

# Energy Efficiency & Conservation Block Grant (EECBG) Blueprint Cohorts

Session #7: Introduction to Electric Vehicles & Charging Infrastructure

April 25, 2024



# Virtual Housekeeping



Mute your audio, please!



Use the chat to ask questions during the presentation



We are working on answering your registration questions!



FYI, we're recording! We'll send out the slides and video

# Agenda

- EECBG Program Announcements & Reminders
- Intro to Electric Transportation
- Case Study #1: Albany County, NY
- Case Study #2: Montgomery County, MD
- Wrap Up: Key Resources + Q&A

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# **EECBG Application Deadline Extension |** Local Governments

The EECBG Program application deadline for <u>local</u> governments has been extended, from April 30, 2024, to:

October 31<sup>st</sup>, 2024

The EECBG Program application deadline for <u>Tribes</u>, remains May 31, 2025

# **EECBG Program Reminders**

### **Upcoming Deadlines**

- EECBG Program local government application deadline: **October 31, 2024**
- EECBG Program Tribal application deadline: **May 31, 2025**

### **Exciting EECBG Program Events**

#### **EECBG Office Hours**

• Sign up to get your questions answered by DOE Staff! April 26, May 3, and May 10 at 2:30 pm ET

#### **EECBG Blueprint Cohorts**

May's theme is Resilience!

- NREL Training | May June's theme is J40 & Community Engagement!
- NREL Training | June

### **Other Opportunities**

- ✓ Energy Savings Performance Contracting (ESPC)
  Campaign is a technical assistance opportunity that engages local governments and other stakeholders to expand & enhance ESPC programs. Interested in Blueprint 2B? We encourage you to sign up!
  - EVENT: <u>Maximizing Municipal Energy Strategies</u> | May 8
- ✓ Energy Efficiency Finance Foundations Training: Summer '24! This Berkeley Lab training is for public-sector facilities managers, energy/sustainability staff, & finance officers to learn to navigate "finance speak". Interested in Blueprint 5? We encourage you to sign up!
  - FIRST WEBINAR: June 20 <u>Sign up here for each event!</u>
- ✓ 2024 National Energy Codes Conference | May 6-8 Sacramento, CA. Using in Blueprint 2D? This might be of interest to you!

# Your EECBG Support System | If you have questions about ....

# Your Grantor Voucher Application:

- ✓ The status of your application
- ✓ Eligible uses and application requirements (e.g., BABA, NEPA, Davis Bacon)
- Project-specific questions





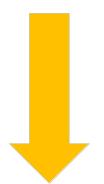
# Technical Assistance:

- ✓ Blueprints & Blueprint Cohorts
- ✓ Community Energy Fellowship
- ✓ Other technical assistance E.g., "How do I incorporate J40 principles into my project?"



# Application Portals:

Get voucher and grant application portal technical help



### Your EECS:

Get support developing your Energy Efficiency Conservation Strategy (EECS)



Grant Management
Team
<a href="mailto:EECBG@hq.doe.gov">EECBG@hq.doe.gov</a>

Voucher Team <u>DL-EECBGVouchers@hq.doe.gov</u>

TA Team Technical Assistance@hq.d

oe.gov

Voucher Portal
Administrator (ICF)
EECBGVouchers@
icf.com
PAGE platform PAGEHotline@hq.doe.gov

National Renewable Energy Laboratory (NREL) EECS\_TA@nrel.gov

10-20 Hours

Attend EECBG Program Office Hours! Sign up here
Every Friday during May at 2:30pm ET
<a href="https://forms.office.com/g/yc3H3xQeEE">https://forms.office.com/g/yc3H3xQeEE</a>

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# Guest Speaker | Linda Bailey



# **Linda Bailey**

Technical Assistance Program Manager Joint Office of Energy and Transportation

Former Vision Zero director for the District of Columbia Department of Transportation (DDOT)



#### **Linda Bailey**

EECBG April 25, 2024

driveelectric.gov

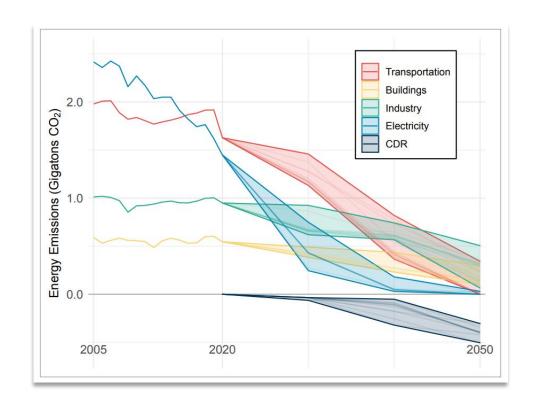
### Agenda

- Federal Approach Overview
- Joint Office Overview and Priorities
- Joint Office Funding Opportunity
- Technical Assistance Offerings





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

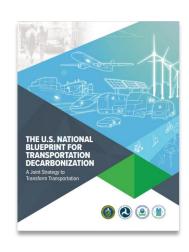


**Source:** U.S Department of State and Executive Office of the President November 2021

# 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:**









#### 2019 U.S. GHG EMISSIONS

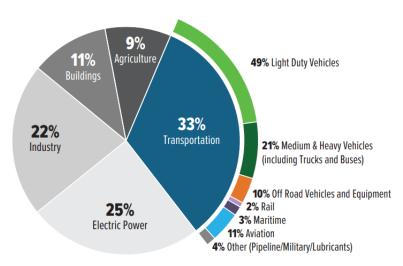


Figure 2. Total 2019 U.S. GHG emissions with transportation and mobile sources breakdown. Data derived from the EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks 855.8 This Blueprint uses 2019 as a baseline since impacts due to COVID-19 complicate the use of later data.

**Transportation** is the leading sector and light-duty vehicles are the largest contributor followed by mediumand heavy-duty vehicles.

### Numerous strategies and solutions are required to tackle transportation emissions

#### Convenient Efficient Clean















**Increase Options to Travel** 

More Efficiently









Transition to Zero Emission
Vehicles and Fuels

Improve Community Design and Land-use Planning

Figure A. Summary of transportation decarbonization strategies.

| 1 icon represents limited long-term opportunity 2 icons represents large long-term opportunity 3 icons represents greatest long-term opportunity | BATTERY/ELECTRIC   | (D)<br>HYDROGEN  | SUSTAINABLE<br>LIQUID FUELS  |
|--|--|--|--|
| Light Duty Vehicles (49%)*   |  | _  | TBD  |
| Medium, Short-Haul Heavy Trucks & Buses (~14%)   |  | <b>©</b>   |  |
| Long-Haul Heavy Trucks (~7%)   |  | <b>© © ©</b>   | <b>市</b>   |
| Off-road (10%)   |  | <b>©</b>   |  |
| Rail (2%)  |  | <b>® ®</b>   | <b>a</b>   |
| Maritime (3%)  |  | <b>⊚ ⊚</b> ⁺   |  |
| Aviation (11%)   |  | <b>©</b>   |  |
| Pipelines (4%)   |  | TBD  | TBD  |
| Additional Opportunities   | Stationary battery use     Grid support (managed<br>EV charging)                                 | Heavy industries     Grid support     Feedstock for chemicals and fuels                      | Decarbonize plastics/chemicals     Bio-products  |
| RD&D Priorities  | National battery strategy     Charging infrastructure     Grid integration     Battery recycling | Electrolyzer costs     Fuel cell durability<br>and cost     Clean hydrogen<br>infrastructure | Multiple cost-effective<br>drop-in sustainable fuels     Reduce ethanol<br>carbon intensity     Bioenergy scale-up |

<sup>\*</sup> All emissions shares are for 2019

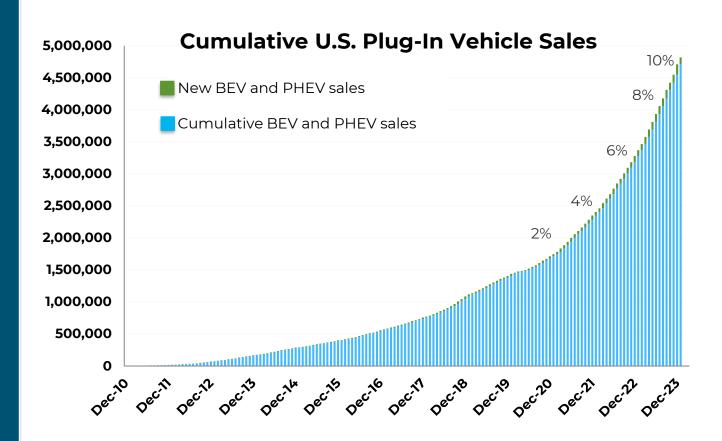
Figure 7. Summary of vehicle improvement strategies and technology solutions for different travel modes that are needed to reach a netzero economy in 2050 (more details provided in Section 5).

Source: U.S. National Blueprint for Transportation Decarbonization

<sup>†</sup> Includes hydrogen for ammonia and methanol

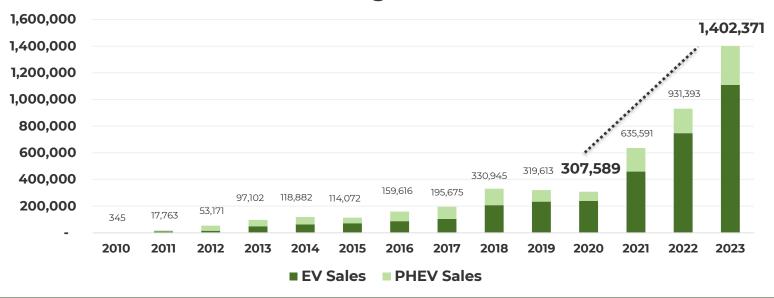
Over 10 years, the PFV market reached 5%.

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



Source: Argonne National Laboratory

#### **Annual Plug-in EV Sales**



## Annual sales of plug-in EVs quadrupled from 2020 to 2023

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

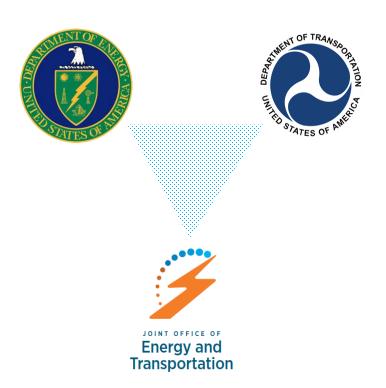


First NEVI station charging session in London, Ohio Source: Ohio DOT



## **Joint Office Overview and Priorities**

### **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.

## Vision for the Joint Office of Energy and Transportation

- Support deployment of zero-emission, convenient, accessible, equitable transportation infrastructure—coordinating and leveraging activities between the U.S. Department of Energy and the U.S. Department of Transportation.
- Serve as the front door to the Federal Government for expertise and technical assistance.
- Serve as a convenor of federal agencies, private sector companies, NGO and academia to bring an all of government and stimulate an all of society approach to zero emissions transportation and mobility services.
- Focus on social return on investment and providing pilot funding to test **outcomes** vs. simply hardware.

# Infrastructure Investment & Jobs Act (IIJA) Programs Supported by the Joint Office

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



**\$5 billion** for states to build a national electric vehicle (EV) charging network along corridors, including **\$148** million awarded to repair and replace nonoperational 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 electric school bus deployments



# **Joint Office Funding Opportunities**

Joint Office Funding Opportunity:

**Learn more:** 

**Communities Taking Charge Accelerator** 



Visit Driveelectric.gov/communities-taking-charge

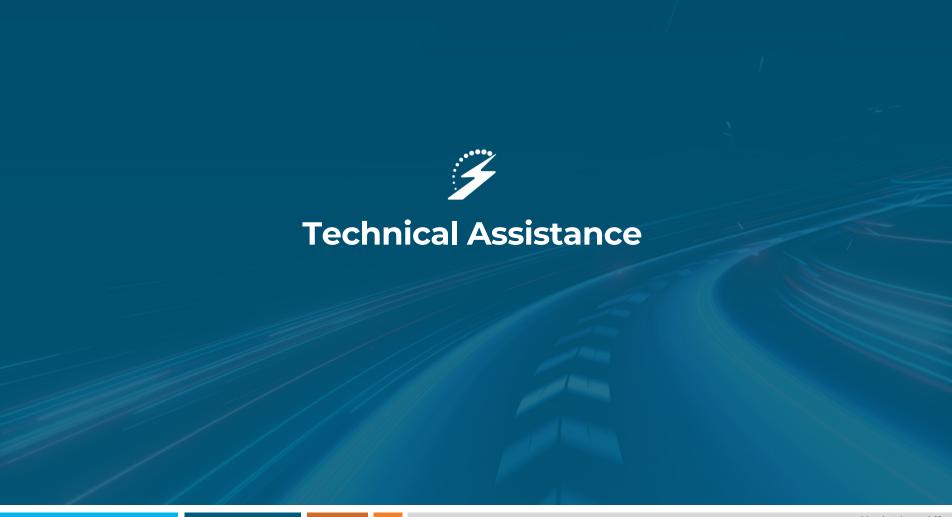
## \$54 million in funding available

| Topic Area  | Anticipated<br># of Awards | Anticipated Award Range (\$) | Total Funding Available (\$) |
|---|----------------------------|------------------------------|------------------------------|
| 1. Solving for No-Home<br>Charging: Expanding<br>Charging Access for Privately<br>Owned E-Mobility  | 6-20                       | \$250,000 -<br>\$4,000,000   | \$23,000,000                 |
| 2. Expanding E-Mobility<br>Solutions through Electrified<br>Micro, Light and Medium-<br>Duty Fleets | 5-15                       | \$250,000 -<br>\$4,000,000   | \$20,000,000                 |
| 3. Managed Charging for<br>Clean Reliable Energy  | 3-6                        | \$1,000,000 -<br>\$4,000,000 | \$11,000,000                 |

## **Key Dates**

| FOA Issue Date:  | April 16, 2024           |
|--|--------------------------|
| Submission Deadline for Concept Papers:                        | May 20, 2024, 5 p.m. ET  |
| Anticipated Date of Concept Paper<br>Notification:             | June 13, 2024            |
| Submission Deadline for Full Applications:                     | July 16, 2024, 5 p.m. ET |
| Expected Submission Deadline for Replies to Reviewer Comments: | Aug. 30, 2024, 5 p.m. ET |
| Expected Date for DOE Selection Notifications:                 | Dec. 2024                |
| Expected Timeframe for Award Negotiations:                     | Dec. 2024 – April 2025   |

Questions? Please direct towards: FOA3214@netl.doe.gov



### **Technical Assistance Strategies**

- Specialized assistance for states, communities, Tribal Nations, transit agencies, and school districts
- One-on-one meetings with states to address questions and concerns related to NEVI Formula Program
- Concierge service (phone, email, web form) to efficiently route technical assistance requests for NEVI, electric school buses, and transit buses
- Technical assistance support team has 50 staff members across 10 organizations.

#### **Technical Assistance**

The Joint Office of Energy and Transportation (Joint Office) provides technical assistance on planning and implementation of a national network of electric vehicle chargers and zero-emission fueling infrastructure as well as zero-emission transit and school buses.

#### States and Communities

The Joint Office provides technical assistance for states and communities creating and executing state plans under the National Electric Vehicle Infrastructure Formula Program and the Charging and Fueling Infrastructure Discretionary Grant Program.

#### **Tribal Nations**

The Joint Office provides technical assistance to tribal nations electrifying their transportation systems. Learn more about zero-emission transportation funding opportunities for tribal nations

#### School Districts

The Joint Office provides technical assistance to school districts applying for or receiving funding through the U.S. Environmental Protection Agency's Clean School Bus Program.

#### **Transit Agencies**

The Joint Office provides technical assistance to transit agencies applying for or receiving funding through the Federal Transit Administration's Low or No Emission Vehicle Program.

driveelectric.gov/technical-assistance



### **Thank You**

# The Impact of the Transportation Sector on Our Shared Goals



The U.S transportation sector is responsible for 29% of total greenhouse gas emissions

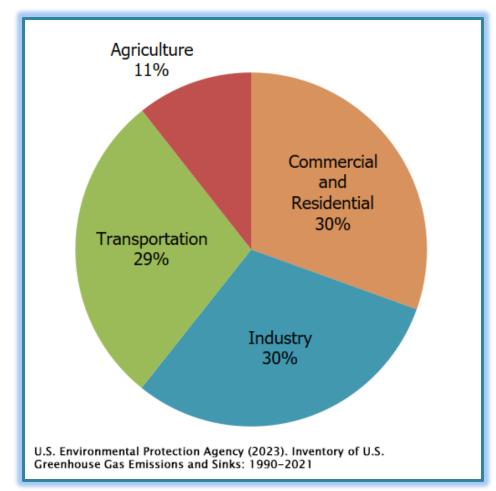


Light-duty vehicles make up 58% of U.S transportation sector emissions, followed by medium and heavy-duty trucks at 23%



More than 45 million Americans live within 300 feet of busy roads and major transportation facilities, increasing their risk of health problems

Total U.S. Greenhouse Gas Emissions by Economic Sector and Electricity End-Use



# **Why Transportation Decarbonization Matters**

#### The Benefits

- ✓ Health & Air Quality improved air quality, reduced cost of social/health services
- ✓ Emissions Reductions helps you meet your community's climate/economic development goals
- ✓ Energy Cost Savings reduced vehicle operating & maintenance costs free up \$\$ to be spent elsewhere
- ✓ Energy Security reduced reliance on oil & gas, as well as limits the impact of price volatility
- ✓ Improves Safety investment in alternative transportation (e.g., walking & biking) improves public safety
- ✓ Workforce Development Expanded manufacturing needs, training opportunities for mechanics



# Transportation decarbonization at the local level

### Convenient













**Efficient** 







## Clean

Sustainable











Clean

Hydrogen

#### Improve Community Design and Land-use Planning

#### **Policies**

- ✓ Telework policies to reduce VMT
- ✓ Parking capacity or pricing requirements
- ✓ Reform your zoning code towards mixed-use development

#### **Programs**

✓ Car free zone program

#### **Projects**

✓ Sidewalk and bike lane widening in a disadvantaged neighborhood

#### Increase Options to Travel More Efficiently

#### **Policies**

✓ Improve EVSE permitting processes

#### **Programs**

- ✓ ZEV rideshare program
- ✓ Rebate programs for bikes/scooters
- Micromobility sharing programs

#### **Projects**

- Build more stops along priority bus routes
- Optimize traffic lights or other public transit features

#### Transition to Zero Emission Vehicles and Fuels

#### **Policies**

✓ EV ready code provision for affordable housing

#### **Programs**

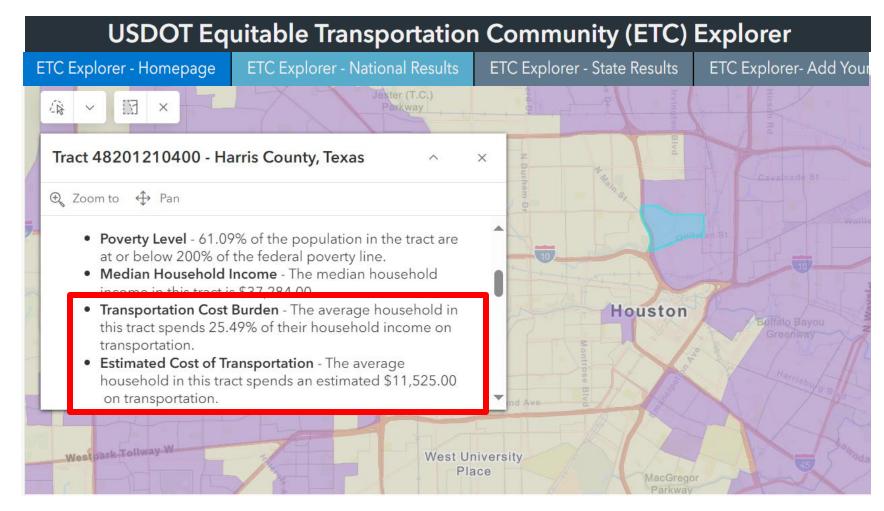
✓ Rebate programs for electric vehicles and/or charging infrastructure

#### **Projects**

- ✓ Procure electric fleets
- Install public chargers in a LMI community

Source: U.S National Blueprint for Transportation Decarbonization

# **Equitable Transportation | USDOT's ETC Data Explorer**



<u>USDOT ETC Explorer:</u> Explore the burden your community experiences due to underinvestment in transportation.

- ✓ Transportation cost burden
- ✓ Estimated cost of transportation
- ✓ Number of Households with no Personal Vehicle
- ✓ Transit availability
- ✓ Estimated drive distances
- ✓ Transportation safety



- ✓ Environmental indicators
- ✓ Climate risk indicators
- ✓ Social vulnerability
- ✓ Health indicators

# **Electric Transportation Blueprints | 4A & 4B**

# Blueprint 4A: Electric Vehicles and Fleet Electrification

Office of State and Community Energy Programs

Office of State and Community Energy Programs » Blueprint 4A: Electric Vehicles and Fleet Electrification

This Electric Vehicle and Fleet Electrification Blueprint includes a high-level overview of the process and benefits of fleet electrification, showcases important tools and online resources, and outlines Key Activities to help guide EECBG Program entities to success. A Blueprint Summary PDF is also available for download (below), which provides a concise summary of the Blueprint Key Activities. DOE plans to make technical assistance available to support all entities interested in EVs and fleet electrification, which



may include, one-on-one support from national lab or DOE experts, webinars, and peer learning opportunities.

# Blueprint 4B: EV Charging Infrastructure for the Community

Office of State and Community Energy Programs

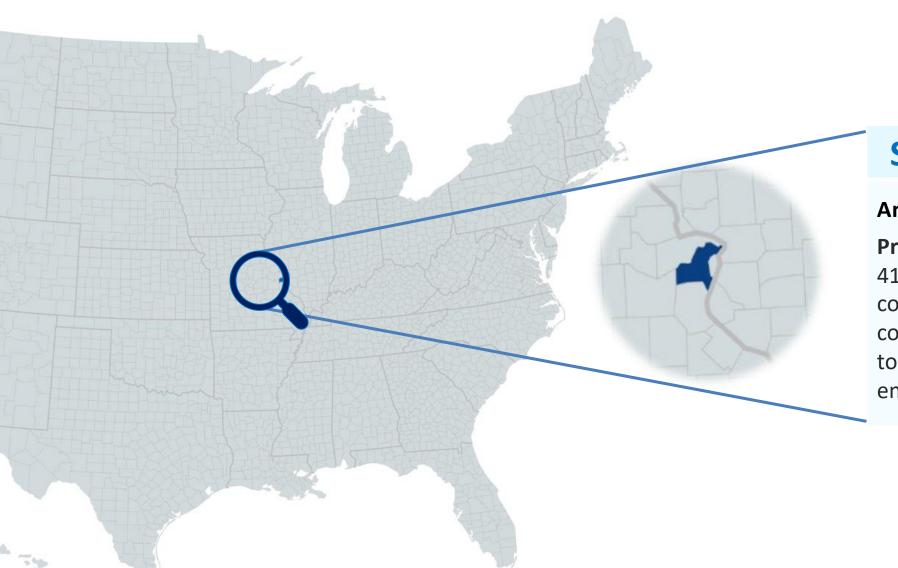
Office of State and Community Energy Programs » Blueprint 4B: EV Charging Infrastructure for the Community

This EV Charging Infrastructure Blueprint includes a high-level overview of the process and benefits of electric vehicle charging infrastructure, showcases important tools and online resources, and outlines Key Activities to help guide EECBG Program entities to success. A Blueprint Summary PDF is also available for download (below), which provides a concise summary of the Blueprint Key Activities. DOE plans to make technical assistance available to support all entities interested in electric transportation,



which may include, one-on-one support from national lab or DOE experts, webinars, and peer learning opportunities.

# **EECBG Community Project Spotlight!**



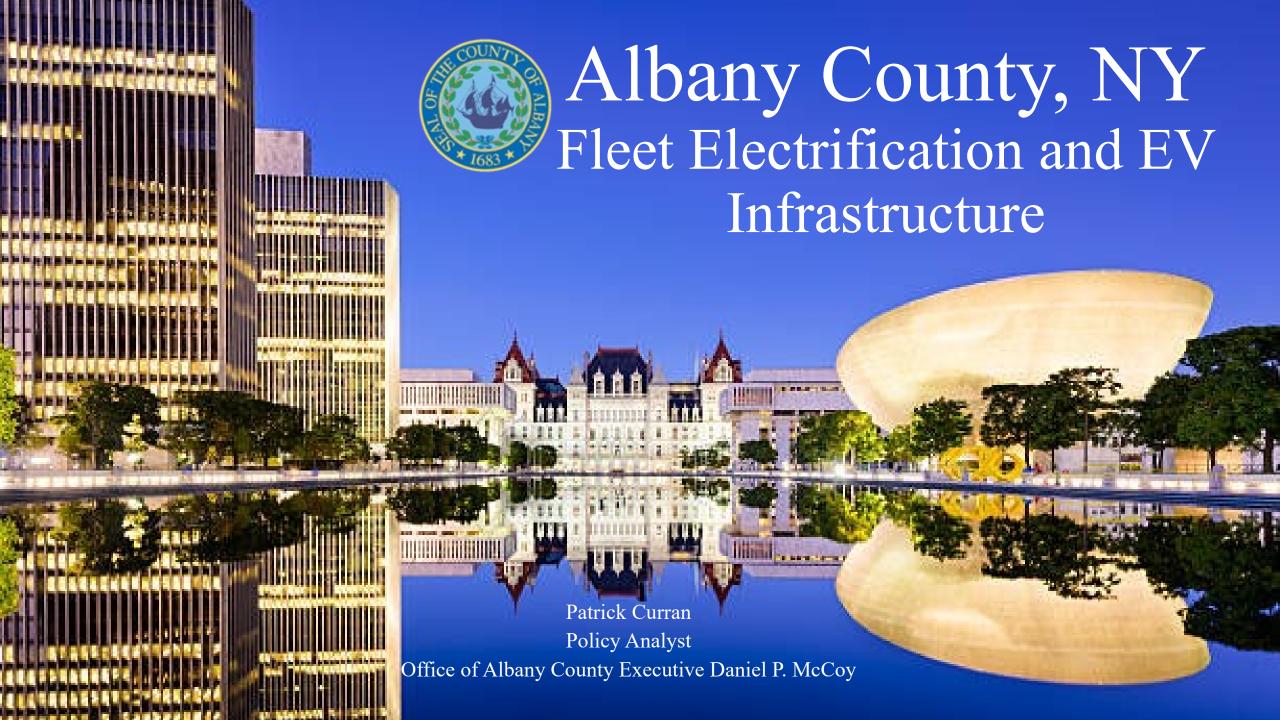
# St. Louis County, MO

**Amount**: \$712,040

**Project**: Plan, purchase, and install 41 EV charging stations across six county-operated facilities. The county will also purchase five EVs to replace internal combustion engine light duty vehicles

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### About Albany County

- Population: ~ 315,000
- 18 Municipalities
- County Fleet
  - The Albany County Fleet consists of 202 vehicles
    - 109 light-duty vehicles
    - 93 medium and heavy-duty vehicles
- 76% internal combustion engines
- 44 light-duty hybrid electric vehicles and 12 light-duty battery-electric vehicles
- Large percentage of commuters into the City of Albany



### Albany County EV and Electrification Goals

- "Greenest County in New York State"
- 100% electrification of the County fleet by 2030
- Expand and improve EV infrastructure
- Create alternative/sustainable energy sources
  - MVP Arena Parking Garage Solar Array
- Provide Transportation Alternatives and Green Infrastructure
  - Broadway Corridor Multi-Modal Transportation Study — EV Infrastructure



### Procurement Process

- General Procedure
- The goal of the Albany County Purchasing Division is to make the process as competitive and objective as possible
- Purchasing Division will identify sources, provide assistance for specification, put out solicitation for bids, proposals and quotes, and interact with vendors
- Once bids are received, County officials will review, evaluate, and grade the bids. The highest rated vendor will then be selected and notified

- Procurement Challenges
- Communication with vendors
- Lack of product availability
- Funding sources
- Regulations from partners and municipalities
- Existing infrastructure

## Albany County Electric Vehicle Case Study

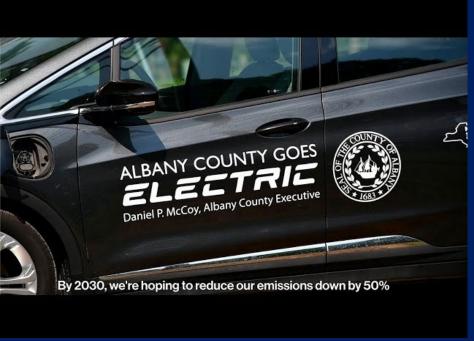


https://youtu.be/BmwFu8qeK8s

### EV Successes

- Electric Vehicles and Charging Stations
- Building Strong Partnerships
  - National Grid
  - NYS Energy Research and Development Authority
  - NYS Department of Environmental Conservation
  - Local Car Dealerships
- Taking advantage of funding opportunities
  - NYSERDA Clean Energy Communities Program
  - NYS Climate Smart Communities Program
- Albany County currently has 25 EV charging ports located across the County and 21 electric County fleet vehicles
- The County has also purchased 8 new light-duty vehicles and 4 new Ford Lightning trucks in 2024





# Thank you!



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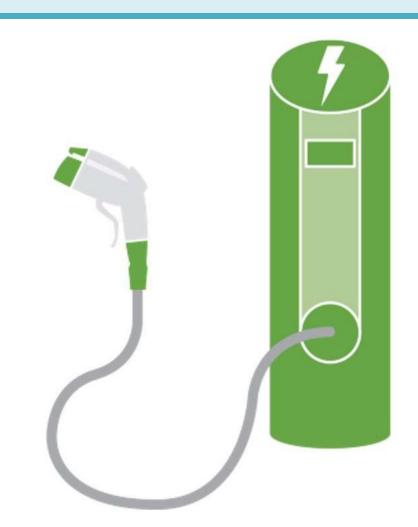


### **Charge Montgomery**

Community EV Charging Infrastructure Plan

April 2024





## Why Electric Vehicles?



The Climate Action Plan sets a goal for 80% emissions reductions by 2027 and 100% by 2035. About 30% of this goal would come from vehicle electrification. EVs will provide a wide range of benefits to County residents:



Zero tailpipe pollution and 50% lower lifecycle emissions



Lower cost of ownership from electricity and maintenance costs



Convenient charging at home, work, or your destination

## **ZEV Planning**





#### **Objectives**

- 1. Accelerate EV Adoption to Rapidly Reduce GHG Emissions
- 2. Ensure ZEV Adoption Promotes Racial Equity and Social Justice
- 3. Support the Long-Term Market for ZEV



#### **Barriers**

- 1. High costs for vehicles
- 2. Lack of EV charging at home
- 3. Unreliable and insufficient community charging
- 4. Technology preferences and lack of familiarity among residents and supply chain



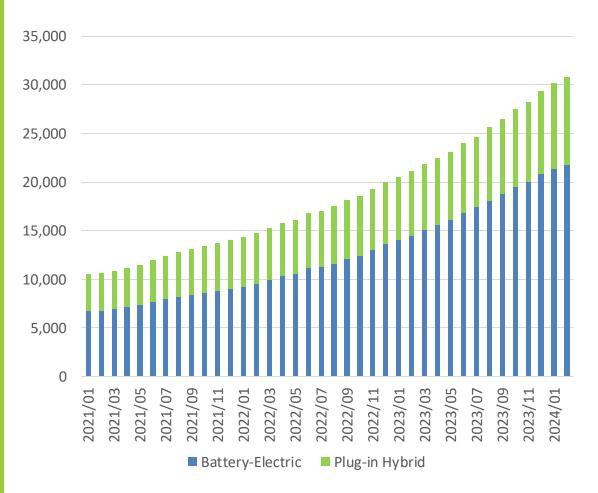
#### **Key Strategies**

- 1. Expand community charging through grants and partnerships
- 2. Offer EV charging planning & technical support for workplaces and multifamily communities
- 3. Standards and incentives for community charging reliability and experience
- 4. EV Co-op: cost savings, education, and experiences
- 5. Education and engagement for dealerships, installers
- Utility, state, and regional coordination on building codes, grid and charging reliability, incentives

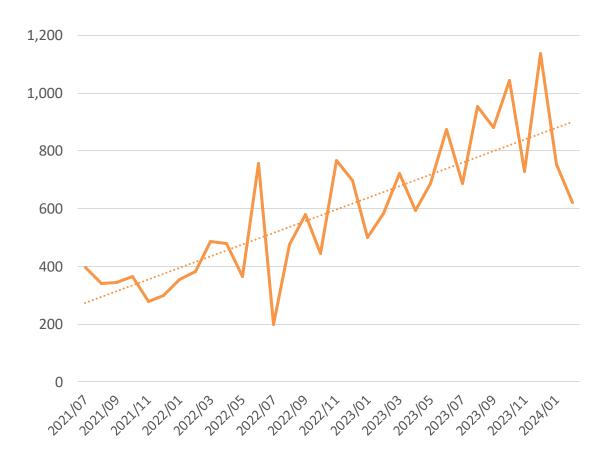
## Montgomery County Plug-in Vehicle Data



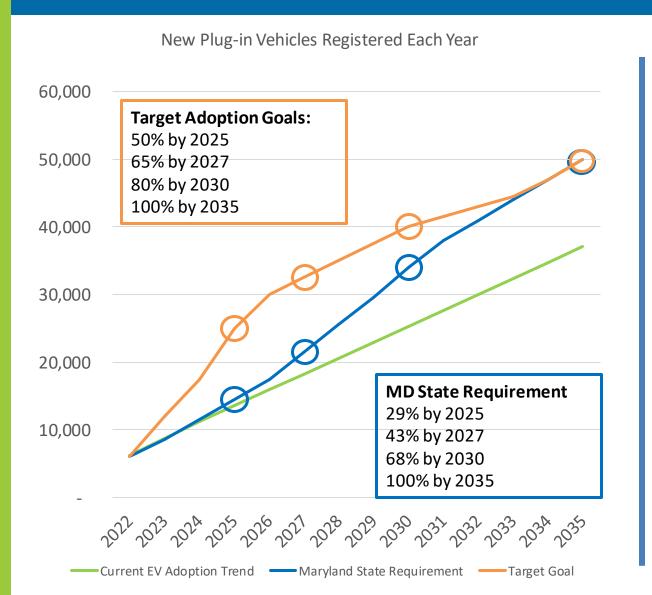




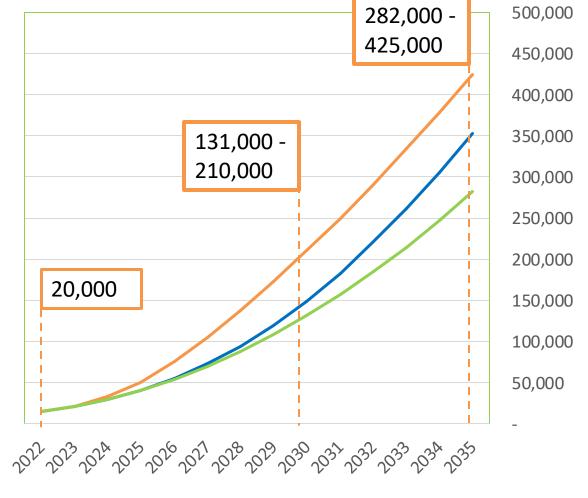
#### Newly Registered Plug-in Vehicles by Month



## Plug-in Vehicle Projections for Montgomery County



Cumulative Total of Registered Plug-in Vehicles by Year



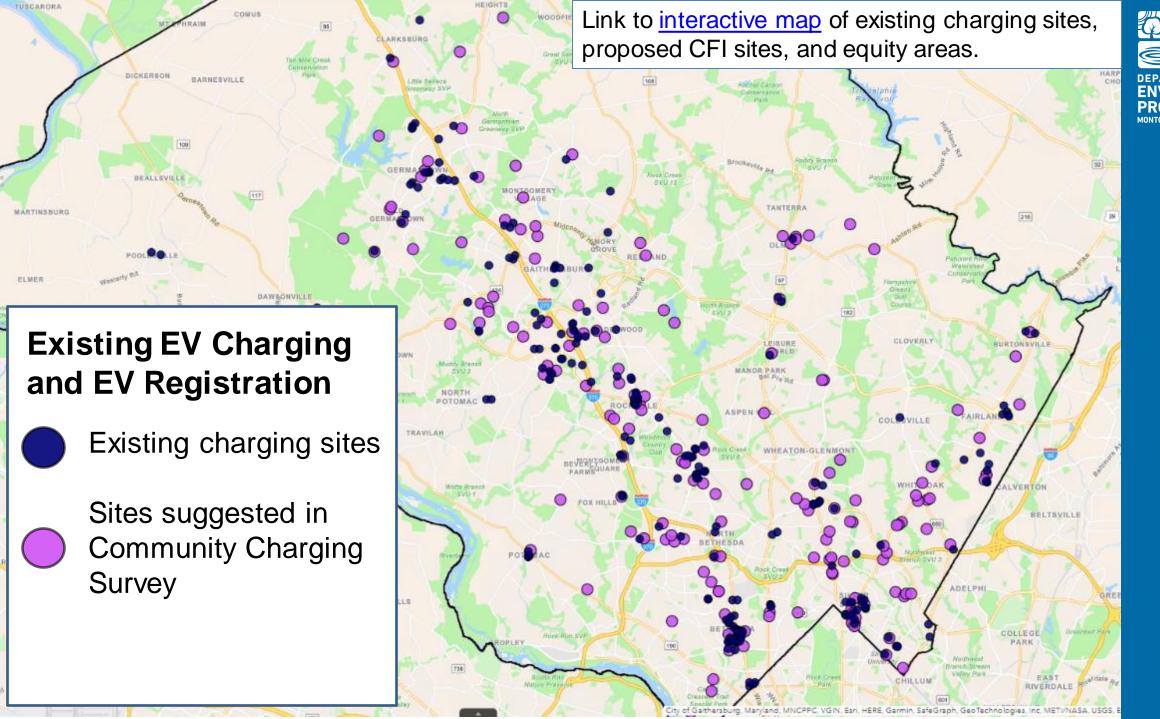
## Projected EV Charging Demand



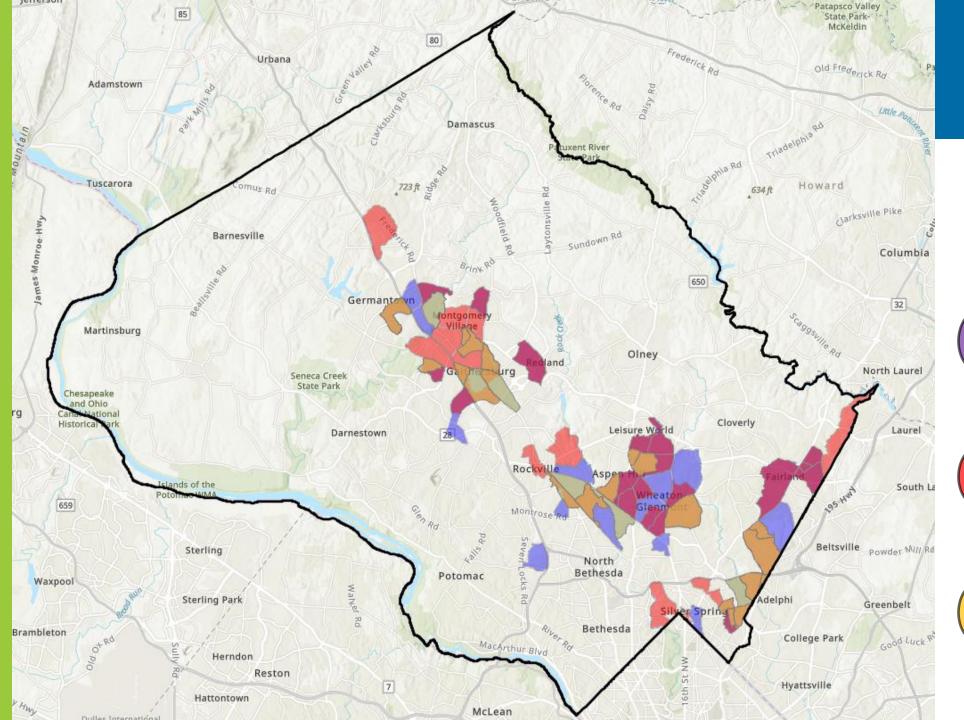
Based on projected market adoption of electric vehicles, U.S. DOE's National Renewable Energy Laboratory estimates the following need for EV charging for our region:

| Years        | Number of<br>Plug-in<br>Vehicles | Private Workplace Level 2 Ports | Multi-Unit Dwelling Level 1 and 2 Ports | Public<br>Level 2<br>Ports | Total<br>Level 2<br>Ports | Public<br>Level<br>3 Ports |
|--------------|----------------------------------|---------------------------------|---|----------------------------|---------------------------|----------------------------|
| Market Today | 26,000                           | <100                            | <100                                    | 618                        | ~800                      | 123                        |
| 2026         | 50,000                           | 1,829                           | 807                                     | 2,872                      | 5,500                     | 208                        |
| 2027         | 75,000                           | 2,745                           | 1,213                                   | 4,300                      | 8,200                     | 313                        |
| 2028         | 100,000                          | 3,661                           | 1,616                                   | 5,732                      | 10,900                    | 418                        |
| 2030         | 150,000                          | 4,409                           | 2,415                                   | 7,132                      | 14,900                    | 412                        |
| 2035         | 300,000                          | 8,820                           | 4,834                                   | 14,268                     | 27,800                    | 826                        |

<sup>\*</sup>Assumes 70% of drivers have access to home charging; lower home charging access requires more public and workplace charging









# **Equity Based Census Tracts**







## **Prioritizing Sites**



### **Factors:**

- 1. Promote Racial Equity and Social Justice
- 2. Enable EV Adoption for Apartments and Condos
- 3. Enable EV Adoption in Rural Areas
- 4. Meet High Current and Projected Demand
- 5. Promote Multi-Modal Transportation
- 6. Serve MCG Fleet and Emergency Management Needs

## Community Charging Sites





- Fast Charging Hubs
- Public Parking Garages and Lots
- Libraries and Recreation Centers
- Public Schools
- Park-and-Ride Lots and TransitCenters
- Right-of-Way Charging
- Publicly accessible multifamily properties, workplaces, and destinations

## **Questions?**

Contact: Brian Booher

Senior Planning Specialist – Zero Emissions Vehicles

Brian.Booher@MontgomeryCountyMD.gov

240-506-6075

www.montgomerycountymd.gov/ZEV





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### **Blueprint How-to-Guides**



#### **Blueprint 2A How-To Guide: Energy Efficiency - Energy Audits, Building Upgrades**

#### Introduction

The Energy Efficiency and Conservation Block Grant (EECBG) Program Blueprints are model projects and programs that EECBG participants can pursue, covering a range of areas in energy planning, energy efficiency, renewable energy, transportation electrification, clean energy finance, and workforce development. Each Blueprint outlines several high-level key activities, which are suggested steps participants can take as they pursue the Blueprint. The Blueprint How-To Guides go into further detail, providing more granular steps, recommendations, and resources within each key activity. The How-To Guides are designed to support practitioners as they move from planning to implementing their EECBG projects and programs. By using these documents, communities can quickly identify where they need to start, where they need to go next to make progress, and how they can leverage existing resources to get ahead.

#### **Key Terms in this Document**

- . Benchmark: Compare a building's energy performance to other similar buildings, past performance, or a standard reference point.
- · Building-specific data: Data such as floor area, date built, and percentage of floor area occupied.
- Central energy database: System that manages utility bill information, identifies assets with the greatest opportunity for improvement, and streamlines communication and decision-making with key stakeholders in your organization.

Key terms continue in the text box on the next page.

#### KEY ACTIVITY CHECKLIST: BLUEPRINT 2A

#### 1. Building Energy Assessments

- Gather utility bills and buildingspecific data.
- Select a benchmarking platform and set up an account.
- Benchmark your buildings to identify buildings with poor energy performance to select for an energy audit.

#### 2. Energy Audits

- Hire an Energy Auditor.
- Determine available funding

#### 3. Building Upgrades

Review results of the energy audits. Identify the ideal sequence of upgrades, which items can be implemented immediately, and which upgrades need further study or should be incorporated into longer-term plans.



- ✓ Goes into further detail than Blueprints alone
- ✓ Provides more granular steps and recommendations
- ✓ Adds additional resources within each key activity
- ✓ Supports EECBG program grantees as they move towards implementing their projects



4A and 4B How-to-Guides coming soon!

U.S. DEPARTMENT OF ENERGY

### Blueprint How-to-Guide | 4A - EV's & Fleet Electrification I/II





- Gather information on fleet
- Engage with stakeholders
- Plan for driver and technician trainings





- Determine charging locations
- Evaluate charging equipment options
- Coordinate with local utility





- Learn about your utility's managed charging programs
- Work with your utility to develop the agreement
- Make a list of data to share

### Blueprint How-to-Guide | 4A - EV's & Fleet Electrification II/II





- Gather relevant information about the fleet and billing rates
- Develop the charging plan with a cost assessment of the electric bill





- Identify suitable EVs on the market for fleet needs
- Determine financials (incentives & lifecycle costs)
- Procure charging equipment to support EV use





- Identify inspection requirements and site needs
- Select construction and electrical contractors
- Manage installation project

### Blueprint How-to-Guide | 4B - EV Charging Infrastructure I/II





## SUPPORT TO PURCHASE EVSE

- Assess charging infrastructure needs of the community
- Vendor selection and compliance assessment
- Ownership model and maintenance and operating planning





### STAKEHOLDER ENGAGEMENT

- Identify and compile a comprehensive list of stakeholders
- Establish a regular meeting schedule to gather input
- Customize outreach efforts for each stakeholder group





- Conduct community EV adoption projections, readiness, and site assessments
- Engage with your utility to determine installation feasibility
- Assess and prioritize locations

### Blueprint How-to-Guide | 4B - EV Charging Infrastructure II/II





#### **INSTALL EVSE**

- Install and confirm the safety and functionality of your charging equipment
- Confirm the visibility and accessibility of your charging location, including signage and pavement markings



- presence
- Provide updates on effectiveness of the charging installations
- Solicit feedback from the community for continued improvements

### Other DOE/Federal Funding

| Name  | Amount | Recipients  | Purpose   | Due Date  |  |  |
|---|--------|---|---|---|--|--|
| Communities Sparking Investment in Transformative Energy (C-SITE) | \$18M  | Local governments and federally recognized Tribes.  LGEP focuses on disadvantaged communities, energy communities, and small-to –medium-sized jurisdictions           | To implement clean energy projects and programs that provide direct community benefits, spark additional investments, meet community-identified priorities, and build local capacity. | May 31, 2024  |  |  |
| Clean Energy Technology Deployment on Tribal Lands                | \$50M  | Indian Tribes (including Alaska Native<br>Regional Corporations and Village<br>Corporations, Intertribal Organizations, &<br>Tribal Energy Development Organizations) | To deploy clean energy technology on Tribal lands.  | May 30, 2024  |  |  |
| EPA Community Change Grants                                       | \$2B   | Partnership between two community-based non-profit organizations (CBOs). <b>OR</b> Partnership between a CBO & Tribe, local gov., or institute of higher education:   | To support community-driven projects that build capacity to tackle environmental and climate justice challenges, strengthen climate resilience, and advance clean energy.             | November 21,<br>2024 (accepted &<br>reviewed on a<br>rolling basis) |  |  |
| Communities Taking Charge Accelerator                             | \$54M  | Institutions of higher education, for-profit entities, non-profit entities; State and local governmental entities, and Tribes   | For projects that will expand community e-mobility access and provide clean reliable energy.  | Concept Papers due <b>May 20, 2024</b>                              |  |  |
|   |        | Stay Updated via the State and Local Solution Center:   |   |   |  |  |

https://www.energy.gov/scep/slsc/about-state-and-local-solution-center

### Other DOE/Federal Technical Assistance

| Name  | Recipients  | Purpose  | Due Date  |
|---|---|--|---|
| Clean Energy to Communities (C2C)                         | Local governments, tribes, electric utilities, and community-based organizations  | Provides communities with expertise and tools to achieve their clean energy goals through 1) in-depth partnerships, 2) peerlearning cohorts, and 3) expert match | In Depth Partnerships:  June 14, 2024  Peer Cohorts: April 30,  2024  Expert Match: Rolling |
| Energy Transitions Initiative Partnership Project (ETIPP) | Local governments, Tribes or Tribal organizations, community-based organizations, special purpose districts, academic institutions, municipal utilities, electric co-ops.                     | To help U.S. coastal, remote, and island communities assess and advance the solutions that best meet their needs and become more energy resilient.               | July 10, 2024   |
| Clean Bus Planning Awards                                 | States and local governments providing bus service. Tribes, Tribal organizations, or Tribally controlled schools responsible for the purchase of school buses or providing school bus service | Provides school and transit bus fleets with free technical assistance to develop comprehensive and customized fleet electrification transition plans.            | Open now, rolling applications.   |

**Stay Updated via the State and Local Solution Center:** 

https://www.energy.gov/scep/slsc/about-state-and-local-solution-center

### **Electric Transportation Resources**

#### **EECBG Program Resources**

- Blueprint 4A: Electric Vehicles and Fleet Electrification (How-to-Guide coming soon!)
- Blueprint 4B: Charging Infrastructure for Your Community (How-to-Guide coming soon!)

#### **Joint Office of Energy and Transportation**

- Technical assistance and resources for communities
- <u>Technical assistance and resources for Tribes</u>
- Data and Tools
- Subscribe to the Joint Office newsletter
- Upcoming and past webinars
- Open funding opportunities
- Public Electric Vehicle Charging Infrastructure Playbook

#### **Other Transportation Resources**

- US National Blueprint for Transportation Decarbonization
- Benefits of Electric Vehicles for Local Governments
- <u>Electrifying Transportation in Municipalities: A Policy Toolkit for Electric Vehicle Deployment</u> and Adoption at the Local Level
- Electrification Coalition Resources
- US DOT Webinar: Climate Change and Transportation 101

### Your EECBG Support System | If you have questions about ....

### Your Grant or Voucher Application:

- The status of your application
- Eligible uses and application requirements (e.g., BABA, NEPA, Davis Bacon)
- Project-specific questions





## **Technical**

- ✓ Blueprints & Blueprint Cohorts
- Other technical assistance E.g., "How do I incorporate J40 principles into my project?"

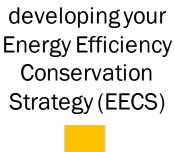


# Assistance:

Get voucher and Community Energy Fellowship grant application portal technical help

**Application** 

Portals:



Your EECS:

Get support



Grant Management Team EECBG@hq.doe.gov

Voucher Team DL-EECBGVouchers@ hq.doe.gov

TA Team TechnicalAssistance@hq.d oe.gov

Attend EECBG Program Office Hours! Sign up here Every Friday in May at 2:30pm ET https://forms.office.com/g/yc3H3xQeEE

**Voucher Portal** Administrator (ICF) **EECBGVouchers@** icf.com PAGE platform PAGE-Hotline@hq.doe.gov

National Renewable Energy Laboratory (NREL) EECS\_TA@nrel.gov

10-20 Hours

# Thank You!!