevent \$6.7 billion in health costs, 600 premature deaths, 11,600 asthma attacks and 47,000 lost workdays.



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.

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.

Fleet Electrification Solutions Center

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

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.

North American Council for Freight Efficiency

A nonprofit organization that coordinates with fleets to test best practices and recently completed an extensive study on electric fleets. A long series of easy-to-follow one-pagers and videos provide great lessons on fleet electrification.

EVolve Houston

A public-private partnership focused on accelerating electrified transportation and improving air quality across Houston. They are also working with other regional fleets to support the development of many more regional fleet electrification targets.

Texas Council of Governments

Fleets that are located outside of the Clean Cities Coalition areas, should contact their respective council of government, which are responsible for regional transportation planning and can help connect fleets that are interested in electrification with other fleets that are exploring, amid, or done with electrification.

Alamo Area (San Antonio) Clean Cities

Lyle Hufstetler
210-362-5225 | lhufstetler@aacog.com

Dallas-Fort Worth Clean Cities

Lori Clark
817-695-9232 | lclark@nctcog.org

Houston-Galveston Clean Cities

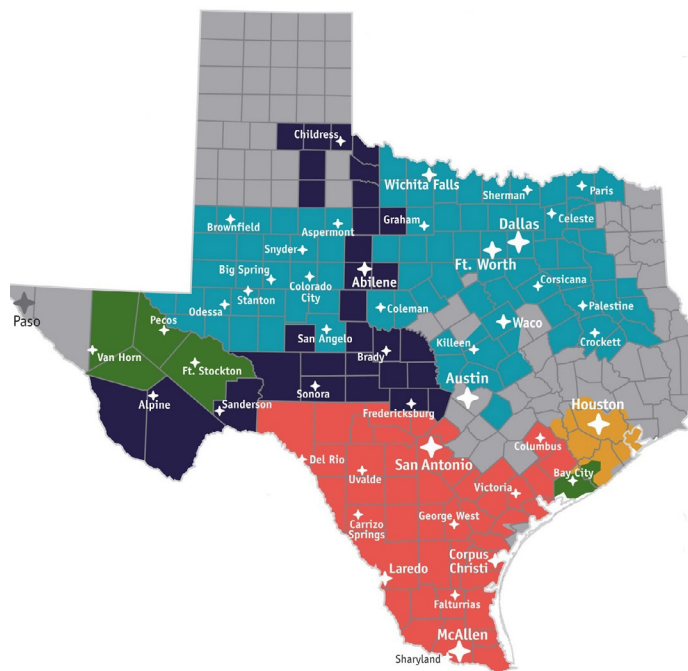
Andrew DeCandis
832-681-2589 | Andrew.DeCandis@h-gac.com

Lone Star (Central Texas) Clean Cities

Elizabeth Munger
512-694-1004 | elizabeth@lonestarcfa.org

Support from Utilities

Installing charging stations at the location where a fleet's vehicles are stored overnight will help fleets achieve their duty cycles. Doing so will require fleet professionals to talk with their local utility about the interconnection process, timing and permitting requirements. The following map provides contact information for a portion of the utilities across the state. You can also find your utility's contact information by entering your ZIP code on [this website](#).



Electric utility contacts

Oncor: 888-313-6862, contactcenter@oncor.com

AEP North: 888-710-4237, pev@aep.com

Centerpoint: 713-207-2222 david.owen@centerpointenergy.com

TNMP: 888-866-7456

AEP Central: 888-710-4237, pev@aep.com

Municipal utilities contacts

San Antonio: 210-353-2728

Austin Energy: 512-494-9400, pluginaustin@austinenenergy.com

El Paso Electric: 915-543-5970, customercare@epelectric.com



Section 3:

Obtaining funds for electric vehicles and charging infrastructure

Though the upfront cost of electric medium- and heavy-duty vehicles is still greater than for diesel models, the greater costs can typically be paid back via annual operating and fuel savings over the lifetime of the vehicle. Grants, incentives and other forms of financial assistance will make electrification an even more attractive financial decision. Fleets should expect approximately 18 months before vehicles are delivered, based on current supply chain constraints, and should expect charging infrastructure installation to take at least 12 months. Fleets should plan to start collaborating with their utility early in the process to ensure charging infrastructure is available for the vehicles upon delivery. The following state, utility and federal funding sources may be accessible to fleets across Texas.

State incentives

These incentives are limited to fleets operating in specific counties, which are detailed in this guidance document.

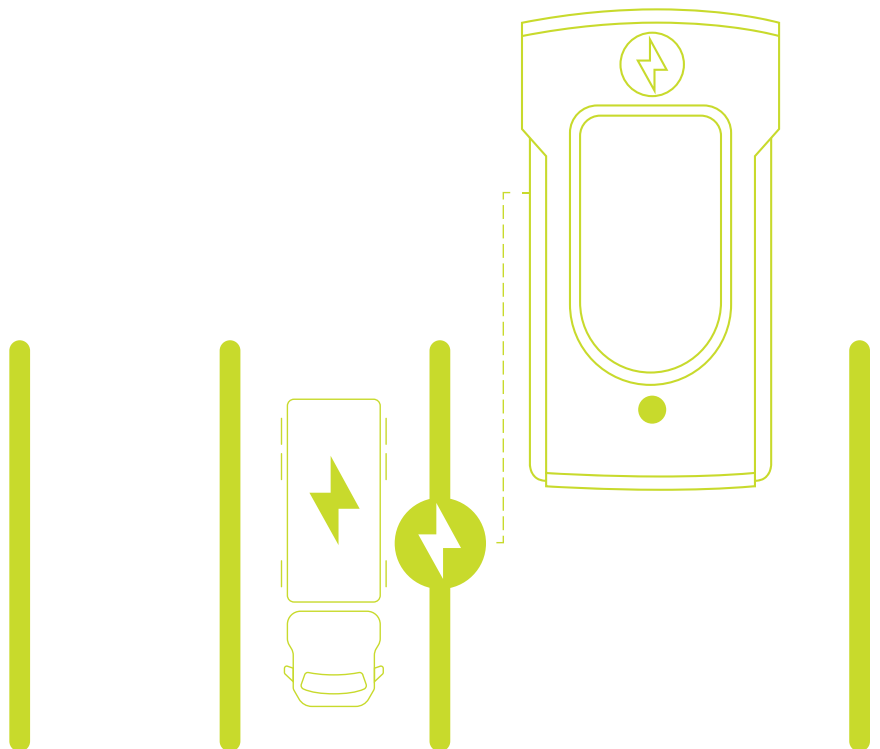
Vehicle incentives

Clean Fleet Program

Covers up to 80% of the cost associated with the purchase of Class 2b-8 zero-emission vehicles for fleets operating 75 or more vehicles.

Emissions Reduction Incentive Grants Program

Provides grants in varying quantities for on-road and non-road vehicles operating in air quality nonattainment areas and other affected counties.



Houston-Galveston Area Council Clean Vehicles Program

Provides an average of \$30,000 to purchase cleaner heavy-duty trucks. Projects must spend 75% of usage time in the Houston-Galveston-Brazoria region.

Houston-Galveston Area Council Heavy Duty Diesel Replacement Program

Covers up to 75% of the cost of Class 6-8 electric vehicles operating in the Houston-Galveston-Brazoria region.

North Texas Clean Diesel Project

Covers between 45% and 60% of on-road electric vehicle replacements, and 25% and 50% of non-road electric vehicle replacements for fleets operating in the Dallas-Fort Worth 10-county ozone nonattainment area and identified within a 10-county area housing several goods movement and transportation hubs.

Seaport and Rail Yard Emissions Reduction Grants

Covers up to 80% of the eligible costs associated with the purchase or lease of on- and non-road electric vehicles operating at seaports, facilities and Class I rail yards in air quality nonattainment areas and other affected counties.

Infrastructure incentives

Alternative Fueling Facilities Program

Covers up to \$600,000 or 50% of DC fast or Level 2 charging infrastructure located in air quality nonattainment areas and other counties.

New Technology Implementation Grant Program

Previous recipients have received between \$2 million and \$2.6 million for electricity storage projects that store electricity from wind, solar or other renewable energy generation that provides efficient means of making the stored energy available during periods of peak energy use. Projects must be located in air quality nonattainment areas and other affected counties.

Utility incentives

Vehicle incentives

Entergy Fleet Electrification Incentive

Covers up to \$25,000 for electric vehicles in Entergy service territory.

Infrastructure incentives

Austin Energy Workplace Charging Rebate

Covers up to \$4,000 or 50% of the cost to install approved Level 2 fast charging infrastructure, and up to \$10,000 of the costs to install approved DC fast charging infrastructure.

Entergy Fleet Charging Incentive

Covers up to \$25,000 for level 2 and DC fast charging infrastructure in Entergy service territory.

Section 4: Establishing electric vehicle maintenance protocols

While various EV mechanics exist throughout Texas, some may not 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, and 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 these skills.

The following resources offer EV-specific maintenance training:

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

Waco's Texas State Technical College has been chosen as the first school in Texas 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

Offers an electric vehicle certification curriculum as part of its 15-week Ford FACT (Ford Accelerated Credential Training) program at its Houston, TX location.