

New Jersey Fleet Electrification Supplement

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

This Supplement is a state-focused addendum to Environmental Defense Funds' <u>Fleet Electrification</u> <u>Solutions Center</u> — a comprehensive guide for medium- and heavy-duty vehicle electrification — that provides fleets with information to assist successful adoption of electric Class 2b-8 vehicles. The following sections are included:

Section 1: Electric medium- and heavy-duty vehicle landscape

- Section 2: Connecting with fleet electrification resources
- Section 3: Obtaining funds for electric vehicles and charging infrastructure

Section 4: Establishing electric vehicle maintenance protocols

Section 1: Electric medium- and heavy-duty vehicle landscape

- New Jersey signed on to a multi-state agreement committing to transition trucks and buses in the state entirely to zero-emission vehicles, starting with 30% of vehicle sales by 2030, and became the first state on the East Coast to adopt the Advanced Clean Trucks (ACT) rule — which requires an increasing number of zero-emission truck sales each year in the state.
- Electric medium- and heavy-duty vehicles currently have a higher upfront cost than diesel models, but over the vehicle's life-span electrified models have lower total cost of ownership than their diesel counterparts. Lower maintenance and fuel costs drive lower total cost of ownership for electric vehicles, and the upfront cost of these vehicles is <u>forecasted</u> to continue dropping.
- Timeline management is key when electrifying vehicles. Fleets can expect up to 12 months before vehicles are delivered. Charging stations may take 12-24 months to commission, depending on supply chain and infrastructure needs. Fleets can limit project delays by engaging with manufacturers and their <u>utilities</u> early and often in the planning process.
- 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% increase</u> in the number of zero-emission truck models available since 2019.

Section 2: Connecting with fleet electrification resources

The following resources will be able to help fleets identify what's possible right now and to set the priorities that will determine which vehicles and/or routes to electrify first.

Support from Non-Profits and Governments The following list of entities can help fleets deepen their understanding of these solutions. Please note that this is not a comprehensive list.

- <u>New Jersey Department of Environmental Protection, Drive Green</u>: A NJDEP dashboard with information on electrifying your fleet in the state of New Jersey.
- <u>Fleet Electrification Solutions Center</u>: An Environmental Defense Fund dashboard that guides fleets through the process of electrifying class 3-8 vehicles.
- <u>Climate Corps Fellowship</u>: An Environmental Defense Fund program that deploys experienced graduate candidates from top universities to further sustainability goals, including a cohort of fellows trained and supported by EDF staff on fleet electrification.

- <u>Corporate Electric Vehicle Alliance</u>: 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.
- <u>Clean Cities Coalition</u>: A US 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:
 - <u>New Jersey Clean Cities Coalition</u>: Chuck Feinberg, 973-886-1655, chuck.feinberg@gmail.com

Support from Utilities It's important to engage your local utility early in the electrification process to mitigate delays in interconnection times.

It is critical for fleets to understand their charging profile and work with their utility to create a charging plan and install charging stations. Doing so will help fleets meet duty cycle and operational requirements and reduce energy costs. Fleet professionals will need to talk with their local utility about the interconnection process, timing, and permitting requirements. Read best practices for <u>Working with your</u> <u>Utility</u> for fleet electrification.

Reach out to your utility provider, listed below, to find out how they can assist in your fleet transition.

- Orange & Rockland
- Jersey Central Power & Light
- PSE&G
- Atlantic City Electric
- <u>Vineland Municipal Utilities</u>

Section 3: Obtaining funds for electric vehicles and charging infrastructure

Long-term, the lower operating costs of electric medium- and heavy-duty vehicles result in a lower total cost of ownership over a vehicles lifespan. Even without financial assistance, (e.g. state grants or utility programs), fleets can see operating savings over the lifespan of an electric model as compared to its diesel counterpart. Fleets can estimate and compare the total cost of ownership of electric and diesel models using the tools in the Fleet Electrification Solution Center's Resource Library.

Grants, incentives, and other forms of financial assistance will make electrification an even more attractive financial decision. The following state, utility and federal funding sources may be accessible to fleets across New Jersey. The <u>Drive Green New Jersey</u> dashboard provides up-to-date information on current incentives.

State Incentives

- <u>NJ ZIP</u>: New Jersey Zero-Emission Incentive Program is a \$90 million voucher pilot launched by New Jersey Economic Development Authority for medium- and heavy-duty zero-emission vehicles, ranging from \$20,000 to \$175,000 per vehicle. Bonus amounts available for women/minority/veteran/small businesses, businesses in environmental justice priority areas, and school buses.
- <u>NJ CELs</u>: New Jersey Clean Energy Loans program provides financing assistance for clean energy infrastructure projects, which includes electric vehicles and charging infrastructure. Loans range from \$250,000 to \$10 million, with some requirements for matching capital.
- <u>Garden State C-PACE</u>: The Commercial Property Assessed Clean Energy program is in final steps of implementation and, when finalized, will include EV charging infrastructure as part of the program's energy efficiency and resiliency improvements for commercial buildings.
- <u>NJ Sales Tax Exemption</u>: The New Jersey Sales and Use Tax Act provides a sales and use tax exemption for zero emission vehicles.

- <u>New Jersey Regional Greenhouse Gas Initiative</u>: RGGI is a multi-state, market-based program that establishes a regional cap on carbon dioxide (CO2) emissions and requires fossil fuel power plants with a capacity greater than 25 megawatts (MW) to obtain an allowance for each ton of CO2 emitted annually.
- <u>National Electric Vehicle Infrastructure (NEVI) Formula Program</u>: NEVI Formula Program will
 provide funding to states to strategically deploy public electric vehicle (EV) charging stations and
 to establish an interconnected network to facilitate data collection, access, and reliability. NJ's
 NEVI plan aims to reduce greenhouse gas emissions by electrifying the transportation sector and
 provide access to electric vehicle infrastructure for all. Funding opportunities for ZEVs are
 expected in the future.
- <u>NJ CELs</u>: An \$80 million co-lending program launched by the New Jersey Economic Development Authority for small businesses seeking to finance clean energy projects.

Infrastructure Incentives

- <u>It Pay\$ to Plug In:</u> State provided grants to offset the cost of purchasing and installing electric vehicle charging stations. Grantees can receive up to \$4k per port and \$200k per site, depending on eligibility.
- <u>EV Tourism Incentives</u>: Qualifying tourist locations can receive up to \$5k per charger, depending on eligibility.
- <u>Clean Fleet EV Incentive</u>: Qualifying fleets can receive up to \$4k per charger, depending on eligibility.
- <u>PSE&G Electric Vehicle Charging Program</u>: Qualifying fleets can receive up to \$7.5k per charger for behind the meter installation, up to 4 chargers per site.

Federal Programs

NJ fleets can benefit from federal programs including the <u>Infrastructure Investment and Jobs</u> Act and the <u>Inflation Reduction Act</u>.

- The <u>Charging and Fueling Infrastructure</u> program, under NEVI, includes \$2.5 billion for community and corridor charging, including medium- and heavy-duty charging. Eligible applicants are public agencies, but public-private partnerships are encouraged. Reach out to your nearest <u>Clean Cities Coalition</u> to connect with existing applications.
- The Inflation Reduction Act (IRA) includes tax incentives for vehicles, charging infrastructure, and for fleets operating in ports, summarized in this <u>IRA guide for fleets</u>.

Section 4: Establishing electric vehicle maintenance protocols

While various EV mechanics exist throughout New Jersey, 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, 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:

- Staff who are currently employed at electric vehicle maintenance locations may be interested in working for fleets that are transitioning to electric vehicles.
- <u>Federal Energy Management Program</u>: Offers brief courses for fleet and facility managers interested in developing expertise in fleet electrification.
- <u>TÜV SÜD</u>: Offers online courses on safe handling of high voltage systems.
- <u>Universal Technical Institute</u>: UTI is expanding its electric vehicle technician training to its auto mechanic career college curriculum at campuses across the country.