New York 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' Fleet Electrification Solutions Center — a comprehensive guide for medium- and heavy-duty vehicle electrification — that provides fleets with information to assist successful adoption of electric Class 3-8 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 York adopted the Advanced Clean Trucks rule, complementary to Assembly Bill A4302, which provides that all in-state sales of medium- and heavy-duty vehicles shall be zero-emissions by 2045.
- 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 forecasted 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 utilities early and often in the planning process.
- 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.

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.

- Fleet Electrification Solutions Center: An Environmental Defense Fund dashboard that guides fleets through the process of electrifying class 3-8 vehicles.
- Climate Corps Fellowship: 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.

- 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.
- Clean Cities Coalition: 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:
    - Capital District Clean Communities (Albany): Jacob Beeman, 518-458-2161, jbeeman@cdtcmpo.org
    - Clean Communities of Central New York (Syracuse): Barry Carr, 315-278-2061, coordinator@ccofcny.com
    - Clean Communities of Western New York (Buffalo): Craig Jackson, 716-589-6030, cjackson@ccofwny.org
    - Empire Clean Cities: Joy Gardner, 212-839-7728, joy@empirecleancities.org
    - Greater Long Island Clean Cities: Rita D. Ebert, 516-492-4795, rebert@gliccc.org
    - Greater Rochester Clean Cities: Olivia Arnone, 585-442-0200 ext. 223, oarnone@causewave.org

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 Working with your Utility for fleet electrification.

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

- NYSEG
- Central Hudson Gas & Electric
- RG&E
- Con Edison
- National Grid
- Orange & Rockland

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 York.

State Incentives

- National Electric Vehicle Infrastructure (NEVI) Formula Program: 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.

- Heavy-Duty Alternative Fuel and Advanced Vehicle Purchase Vouchers (NYT-VIP) : The New York State Energy Research and Development Authority (NYSERDA) provides incentives for all-electric and hydrogen fuel cell electric trucks and buses, up to $385,000 on qualifying vehicles.
- Vehicle Emissions Reduction and Electric Vehicle (EV) Charging Station Project Funding: Provides funding for the replacement or repower of diesel medium- and heavy-duty vehicles, including Class 8 local freight or port drayage trucks, Class 4-8 school, shuttle, or transit buses, and Class 4-7 local freight trucks. The Plan also provides funding for the all-electric repower or replacement of airport ground support equipment, forklifts, and port cargo handling equipment, as well as light-duty EV charging stations.
- Clean Truck Replacement Program: Provides funding for up to 50% of the cost to replace a heavily emitting truck or up to $25,000, whichever is less. Eligible recipients include independent owner operators and licensed motor carriers servicing the port with drayage trucks equipped with Model Year 1998 to 2006 engines.
- New York City Clean Trucks Program (NYCCTP) Provides funding from $12,000 up to $185,000 per truck replacement, depending on fuel type and truck class size, for businesses located in or operating within 0.5 miles of program-approved IBZs throughout New York City.

Infrastructure Incentives

- Electric Vehicle Charging Station Rebate: Qualified applicants can receive incentives for the installation of eligible charging equipment. Charging station vendors will submit applications to determine eligibility of one or more models of charging equipment.
- Non-Residential Electric Vehicle Charging Station Program – Central Hudson: Central Hudson commercial customers may be eligible to receive one-time incentives up to 90% of the utility-side make-ready infrastructure costs associated with EVSE installations.
- Medium- and Heavy-Duty (MHD) Fleet Electric Vehicle Charging Station Program – ConEdison: ConEdison commercial customers may be eligible to receive incentives up to 85% of eligible DCFC infrastructure costs.
- The Fleet EV Charging Program – National Grid: Provides up to 100% funding of electrical infrastructure costs for all fleet customers, and additional rebates on charging station equipment costs for public fleets.
- May through June 2023: Opportunity to weigh-in on NY make-ready projects for medium- and heavy-duty charging. Currently, major utilities in NY offer little utility-side support for truck and bus fleets as they electrify their vehicles, however NY Public Services Commission (PSC) is considering new large-scale programs to support charging infrastructure for truck and bus fleets.
    - The PSC is taking comments through June 5, 2023.
    - Contact Dakoury Good-Solo (dgodosolo@edf.org) or respond to the PSC's list of questions.

Federal Programs

NY fleets can benefit from federal programs including the Infrastructure Investment and Jobs Act and the Inflation Reduction Act.

- The Charging and Fueling Infrastructure 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 Clean Cities Coalition 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 IRA guide for fleets.

Section 4: Establishing electric vehicle maintenance protocols

While various EV mechanics exist throughout New York, 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:

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