



Joint Office of
**Energy and
Transportation**

Building a Future Where Everyone Can Ride and Drive Electric

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Deputy Director for the Joint Office of Energy and Transportation

Wednesday, May 8th, 2024

driveelectric.gov

Agenda

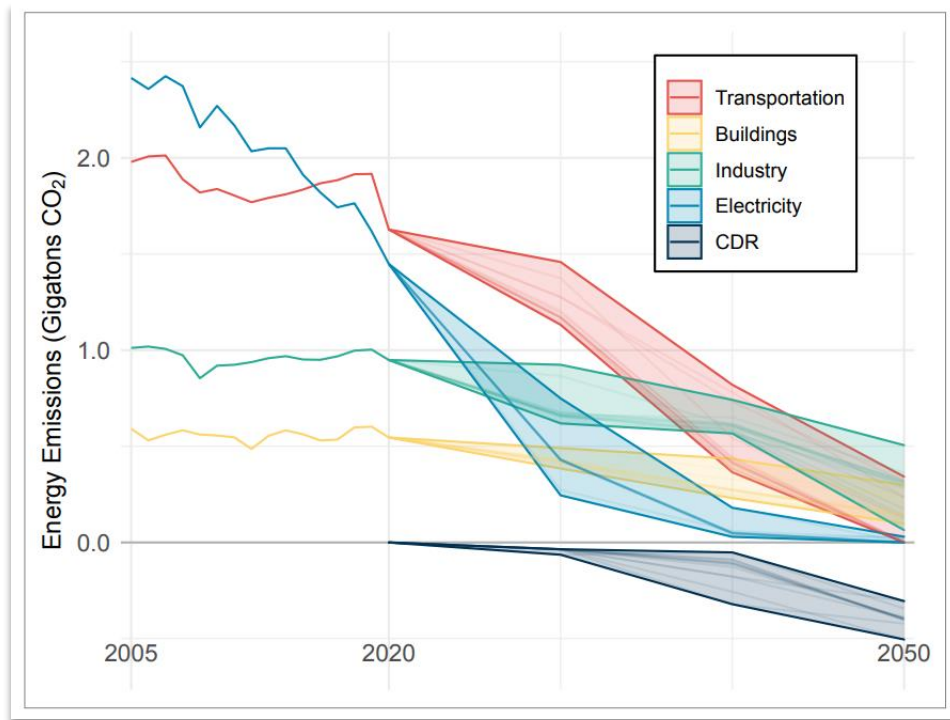
- **Federal** Approach Overview
- Joint Office **Overview and Priorities**
- **Technical Assistance Offerings**
- **What's Next** for the Joint Office





Federal Approach Overview

This is the **biggest change to our transportation system in a century** – and we are right in the middle of it.



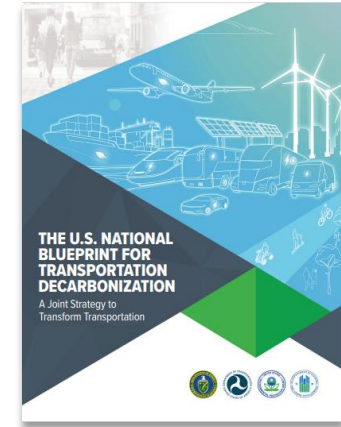
Source: U.S Department of State and Executive Office of the President
November 2021

U.S. National Blueprint for Transportation Decarbonization

Goal:

- Reduce greenhouse gas emissions associated with the transportation sector by 2050 and ensure resilient and accessible mobility options for all Americans
























Partners:



Numerous strategies and solutions are required to tackle transportation emissions



Figure A. Summary of transportation decarbonization strategies.

	 BATTERY/ELECTRIC	 HYDROGEN	 SUSTAINABLE LIQUID FUELS
Light Duty Vehicles (49%)*		—	TBD
Medium, Short-Haul Heavy Trucks & Buses (~14%)			
Long-Haul Heavy Trucks (~7%)			
Off-road (10%)			
Rail (2%)			
Maritime (3%)			
Aviation (11%)			
Pipelines (4%)		TBD	TBD
Additional Opportunities	<ul style="list-style-type: none"> Stationary battery use Grid support (managed EV charging) 	<ul style="list-style-type: none"> Heavy industries Grid support Feedstock for chemicals and fuels 	<ul style="list-style-type: none"> Decarbonize plastics/chemicals Bio-products
RD&D Priorities	<ul style="list-style-type: none"> National battery strategy Charging infrastructure Grid integration Battery recycling 	<ul style="list-style-type: none"> Electrolyzer costs Fuel cell durability and cost Clean hydrogen infrastructure 	<ul style="list-style-type: none"> Multiple cost-effective drop-in sustainable fuels Reduce ethanol carbon intensity Bioenergy scale-up

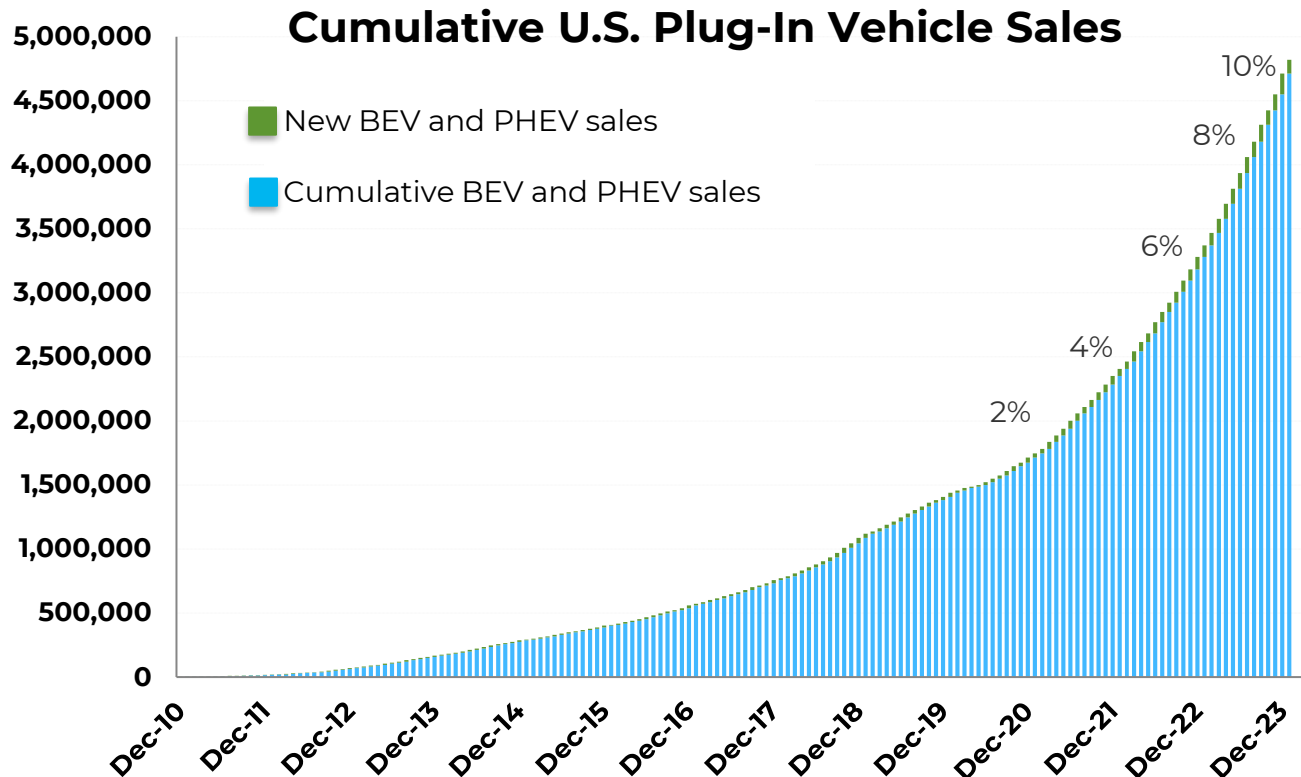
* All emissions shares are for 2019

† Includes hydrogen for ammonia and methanol

Figure 7. Summary of vehicle improvement strategies and technology solutions for different travel modes that are needed to reach a net-zero economy in 2050 (more details provided in Section 5).

Over 10 years,
the PEV
market
reached 5%.

In the last 24
months, the
PEV market
jumped from
5% to 10%.



Source: Argonne National Laboratory

The Biden Administration is prioritizing building a network of 500,000 public chargers by 2030

- Since President Biden took office, the number of publicly available charging ports has grown by **80%**
- Currently the US has more than **175,000 public charging ports**
 - **35%** of the way to the Biden Administration goal
- **1 in every 10** vehicles sold is an **EV**



First NEVI station charging session in London, Ohio
Source: Ohio DOT



Joint Office Overview and Priorities

Joint Office of Energy and Transportation

Established in the Bipartisan Infrastructure Law to address areas of joint interest to the Departments of Energy and Transportation

\$300M

in FY22 funds to DOT
with transfer authority to DOE

9

major areas of emphasis

Background on Joint Office of Energy and Transportation

Established in the **Bipartisan Infrastructure Law** to address areas of joint interest to the **Departments of Energy and Transportation**

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major areas of emphasis

Areas of emphasis (summarized)

- 1) technical assistance of vehicle charging
- 2) data sharing
- 3) performance of a national and regionalized study vehicle charging
- 4) training and certification programs
- 5) a program to promote renewable energy generation, storage, and grid integration
- 6) transmission pilots in the rights-of-way
- 7) research, strategies, and actions to mitigate the effects of climate change
- 8) development of a streamlined utility accommodations policy for transmission in the transportation right-of-way
- 9) any other issues that the Secretary of Transportation and the Secretary of Energy identify as issues of joint interest

Mission and Vision



Mission

To accelerate an electrified transportation system that is affordable, convenient, equitable, reliable, and safe.

Vision

A future where everyone can ride and drive electric.

BIL Programs Supported by the Joint Office

The Joint Office provides unifying **guidance**, **technical assistance**, and **analysis** to support the following programs:



National Electric Vehicle Infrastructure (NEVI) Formula Program (U.S. DOT)

\$5 billion for states to build a national electric vehicle (EV) charging network along corridors, including **\$148 million** awarded to repair and replace non-operational chargers.



Charging & Fueling Infrastructure Discretionary Grant Program (U.S. DOT)

\$2.5 billion in community and corridor grants for EV charging, as well as hydrogen, natural gas, and propane fueling infrastructure



Low-No Emissions Grants Program for Transit (U.S. DOT)

\$5.6 billion in support of low- and no-emission transit bus deployments



Clean School Bus Program (U.S. EPA)

\$5 billion in support of clean school bus deployments

We are tackling the overarching challenges to build a reliable, convenient national charging network

Reliability

Cybersecurity

Interoperability

Data Sharing

Equity

**Utility
Coordination**



Joint Office Funding Opportunities

Joint Office Funding Opportunity:

Communities Taking Charge Accelerator

[Learn more:](#)



Visit [Driveelectric.gov/communities-taking-charge](https://driveelectric.gov/communities-taking-charge)

Clean Bus Planning Awards (CBPA) Program

[Learn more and apply](#)



Free technical assistance for comprehensive and customized fleet electrification transition plans.

- Fleets eligible for FTA Low or No Emission Grant Program funding, with some exceptions, can apply now for CBPA assistance.
- Deployment assistance also available at the completion of the plan.
- Funded by the Joint Office and managed by the National Renewable Energy Laboratory (NREL).
- Applications open on a rolling basis.



driveelectric.gov/clean-bus-planning-awards



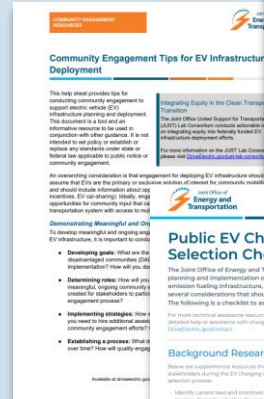
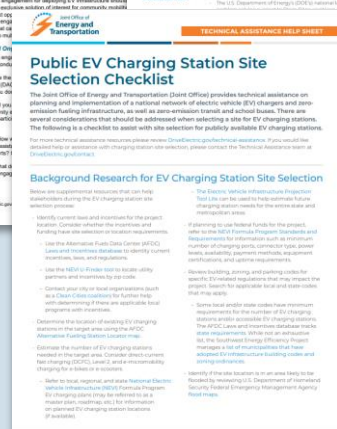
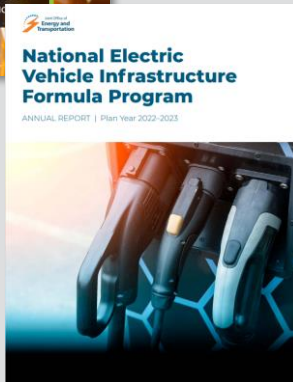
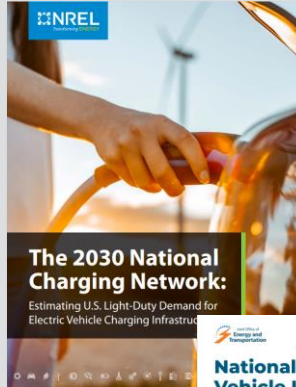
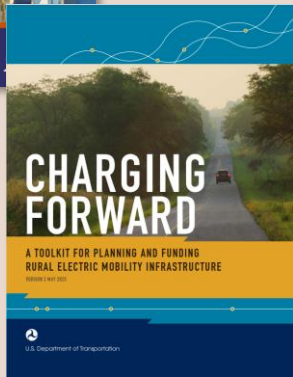
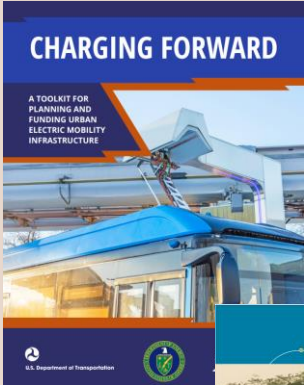


Joint Office-Supported Resources and Tools

Rural and Urban EV Toolkits

Forecasts and Reports

Help Sheets and Checklists

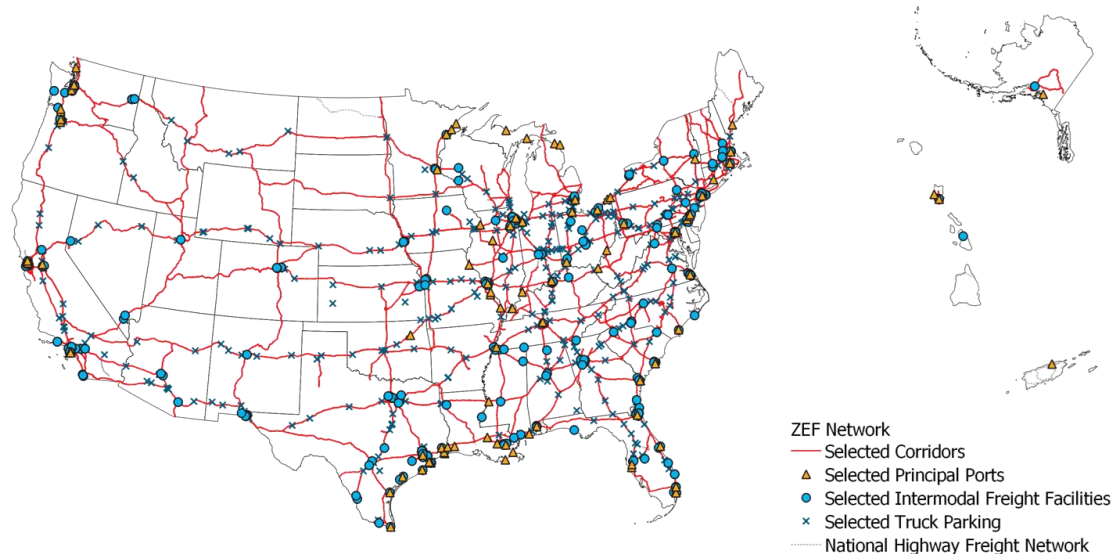




What's Next for the Joint Office?

Goal

The *National Zero-Emission Freight Corridor Strategy* seeks to **align and accelerate cross-sector investments** in zero-emission medium- and heavy-duty vehicle (ZE-MHDV) infrastructure and **clearly signal the need to bolster electric grid and hydrogen planning** to achieve a zero-emission freight network by 2040.

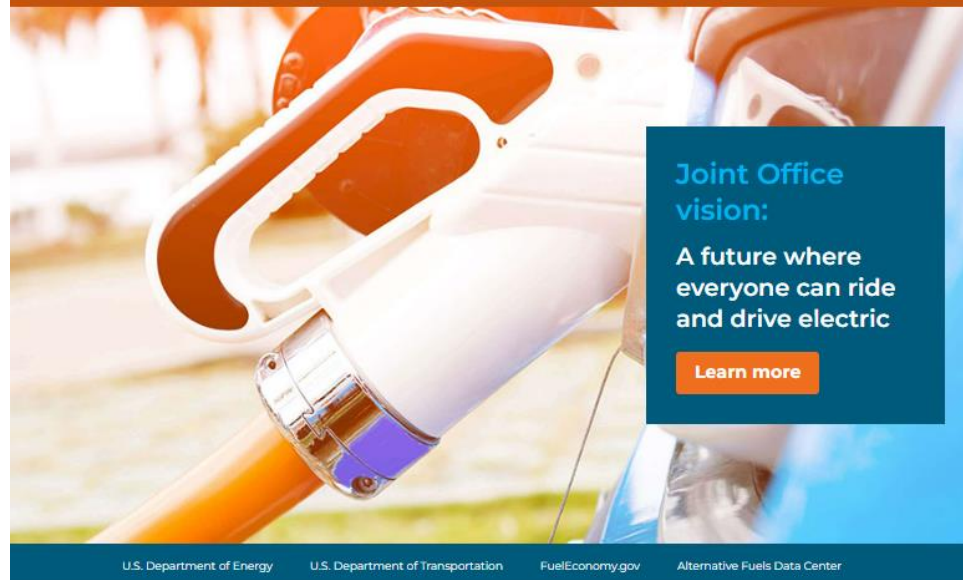


DriveElectric.gov

Website connects state DOTs and other stakeholders to resources, including:

- Infrastructure planning and implementation guidance
- Data and tools
- News and events
- Technical assistance request form

Interested in working to build a zero-emission transportation future? Learn more about [Joint Office careers](#).



A modernized and interagency approach to support the deployment of zero-emission, convenient, accessible, equitable transportation infrastructure

The Joint Office of Energy and Transportation was created through the Bipartisan Infrastructure Law (BIL) to facilitate collaboration between the U.S. Department of Energy and the U.S. Department of Transportation. The Joint Office will align resources and expertise across the two departments toward leveraged outcomes. The office will be a critical component in the implementation of the BIL, providing support and expertise to a multitude of programs that seek to deploy a network of electric vehicle chargers, zero-emission fueling infrastructure, and zero-emission transit and school buses. The scope of the Joint Office will continue to evolve as directed by both departments.

- Request assistance via online form

- Initial response within 48 hours

- General questions and feedback welcome!

The screenshot shows the 'Contact Us' page on the Joint Office of Energy and Transportation website. The page header includes the logo and navigation links: About, Technical Assistance, Data & Tools, Publications, News & Events, and Contact. The main heading is 'Contact Us'. Below it, a paragraph explains the form's purpose: 'Use this contact form to submit a media inquiry, ask a general question about Joint Office of Energy and Transportation resources and activities, or request technical assistance for states, tribal nations, or clean school buses or transit buses.' To the right, there is a 'Find Us on Social' section with icons for LinkedIn and YouTube. The form itself is a light gray box with a note: 'Required fields are marked with an asterisk (*)'. It contains the following fields: 'Inquiry type *' (a dropdown menu), 'Name *' (a text input), 'Email *' (a text input), 'Subject *' (a text input), and 'Message *' (a large text area). A blue 'Send' button is located at the bottom left of the form.

driveelectric.gov/contact

The screenshot shows the 'Subscribe to News and Updates' page on the Joint Office of Energy and Transportation website. The page header includes the logo and navigation links: About, Technical Assistance, Data & Tools, Publications, News & Events, and Contact. The main heading is 'Subscribe to News and Updates'. Below it, a paragraph explains the form's purpose: 'Subscribe to news and updates from the Joint Office of Energy and Transportation.' To the left, there are three radio button options: 'News', 'Webinars', and 'Subscribe' (which is selected). Below these options is a 'Sign up for news alerts *' section with a text input field containing 'name@example.com'. Below the input field is a checkbox with the text: 'By checking this box, you consent to our [data privacy policy](#) *'. A blue 'Next' button is located at the bottom left of the form.

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Thank You

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