



MARYLAND ZERO EMISSION

Electric Vehicle Infrastructure Council

April 24, 2024

Agenda

- Welcome and Announcements
- Public Comments
- 2024 MGA Legislative Session - Recap
- Zero Emission Commercial and Freight Transportation Corridors
- Closing Remarks



Welcome and Announcements

Deron Lovaaas, ZEEVIC Chair & MDOT Chief of Environment and Sustainable Transportation

ZEEVIC Member Welcome



Diego Lopez

ZEEVIC Seat: MEA Director's Designee

Affiliation: Maryland Energy Administration (MEA)

ZEEVIC Member Welcome



Ryan Powell

ZEEVIC Seat: Department of Commerce Secretary's Designee

Affiliation: Maryland Department of Commerce



Maryland By The Numbers

EVs registered in Maryland last month




Maryland By the Numbers*:

 **99,745**
Registered EVs

 **16.18**
EVs per 1,000 people

 **1,644** **4,690**
Charging Stations Ports

 **0.76**
Ports per 1,000 people

 **23**
Alt. Fuel Corridors

**As of March 31, 2024*

Announcement - DGS

- EVAL Gold Certification
- DGS was awarded Forth's Electric Vehicle Adoption Leadership (EVAL) Gold certification
- EVAL is a national workplace charging certification program that provides recognition and technical assistance to organizations supporting the adoption of clean transportation.
- Notable efforts leading to the award included:
 - 8 EV chargers installed at the State Center Office Complex in Baltimore, MD (with BGE EV Smart)
 - An EV Ambassadors affinity group, info sessions and Ride and Drive events
 - Participation in Electrification Coalition state fleet cohort, hosting state agency EV Strategy meeting



Announcement - DGS

Upcoming Event: Lunch & Learn

Tuesday, April 30, 2024

12-1:30 pm

Treasury Building

State employees are welcome to join us for this free event!



EV | Lunch & Learn

Tuesday, April 30, 2024
12 pm – 1:30 pm
Presentation: 12 pm – 1 pm
Vehicle Display: 1 pm – 1:30 pm

Treasury Building
80 Calvert Street
The Assembly Room | 1st Floor
Annapolis, MD 21401

Scan the QR code to register for the Lunch & Learn.



Bring your lunch and learn about the basics of electric vehicles with Maryland's EV Ambassadors Group.

If you are curious about learning more about how EVs work and their benefits, where to find information about tax credits and incentives for EVs and charging infrastructure, or have specific questions about driving an EV, this session is for you!

EV Ambassadors are Maryland State employees across multiple agencies who share their enthusiasm and knowledge about EVs through events and outreach opportunities. To join the EV Ambassadors, visit <https://t.ty/evambassador>.



EV AMBASSADORS | **Maryland**
DEPARTMENT OF GENERAL SERVICES

Announcement - MDOT

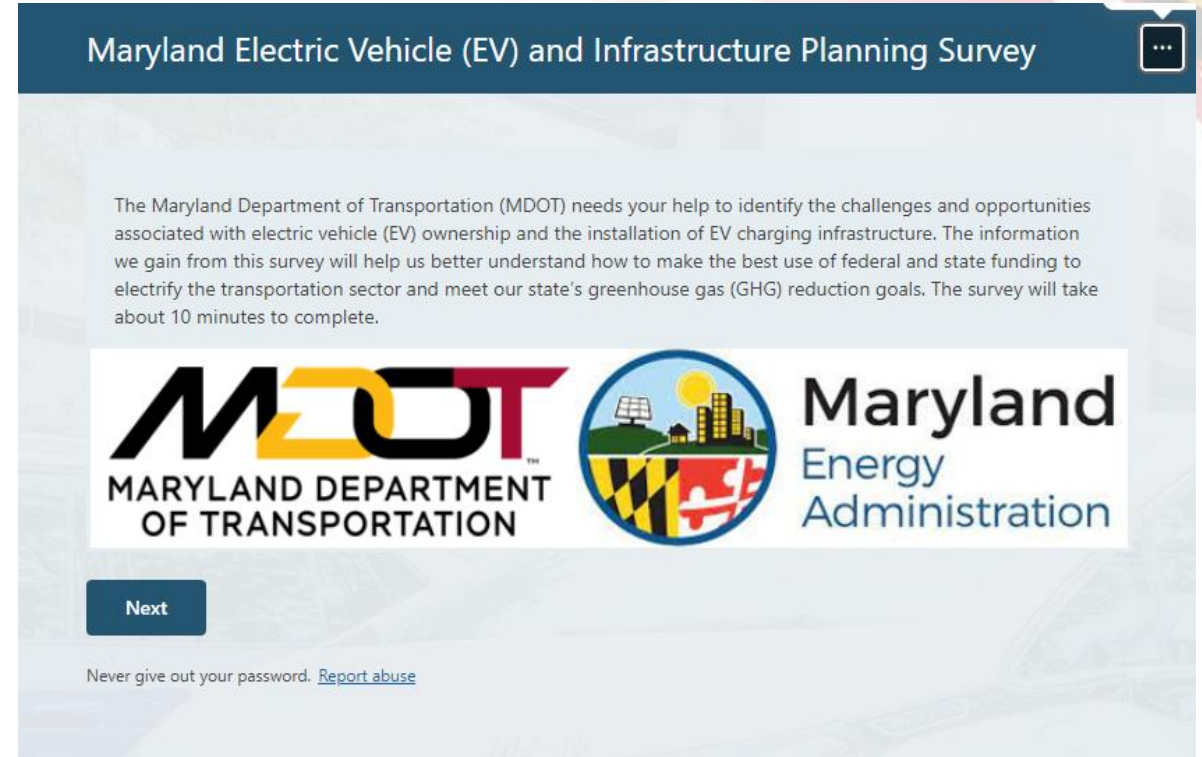
NEVI Program Update

Round 1 RFP Closed on April 10th

- Reviews now underway
- Conditional awards expected in early July
- Round 2 expected late 2024/early 2025

EV and Infrastructure Planning Survey

- Soliciting community input to identify challenges and opportunities associated with EV ownership and EV charging infrastructure installations
- Available until May 15th:
<https://tinyurl.com/MDEVCommunitySurvey>



The screenshot shows the landing page for the "Maryland Electric Vehicle (EV) and Infrastructure Planning Survey". The page has a dark blue header with the survey title and a menu icon. Below the header, there is a paragraph of text explaining the purpose of the survey: "The Maryland Department of Transportation (MDOT) needs your help to identify the challenges and opportunities associated with electric vehicle (EV) ownership and the installation of EV charging infrastructure. The information we gain from this survey will help us better understand how to make the best use of federal and state funding to electrify the transportation sector and meet our state's greenhouse gas (GHG) reduction goals. The survey will take about 10 minutes to complete." Below the text, there are logos for MDOT (Maryland Department of Transportation) and the Maryland Energy Administration. At the bottom of the page, there is a blue "Next" button and a small disclaimer: "Never give out your password. [Report abuse](#)".

Public Comments



A stylized graphic in the top right corner shows two hands, one in red and one in white, holding a globe. The globe is composed of yellow, grey, and red segments. The hands are rendered in a simple, bold style.

2024 MGA Legislative Session - Recap

Josh Cohen, ZEEVIC Legislative WG - Chair

2024 Legislative Session Recap

- Maryland's "right to charge" protection, which currently applies to condominiums and homeowner associations (HOAs), expanded to include common ownership communities (COCs) (HB 0159 / SB 0465)
- ZEEVIC's membership expanded to include two new members 1) DGS, 2) MHDV EV manufacturer. (HB 0437)
- Established an Electric Vehicle Supply Equipment Workgroup that will develop a reliability and reporting framework for EV charging stations (HB 1028 / SB 0951)
- Requiring electric companies to file time-of-use tariffs with the PSC to incentivize off-peak electricity consumption including EV charging, and requiring electric companies to establish expedited processes for customers to interconnect bidirectional EV charging systems (HB 1256 / SB 0959)
- Establishment of an annual registration fee for ZEV owners in Maryland, \$125 per ZEV and \$100 per PHEV (SB 0362)

2024 MGA Passed ZEV Legislation

Bill #	Bill Title and Synopsis	ZEEVIC Position
HB0159 SB0465	<p>Common Ownership Communities - Electric Vehicle Recharging Equipment (Electric Vehicle Recharging Equipment Act of 2024)</p> <p>Altering certain requirements for procedures relating to electric vehicle recharging equipment; establishing requirements and procedures relating to an application to the governing body of a cooperative housing corporation to install or use electric vehicle recharging equipment; and requiring the Department of Housing and Community Development to publish information on its common ownership community website regarding requirements, contact information, certain points of contact, and resources on dispute resolutions.</p>	Support
HB0437 SB0553	<p>Maryland Zero Emission Electric Vehicle Infrastructure Council – Membership</p> <p>Codifying provisions relating to the Maryland Zero Emission Electric Vehicle Infrastructure Council; altering and clarifying the composition of the Council to include certain public and private sector members; requiring the Council to submit interim reports of its work to the Governor and the General Assembly on or before December 1, 2024, and December 1, 2025; and requiring the Council to submit a final report of its work and recommendations by June 30, 2026.</p>	Support
HB1028 SB0951	<p>Electric Vehicle Supply Equipment Workgroup</p> <p>Establishing the Electric Vehicle Supply Equipment Workgroup; and requiring the Workgroup to report its framework and recommendations to the Senate Education, Energy, and the Environment Committee and the House Economic Matters Committee on or before November 1, 2024.</p>	Did not comment
HB1256 SB0959	<p>Electricity – Tariffs, Distributed Energy Resources, and Electric Distribution System Support Services (Distributed Renewable Integration and Vehicle Electrification (DRIVE) Act)</p> <p>Requiring a certain electric company to file certain time-of-use tariffs with the Public Service Commission by July 1, 2025; requiring a certain electric company to attempt to achieve a certain enrollment target for certain tariffs by January 1, 2028; authorizing the Commission to require the automatic enrollment of certain customers in a time-of-use tariff on an opt-out basis; requiring the Commission to certain adopt regulations on or before May 1, 2025; etc.</p>	Did not comment
SB0362	<p>Budget Reconciliation and Financing Act of 2024</p>	Did not comment

2024 Failed ZEV Legislative Proposals

Bill #	Bill Title	ZEEVIC Position
HB0064	Motor Vehicle Excise Tax - Tax Credit for Electric Vehicles - Eligibility	Support
HB0156	Transportation - Electric Bicycle Rebate and Voucher Program - Establishment	Support
HB0652 SB0870	Vehicle Laws - Electric Vehicles - Weight Limits	Support
HB0689	Electric Vehicles – Repeal of Excise Tax Credit and Establishment of Rebate Program	Support
HB0889 SB0695	Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces	Support
HB1279 SB1023	Maryland Building Performance Standards - Fossil Fuel Use, Energy Conservation, and Electric- and Solar-Ready Standards (Better Buildings Act of 2024)	Support
HB1247 SB1063	Environment – Advanced Clean Cars II Program – Application and Enforcement	Oppose

2024 Failed ZEV Legislative Proposals

Bill #	Bill Title	ZEEVIC Position
HB0774	Motor Vehicles - Certificate of Title Fees - Zero-Emission Plug-In Electric Drive Vehicles	No Position
HB0913	Motor Vehicles – Registration – Annual Surcharge	No Position
SB1065	Motor Vehicles - Registration - Annual Surcharge	No Position
HB1280 SB1076	Sales and Use Tax – Electricity to Charge Electric Vehicles – Transportation Trust Fund	No Position
HB1428	Public Safety - Electric Vehicle Charging Station Safety Commission	Did not comment
HB0150	Vehicle Emissions Inspection Program and Diesel Vehicle Emissions Control Program - Fees and Fines	Did not comment
HB1010	Condominiums and Homeowners Associations - Governing Documents - Electric Vehicle Recharging Equipment	Did not comment



Zero Emission Commercial and Freight Transportation Corridors

Scott Halerz, Jacobs

National Zero Emission Freight Corridor Strategy

- Strategy Goals
 - Achieve Administration goals
 - Scale growth in zero emission freight technologies
 - Respond to congressional requirements under BIL
- Prioritize investments areas along the National Highway Freight Network
- Stakeholder engagement
- Infrastructure Build-out (Timeline)
 - Phase 1 – Establish Hubs (2024-2027)
 - Phase 2 – Connect Corridors (2027-2030)
 - Phase 3 – Expand Network (2030-2035)
 - Phase 4 – Complete Network (2035-2040)



National Zero-Emission Freight Corridor Strategy
Released: March 2024

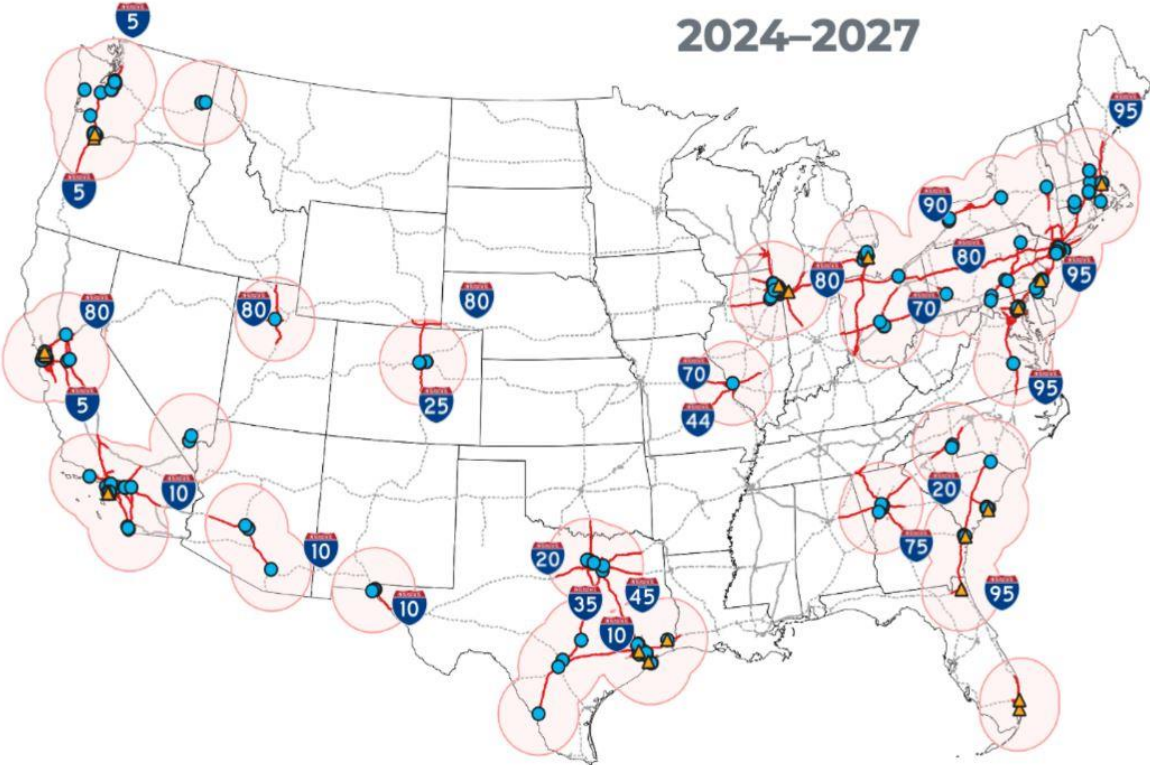
Government	Energy	Industry	Community
Federal & State	Electric Utility & Hydrogen	Fleets, Ports, Logistics, and Fueling	Urban, Rural, and Tribal Communities
<ul style="list-style-type: none"> • Set Funding Priorities • Policy and Program Development • Grant Criteria or Bonus Points 	<ul style="list-style-type: none"> • Systems-Level Planning • Infrastructure Needs Assessment • Energy Scaling 	<ul style="list-style-type: none"> • Transparency on Priorities • ZE-MHDV Investment • Infrastructure Planning and Deployment 	<ul style="list-style-type: none"> • Advocate for ZE-MHDVs • Building Partnerships • Project Development



Figure 1. National Zero-Emission Freight Corridor Strategy stakeholder groups and implementation

National Zero Emission Freight Corridor Strategy

Phase 1: Establish Hubs 2024–2027



- ZEF Network
- Selected Corridors
 - ▲ Selected Principal Ports
 - Selected Intermodal Freight Facilities
 - × Selected Truck Parking
 - Selected Hubs
 - ⋯ National Highway Freight Network



MD Zero-Emission Freight Hubs for Phase 1 and 2	
Location	Facility Type
BWI Airport	Air to Truck
Baltimore	Intermodal Freight Rail
Baltimore – Seagirt Marine Terminal	Intermodal Freight Rail
Port of Baltimore	Principal Port
Port of Baltimore	Marine Freight Roll-on Roll-off

East Coast Commercial ZEV Corridor

- U.S. DOE funded Planning Partnership 2023-2025
- Focus on locating prime areas along the **I-95 corridor** for alternative fuel refueling stations promoting equity, innovation, and clean air.
 - Identity Key Freight Nodes
 - Identify infrastructure technical challenges and strategies
 - Planning through best practices
- Working Groups
 - Community Needs and Benefits
 - Industry and Fleet Needs
 - Infrastructure Planning





Powering America's Commercial Transportation (PACT)

Aravind Kailas and Kelly Bobek, Volvo Group North America



PACT

Powering America's Commercial Transportation

The voice for zero-emission vehicle infrastructure

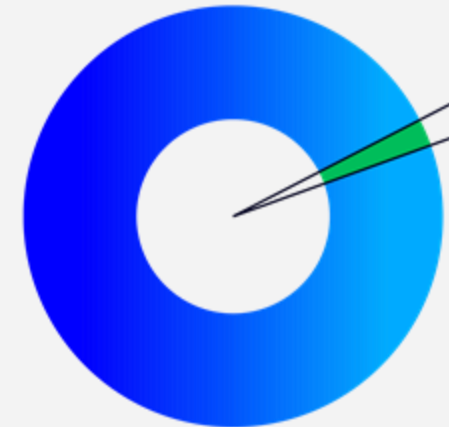
What is PACT?

PACT is an advocacy coalition focused on accelerating the adoption of medium- and heavy-duty (MHD) zero-emission vehicles (ZEVs) by overcoming barriers to the deployment of ZEV infrastructure

MHD ZEV deployments currently outpace infrastructure readiness

60,000

public charging stations for light-duty ZEVs



Less than 10

Support Class 8 ZEVs¹

¹ https://afdc.energy.gov/stations/#/analyze?country=US&fuel=ELEC&ev_levels=all

Our Challenge

The country's infrastructure readiness, ZEV-focused goals, and enabling regulations are not in sync

Building ZEV infrastructure takes time²

1-2
Years



Securing construction permits

3-5
Years



Distribution capacity upgrades

7-10
Years



Building new substations

10+
Years



Transmission system upgrades






















² <https://efiling.energy.ca.gov/GetDocument.aspx?tn=250051&DocumentContentId=84769>

Our Goal

To expedite the delivery of nationwide infrastructure for MHD zero-emissions vehicles by establishing a unified voice for stakeholders, equipped with resources, knowledge, and experience.



Founding Members

Our Approach



Collaborate

Convening cross-sector stakeholders whose operations would benefit from a streamlined approach to deploying ZEV infrastructure



Educate

A multi-channel approach to inform stakeholders about the state of ZEV infrastructure and installation challenges fleets face



Advocate

Specific policies, regulations, and funding are needed to support the deployment of reliable ZEV infrastructure for commercial fleets

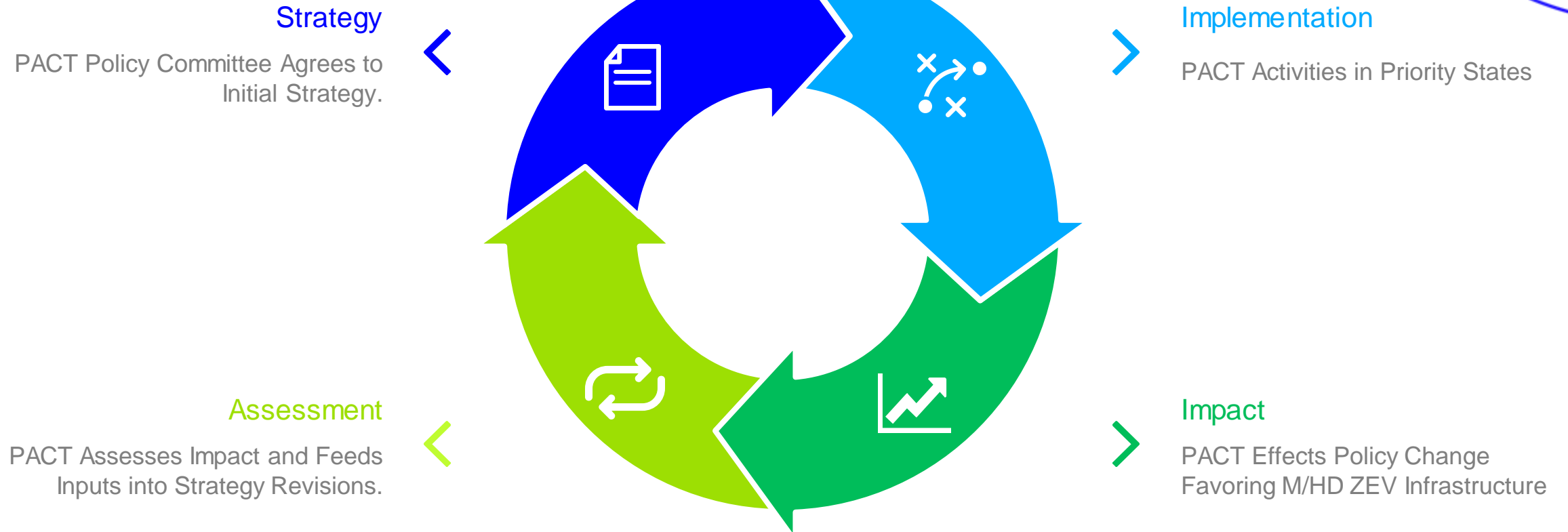


Lead

Share best practices to launch and execute commercial ZEV infrastructure projects

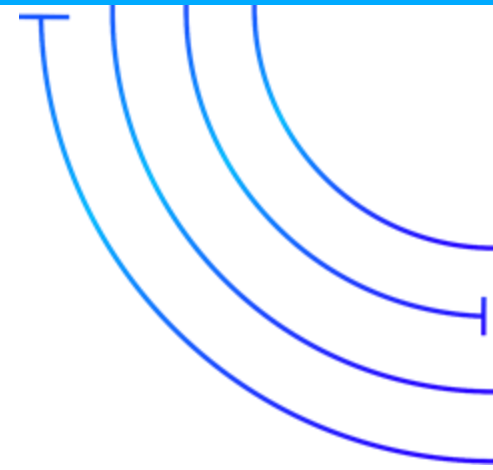
Continual Strategy Development

PACT Reassesses and Revises Strategy Based on State Inputs and Feedback



PACT Strategy Outline

Each Priority State Combines Key Factors Favorable to M/HD ZEV Infrastructure Deployment



Business Case

ZEV Trucks Current or Planned Deployment



Favorable Regulatory Environment

ACT or ACF states

A+

Port Emissions Reductions

Large ports with focus on drayage emissions reduction



Existing Incentives

Incentives are available for vehicle purchase and infrastructure build



Factors for Priority State Selection

Progressive Utility Partner

Utility is forward leaning on transportation electrification



2024 ZEV Infrastructure Strategy Overview

PACT Policy Objectives

Permitting

- Streamline permitting processes to accelerate project timelines

Power

- Encourage “no regrets” planning
- Advance legislation to authorize planning assessments and grid studies ahead of established demand

Power

- Educate utilities and regulators to inform best practices and identify opportunities for managed charging

Funding

- Increase available funding for medium- and heavy-duty ZEV infrastructure through incentive programs, grants, and set-asides

2024 ZEV Infrastructure Objectives: States

- Advance legislation that accelerates access to power, authorizes pre-builds, and directs funding toward MHD ZEV infrastructure projects
- Partner with utilities to establish best practices for accommodating ZEV infrastructure
- Community engagement



Tier 1

- California
- Washington
- New York
- New Jersey



Tier 2

- Texas
- Illinois

2024 Near- and Mid-Term Activities

Regulation

- State Public Utility Proceedings
 - Transportation Electrification and Energy Forecasting Planning
 - Medium-and Heavy- Duty Vehicle Make-Ready Program Cases
 - Energization and Grid Pre-Build Rulemakings
 - General Rate Cases
- Federal Charging and Infrastructure Programs
 - Formula Funding and Grants

Policy making

- Make-Ready, Pre-Build, Energization/Interconnection
- Grid Planning, Studies and Assessments
- Permitting
- Charging Infrastructure Site Design
- Tax Incentives, Grant Funding, Pilot Programs

Education

- Fact sheets
- White papers
- Industry Conferences
- Webinars
- Roundtables

2024 Engagement

Regulation

- CT PURA Comments
- NY PSC Comments
- CPUC Energization Timelines Comments
- CPUC TEP&I Scoping Memo
- CARB LCFS

Policy making

- Powering Up Illinois
- NY Pre-Build

Education

- Fact sheets
- White House Roundtable on Zero-Emission Freight Infrastructure
- ACT Expo, GTSE, MOVE America



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Visit us at pactcoalition.org



Needs Assessment Study

Clean Trucks Act of 2023

Tim Shepherd, Maryland Department of the Environment



Clean Corridor Coalition (C3) CPRG Proposal

Amanda Hinh, MDOT

Clean Corridor Coalition (C3) CPRG Proposal

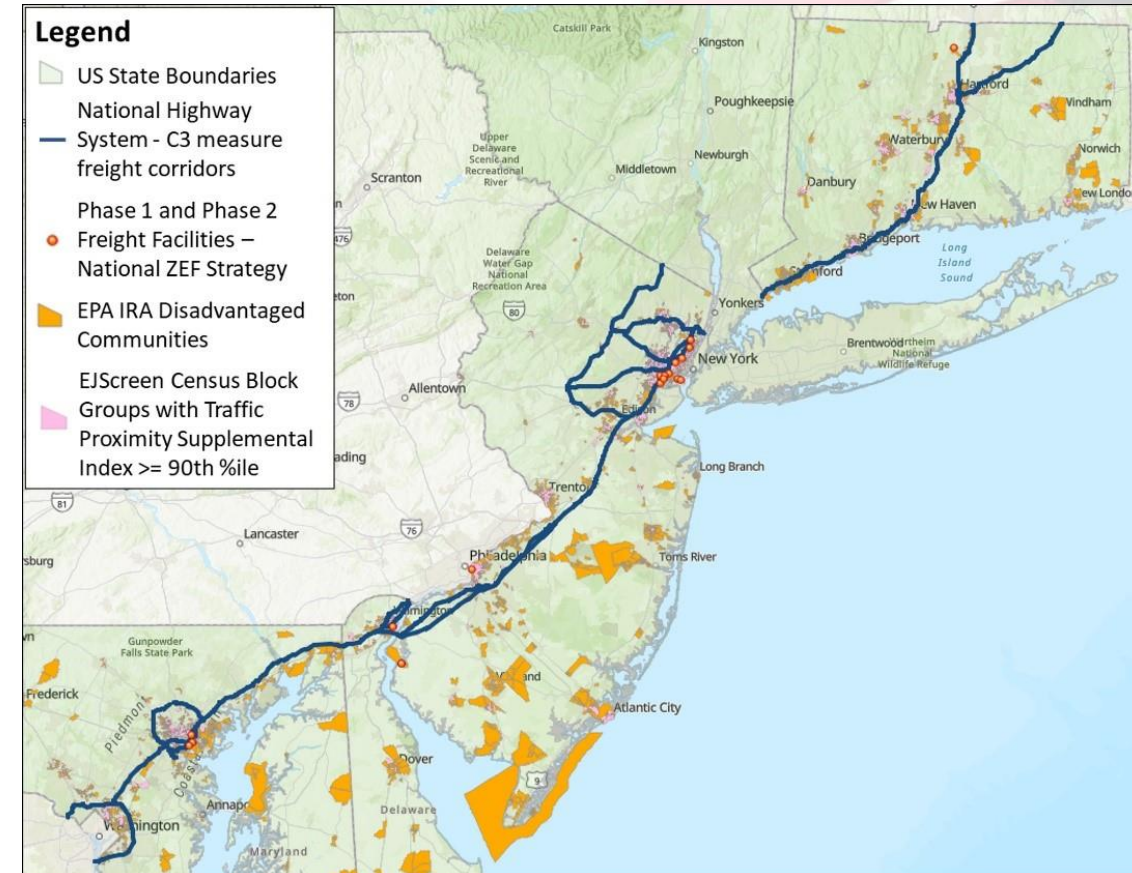
Multi-State Proposal for Zero Emission Medium- and Heavy-Duty Vehicle Charging Hubs Along the I-95 Corridor (Phase 1 Priority in National ZEF Corridor Strategy)

New Jersey (lead), Connecticut, Delaware, Maryland (MDE & MDOT)

Total \$227 Million Request for:

- ZE-MHDV Charging Hubs
- Technical assistance to host sites
- Local workforce development and job creation
- Community engagement for site selection and workforce development program input
- Beginnings of a wider Northeast and Mid-Atlantic public freight truck charging network

Maryland's Apportionment: 34% of Total Request



Closing Remarks

ZEEVIC Meeting Schedule through 2024

- July 24
- October 24

To receive ZEEVIC Meeting Notices, email: ZEEVIC@mdot.maryland.gov