

Inspiring Climate Action: Understanding Electric Vehicles and Funding Opportunities

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About Green Energy Consumers Alliance

A nonprofit organization based in Massachusetts and Rhode Island with a mission to empower consumers and communities to speed a just transition to a zero-carbon world.



I'll Cover

- 1. Electric Vehicle Basics
- 2. State Incentives for EVs
- 3. State & Utility Incentives for EV Charging
- 4. Encouraging EV Adoption In Your Community



Electric Vehicles Basics



Three Types of EV

- 1. Battery Electric Vehicles (BEVs): Run purely on electricity
- 2. Plug-in Hybrids (PHEVs): Have a battery you can charge from an external source and a small gas tank
- 3. Fuel Cell Electric Vehicles (FCEVs): Refuel using hydrogen fuel, not electricity

Traditional hybrids, which charge an onboard battery only from the gas tank and regenerative

braking, do not qualify as electric vehicles.



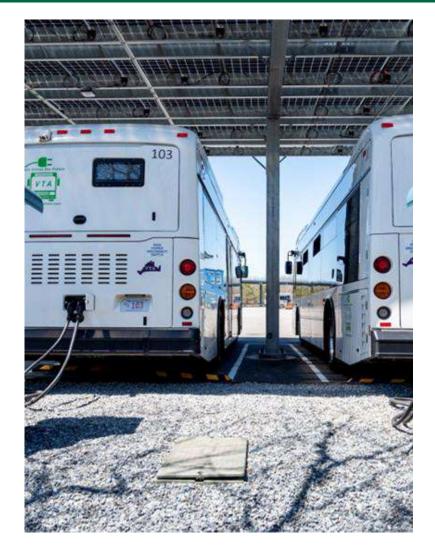
Benefits



- Lower fuel costs
- Lower maintenance costs
- Reduce air pollution, both regarding climate change and public health



EVs in all shapes & sizes









How to find the right EV

- There are lots of excellent light-duty vehicles you can use in your fleet. You can learn about available models on the <u>Drive Green shopping tool</u>.
- There are also increasing options for medium- and heavy-duty vehicles.
 Here are some helpful resources.
 - MOR-EV Truck: List of vehicles eligible for the state rebate.
 - <u>CALSTART's ZETI</u>: Zero Emission Technology Inventory tool.
 - CALSTART's O-ZETI: For off-road vehicles.



DRVE Tool 2.0

Turnkey analysis application for light-, medium-, and heavy-duty fleet electrification through the <u>Electrification Coalition</u>

- Features:
 - Fuel price comparison
 - Maintenance comparison
 - Ability to input electricity rate for more accurate comparison
- To begin, you just need the following data inputs:
 - Vehicle Identification number (VIN) (required)
 - Annual mileage
 - Vehicle life expectancy
- Can include incentives:
 - Alternative Fuel Vehicle Refueling Property Credit
 - Various state rebates



State Incentives for Electric Vehicles



For light-duty vehicles: Mass EVIP

- Administered by the Department of Environmental Protection (MassDEP)
- Incentives available first come, first served
- Online application (<u>link here</u>)
- Payment either goes directly to vendor if on statewide contract or to city/town if not

Vehicle Type	Purchase	Lease
Battery Electric Vehicle (BEV)	\$7,500	\$5,000
Plug-in Hybrid Electric Vehicle (PHEV)	\$5,000	\$3,000



For MHDVs: MOR-EV Truck

- Available to residents, businesses, nonprofit organizations, educational institutions, and local, municipal, and state government fleets
- Rebates vary by class
- For Class 2a/b, MSRP must be <\$80,000; for Class 3 and above, <\$2,000,000
- Apply within 90 days of purchasing for rebate, or in advance for rebate voucher
- More info at: <u>mor-ev.org/</u>



Vehicle Class	Examples	Gross Vehicle Weight Rating (lbs)	Rebate
2 a/b	Pickup Truck, Transit Van	8,501 - 10,000 (6,000 - 10,000 if pickup truck)	\$7,500
3	Mini Bus	10,001 - 14,000	\$15,000
4	Step Van	14,001 – 16,000	\$30,000
5	Bucket Truck	16,001 - 19,500	\$45,000
6	School Bus	19,501 - 26,000	\$60,000
7	Transit Bus	26,001 - 33,000	\$75,000
8	Trash Truck	> 33,000	\$90,000

Incentives for Installing Charging



Charging 101







Level 1

 2-6 miles of range per hour

Level 2

11-25 miles of range per hour

DC Fast Charging

 Very high-powered, speed varies depending on model



MassEVIP Charging Programs

Workplace & Fleet Charging

- Incentives for employers and fleet operators to install Level 1 or Level 2 charging
- Applicants must have 15 or more employees to be eligible
- Covers up to 60% of hardware and installation costs, up to \$50,000 per street address
- More info here

Public Access Charging

- Incentives for the installation of publicly-accessible EV chargers
- For government-owned locations, 100% of hardware and installation costs are covered, up to \$100,000 per street address
- More info here



Utility Incentives

Served by a municipal light plant? Then check with your MLP!

Served by National Grid or Eversource? Then your location may be eligible for infrastructure incentives, and/or charger rebates.

- A lot depends on whether the location is designated by the state as being an Environmental Justice Community (EJC);
- You must choose equipment from a list of qualified equipment;
- You must apply for available and aligned third-party funding, such as MassEVIP,
 and utility incentives cannot be stacked with third-party funding.

Workplace / Public Charging

Charger Level	EJC	Infrastructure Incentive	Charger Rebate
Level 2	Meets income requirement	Up to 100%	Up to 100%
Level 2	In an EJC that does not meet income requirement	Up to 100%	Up to 75%
Level 2	Not in an EJC	Up to 100%	Up to 50%
DCFC	In an EJC that meets any criteria	Up to 100%	Up to 100%
DCFC	Not located in an EJC	Up to 100% for 150+ kW; Up to 50% for <150 kW	Up to 100%

Note: Networking rebate are also available.

National Grid program info here; Eversource here.



Fleet Charging

Charger Level	EJC	Infrastructure Incentive	Charger Rebate
Level 2	Meets income requirement	Up to 100%	Up to 100%
Level 2	In an EJC that does not meet income requirement	Up to 100%	Up to 75%
Level 2	Not in an EJC	Up to 100%	Up to 50%
DCFC	In an EJC that meets any criteria	Up to 100%	Up to 100%
DCFC	Not in an EJC	Up to 100%	Up to 50%

Note: Eversource's program is only available for light-duty fleets.

National Grid program info here; Eversource here.



Fleet Advisory Services



- Great resource if you're not sure where to start
- Will assess the whole fleet and make recommendations for replacement
- Links to program pages
 - EV Chargers for Fleets | Eversource
 - MA National Grid Fleet program



Encouraging EV Adoption

