

DOE EVSE and ZEV Targets, Goals, and Progress



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ENERGY



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- Policy Drivers
- Current status of ZEVs and EVSE across DOE
- ZEV Ready and GSA solutions
- Net-Zero roadmap
- Q&A

Fixing America's Surface Transportation (FAST) Act of 2015

- The FAST Act of 2015 authorizes GSA and other Federal agencies to install, operate, and maintain electric vehicle charging stations for privately-owned electric vehicles (EVs) in parking areas used by Federal employees and other authorized users.
- Requires Federal agencies to collect fees to recover the costs of this electric vehicle supply equipment (EVSE) made available for workplace charging.

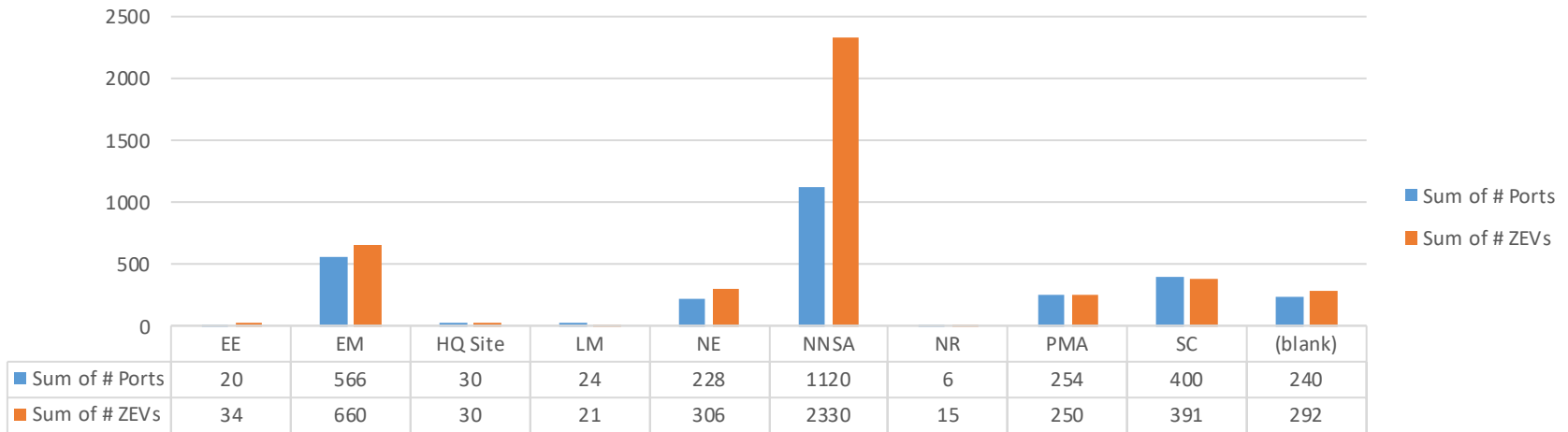
Executive Order 14057: Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability

- Transitions the Federal fleet to 100% zero-emission vehicle (ZEV) acquisitions by 2035, including 100% zero-emission light-duty vehicle acquisitions by 2027 [Sec. 102(a)(ii) of the EO]

Executive Order 14057: Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability

- *Electric Vehicle Supply Equipment (EVSE): Agencies are to ensure the availability of sufficient EVSE to support their transition to a ZEV fleet, including planning, financing, and deploying EVSE in coordination with their vehicle acquisitions. In leased facilities, agencies are to work with facility owners and operators to ensure availability of EVSE.*
- *EVSE Data and Reporting Requirements: FAST will be modified to enable agencies to submit quarterly updates to CEQ on their EVSE planning and installation progress beginning with FY 2023 Q2 (submissions prior to that will go directly to CEQ outside of FAST[Federal Automotive Statistical Tool]). FAST's annual collection of fueling center and EVSE inventory will be expanded to capture information about mobile (i.e., not permanently installed) EVSE, number of ZEVs supported by EVSE, and home-to-work charging.*

Current Status of ZEV & EVSE Deployment



- Currently there are about 580 active ports across 150 different stations, however based on the Q2 2023 EVSE Deployment Status Report there are >2,500 total ports in various stages of design.
- These ports will go towards supporting our rapidly growing fleet of ZEVs. In FY 2023, over 500 new ZEV were ordered.

ZEV Ready Steps: Planning



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Step 1

Identify and coordinate team



Team Ready

Step 2

Review training materials



Team Ready

Step 3

Review requirements, goals, and data



Commitment Ready

Step 4

Align headquarters strategy with site planning



Commitment Ready

Step 5

Identify ZEV opportunities



Vehicle Ready

Step 6

Identify EVSE opportunities



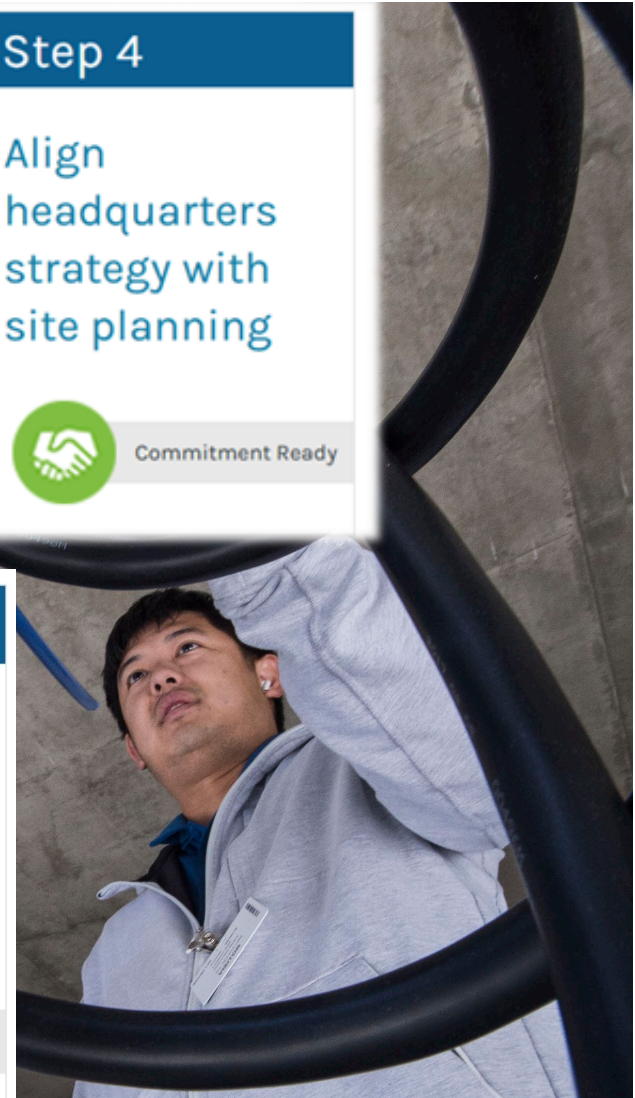
Charging Ready

Step 7

Coordinate site financial planning with headquarters



Commitment Ready



ZEV Ready Steps: Design



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Step 8

Engage with key electrification stakeholders at site



Team Ready

Step 9

Coordinate with local utility service



Charging Ready

Step 10

Complete site assessment and design EVSE



Charging Ready

Step 11

Identify EVSE at non-agency locations



Charging Ready

Step 12

Work with leadership to secure EVSE funding



Commitment Ready



ZEV Ready Steps: Active



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Step 13

Acquire ZEVs
and EVSE



ZEV Ready

Step 14

Install and
activate EVSE



ZEV Ready

Step 15

Support drivers
in using ZEVs
and EVSE



ZEV Ready

ZEV Active Phase: Means you have completed all the designated ZEV Ready steps and are ready to acquire ZEVs and install EVSE at your location.



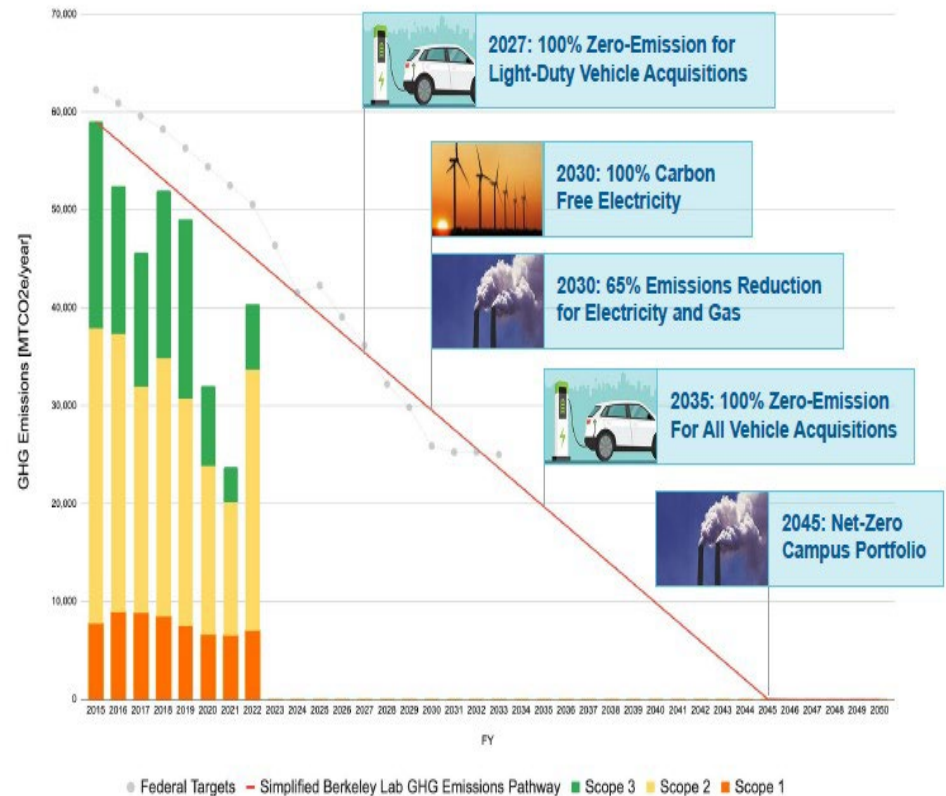
- GSA established 16 blanket purchase agreements (BPAs) in all, nine of which are with small businesses. These 60-month agreements include over 1,165 EVSE products across more than 30 unique EVSE manufactured brands with ordering preferences for small, disadvantaged businesses.
- GSA offers comprehensive support for fleet and facility managers, including design, procurement, charging infrastructure, and maintenance.
- Utilizing GSA Turnkey Solutions can provide for a seamless transition to ZEVs.

Net Zero, Fleet, and FIMS



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- The next 20 years of goals cumulating in a 2045 Net-Zero Campus Portfolio will require a tremendous amount of coordination between fleet and faculties.
- By 2035 most, if not all the 16,000+ vehicles in the DOE fleet will be electrified. Many of which will be in the medium and heavy-duty class, requiring significantly more energy to charge.



LBNL Net-Zero Glide Path

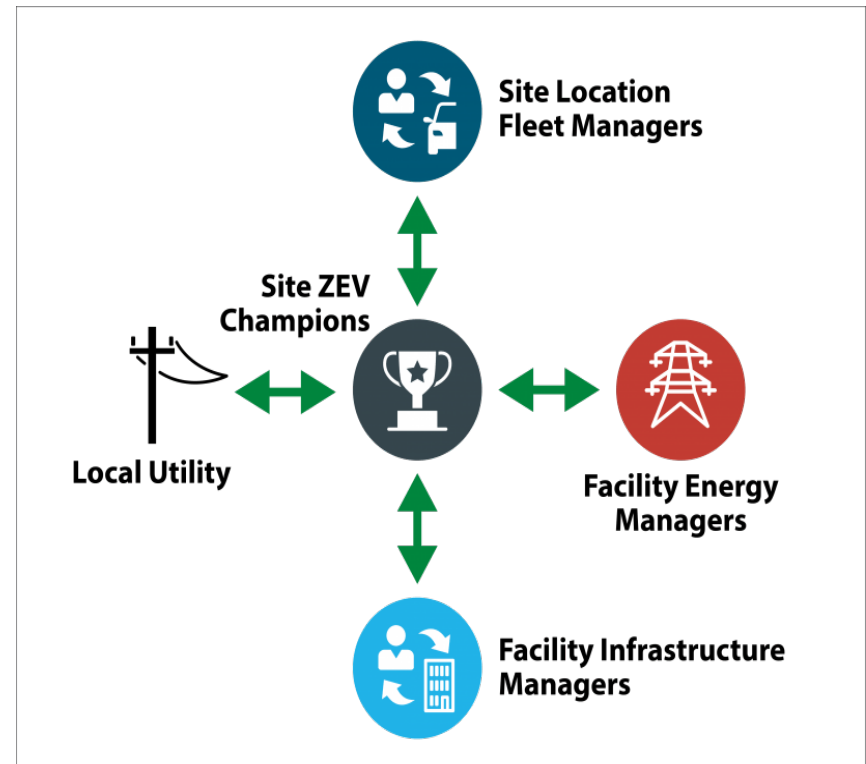
Net Zero, Fleet, and FIMS

Key Stakeholder Engagement

- The site ZEV champion is responsible for engaging and coordinating with these key fleet electrification stakeholders at the site, including the site fleet manager, facility infrastructure manager, and facility energy manager
- Site teams should consider completing the [Federal Fleet EVSE Planning Form](#)
- The [EV U-Finder](#) tool can allow teams identify local utility partners, EV and EVSE programs and incentives, and Clean Cities Coalitions using the ZIP Code

Power Requirements

- Example: a federal facility with an on-peak maximum demand of 54,379 kW decides to install EVSE to support electrification of its fleet.
- The fleet at the facility locations includes 682 light-duty vehicles and 648 medium- or heavy-duty vehicles.
- If the fleet transitioned all of those vehicles to electric and, during the existing peak, 50 percent of those vehicles were charging on Level 2 chargers simultaneously, they would increase the maximum power demand by 4,459 kW or 8 percent.

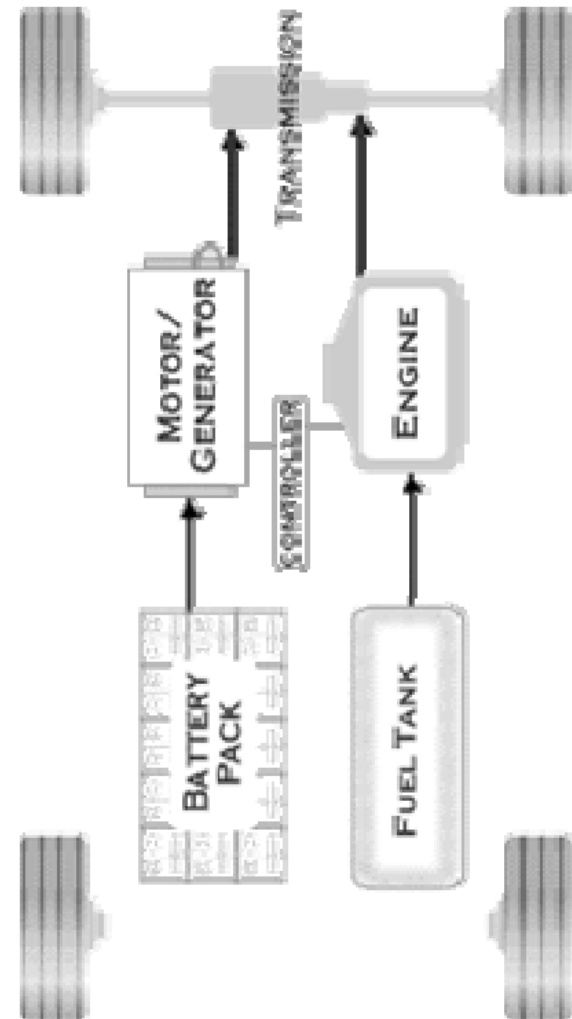


Engage with Key Electrification Stakeholders at Site

Photo: Cabell Hodges, NREL, 2023

PHEVs Counted as EVs

- Plug-in Hybrid Electric Vehicles (PHEVs) are counted as Zero ZEVs.
- If you've seen PHEVs around your site, make sure they are being charged. The Chrysler Pacifica PHEV was the most ordered ZEV vehicle of 2022.
- The adoption of PHEVs is a steppingstone towards full electrification.



- ZEVs and EVSE are a crucial step in meeting E.O. 14057 sustainability goals.
- Facilities professionals will need to be increasingly collaborative with fleet management teams to help advance clean transportation initiatives.
- Contact information for further inquiries or collaboration.
 - Your site fleet manager, program fleet manager, then DOE Federal Fleet Manager Benjamin Robles
 - GSA: GSAfleetafvteam@gsa.gov
- Questions?