



Fleet Electrification Webinar Series: Federal Highlights and Resources

January 27, 2022 | 2 PM Eastern

Three audio options:

1. Listen via computer
2. Use the “Call Me” feature
3. Dial 1-415-655-0002 or 1-855-797-9485; Event number: 2432 478 0898

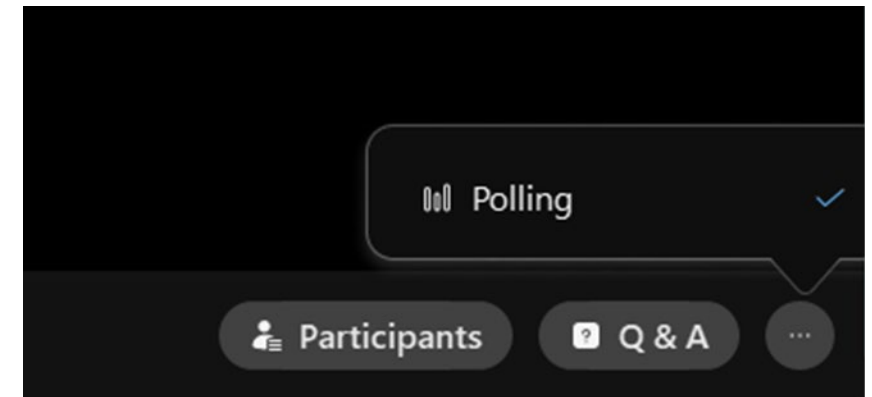
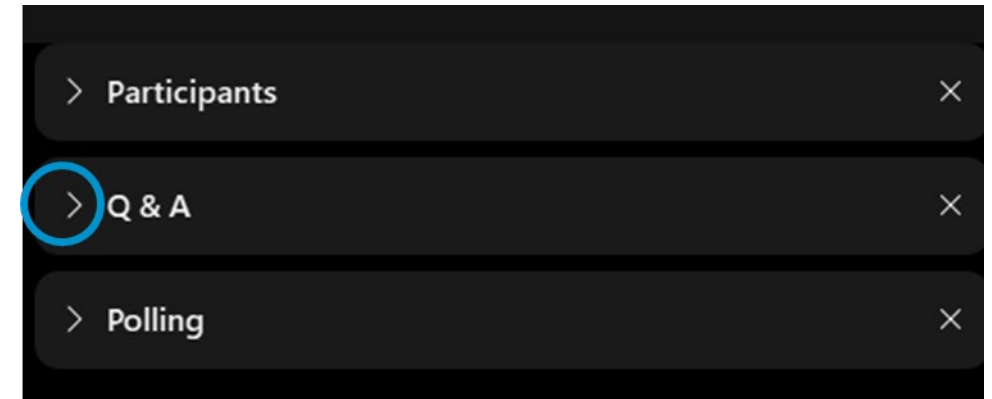
Webinar Panels

We'll use three panels

- Participants, Polling, and Question & Answer (Q&A)
- Use the arrow to expand or collapse the panels

Adding Panels

- If some panels don't appear, hover over the bottom of the screen and select the desired panels
- Select More Options (...) for additional panels
- Highlighted backgrounds indicate active panels



↑
Participants

↑
Q&A

↑
More Options
Polling

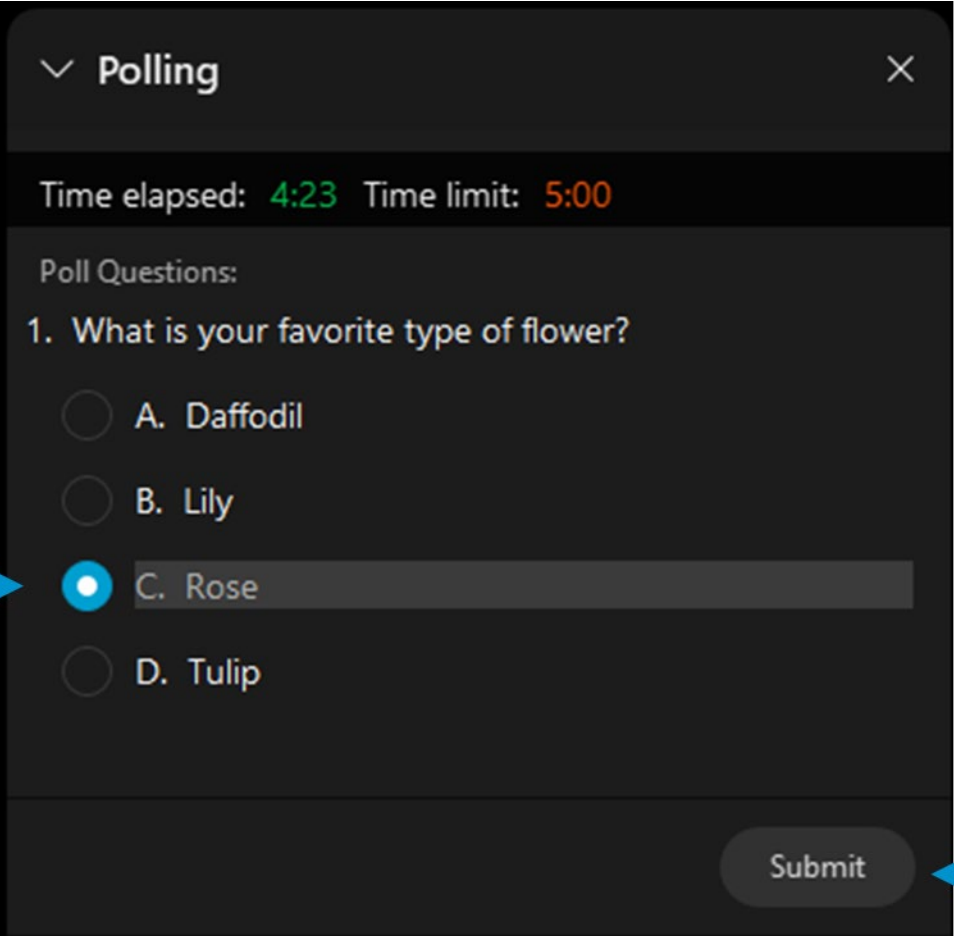
Polling and Feedback

Polling

- We'll ask several poll questions during the webinar
- The polling panel will appear when we open the first poll
- Select your desired response and hit "Submit"

Webinar Feedback

- A feedback form will pop-up when you exit today's webinar



▼ Polling ×

Time elapsed: 4:23 Time limit: 5:00

Poll Questions:

1. What is your favorite type of flower?

A. Daffodil

B. Lily

C. Rose

D. Tulip

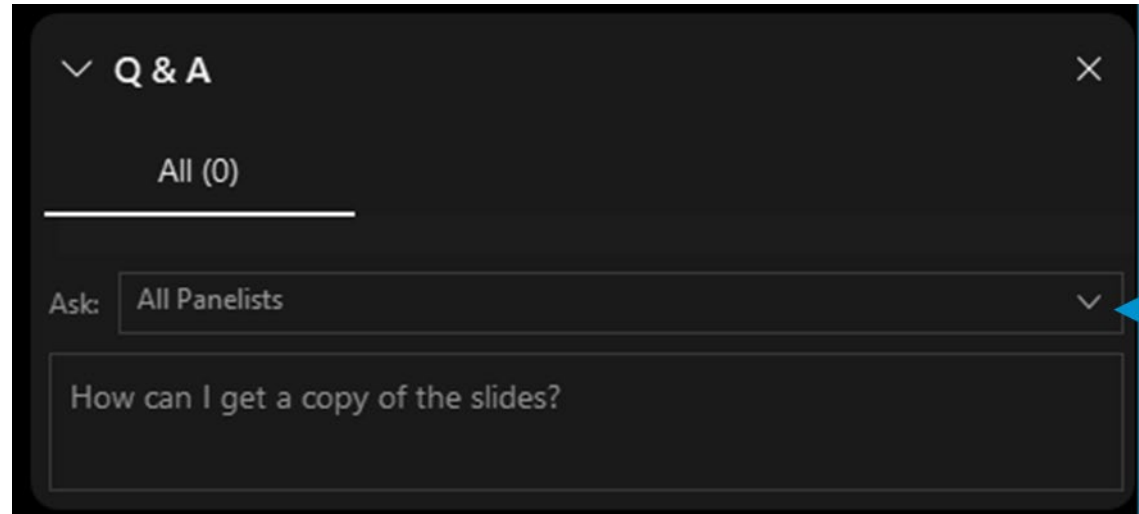
Submit

Two blue arrows point to the selected radio button for 'C. Rose' and the 'Submit' button.

Q&A

- Participants are muted
- Questions will be moderated at the end
- To ask a question:

1. Select “All Panelists” from the drop-down menu
2. Enter your question in the Q&A box
3. Hit “Enter”



- EPA will post final materials on the Webinar Series page:
www.epa.gov/statelocalenergy/state-local-and-tribal-webinar-series

Today's Agenda

- Introduction – Jessica Daniels, U.S. Environmental Protection Agency (EPA)
- Building a Federal Fleet Community – Cabell Hodge, National Renewable Energy Laboratory (NREL)
- U.S. Department of Energy: Supporting Fleet Electrification in Partnership with Clean Cities Coalitions – Margaret Smith, U.S. Department of Energy (DOE) Vehicle Technologies Office (VTO)
- Federal Energy Policy Act (EPAAct) State and Alternative Fuel Provider Fleet Program and the Alternative Fuels Data Center – Ted Sears, NREL
- Federal EV Procurement Mechanisms – Stephanie Gresalfi, U.S. General Services Administration (GSA)
- Question and Answer Session

The views expressed by speakers on this webinar are solely those of the participants and EPA does not endorse any products or commercial services mentioned in this webinar.



State and Local Climate
and Energy Program

INTRODUCTION

Andrea Denny

State and Local Climate and Energy Program
U.S. EPA

Jessica Daniels

Office of Transportation and Air Quality (OTAQ)
U.S. EPA

U.S. EPA's State and Local Climate and Energy Program

- We offer free tools, data and technical expertise about energy strategies, including energy efficiency, renewable energy and other emerging technologies, to help state, local and tribal governments achieve their environmental, energy and economic objectives
- Access these resources at: www.epa.gov/statelocalenergy
- Electrification Webinar Series
 - Get notifications by subscribing to our newsletter:
 - www.epa.gov/statelocalenergy/state-and-local-energy-newsletters
 - Past Webinars:
 - www.epa.gov/statelocalenergy/state-local-and-tribal-webinar-series

Select State and Local Resources

- **Electrification Toolfinder:** screen tools and resources to evaluate environmental and economic benefits of electrification programs
www.epa.gov/statelocalenergy/tool-finder-local-government-clean-energy-initiatives
- **Avoided Emissions and geneRation Tool (AVERT):** quantifies the emissions benefits of energy efficiency and renewables
www.epa.gov/avert
- **Co-Benefits Risk Assessment Health Impacts Screening and MappingTool (COBRA):** calculates health impacts of emissions changes and their economic value
www.epa.gov/cobra
- **Benchmarking and Building Performance Standards Policy Toolkit:** informs policies for commercial and multifamily buildings
www.epa.gov/statelocalenergy/benchmarking-and-building-performance-standards-policy-toolkit



U.S. EPA's State, Local, and Tribal Transportation Resources

- EPA's OTAQ protects human health and the environment by reducing air pollution and greenhouse gases from mobile sources and the fuels that power them, advancing clean fuels and technology, and encouraging business practices and travel choices that minimize emissions.
- We help state, local, and tribal governments achieve their environmental and other objectives by providing expertise on:
 - State Implementation Plans
 - Transportation Conformity
 - Vehicle Emissions Inspection & Maintenance and state fuel programs
 - Travel Efficiency and Greenhouse Gas (GHG) Planning
 - MOtor Vehicle Emission Simulator (MOVES), Calculators, and Tools
- Access these resources at the State and Local Transportation Resources page: www.epa.gov/state-and-local-transportation



OTAQ's Voluntary Programs and Initiatives

- Clean Diesel Program – To reduce diesel emissions that impact public health
 - Includes grants and rebates under the Diesel Emissions Reduction Act (DERA)
 - www.epa.gov/cleandiesel
- Ports Initiative – To improve environmental performance near ports
 - www.epa.gov/ports-initiative
- SmartWay – To advance sustainable transportation supply chains
 - www.epa.gov/smartway

Clean School Bus Program

Building a Better America
with the 2021 Bipartisan
Infrastructure Law

www.epa.gov/cleanschoolbus

Transportation Trends

- EPA Automotive Trends Report
 - Public information about new light-duty vehicle greenhouse gas emissions, fuel economy data, technology data, and auto manufacturers' performance in meeting the agency's GHG emissions standards
 - www.epa.gov/automotive-trends
- EPA Green Vehicle Guide
 - Learn more about emerging options in transportation like zero emission vehicles (ZEVs), shared mobility, and self-driving cars
 - www.epa.gov/greenvehicles

The screenshot displays the EPA Automotive Trends Report for 2021, focusing on Greenhouse Gas Emissions, Fuel Economy, and Technology. It also shows the Green Vehicle Guide, which includes sections on learning about green vehicles, understanding greenhouse gases and smog, and savings from fuel economy standards. A separate box highlights 'Electric Vehicle Myths' with six common misconceptions.

The 2021 EPA Automotive Trends Report

Greenhouse Gas Emissions, Fuel Economy, and Technology since

Green Vehicle Guide

Drive Green. Save Green.

What you drive, how you drive, and what fuel you use can impact both the environment and your pocketbook.

What is a green vehicle?

1 2 3

Learn About Green Vehicles

- What is a green vehicle?
- Consider a SmartWay vehicle
- Advise on gas and diesel vehicles
- EVs and PHEVs
- EV charging
- Hydrogen fuel cell vehicles
- Promote green vehicles

Vehicles, Greenhouse Gases, and Smog

- Save vehicle emissions
- GHG emissions from a typical passenger vehicle
- Fast facts on transportation GHG emissions in the US
- GHG emissions & standards
- Automotive Trends Report

Savings from the Fuel Economy & Light-Duty Greenhouse Gas Standards

\$147,121,963,051

Check out the estimated savings of U.S. consumers who have already purchased new vehicles under the fuel economy & greenhouse gas standards. [More about the standards.](#)

[Click to see GHG emissions](#)

[Read the myths](#)

Electric Vehicle Myths

On this page:

- [Myth #1: Electric vehicles are worse for the climate than gasoline cars because of the power plant emissions.](#)
- [Myth #2: Electric vehicles don't have enough range to handle daily travel demands.](#)
- [Myth #3: Electric vehicles only come as sedans.](#)
- [Myth #4: There is nowhere to charge.](#)
- [Myth #5: Electric vehicles are worse for the climate than gasoline cars because of battery manufacturing.](#)
- [Myth #6: Electric vehicles are not as safe as comparable gasoline vehicles.](#)

Upcoming Webinars

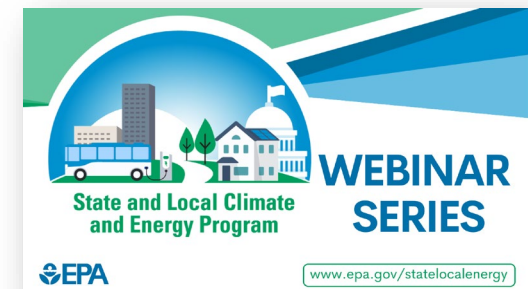
February 10: Learn about EPA's Tribal Greenhouse Gas Inventory Tool

February 15: Learn about EPA's Local Greenhouse Gas Inventory Tool

February 22: EPA CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool (COBRA) (registration coming soon)

March 8: Electrification in the Urban Environment: Making Room for Express Delivery (registration coming soon)

www.epa.gov/statelocalenergy/state-local-and-tribal-webinar-series



Contact Information

Andrea Denny
denny.andrea@epa.gov

Jessica Daniels
daniels.jessica@epa.gov



Visit Our Website | www.epa.gov/statelocalenergy

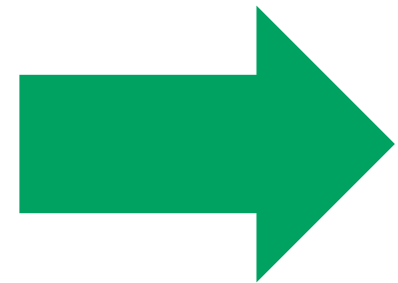
Sign Up for Our Newsletter | www.epa.gov/statelocalenergy/state-and-local-energy-newsletters

Follow Us on LinkedIn | <https://linkedin.com/showcase/epa-state-and-local-climate-and-energy-program>

Which best describes your organization's experience with fleet electrification?

- We have a program
- We are launching a program
- We are considering a program
- We are not considering a program
- Other (enter in Q&A box)

Poll 1





State and Local Climate
and Energy Program

Building a Federal Fleet Community

Cabell Hodge

National Renewable Energy Laboratory



Building a Federal Fleet Community

Cabell Hodge
1/27/2022

Overview

1 Federal Fleet Overview

2 NREL Role + Support

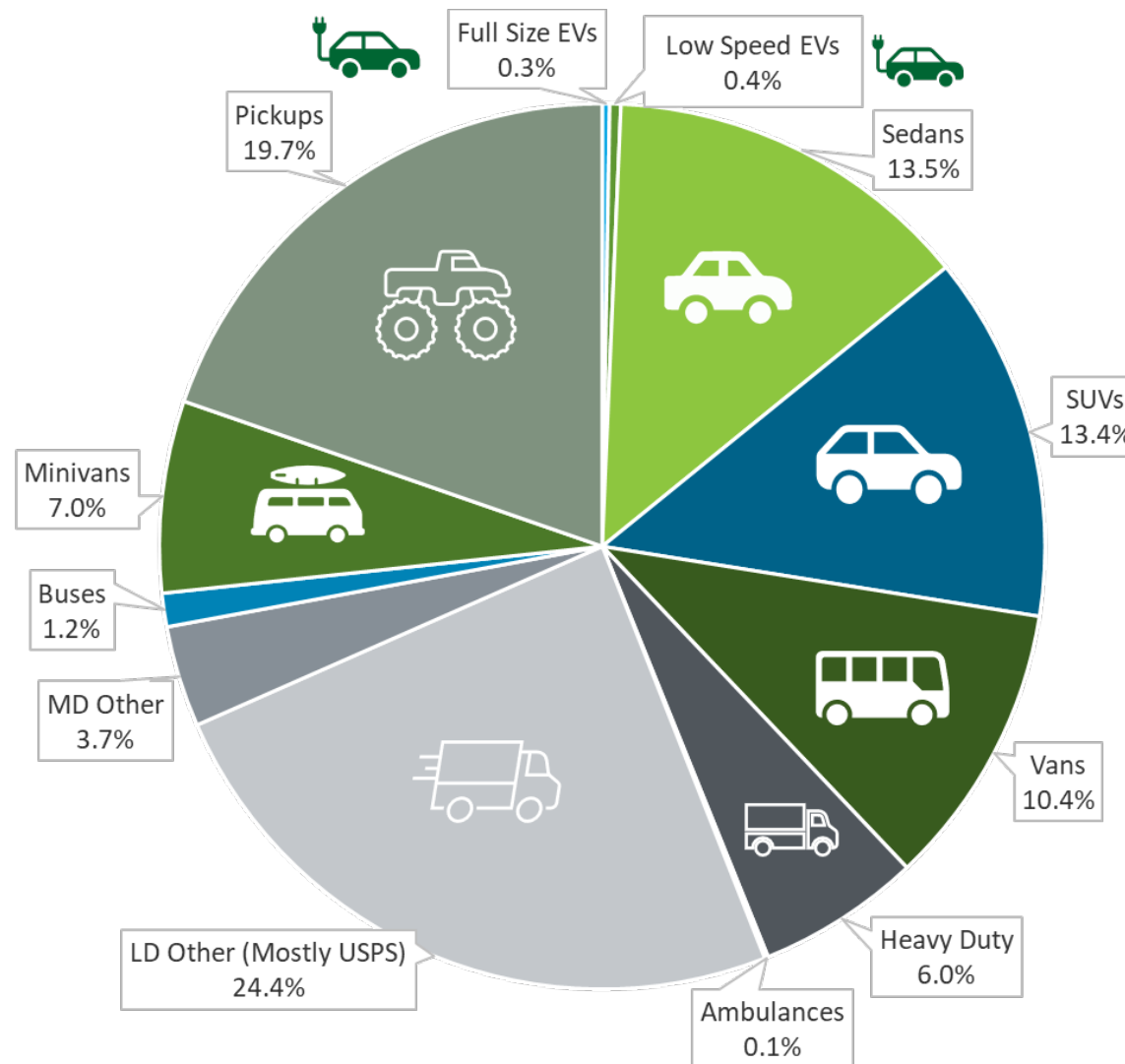
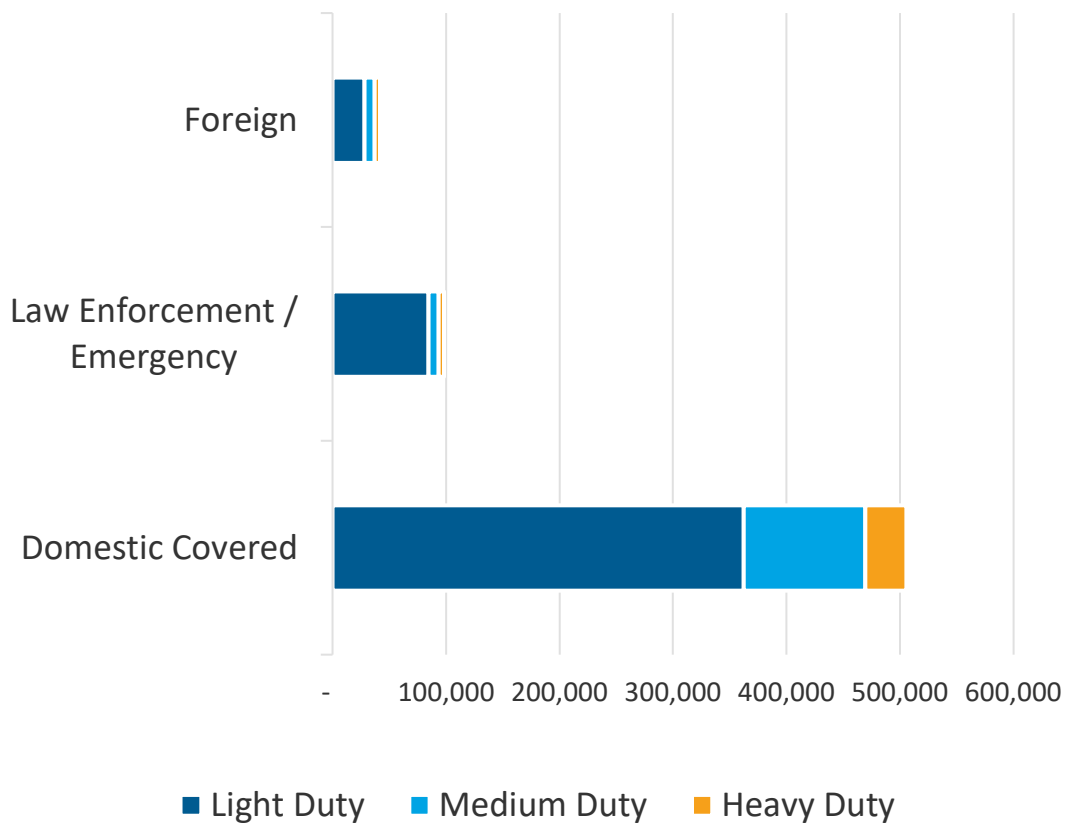
3 Building a Community

4 Tools and Engagement

5 Training Opportunities

Breakdowns of the Federal Fleet

Federal Fleet by Classification



LD: Light duty
 SUV: Sport utility vehicle
 USPS: United States Postal Service

Largest Stakeholders in the Federal Fleet

GSA Fleet

- Leases or sells majority of vehicles in Federal fleet

USPS

- USPS vehicle ownership represents the largest single segment of the Federal fleet (225,000 vehicles)
- Planning to replace long-life vehicle local delivery fleet

Council on Environmental Quality (CEQ)

- Executive Order, Implementing Instructions
- Directs chief sustainability officers and high-level agency action

Office of Management and Budget (OMB)

- Sustainability scorecards
- Administration budget plans

Department of Defense (DOD)

- Manages domestic fleet of 146,000 vehicles

Civilian Agencies

- 242,000 domestic vehicles in 25 civilian Energy Policy Act (EPA Act)-covered agencies

GSA Office of Governmentwide Policy (OGP)

- Develops Federal Management Regulations and Bulletins

DOE/NREL/Idaho National Laboratory (INL)

- Responsible for compliance oversight
- Technical expertise and thought leadership

EPA

- Compliance oversight and support

Electric Vehicles as an Administration Priority

WH.GOV



Executive Order on Tackling the Climate Crisis at Home and Abroad

January 27, 2021

GSA, CEQ, and OMB in coordination with DOE, DOL, and DOC to develop a plan to convert Federal, state, local, and Tribal fleets to ZEVs



WH.GOV



Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability

December 8, 2021

Transition to a zero-emission Federal fleet

- Annual targets for ZEVs by agency
 - 100% LD acquisitions by 2027
 - 100% MD/HD acquisitions by 2035

Federal Energy Management Program (FEMP) Fleet Program + NREL Support

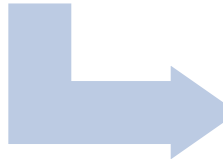
Tools to plan and execute agency fleet electrification goals

- Statutory Requirements
- Fleet Data
- Alternative Fuel Vehicle (AFV) Candidates
- EV Technology Training
- Electric vehicle supply equipment (EVSE) Installation Planning
- Workplace Charging Programs
- Cybersecurity Considerations
- Best Practices and Case Studies

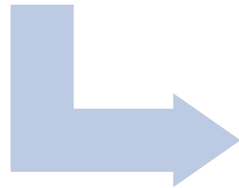


ZEV Planning and Charging Tool (Example of NREL Support)

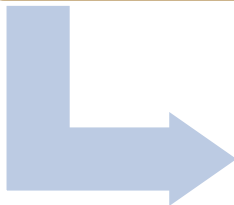
1. Vehicle up for replacement (100 vehicles)



2. Great and good candidates (70 vehicles)



3. Minus unsuitable candidates (52 vehicles)



4. At priority EVSE locations (48 vehicles)

Garage	Zip	Vehicles	EVs
NREL Bldg. 16	01234	25	17
NREL South Table Mountain (STM) Lot	01234	65	44
NREL Wind	56789	10	9

Garage	Zip	Vehicles	EVs	EVs
NREL Bldg. 16	01234	25	17	12
NREL STM Lot	01234	65	44	36
NREL Wind	56789	10	9	4

Garage	Zip	Vehicles	EVs	EVs
NREL Bldg. 16	01234	25	17	12
NREL STM Lot	01234	65	44	36
NREL Wind	56789	10	9	4

Federal EV Agency Roundtable (FEVAR)

- Peer group to share electrification plans and goals and to discuss ways to overcome gaps and barriers to fleet electrification
 - Technology options
 - Data usage
 - Site and agency planning
 - Collaboration with external stakeholders (e.g., utilities)



**Become a Member of the Federal Electric
Vehicle Agency Roundtable (FEVAR)**

Join fellow agencies in sharing best practices and overcoming
barriers in electrifying the Federal fleet



Federal EV Agency Roundtable

Meeting format

- Standing updates from FEMP, GSA Fleet, GSA OGP, and CEQ
- Roundtable discussion
- Agency speaker (e.g., fleet manager)
- External speaker (e.g., technical expert)

Objectives

- Inform on latest policy updates and fleet requirements
- Share lessons learned with fleets
- Connect fleets with other stakeholders
- Understand fleet needs



Zero-emission Vehicle Planning and Charging (ZPAC) Tool Agency Engagement

- **ZPAC Process**
 - Introduced the tool at FEVAR
 - Posted training videos for agencies
 - Set up working meetings with each agency
 - Reviewed results and discussed issues



BEV Considerations					
BEV SIN Availability	BEV Replacement SIN	Modeled BEV Range Concerns*	Reported BEV Range Concerns (Dropdown)	BEV GHG Emission Reduction Potential	Quality of BEV Candidate
3 - Consider PHEV	20P	1 - Minimal Public Charging Likely		5 - Limited	5 - Consider PHEV
1 - Identical BEV	96E	2 - Some Public Charging Likely		4 - Moderate	2 - Good
1 - Identical BEV	105E	1 - Minimal Public Charging Likely		2 - High	1 - Great
4 - Reassess Next Year	-	5 - Very Frequent Public Charging Likely		1 - Very High	6 - No FY22 ZEV Option
1 - Identical BEV	8E	5 - Very Frequent Public Charging Likely		1 - Very High	4 - Challenging

SIN: Standard Item Number

EVSE Tiger Team Engagement

EVSE Tiger Teams

- Team of EVSE experts and electrical engineers from NREL

Objectives

- Develop plans for charging infrastructure
- Use information on vehicle plans to inform charging needs
- Assess site needs, logistics, and electrical infrastructure

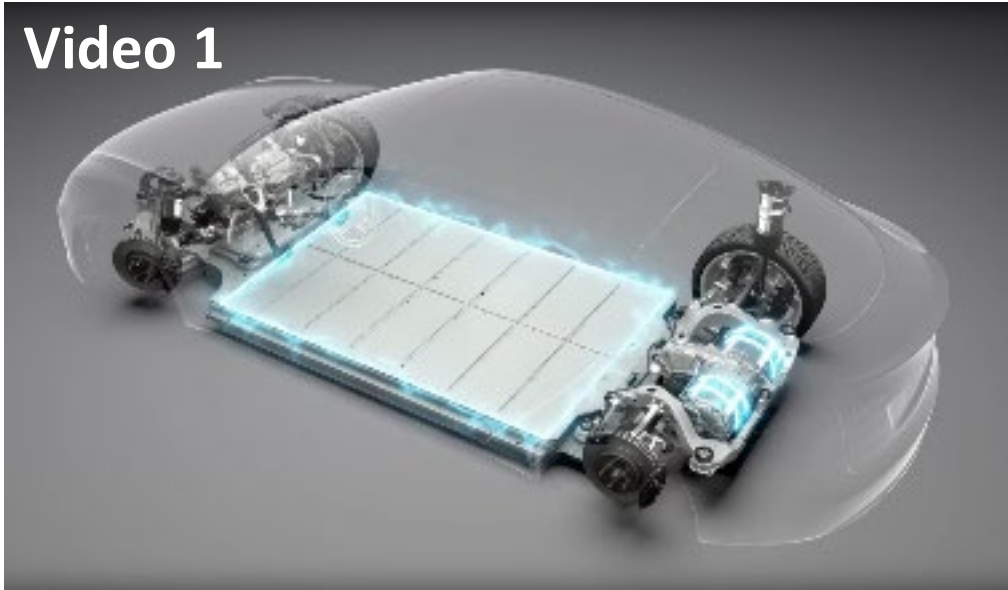
Activities

- Visit potential EVSE locations
- Develop site-specific recommendations



EV Training Videos

Video 1



Video 2



Video 3



Video 1: [EV Technology Overview](#)

Video 2: [EV Financial Considerations](#)

Video 3: [Electric Vehicle Supply Equipment](#)

Federal Fleet EV Training Materials

TRAINING	TYPE	DURATION	SUBJECT AREA AND LEVEL
<input type="checkbox"/> <u>FEMP EV Technology Overview</u>	Video	12 minutes	EV 101, EVSE 101
<input type="checkbox"/> <u>FEMP EV Financial Considerations</u>	Video	9 minutes	Financial 101
<input type="checkbox"/> <u>FEMP Electric Vehicle Supply Equipment Infrastructure</u>	Video	8 minutes	EVSE 101, Facility 101
<input type="checkbox"/> <u>Charging GSA Fleet EVs Publicly</u>	One Page	5 minutes	EVSE 101
<input type="checkbox"/> <u>GSA ZEV Fact Sheet and AFV Guide</u>	Website	30 minutes	EV 101
<input type="checkbox"/> <u>Attend EV Champion Training 1: Technology & Financials</u>	CEU Webinar	1.5 hours	EV 102, EVSE 102
<input type="checkbox"/> <u>Attend EV Champion Training 2: EVSE Power/Install</u>	CEU Webinar	1 hour	EVSE 201, Facility 201
<input type="checkbox"/> <u>Attend EV Champion Training 3: EV Site Assessments</u>	CEU Webinar	2 hours	EVSE 202, Facility 202
<input type="checkbox"/> <u>Attend EV Champion Training 4: Advanced EV Solutions</u>	CEU Webinar	2 hours	Facility 301, Program 301
<input type="checkbox"/> <u>EV Champion Worksheet 1: Technology & Financials</u>	Worksheet	30 minutes	EV 201, Financial 201

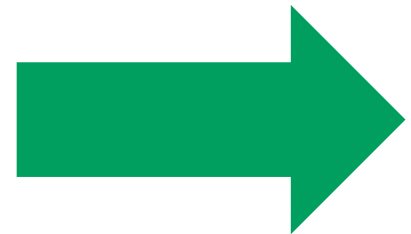
Cabell Hodge

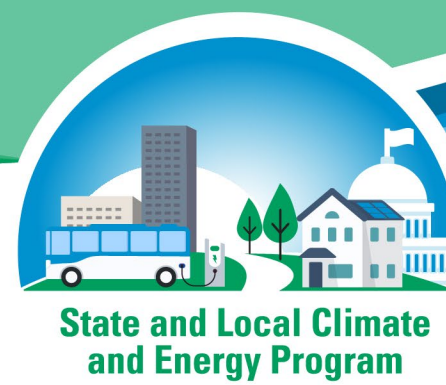
cabell.hodge@nrel.gov

Which of these Federal resources and partners do you use in your fleet electrification work?

- Clean Cities Coalitions
- Technical Response Service
- Alternative Fuels Data Center
- FuelEconomy.gov
- Alternative Fuel Life-Cycle Environmental and Economic Transportation Tool

Poll 2





U.S. Department of Energy: Supporting Fleet Electrification in Partnership with Clean Cities Coalitions

Margaret Smith
U.S. DOE Vehicle Technologies Office

U.S. DEPARTMENT OF
ENERGY

Office of
**ENERGY EFFICIENCY &
RENEWABLE ENERGY**

DOE Supporting Fleet Electrification in Partnership with Clean Cities Coalitions

Margaret Smith, U.S. Department of Energy, Vehicle Technologies Office

January 27, 2022

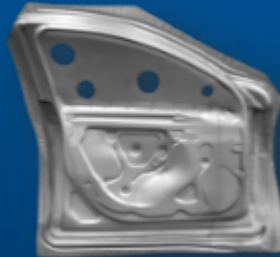


Vehicle Technologies Office (VTO)

Batteries & Electrification



Materials Technology



Mobility Systems



Technology Integration and Deployment



ON-ROAD
Light-, Medium-, Heavy
Duty Vehicles



Air, Marine, Rail



Some research and development (R&D) for
On/Off-Road MD/HD Vehicles

VTO Technology Integration Program

Provide objective data and real-world lessons learned that inform future research needs and support local decision-making to advance affordable, domestic transportation fuels and energy-saving technologies



**Clean Cities
Coalitions**



**Information
and Tools**



**Technical
Assistance**



**Training,
Outreach,
Partnerships**



**Financial
Assistance**




**Regulatory Activities /
State and Alt Fuel
Provider Fleets**




**Advanced Vehicle
Technology
Competitions**

VTO Technology Integration Strategies



1. Work closely with the nationwide network of local Clean Cities coalitions to support local decision-making



2. Help stakeholders evaluate transportation needs and energy choices



3. Fund projects that:

- Shift to domestic transportation energy sources,
- Improve transportation fuel efficiency,
- Reduce harmful emissions, and
- Demonstrate new mobility choices.



Vehicle Technology Focus Areas

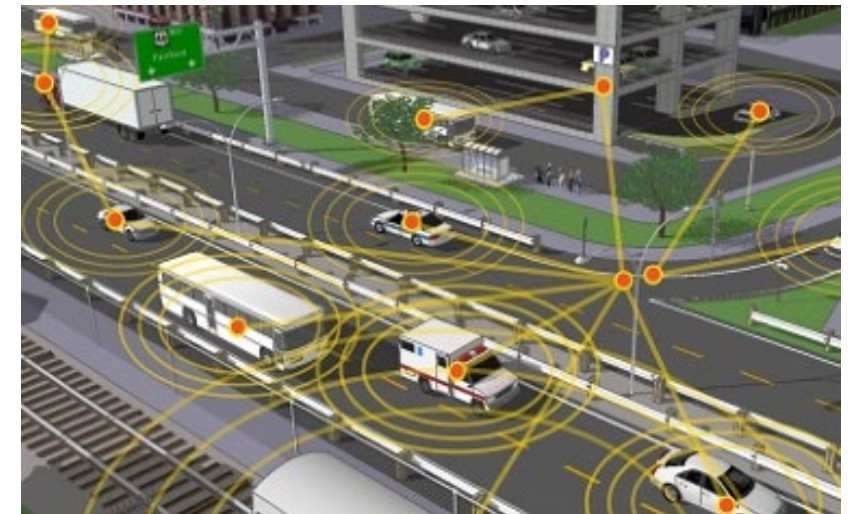
Light-, Medium- and Heavy-Duty Vehicles



Alternative Fuel Infrastructure



Energy Efficient Mobility Systems and Technologies



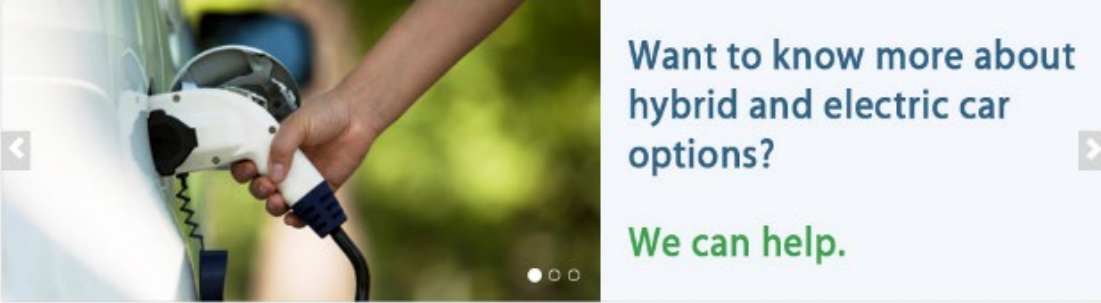
FuelEconomy.gov and Alternative Fuels Data Center (AFDC)

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy | Office of Transportation & Air Quality | U.S. ENVIRONMENTAL PROTECTION AGENCY

www.fueleconomy.gov
the official U.S. government source for fuel economy information

Mobile | Español | Site Map | Links | FAQ | Videos

Find a Car | Save Money & Fuel | Benefits | My MPG | Advanced Cars & Fuels | About EPA Ratings | More...



Want to know more about hybrid and electric car options?
We can help.

Find & Compare Cars
Compare Side-by-Side
Power Search
Mobile Find-a-Car

My MPG
Calculate or Share Your MPG
Estimates from Drivers Like You
Enter Your MPG at the Pump

Save Money
Gas Mileage Tips
Fuel Cost Calculator
Find the Cheapest Gas

Hybrids & Electrics
Hybrids
Plug-in Hybrids
All-Electric Vehicles

Calculators and Other Tools
Fuel Savings Calculator
Trip Calculator
Can a Hybrid Save Me Money?
My Plug-in Hybrid Calculator
Used Car Label Tool
Developer Tools
Find a Car Widget

New on fueleconomy.gov...
2015 Fuel Economy Data Updated
2015 Fuel Economy Guide
2015 Best and Worst Fuel Economy
2015 Top 10 Most Efficient Vehicles

Quick Picks
Can a Hybrid Save Me Money?
Video - How Plug-in Hybrids Save Money
Extreme MPG
Motorweek Videos
Top 10 - Most Efficient Vehicles, Myths and More
My Plug-in Hybrid Calculator

Related Links
Clean Cities
Alternative Fuels Data Center
Vehicle Cost Calculator
Station Locator
EPA Climate Change Website
EV Explorer

[FuelEconomy.gov](http://www.fueleconomy.gov)

Alternative Fuels Data Center


Search the AFDC

FUELS & VEHICLES | CONSERVE FUEL | LOCATE STATIONS | LAWS & INCENTIVES | Maps & Data | Case Studies | Publications | Tools | About | Home

EERE > AFDC


Printable Version | Share

Fuels & Vehicles



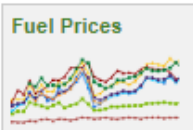
Information by State
select a state

Information by Fleet Application



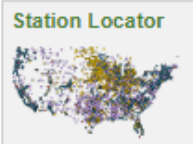
Maps & Data

- U.S. Alternative Fuelling Stations by Fuel Type
- Alternative Fuel Vehicles in Use
- U.S. Hybrid Electric Vehicle Sales by Model



Tools

- Law & Incentives
- Electricity Sources & Emissions
- Vehicle Cost Calculator
- Vehicle Search



Download iPhone app or Android app

Find Fleet Information by Application
Get detailed vehicle data, case studies, and resources.

The Information Source for Alternative Fuels and Advanced Vehicles
The Alternative Fuels Data Center (AFDC) provides information, data, and tools to help fleets and other transportation decision makers find ways to reach their energy and economic goals through the use of alternative and renewable fuels, advanced vehicles, and other fuel-saving measures.

afdc.energy.gov

Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool by Argonne National Laboratory (ANL)

Examines light-duty, heavy-duty, and off-road vehicle:

- Petroleum use
- Greenhouse gas (GHG) emissions
- Air pollutant emissions
- Cost of ownership



AFLEET Spreadsheet: 10,000 users



AFLEET Online: 7,500 users



Heavy-Duty Vehicle Emissions Calculator: 10,000 users

Covers 18 fuel/vehicle technologies

- Conventional, Hybrid
- Plug-in electric
- Alt. fuels: natural gas, propane, hydrogen, ethanol, biodiesel, renewable diesel

Recent AFLEET updates

- Updated vehicle and charging infrastructure costs
- Updated emission factors using EPA's MOtor Vehicle Emission Simulator (MOVES3)
- New EV charging emissions calculator

afleet.es.anl.gov

Technical & Problem-Solving Assistance



Technical Response Service

Seasoned experts who will help you find answers to technical questions about

- Alternative fuels,
- Fuel economy improvements,
- Idle-reduction measures,
- Advanced vehicles, and
- Clean Cities resources

TechnicalResponse@icf.com 800-254-6735

VTO Technology Integration Competitive Project Funding

VTO has funded over 600 Technology Integration projects and distributed nearly \$500 million since 1993



Living Labs for
Energy Efficient
Transportation



AFV Adoption
Through
Partnerships



AFV Safety
Training



Rural New
Mobility
Solutions



EV Community
Partner Projects



AFV Data
Collection
and Analysis

cleancities.energy.gov/partnerships/projects

VTO Annual Merit Review Presentations: www.energy.gov/eere/vehicles/annual-merit-review-presentations

VTO Annual Progress Reports: www.energy.gov/eere/vehicles/annual-progress-reports

Fiscal Year (FY) 19 New Mobility Services in Rural America

Area of Interest (AOI) Objective:

- Demonstrate technology approaches to provide affordable access to new mobility services to rural populations
- Vehicle/infrastructure, rural outreach and education

Example Projects:

- Electric First/Last Mile On-Demand Shuttle Service for Rural Communities in Central Texas (Lone Star Clean Fuels) - Low speed EVs to provide on-demand transportation around a small town's downtown area and connections to a park and ride service to Austin.
- The Clean Rural Shared Electric Mobility Project (Forth) - Deployment of light-duty EVs for use in car share (use by tourists and local underserved community residents) with associated EVSE. Location: Rural Oregon

FY20 Alt. Fuel Proof of Concept in New Communities and Fleets

AOI Objective:

- Small, targeted proof of concept demonstrations of alternative fuel vehicles and fueling infrastructure
- Sharing of data, best practices, and lessons learned with other fleets in their areas

Example Projects:

- Cold-Weather Operation, Observation and Learning Electric Vehicles: COOL EVs (American Lung Association Minnesota) – Deployment of several MD/HD commercial trucks in Minnesota winters, including an EV school bus, refuse hauler, and MD shuttle buses, with extensive data collection and analysis to inform replication.
- Pilot Heavy-Duty Electric Vehicle Deployment for Municipal Solid Waste Collection (Municipality of Anchorage) Deployment of Peterbilt battery electric box truck for residential recycling bin distribution and Peterbilt battery electric refuse hauler, plus direct current (DC) fast charging with battery storage to manage grid load/demand charges, all operating in Alaskan winters (harsh for current BEVs).

FY20 EV Community Partner Projects (3-year projects launched late 2020)

Applicant	Clean Cities (CC) Coalition	Project Name (DOE share)	States
American Lung Association	Minnesota CC	Twin Cities EV Community Mobility Network - EV Spot Network & Evie Carshare (\$6.7M)	MN
PacifiCorp	Utah CC, Treasure Valley CC (Boise), Valley of the Sun CC (Phoenix), Columbia-Willamette CC, Rogue Valley CC, Yellowstone-Teton CC	WestSmartEV@Scale (\$6.6M)	OR, UT, NV, ID
Virginia Energy	Virginia CC, Greater Washington Region CC, Maryland CC, State of West Virginia CC	Mid-Atlantic Electrification Partnership (\$5.4M)	VA, DC, MD, WV

Electric Vehicles and Charging Stations



Community Engagement and Workforce Development



Drivers

- Public EV charging
- Multi-family housing charging stations
- Electric car-sharing



Transit Riders

- E-buses
- E-ride hailing



Environmental Justice Community Air Quality

- Electrify MD/HD vehicles operating in or near environmental justice (EJ) communities

EV Spot Network & Evie Carshare in Saint Paul and Minneapolis



- 70 curbside community charging hubs (280 Level 2 ports total)
- 25 multi-unit housing charging hubs (100 Level 2 ports total)
- 12 DC fast chargers (ten 50 kilowatts (kW); two 120kW)

- 170 Evie Carshare vehicles
- 50 EVs for multi-unit housing
- www.evspotnetwork.org

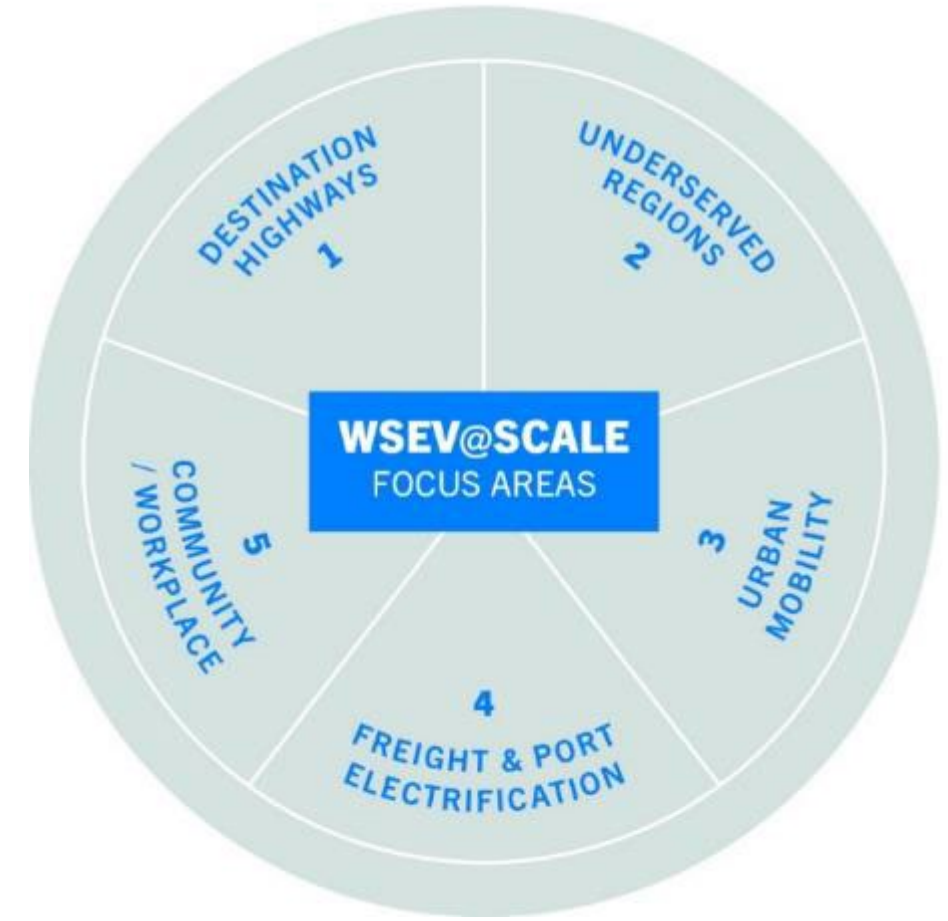
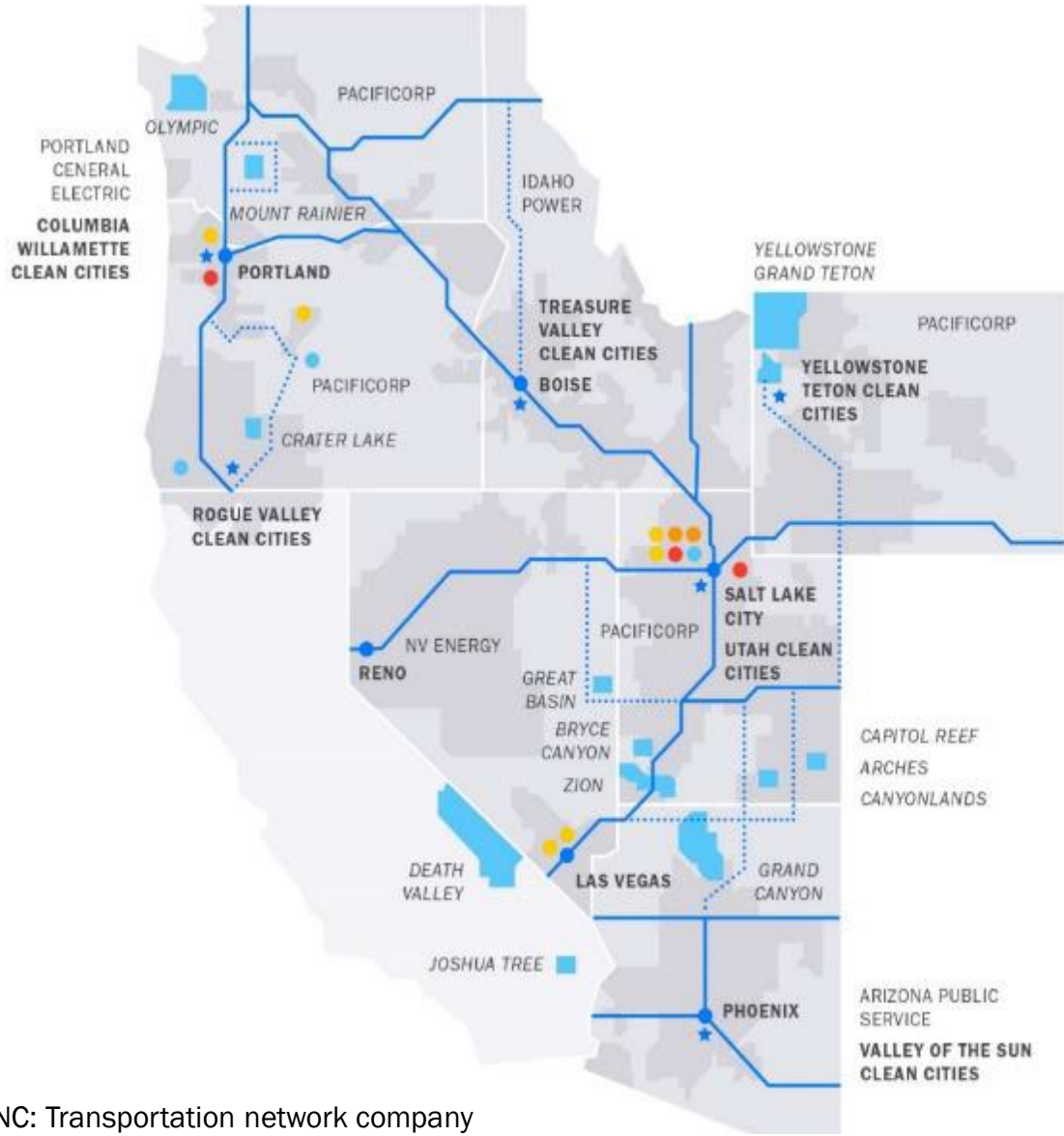


evie
Operated by HOURCAR



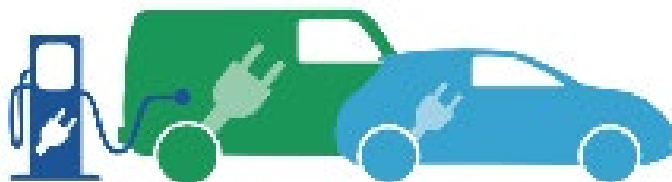
**ev
spot**
network

WestSmart EV (WSEV) @ Scale



TNC: Transportation network company

Mid-Atlantic Electrification Partnership



Mid-Atlantic Electrification Partnership

375
CHARGING STATIONS

installed throughout the region

175
ELECTRIC VEHICLES
light- medium-duty EVs and school buses

25
EDUCATIONAL EVENTS

3
PROJECT YEARS

\$14.6M
PROJECT BUDGET

\$8.7M
COST SHARE

25
PROJECT PARTNERS

PARTNERS- YEAR 1

Utilities	Dominion Energy • Potomac Electric Power Company
Clean Cities	Maryland Clean Cities • West Virginia Clean State Program Virginia Clean Cities at James Madison University
EVSE Deployment	Beam • Blink • EVgo • Greenlots Greenspot • Sonny Merryman
Education and Equity	EVNoire
City	Charlottesville, Virginia
EV Infrastructure Planning	Tradepoint Atlantic
National Lab	Argonne National Laboratory
State Agencies	Maryland Department of the Environment Virginia Department of Environmental Quality Virginia Department of Mines Minerals and Energy
Ride Share	Baltimore Gas and Electric Greater Washinton Region Clean Cities Colaition
Ports	Maryland Port Administration • Port of Virginia
Advisors	Electrify America • Rappahannock Electric Cooperative Virginia Tech Transportation Institute

<https://vacleancities.org/mid-atlantic-electrification-partnership>

FY21 EV Community Partner Projects (3-year projects launching early 2022)

Applicant	Project Name (DOE Share)	Project Objective	States
Tennessee Technological University	Rural Reimagined: Building an EV Ecosystem and Green Economy for Transforming Lives in Economically Distressed Appalachia (\$4M)	<ul style="list-style-type: none"> Deploy electric vehicle (EV) charging stations and demonstrate EVs in the most economically distressed regions in rural Appalachia. Information sharing, outreach, education, and workforce training 	KY, WV, OH, TN, VA
Metropolitan Energy Center	EV Market Stimulation in Divested Economies (\$5.2M)	<ul style="list-style-type: none"> Deploy fleet EVs and charging (e.g., rural and urban municipal fleets, freight yard terminal trucks) Install public and multi-family housing EV charging including engaging community-based organizations in decision-making 	KS, MO
Forth	Affordable Mobility Platform (\$5M)	<ul style="list-style-type: none"> Deploy shared EVs at affordable housing sites for use by housing residents, housing staff, and the public Create training and education materials for project replicability 	NM, ID, NC, MI, NV, OR, WA, MO
Native Sun Community Power Development	Upper Midwest Inter-Tribal EV Charging Community Network (\$6.7M)	<ul style="list-style-type: none"> Demonstrate EVs through a Native-led model program including twenty-three Native Nations. Create fast charging corridors to connect the Tribal reservations with job centers, economic centers, and other critical services. 	ND, SD, MN



THANK YOU

Margaret Smith,
Technology Manager, DOE Vehicle Technologies Office
Margaret.smith@ee.doe.gov

cleancities.energy.gov

afdc.energy.gov

fueleconomy.gov

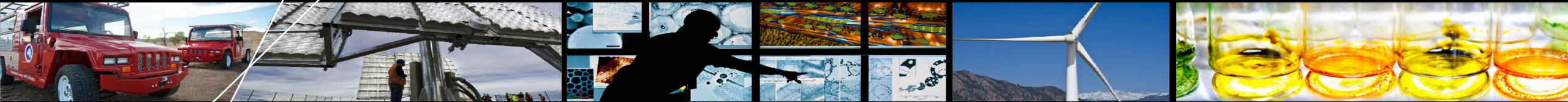


Federal EPA Act State & Alternative Fuel Provider Fleet Program and the Alternative Fuels Data Center

Ted Sears

National Renewable Energy Laboratory

Federal EPA Act State & Alternative Fuel Provider Fleet Program and the Alternative Fuels Data Center



Ted Sears

January 27, 2022

Agenda

- State and Alternative Fuel Provider Fleet Requirements Under EPA Act
- Alternative Fuels Data Center Resources and Tools

Fleet Requirements – State and Alternative Fuel Provider (SFP)

- Energy Policy Act of 1992 (EPA 92) requires certain **SFP** fleets to acquire alternative fuel vehicles if:
 - Fleet has **50** non-excluded light-duty vehicles (LDVs) total
 - Fleet has \geq **20** non-excluded LDVs in a single Metropolitan Statistical Area or consolidated Metropolitan Statistical Area with \geq **250,000** population in 1980
- Current annual AFV acquisition requirements:
 - **States** – **75%** of annual non-excluded LDV acquisitions
 - **Alternative Fuel Providers** – **90%** of annual non-excluded LDV acquisitions
- Alternative Fuel (AF) use requirement
 - Alternative Fuel Providers must **use AF** when AFV operating in area in which AF is available

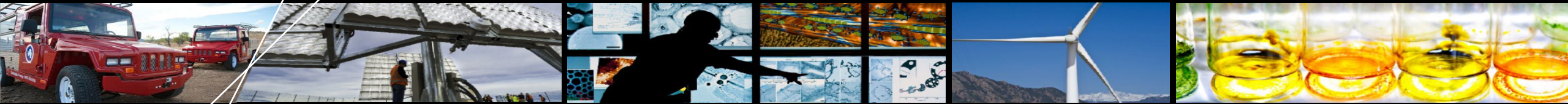
Fleet Compliance Options – SFP

- Initially, fleets could only comply by **acquiring AFVs**
 - **AFVs** (think flex-fuel vehicles (FFV), compressed natural gas (CNG), or Propane dedicated or bi-fuel vehicles, and EVs) and **Conversions**
 - **Exemptions** available if no appropriate AFV model or AF available
 - Fleets may earn and **bank/trade credits** for excess acquisitions
- Congress later allowed fleets to meet up to 50% of annual AFV acquisition requirements through **purchase for use of biodiesel**, if blend **≥20% biodiesel (B20)**
 - One acquisition credit for every **450** gallons of **B100**
- This (**AFV acquisition** and **biodiesel**) is termed **Standard Compliance**
 - Energy Independence and Security Act 2007 authorized DOE to allot credit levels for **Electric Drive Vehicles** (hybrid electric vehicles (HEVs), plug-in hybrid-electric vehicles (PHEVs), MD/HD EVs, neighborhood electric vehicles (NEVs)) and certain vehicle and infrastructure related investments

Credit Allocations Under the 133 Final Rule

Credit Category	Credit Allotment	Limitations/Other
HEV	½ credit	
PHEV	½ credit	
Fuel cell electric vehicle	½ credit	
NEV	¼ credit	Not included in covered LDV count
Medium- or heavy-duty HEV	½ credit	Not included in covered LDV count
Alternative Fuel Infrastructure	1 credit per \$25,000 invested*	Maximum of 5 credits if private infrastructure, 10 credits if publicly accessible infrastructure; credit allocated in model year placed into operation
Alternative Fuel Non-Road Equipment	1 credit per \$25,000 invested*	Maximum of 5 credits per fleet per model year
Emerging Technology	2 credits for initial \$50,000 invested and 1 credit per \$25,000 thereafter, or 1 credit per pre-production vehicle*	Maximum of 5 credits if counting based on amount invested, per fleet per model year

* Aggregation of dollar amounts allowed

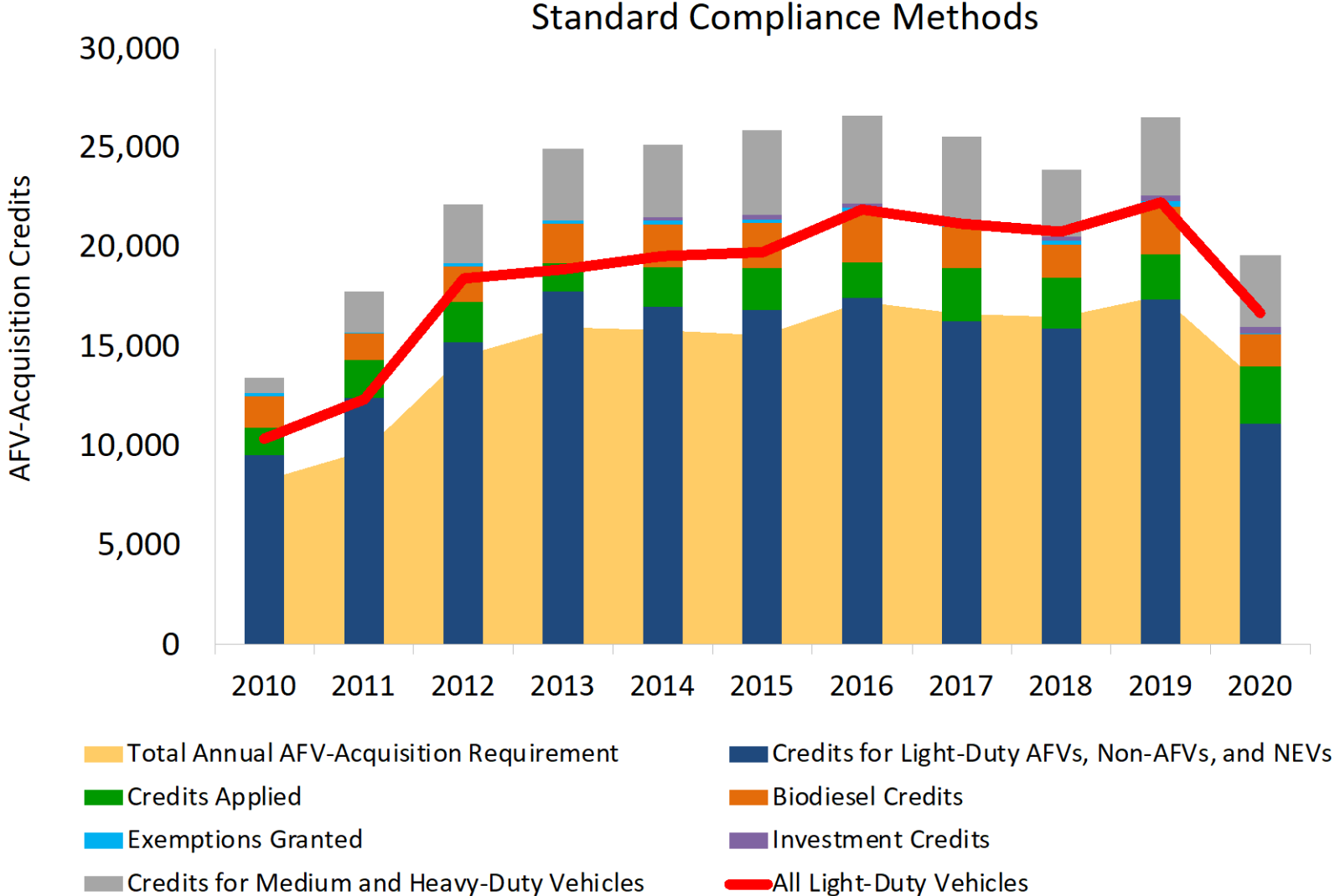


SFP Program Status and Data

SFP Fleet Overall Status

- ~300 fleets submit an annual report each year
- 10-20,000 AFVs acquired annually, most now are FFVs (a few hundred natural gas vehicles/year)
 - Since program began in MY97, 60% FFVs, ~25% Natural Gas Vehicles, ~10% Liquid Petroleum Gas Vehicles
- Over 6M gallons of B100 used annually, several times the amount for which fleets receive credit
- 100% Fleet Compliance
 - Handful of fleets do require some handholding to come into compliance

SFP Program Data



*Purchased credits can be banked for future use.

EPAct Website

www1.eere.energy.gov/vehiclesandfuels/epact/resources.html

U.S. DEPARTMENT OF **ENERGY** | Energy Efficiency & Renewable Energy

EERE Home | Programs & Offices | Consumer Information

EPAct Transportation Regulatory Activities

EPAct Transportation Regulatory Activities

Search Help >

EERE » [Vehicle Technologies Office](#) » [EPAct Transportation Regulatory Activities](#) » Resources

[Site Map](#) [Printable Version](#) [Share](#)

- Home
- About
- Covered Fleets
- Compliance Methods
- Alternative Fuel Petitions
- Resources
- Guidance Documents
- Statutes & Regulations
- Program Annual Reports
- Fact Sheets
- Case Studies
- Newsletter
- Workshops
- Tools
- Key Terms
- FAQs


Resources for EPAct Transportation Regulatory Activities

These resources help [covered fleets](#) meet their Energy Policy Act (EPAct) requirements and educate the public about EPAct transportation regulatory activities. For additional help, find Alternative Fuel Transportation Program [contacts](#).

Requirements and Results

Learn about EPAct requirements and compliance results for state and alternative fuel provider fleets.


- [Guidance Documents](#)
- [Statutes and Regulations](#)
- [Program Annual Reports](#)



Publications and News

Learn about EPAct transportation regulatory activities, success stories, news, and events.


- [Fact Sheets](#)
- [Case Studies](#)
- [Newsletter](#)
- [Workshops](#)

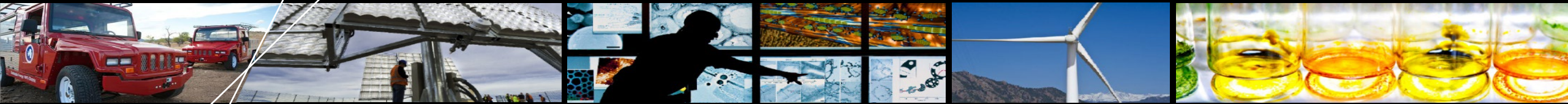


Tools and Questions

Find tools and answers to your questions to help meet your EPAct requirements.

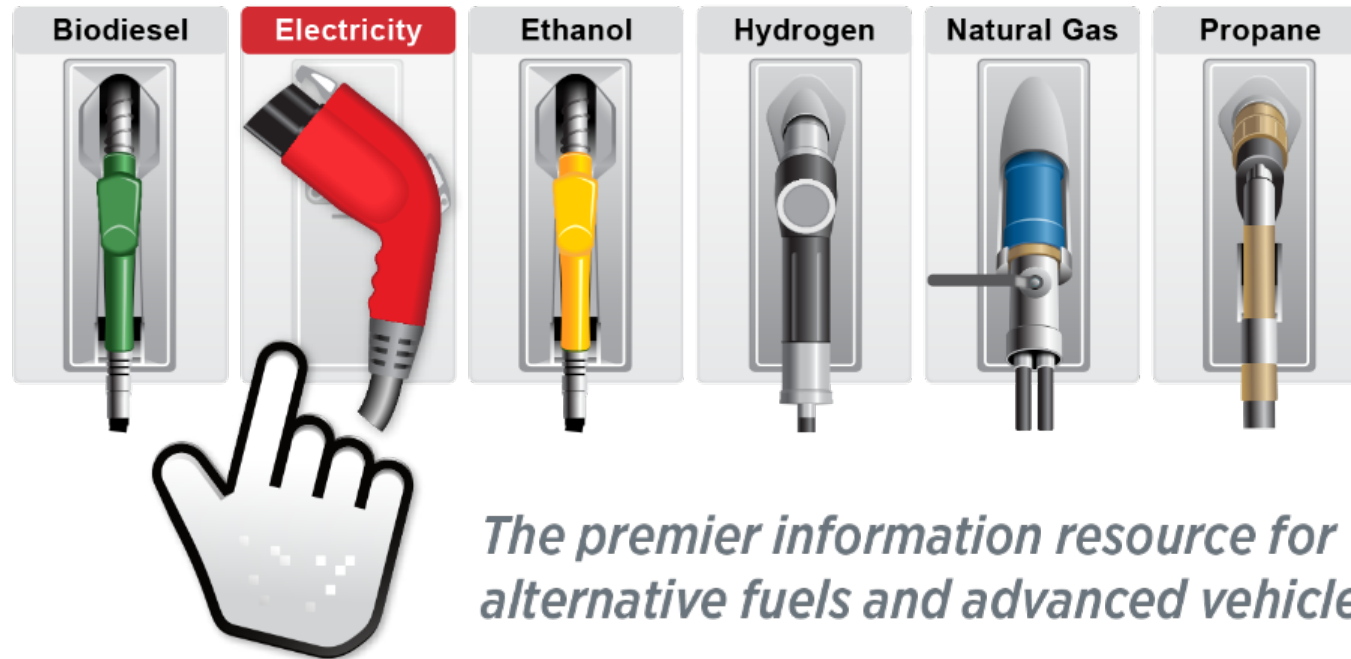
- [Tools](#)
- [Key Terms](#)
- [Frequently Asked Questions](#)





Alternative Fuels Data Center (AFDC) Resources and Tools

Alternative Fuels Data Center



*The premier information resource for
alternative fuels and advanced vehicles*

afdc.energy.gov

AFDC: Resource Central



U.S. DEPARTMENT OF **ENERGY** | Energy Efficiency & Renewable Energy EERE Home | P

Alternative Fuels Data Center


Search the /

FUELS & VEHICLES
CONSERVE FUEL
LOCATE STATIONS
LAWS & INCENTIVES
Maps & Data
Case Studies
Publications


EERE » AFDC

Fuels & Vehicles ▶


Biodiesel




Electricity




Ethanol




Hydrogen




Natural Gas



Propane






Would a battery electric bus be cost effective for your transit fleet?
Check out a new financial analysis tool to find out.



The Information Source for Alternative Fuels and Advanced Vehicles

The Alternative Fuels Data Center (AFDC) provides information, data, and tools to help fleets and other transportation decision makers find ways to reach their energy and economic goals through the use of alternative and renewable fuels, advanced vehicles, and other fuel-saving measures.

Information by State



Information by Fleet

-  Delivery Services
-  Public Transit

Maps & Data ▶

- U.S. Alternative Fueling Stations by Fuel Type
- U.S. Hybrid Electric Vehicle Sales by Model
- Light-Duty Alternative Fuel Vehicle Registrations

Tools ▶

- Laws & Incentives
- Electricity Sources & Emissions
- Vehicle Cost Calculator
- Vehicle Search

AFDC: Go To Resources and Pages to Bookmark

State Information Page – Search!

Find transportation data and information about alternative fuels and advanced vehicles in your state.



Laws and Incentives & Fueling Stations Data



Clean Cities Coalitions



Transportation Fuel Consumption Data



Fuel Production & Bioenergy Production and Infrastructure Data



Electricity Sources and Vehicle Emissions



Case Studies on Transportation Projects

afdc.energy.gov/states

Interactive Maps, Charts, and Data

afdc.energy.gov/data/

Maps and Data

Find maps and charts showing transportation data and trends related to alternative fuels and vehicles.

BROWSE BY CATEGORY OR Search... **GO**

Sort by: Category Most Recent Most Popular 85 results

 **Average Retail Fuel Prices in the United States** [View Graph](#)

Trend of alternative and traditional motor fuel prices from 2000 to 2021
Last update April 2021 [Download Data](#)

 **U.S. Alternative Fueling Stations by Fuel Type** [View Graph](#)

Download station data for a variety of alternative fuels.
Last update October 2019 [Download Data](#)

 **Electric Vehicle Charging Outlets by State** [View Map](#)

Displays states and their respective electric vehicle charging outlet counts

Types of data:

- Find maps, graphs, and charts showing transportation data and trends related to alternative fuels and vehicles
- Identify information about transportation behavior (e.g., trip making, vehicle miles traveled, commuting)

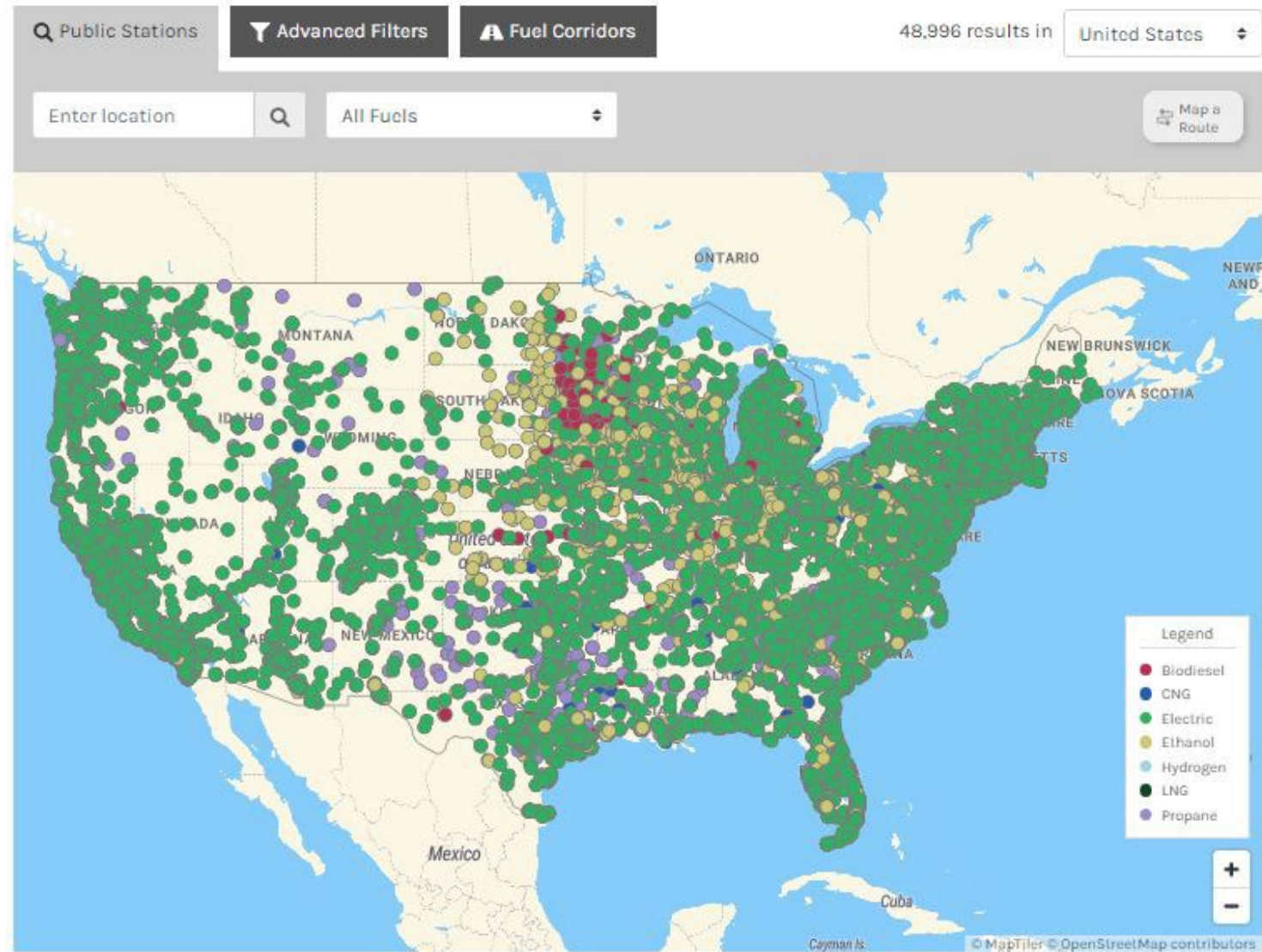
Search and share:

- Browse by category or keyword search
- Sort
- Download data and embed

Station Locator

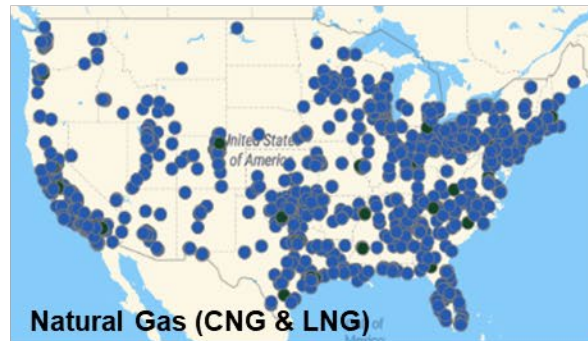
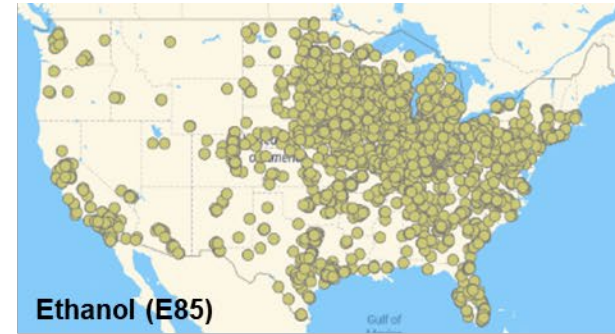
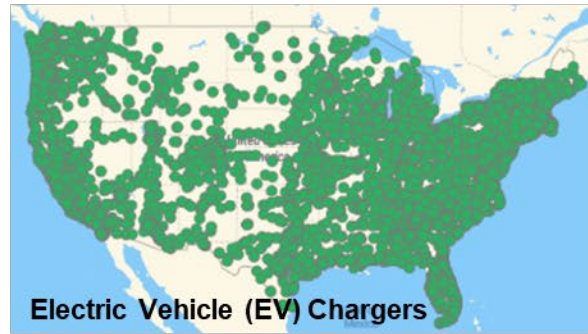
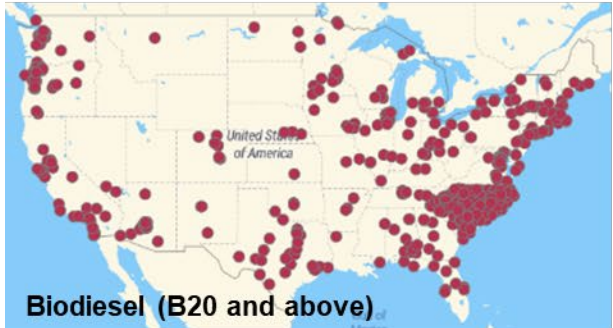
Locate alternative fueling stations and get maps and driving directions.

afdc.energy.gov/stations



[iPhone App for U.S. stations](#) [Android App for U.S. stations](#) [Developer APIs](#) [Embed Tool](#) [Submit New Station](#) [About the Data](#)

Station Locator Fuel Types



Federal and State Laws and Incentives Database

Federal and State Laws and Incentives

Find federal and state laws and incentives for alternative fuels and vehicles, air quality, fuel efficiency, and other transportation-related topics.

The screenshot shows the main navigation and search area of the database. On the left, a green arrow labeled 'Federal' points to a blue button with a classical building icon and the text 'Federal'. Below it, a yellow arrow labeled 'State' points to a blue button with a US map icon and the text 'State'. To the right of these buttons are links for 'Recent Federal Actions', 'Key Federal Legislation', 'Recent State Updates', 'Local Examples', and 'Utility Examples'. A blue arrow labeled 'Local & Utility Examples' points to the 'Local Examples' and 'Utility Examples' buttons. In the center, there are two yellow buttons: 'Search by category or keyword' and 'See All in summary tables'. An orange arrow labeled 'Search' points to the 'Search' button. On the right side, there is a sidebar with a green header 'Technology Bulletins' and a list of items: 'Connecting Dots and Bridging Gaps: Alternative Fueling Corridors', 'All Technology Bulletins', '+ Maps & Data', '+ Case Studies', '+ Publications', and '+ Tools'.

For questions or to submit an incentive, email the [Technical Response Service](#). For additional incentives, search the [Database of State Incentives for Renewables & Efficiency](#).

This information provides an overview of laws and incentives and should not be your only source of information for making decisions about vehicle purchases, taxes, or other binding agreements. Please refer to the federal and state contacts included to verify these laws and incentives are still applicable, and consult your tax advisor.

ABOUT THE DATA

[Download Data](#)

[Data Fields](#)

[Developer API](#)

afdc.energy.gov/laws

Local & Utility Examples

Local Laws and Incentives

There are a variety of local laws and incentives that encourage or require individuals and/or public and private organizations to use alternative fuels, advanced vehicles, and strategies to decrease fuel use or increase fuel economy. Local city and county governments create such laws and incentives to ensure people use vehicles and transportation fuels safely and efficiently.

The featured laws and incentives below are a small sampling of existing laws and incentives that local governments have created. For specific laws and incentives in your area, contact your local government.

Incentives | Laws and Regulations

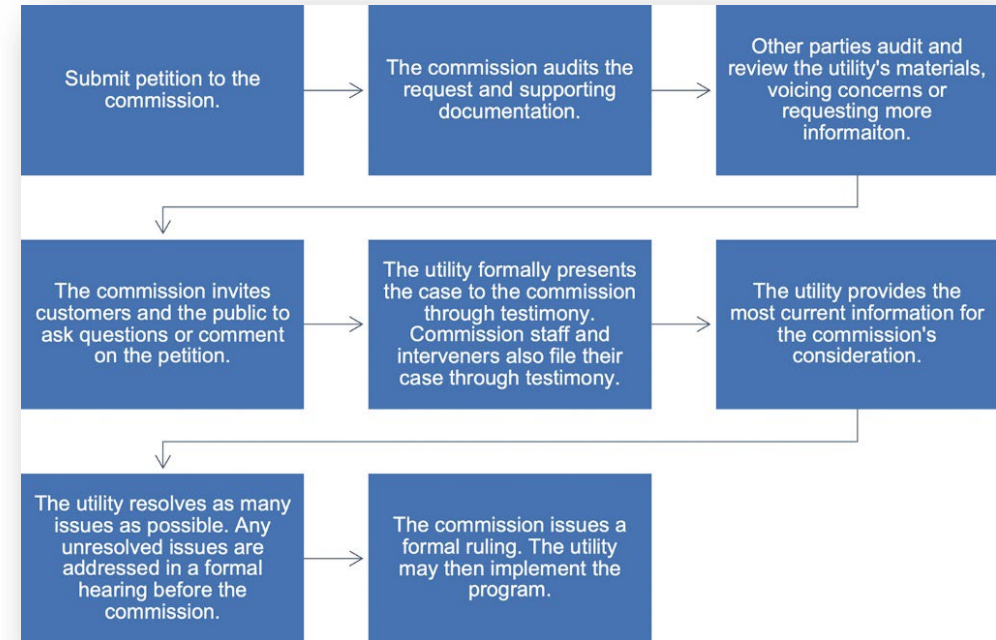
- [Vehicle Acquisition Requirements](#)
- [Promotion Initiatives](#)
- [Idle Reduction Requirements](#)
- [Infrastructure Requirements](#)

Vehicle Acquisition Requirements

Clean Vehicle and Fleet Policy - Hermosa Beach, CA

In order to achieve its goal of carbon neutrality for municipal facilities and operations, the City of Hermosa Beach has established a clean vehicle and fleet policy that requires a transition to alternative fuel and zero and low emission vehicles, as well as improved fleet management and operations. The city must maximize the use of alternative fuel and low emission vehicles to supply city services, including both the city fleet and contractor vehicles, with the goal of net zero greenhouse gas emissions for the city fleet and 100% use of alternative fuel by contracted city service vehicles. For more information, see the [Clean Fleet Policy and Action Plan Administrative Memorandum](#).

afdc.energy.gov/laws/local_examples



afdc.energy.gov/laws/utility-examples

Tools

afdc.energy.gov/tools

Tools

The Alternative Fuels Data Center offers a large collection of helpful tools. These calculators, interactive maps, and data searches can assist fleets, fuel providers, and other transportation decision makers in their efforts to advance alternative fuels and energy-efficient vehicle technologies.



Calculators



Vehicle Cost Calculator

Compare cost of ownership and emissions for most vehicle models. [mobile](#)



VICE Model

Evaluate the financial case for natural gas vehicles and battery electric buses.



AFLEET Tool

Calculate a fleet's petroleum use, cost of ownership, and emissions.



JOBS Model

Estimate economic impacts of natural gas, hydrogen, or fuel cell infrastructure.



Heavy-Duty Vehicle Emissions

Calculate the emissions of alternative fuel medium- and heavy-duty vehicles.



Evolution: E-Drive Vehicle Education

Understand the costs and benefits of electric vehicles based on location.



EVI-Pro Lite

Estimate a city or state's need for vehicle charging and the effect on electric load.



Interactive Maps



Alternative Fueling Station Locator

Locate alternative fueling stations and get maps and driving directions. [mobile](#)



Alternative Fuel Corridors

Find maps and station data to help with nominating alternative fuel corridors.



TransAtlas

Analyze vehicle densities and locations of fuelling stations and production facilities.



Biofuels Atlas

Compare feedstocks and analyze biofuel production by location.



Coalition Locations

Find Clean Cities coalitions and contact information for coordinators.



Data Searches



Vehicle Search

Compare all classes of alternative fuel vehicles, electric vehicles, and hybrids.



Laws and Incentives Search

Search for laws and incentives related to alternative fuels and advanced vehicles.



Fuel Properties Comparison

Compare alternative fuel properties and characteristics.



Find a Car

Compare fuel efficiency, costs, carbon footprints, and emissions. [mobile](#)



State Information

Find state information about alternative fuels and advanced vehicles.

Publications

U.S. DEPARTMENT OF ENERGY
Office of ENERGY EFFICIENCY & RENEWABLE ENERGY

Clean Cities Coalitions: Advancing Affordable, Domestic Transportation Fuels and Technologies Across the Country

A coordinated group of nearly 100 coalitions serve as the foundation of "Clean Cities," working in communities across the country to help local decision makers and fleets understand and implement alternative and renewable fuels, efficiency measures, fuel economy improvements, new mobility choices, and emerging transportation technologies.

The U.S. Department of Energy's (DOE) Vehicle Technologies Office (VTO) and Renewable Energy facilitates national coordination of the coalitions through its Technology Integration Program. Together, Clean Cities coalitions and VTO focus on advancing affordable, domestic transportation fuels, energy efficient mobility systems, and other fuel-saving technologies and practices.

At the national level, VTO's Technology Integration Program offers technical assistance, information resources, online training, and an array of data and analysis tools. At the local level, coalitions leverage these resources to create networks of community stakeholders and provide hands-on technical assistance to fleets.

VTO designated the first Clean Cities coalition in 1993 in response to the Energy Policy Act of 1992, and coalitions across the country have evolved and expanded ever since. After a quarter century, coalitions have generated the respect and trust of fleets and industry alike by providing objective data and real-world lessons learned to smooth the transition to alternative fuels and advanced vehicle technologies. Coalitions accomplish this in communities large and small, one project, one local decision, and one

CLEAN CITIES
Alternative Fuel
Price Report

Clean Cities
U.S. Department of Energy

U.S. DEPARTMENT OF ENERGY
Office of ENERGY EFFICIENCY & RENEWABLE ENERGY

Electric-Drive Vehicles

Electric-drive vehicles use electricity as their primary fuel or to improve the efficiency of conventional engine designs. These vehicles can be divided into three categories:

- Hybrid electric vehicles (HEVs)
- Plug-in hybrid electric vehicles (PHEVs)
- All-electric vehicles (EVs)

Together, PHEVs and EVs can also be referred to as plug-in electric vehicles (PEVs).

Hybrid Electric Vehicles

HEVs are powered by an internal combustion engine (ICE) run by an electric motor. This uses energy stored in a battery. The extra power provided by the ICE allows them to accelerate quickly without sacrificing performance. The battery also allows vehicles to load, like maintenance and weight, and can't be recharged while the vehicle is stopped. Some HEVs can store energy at low speeds or decelerate power down. All four conditions equally reduce carbon dioxide emissions that compare a conventional vehicle. HEVs are used to

Regenerative Braking
Regenerative braking uses HEVs, PHEVs, and EVs to capture energy normally lost during braking by storing the energy in a battery as a general use or to charge the battery.

U.S. DEPARTMENT OF ENERGY
Office of ENERGY EFFICIENCY & RENEWABLE ENERGY

Electric Vehicle Charging Infrastructure Trends from the Alternative Fueling Station Locator: Third Quarter 2020

Abby Brown,¹ Stephen Lommele,¹ Alexis Schayowitz,² and Emily Klotz²

¹ National Renewable Energy Laboratory
² ICF

NREL is a national laboratory of the U.S. Department of Energy Office of Energy Efficiency & Renewable Energy. Operated by the Alliance for Sustainable Energy, LLC. This report is available at no cost from the National Renewable Energy Laboratory (NREL) at www.nrel.gov/publications.

Contract No. DE-AC36-08G028308

Technical Report NREL/TP-6400-78538 May 2021

– Latest Additions

- Clean Cities Coalitions Overview
- Clean Cities Alternative Fuel Price Report, January 2021

[All Latest Additions](#)

+ Technology Bulletins

afdc.energy.gov/publications

Case Studies

March 24, 2021

California Farms Go Green with Zero-Emission Electric Tractors



Find out how farms in California are reducing emissions and leading the future of farming with electric tractors.

For information about this project, contact [San Joaquin Valley Clean Cities](#).

[QuickTime \(.mov\)](#)

[Windows Media \(.wmv\)](#)

[Text version](#)

See more videos provided by [Clean Cities TV](#) and [FuelEconomy.gov](#).

MotorWeek
Television's Original Automotive Magazine

Provided by Maryland
Public Television

Related Videos



[Green Commercial Lawn Mowers](#)

Oct. 28, 2020



[Solar Energy Powers Natural Gas Refuse Trucks in Connecticut](#)

Oct. 14, 2020



[National Alternative Fuel Corridor: Michigan to Montana](#)

Sept. 30, 2020



[Electric Vehicles Charge up](#)

Search for another case study

SEARCH

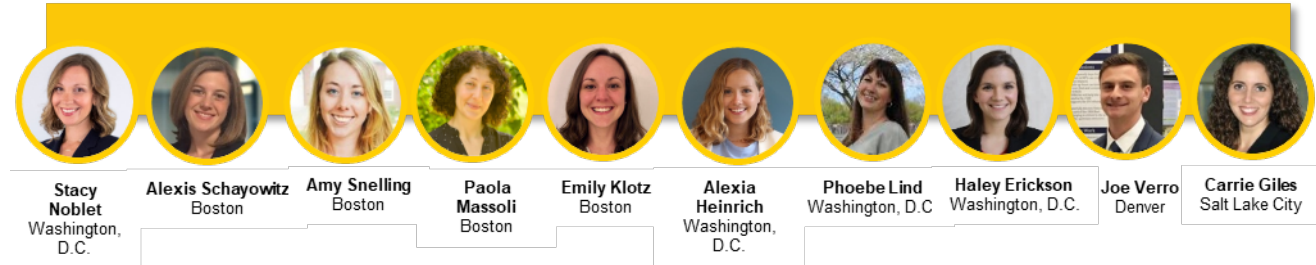
afdc.energy.gov/case

- ✓ Successful alternative transportation technology projects
- ✓ MotorWeek segments
- ✓ Coalition stories
- ✓ Filter by fuel type or application
- ✓ Find Clean Cities YouTube videos

Technical Response Service

Email us at
technicalresponse@icf.com

Leave a voicemail at
800-254-6735



The TRS is here to help you!

- Serves as a key resource for coordinators, staff, stakeholders, and the general public
- Available to help you respond to questions, prep for meetings/events, locate information online, and more
- Email or voicemail
- 48-hour standard response time

Contacts:

Ted Sears

National Renewable Energy Laboratory

Ted.Sears@nrel.gov



State and Local Climate
and Energy Program

Federal EV Procurement Mechanisms

Stephanie Gresalfi

U.S. General Services Administration

EVs and EV Infrastructure: Federal Procurement Mechanisms and Resources

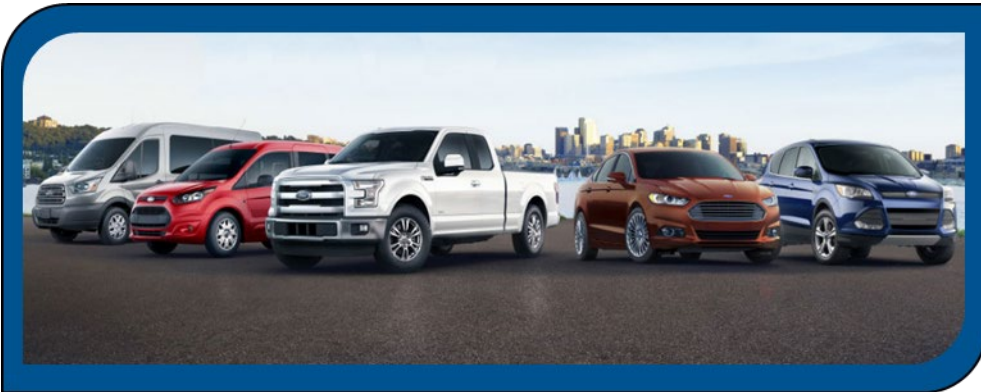
Stephanie Gresalfi, U.S. General Services Administration, Office of Fleet Management

January 27, 2022



Leverage federal government buying power for effective and efficient government services

GSA Fleet®



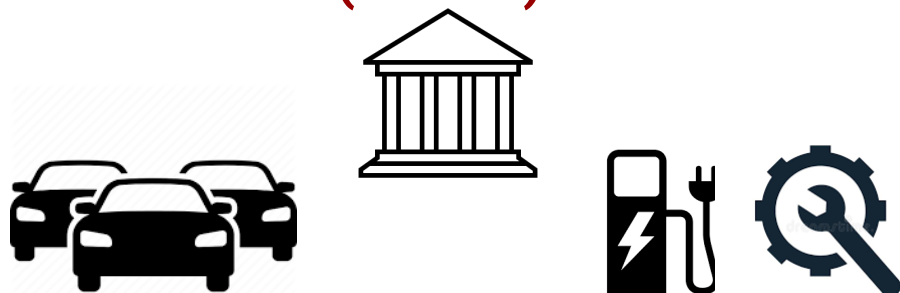
Mandatory source for non-tactical vehicle purchasing for federal agencies & other eligible users; End to end, non-mandatory leasing provider

GSA Advantage!®



Providing access to thousands of GSA-approved contractors and millions of supplies and services at GSA-negotiated prices.

Tribal Organizations (Tribes)



Vehicles & Supplies/Services (MAS)

The Indian Self Determination Act Amendments of 1994 deemed tribal organizations as executive agencies able to access GSA Fleet services to include vehicles (to include ZEVs) accessed through GSA's AutoChoice or leased through gsa.gov/gsafleet and GSA Multiple Award Schedule supplies and services (to include EV Charging Stations)
Authority: Indian Self Determination Act Amendments of 1994; Stafford Act (42 U.S.C. 5121-5207) and 40 U.S.C § 502 (c)

State, Local & Tribal Governments



Vehicles

D.C. Government (40 U.S. Code § 502(a))
All state & local can access when motor vehicles or equipment is used in the performance of counter-drug, homeland security and emergency response activities. Requires a designated State Point of Contact (SPOC) (Sec. 1122 of FY 1994 NDAA**)

Supplies/Services (MAS)

Emergency/disaster preparation, response/major disaster recovery (Stafford Act (42 U.S.C. 5121-5207)); when expending Federal grant funds in response to Public Health Emergencies (42 USC § 247d); IT, law enforcement and security solutions in support of everyday missions (40 U.S.C § 502 (c))

***Note: 1122 Program is managed and approved by the Department of Defense.*

FY22 Awarded Plug-in Hybrids and BEVs – By Vehicle Type

The table below displays the EVs that GSA offers to federal agencies listed by number of configurations and lowest price to aid your negotiations.



Vehicle Type

PHEV

BEV

Fuel Cell

Price Range

FY22 Average
Discount Below
Invoice

Sedans	1	3	-	\$22,293 - \$58,422	10.68%
SUVs	4	3	-	\$24,474 - \$59,092	11%
Van and Light Truck	1	4	-	\$21,137 - \$57,247	2.87%
Medium-Duty, Heavy-Duty, and Specialty	-	10	-	\$35,651 - \$976,00	N/A
Bus (Shuttle, School & Transit)	-	22	3	\$84,279 - \$1,244,287	N/A

Main Brands



TOYOTA



MITSUBISHI



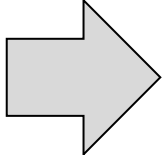
HYUNDAI



Challenge

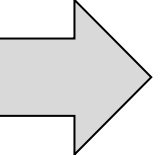
GSA Solution

Upfront Costs



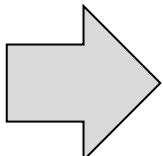
Unique Financing Options & Supplier Partnerships

Model Availability



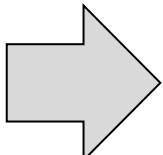
Supplier Relationships Focus on Infrastructure

Coordination & Change




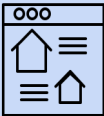










Frequent Training and Assistance with Planning

Infrastructure




EVSE Blanket Purchase Agreement (BPA) & Complimentary Design/Construction Solution

 <p>ZEV Models Mirroring Commercial Marketplace (strong supplier relationships)</p>	 <p>Current EVSE BPA & Future EVSE Complete Solution</p>	 <p>Leasing Services & Support</p>
 <p>Real Property Partnership & Infrastructure Alignment</p>	 <p>Live & Recorded Training</p>	 <p>Fact Sheets, Guides & Engineering & SME Support</p>

<p><u>GSA's Vehicle Solicitations</u></p>  <p>Provides requirements, awarded pricing, make/model which informs Zero Emission Vehicle purchasing decisions & price comparisons</p>	<p><u>AFV Guide</u></p> 	<p><u>Zero Emission Vehicle Fact Sheet</u></p> 
<p><u>FEMP EV Resources</u></p>  <p>Provides information on charging station pricing, data subscription pricing, vendors, policy and manufacturers to inform Electric Vehicle Supply Equipment decisions.</p>	<p><u>FEMP Workplace Charging Policy</u></p> 	<p><u>EVSE BPA Awards, RQQ & Product Guide</u></p> 

[Green Procurement Complication](#)

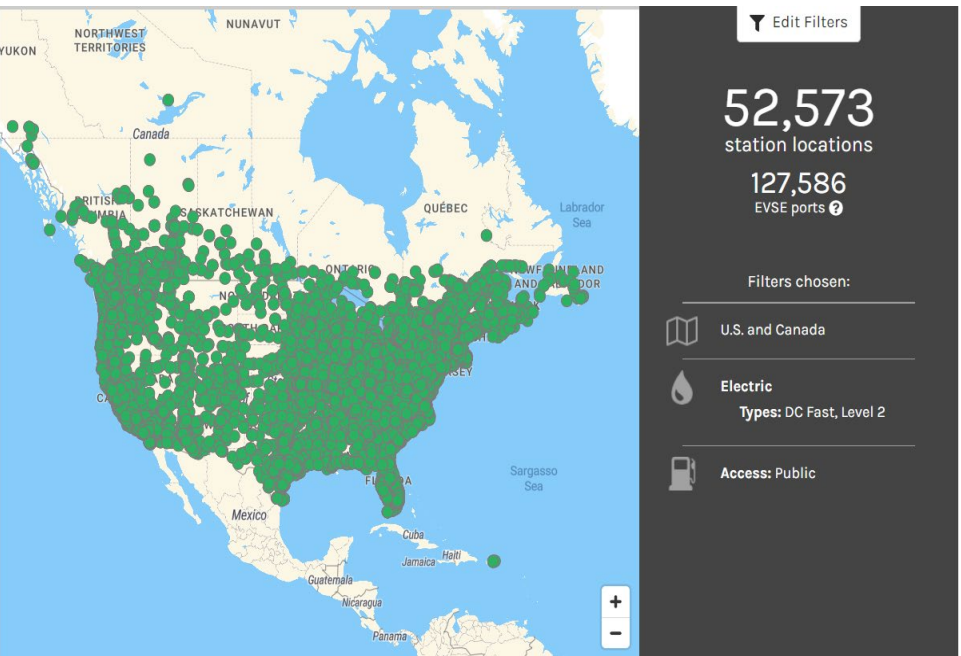


While waiting for ZEV orders, the green procurement guide offers ways to improve the environmental impact of your fleet through checking oil regularly and checking tire pressure to increase vehicle mileage.

Email gsafleetafvteam@gsa.gov for sample statements of work, market research. View [GSAAdvantage](#) and search "EV Charging Stations" or email for a full list of EVSE Offerings.

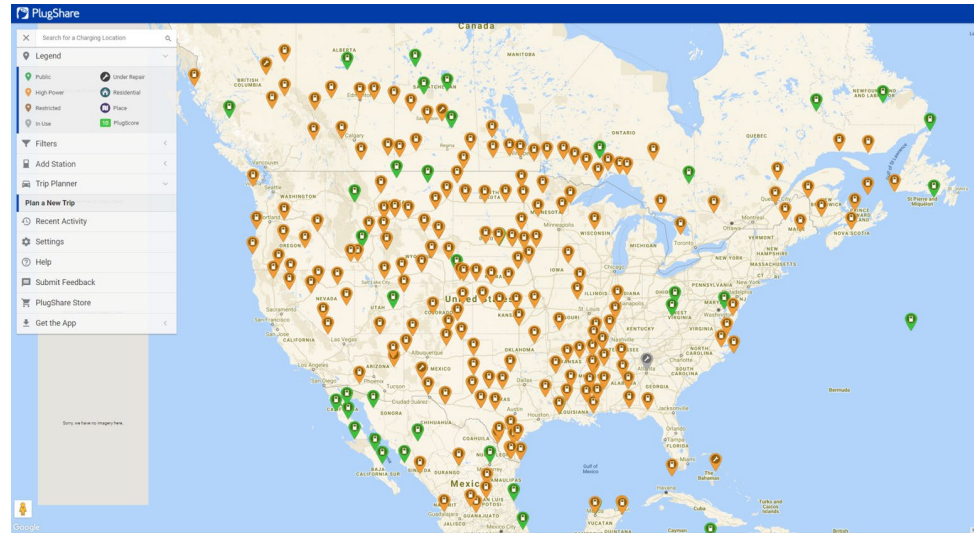
State, local, and tribal governments can access these two charging locators to aid the EV planning transition in their region.

Department of Energy Alternative Fuel Locator



Filter by location, fuel type, status access (e.g., private vs. public), and station status (e.g., planned vs. available)

PlugShare Charger Locator



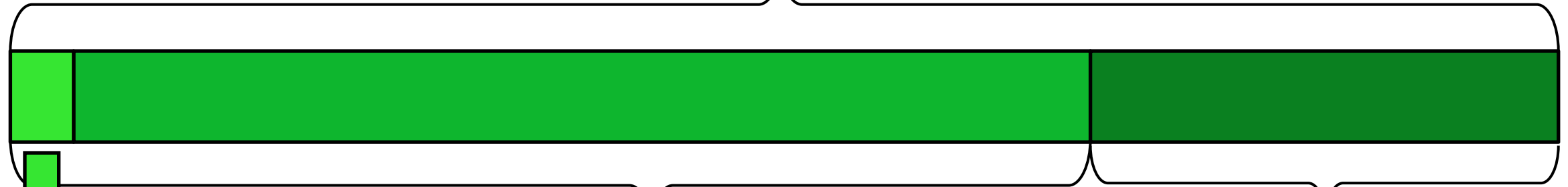
Filter by network, plug type, minimum power, and location type (e.g., hotel, shopping) Also, plan routes!

WEX & Voyager-connected ChargePoint radio-frequency identification (RFID) cards are now accepted as a form of payment at ChargePoint and its roaming networks EVBox, EVgo, evconnect, Flo and Greenlots.

Bipartisan Infrastructure Bill: States Receive \$7.5B in EVSE Funding

**\$7.5B
Total**

Biden-Harris Electric Vehicle Charging Action Plan
From Bipartisan Infrastructure Law enacted November 15th 2021



10% of \$5B (\$500M) set-aside each year
Goal: Secretary to provide grants to **fill gaps** in charging network



\$5B Formula Funding
Goal: **Build** national charging network

State Fact Sheets detail funding each state will receive



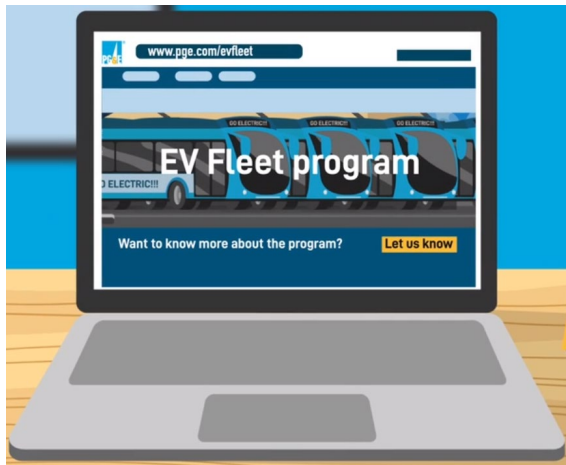
\$2.5B Competitive Grants
Goal: Support **innovative** approaches, **rural charging**, improving air quality, and increasing access in **disadvantaged communities**

Upcoming Guidance: By **February 11, 2022**, the Department of Transportation (DOT) will publish guidance for States and cities to strategically **deploy charging stations along highways**.

Maximize Funding by Utilizing State and Utility/Private EVSE Incentives



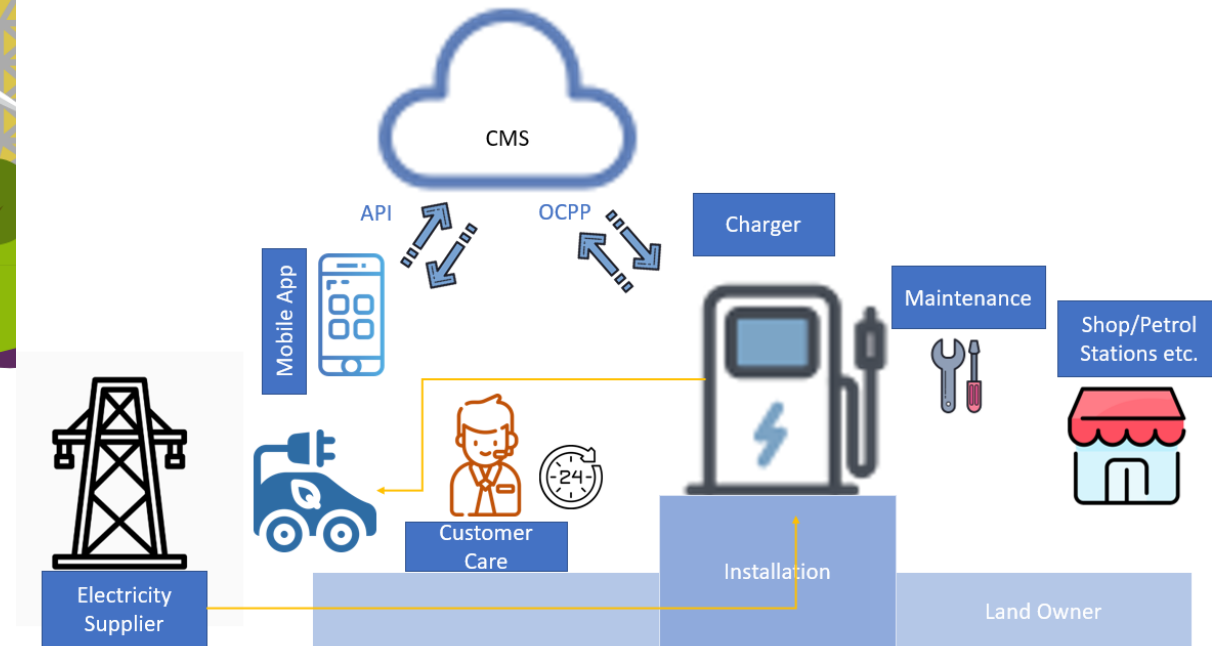
Look for incentives in your city, state or municipality - most support **state/local governments and tribes** or are for **disadvantaged communities**



Utility agreements



Charging as a Service



CHARGE READY TRANSPORT

Clean Energy to Fuel Southern California's Electric Vehicle Truck and Bus Fleets



“[We] are not here merely to make a living. [We] are here in order to enable the world to live more amply, with greater vision, with a finer spirit of hope and achievement. [We] are here to enrich the world...”



-Woodrow Wilson

Stephanie Gresalfi


stephanie.gresalfi@gsa.gov





State and Local Climate
and Energy Program

Question and Answer Session



State and Local Climate
and Energy Program

**WEBINAR
SERIES**



www.epa.gov/statelocalenergy

Upcoming Webinars!

February 10: Learn about EPA's Tribal Greenhouse Gas Inventory Tool

February 15: Learn about EPA's Local Greenhouse Gas Inventory Tool

February 22: EPA CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool (COBRA) (registration coming soon)

March 8: Electrification in the Urban Environment, Making Room for Express Delivery (registration coming soon)

www.epa.gov/statelocalenergy/state-local-and-tribal-webinar-series

Connect with the State and Local Climate and Energy Program

Andrea Denny
U.S. Environmental Protection Agency
Denny.Andrea@epa.gov



Visit Our Website | www.epa.gov/statelocalenergy

Sign Up for Our Newsletter | www.epa.gov/statelocalenergy/state-and-local-energy-newsletters

Follow Us on LinkedIn | <https://linkedin.com/showcase/epa-state-and-local-climate-and-energy-program>