

Charge Ahead: Maine's Electric Vehicle Landscape

Drive Electric Week – October 4, 2024



Agenda

- **Introduction**
 - Emma Cost, Maine Governor's Energy Office
- **EV charging network in Maine**
 - Joyce Taylor, Maine Department of Transportation
- **Financial incentives for EVs and EV charging**
 - Hogan Dwyer, Efficiency Maine Trust
- **Testimonials from EV drivers**
 - Chuck Hayward, Revision Energy
 - Eileen Johnson, Bowdoin College
 - Chris Hansen, Thomaston Police Department



Happy National Drive Electric Week!



- **September 27th – October 6th, 2024**
- **Nationwide celebration** to raise awareness of the benefits of EVs
- **Upcoming event:** Sustainable Scarborough Day on October 6th



CLIMATE COUNCIL GOALS



12.01.20

Climate Action Plan
Delivered



ACHIEVE STATE
CARBON NEUTRALITY BY

2045

REDUCE MAINE'S GREENHOUSE GAS EMISSIONS
BY TARGETS OUTLINED IN STATE LAW

45%

BELOW 1990 LEVELS
BY 2030

80%

BELOW 1990 LEVELS
BY 2050



ENSURE MAINE PEOPLE, INDUSTRIES, AND COMMUNITIES
ARE RESILIENT TO THE IMPACTS OF CLIMATE CHANGE.

Clean Transportation Goals and Strategic Planning

Embrace the Future of transportation in Maine by accelerating the transition to EVs, increase fuel efficiency and alternative fuels, and reduce vehicle miles traveled

- Increase EV adoption: Put 41,000 light-duty EVs on Maine roads by 2025 and 219,000 by 2030.
 - Track progress on Recharge Maine's dashboard
- Developed a state-wide light-duty EV roadmap
- Promote medium- and heavy-duty vehicle electrification
- Updated transportation recommendation strategies published by end of year



Recharge Maine

State Electric Vehicle Charging Network

Joyce Noel Taylor, P.E.
Chief Engineer MaineDOT





Recharge Maine is the state's initiative to build a convenient, reliable, affordable, and equitable EV charging infrastructure network statewide.



Maine Jobs and Recovery Plan (MJRP)

MJRP

- DCFC and Level 2 stations from previous RFPs are operational
- Continue award and construction process with past RFPs – DCFC Stations in Northern and Eastern Maine, and the Maine Destinations RFP
- Finalize locations with remaining funding for non-AFC locations and post RFPs in 2025





National Electric Vehicle Infrastructure (NEVI) Plan

Maine's Plan for EV Infrastructure Deployment

- Published in July 2022
- Updated annually
- Strategies for Level 2 and DCFC



MaineDOT

**MAINE'S UPDATED PLAN
FOR ELECTRIC VEHICLE (EV)
INFRASTRUCTURE DEPLOYMENT
(MAINE'S NEVI PLAN)**

*Submitted to Federal Highway
Administration September 2024*

NEVI Fiscal Year 2022/2023

Route	Location	Number of Ports	Estimated Quarter/Year Operational
US Route 1A / Route 3	Ellsworth 225 High Street, Ellsworth, ME, 04605	4	2025
US Route 1	Waldoboro 1555 Atlantic Highway, Waldoboro, ME 04572	4	2025
I-95 / Route 27	Augusta 281 Civic Center Drive, Augusta, ME 04330	5 NEVI-funded ports (16 total)	Fall 2024
US Route 1	Searsport 423 Main Street, Searsport, ME 04974	4	Fall 2024
US Route 1	Brunswick 11 Atlantic Avenue Brunswick, ME 04011	4	Spring 2025

NEVI Fiscal Year 2024

Route	Location	# of Ports	Estimated Year Operational
I-295 / US Route 1	Portland 140 Marginal Way, Portland ME 04101	4	2026
I-295 / US Route 302	Portland 295 Forest Avenue, Portland, ME 04101	4	2026
I-95 / US Route 2	Newport 44 Moosehead Trail, Newport, ME 04953	5 NEVI-funded ports (8 total)	2026
I-95	Bangor 1129 Union Street, Bangor, ME 04401	4	2026
I-95	Bangor 773 Stillwater Avenue, Bangor, ME 04401	4	2026
US Route 2	Rumford 50 River Street Rumford, ME 04276	4	2026
US Route 302	Windham 770 Roosevelt Trail, Windham ME 04062	4	2026
US Route 302	Bridgton 443 Portland Road, Bridgton ME 04009	4	2024

NEVI Fiscal Year 2025

Route	Location	Number of Ports	Estimated Quarter/Year Operational
I-95	Howland	4	2027
I-95	Sherman	4	2027
US Route 201	Jackman	4	2027
I-295	Topsham	4	2027

NEVI Fiscal Year 2026

- Dependent on future funding (CFI Round 2) and determined at a later date
 - Potential to include Medium and Heavy-Duty Vehicles (MHDV)
 - Pull-through locations





Charging and Fueling Infrastructure (CFI) Round 1

Recharge Maine Project

- Locations include:
 - 520 Level 2 ports at 115 sites (large workplaces, community locations, multi-family buildings, and regional service centers)
 - 34 DCFC ports and 34 Level 2 ports at 17 sites (municipalities with a large number of multi-family buildings)
 - 28 DCFC ports at seven sites along Alternative Fuel Corridors





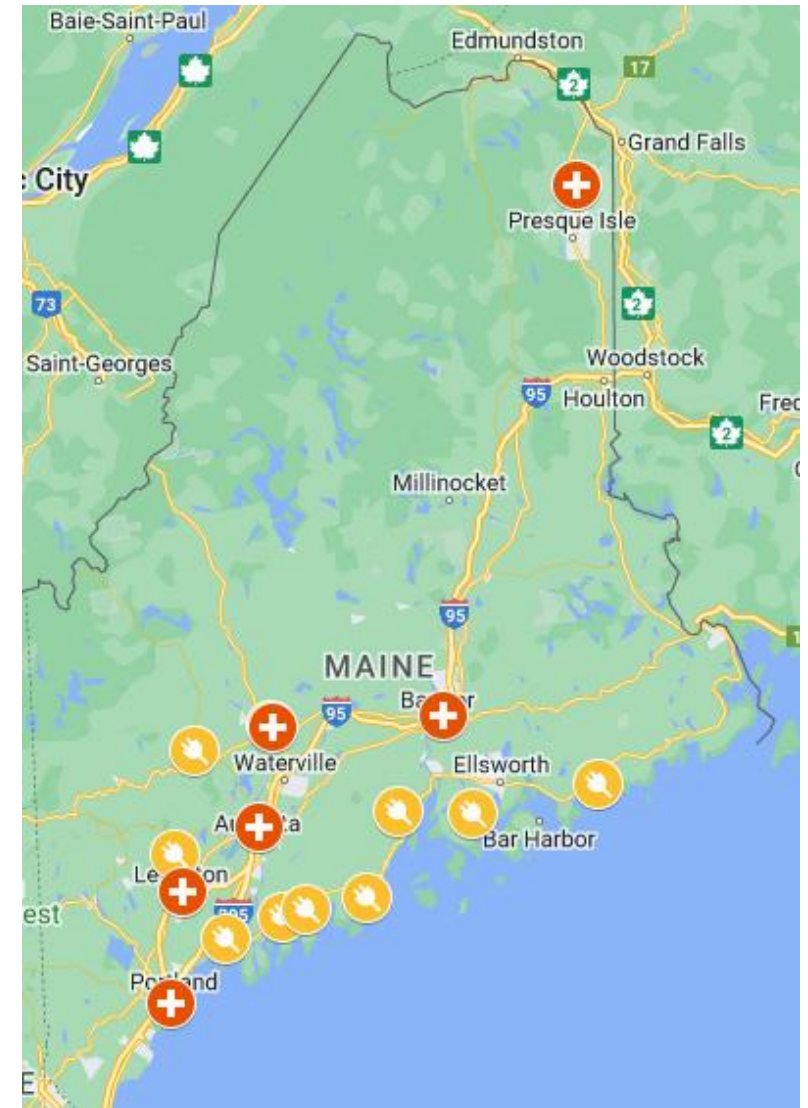
Charging and Fueling Infrastructure (CFI) Round 2

Chargers to Promote Resilience: A Recharge Maine Community Project*

- 64 DCFC ports in 10 communities and at 6 hospitals
- Focus is on increasing resiliency in flood prone areas



***Dependent on competitive future funding through CFI**



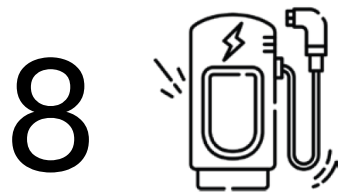
New CFI-funded EV chargers to be installed in communities (yellow plug) and at hospitals (red cross) to improve resiliency and increase access to chargers during power outages

Delivering the Charge: Recharge Maine Corridor Project*

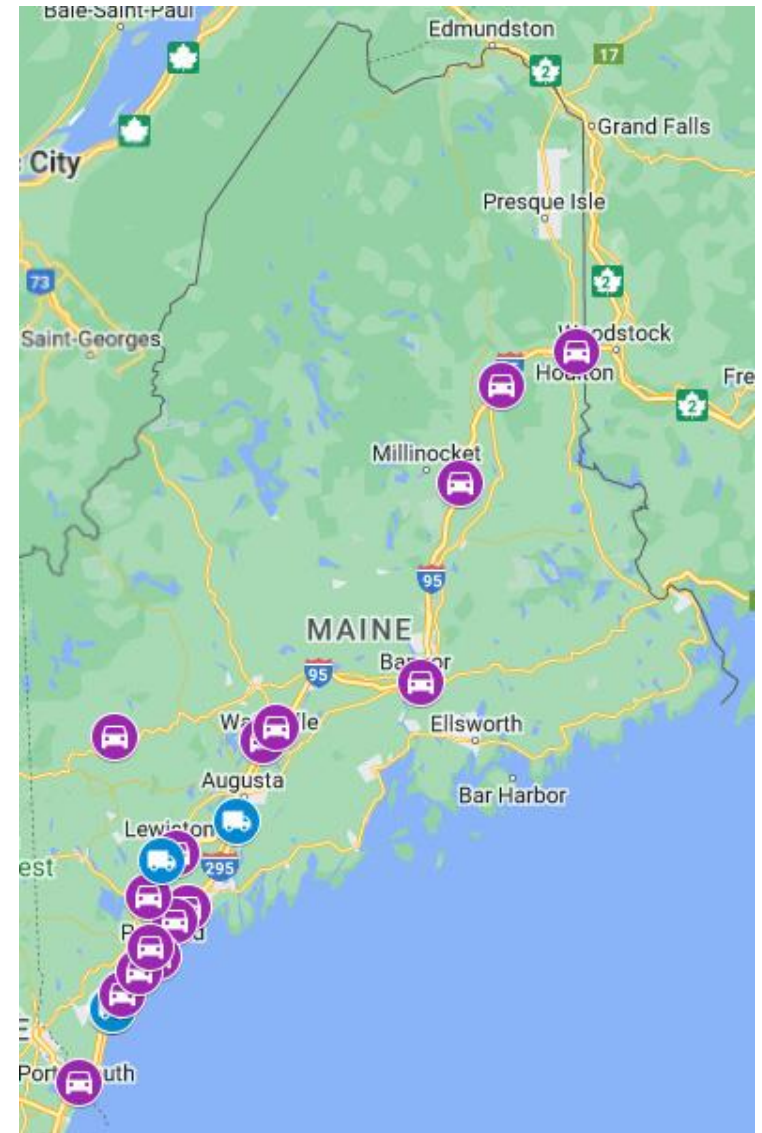
- Install 80 DCFC ports across 20 locations along Maine's Federally designated Alternative Fuel Corridors.
- Each of the 20 locations will host four DCFC ports. Medium- and Heavy-Duty locations will host two 350 kW ports and two 150 kW ports.



LDV ports
across 20 locations



MHDV ports
across 4 locations



New CFI-funded EV chargers installed along AFCs in Maine will expand charging access for LDVs (purple car) and MHDVs (blue truck)

***Dependent on competitive future funding through CFI**

Challenges

- Utility capacity
 - Working with utility companies to verify the current availability of electricity for charging stations within a community
- Lead time
 - Charging equipment lead time and potential transformer upgrades after awarding site locations
- Workforce
 - Need more electricians to go through the Electric Vehicle Infrastructure Training Program (EVITP)



Opportunities



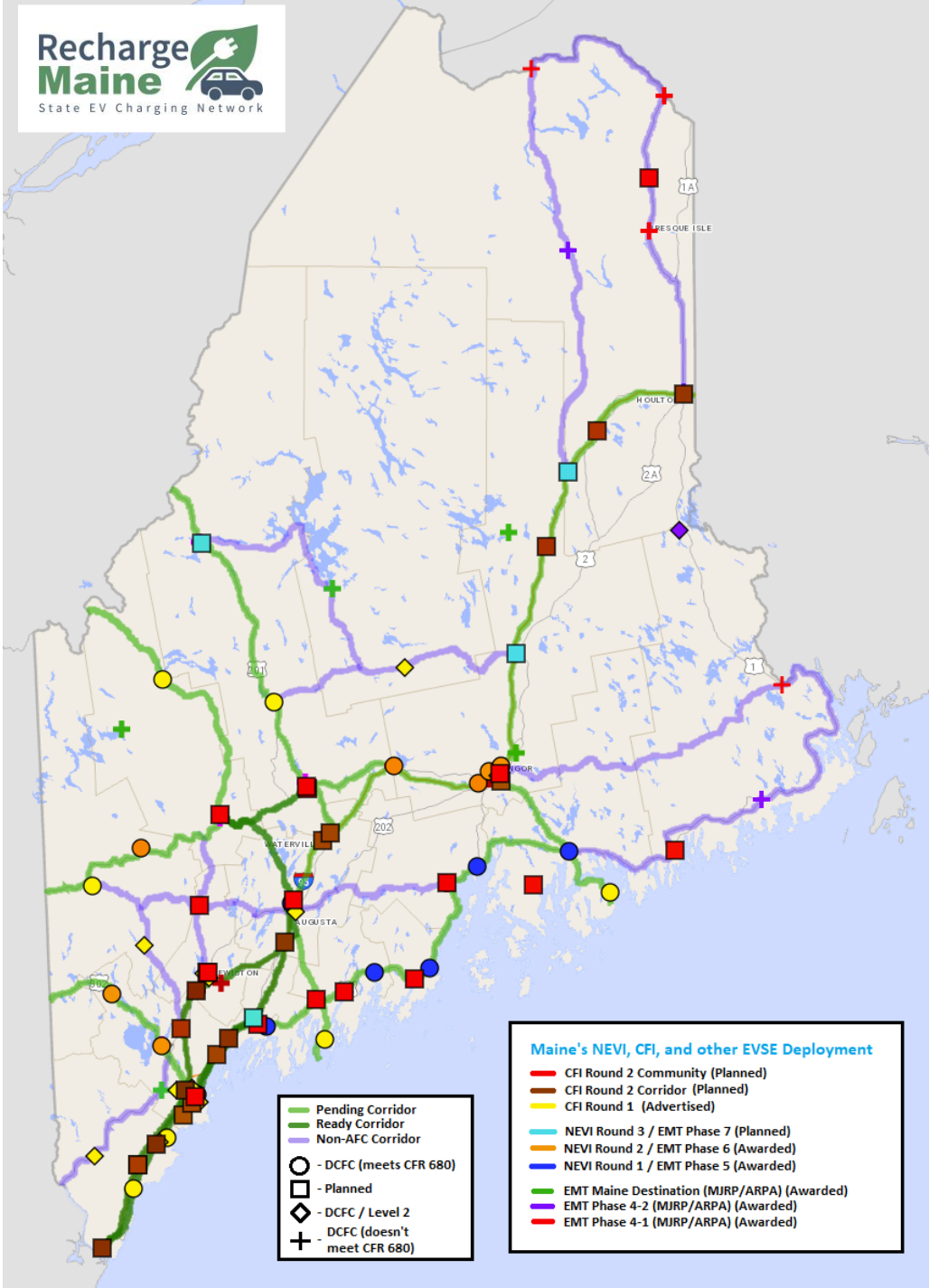
- Workforce development
- Job growth
- Request for Proposals are available on Efficiency Maine's website: <https://www.efficiencymaine.com/opportunities/>



Awarded Sites Online

Route	Location	Number of Ports	Year Operational
US Route 1	Rockland 75 Maverick Street, Rockland, ME 04841	5 NEVI-funded ports (8 total)	March 2024
I-95 / Route 27	Augusta 281 Civic Center Drive, Augusta, ME 04330	5 NEVI-funded ports (16 total)	Fall 2024
US Route 302	Bridgton 443 Portland Road, Bridgton, ME 04062	4	Fall 2024

Past, previous, and future EV stations



Questions?

Electric Vehicle Incentives

Hogan Dwyer

Program Manager, Electric Vehicles

Efficiency Maine

Vehicle Incentives - Individuals

Income Bracket	Efficiency Maine Rebate (upfront at participating dealers or rebate for direct purchases)	Federal Tax Credit (upfront at participating dealers)	Max Total
Any	\$2,000 – new BEV \$1,000 – new plug-in hybrid		\$9,500
Moderate* (AGI < \$70k/year single or \$100k/year joint)	\$3,500 – new BEV \$2,000 – new plug-in hybrid	Up to \$7,500/new EV Up to \$4,000/used EV	\$11,000
Low* (MaineCare, TANF, SNAP, HEAP)	\$7,500 – new BEV \$3,000 – new plug-in hybrid \$2,500 – used BEV or plug-in hybrid		\$15,000 (new) \$6,500 (used)

*Requires verification from Efficiency Maine **before** purchase or lease of rebate-eligible vehicle

How to Get Income Verified

www.energymaine.com/income-based-eligibility-verification/

Income-Based Eligibility Verification

Efficiency Maine offers **low-cost and no-cost** energy upgrades and enhanced electric vehicle rebates for eligible low- or moderate-income Mainers. These rebates are higher than the standard incentives, with the highest amounts for those who are low-income. Efficiency Maine also offers **home energy loans** to eligible homeowners.

Use the online form below for the fastest eligibility verification.

Choose one eligibility option from the five listed below that best represents your situation.

Qualified **low-income** households (at least one household member participates in one of the programs below) may be eligible for the highest rebates for electric vehicles (EVs), heat pumps, water heaters, and insulation.

Select the program that at least one member of the household currently participates in.

- 1 - Home Energy Assistance Program (HEAP)** - I currently receive fuel-assistance benefits from MaineHousing
- 2 - Supplemental Nutrition Assistance Program (SNAP)** for food assistance
- 3 - Temporary Assistance for Needy Families (TANF)** for cash assistance
- 4 - MaineCare** for medical insurance coverage

Qualified **moderate-income** households may be eligible for elevated rebates based on federal Adjusted Gross Income (AGI).

Moderate Income Choice (Required)

- 5 - AGI up to \$70,000** for an individual filing as single or head of household, or **\$100,000** if married filing jointly, married filing separately (both returns required), or individual filing as a qualifying widower.

Residential Charging Incentives: Managed Charging



- Incentive
 - \$50 one-time for enrollment
 - \$50 annually for continuous enrollment
- Management schedule
 - Automatically schedules vehicle charging to occur after 9:00 p.m. roughly 60 times per summer.
- Eligibility
 - [Qualifying vehicle and/or charger](#)

Vehicle Incentives - Organizations

	Efficiency Maine Rebate (upfront at participating dealers or rebate for direct purchases)	Federal Tax Credit (part of annual tax filing)
Business or Nonprofit	\$2,000 – new BEV \$1,000 – new plug-in hybrid \$8,000 – new electric cargo van, chassis cab, cutaway	30% up to \$7,500 for new EV under 14,000 lbs GVWR
Gov’t Entity, Tribal Gov’t, 2-1-1 Nonprofit*	\$7,500 – new BEV \$2,000 – new plug-in hybrid \$8,000 – new electric cargo van, chassis cab, cutaway	

*Requires verification from Efficiency Maine **before** purchase or lease of rebate-eligible vehicle


Public Charger Incentives

www.efficiencymaine.com/opportunities

Program	Efficiency Maine Incentive	Deadline
Level 2 Community Locations	80% up to \$10,000 per port 4 port minimum	Rolling until December 13
Level 2 Multifamily	80% up to \$10,000 per port 4 port minimum	Rolling until December 13
Level 2 Large Workplaces	80% up to \$10,000 per port 10 port minimum	Rolling until December 13
Level 2 Regional Service Centers	80% up to \$10,000 per port 4 port minimum	Rolling until December 13
DCFC Corridor	Up to 80% of eligible costs 4 DCFC ports (150 kW each)	September 30
DCFC Community	Up to 80% of eligible costs 2 DCFC ports (150 kW each), 2 L2 ports	October 22

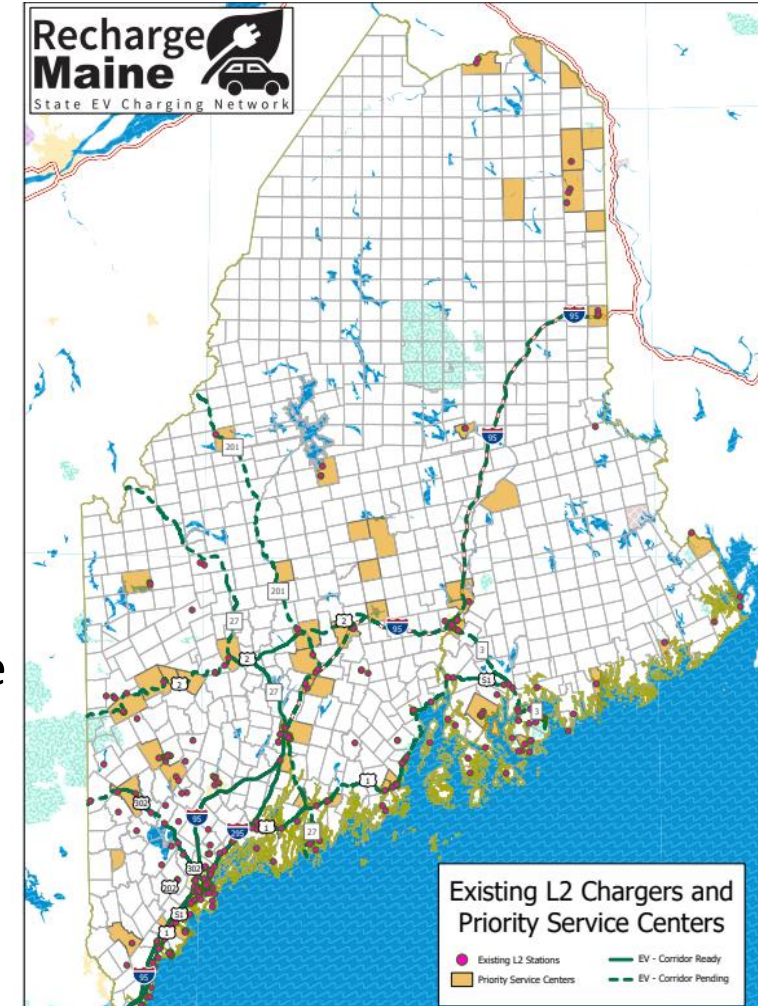
Public Charger Incentives

Level 2 Chargers

1. Multifamily Buildings (EM-022-2024)
 - Auburn, Augusta, Bangor, Biddeford, Dover-Foxcroft, Lewiston, Norway, Oxford, Portland, Sanford, South Portland, Westbrook.
2. Large Workplaces (EM-027-2024): 50+ employees
3. Community Locations (EM-030-2024)
 - Locations within a community where drivers tend to congregate and park for more than one hour (parks, gyms, venues, etc.)
4. Regional Service Centers (EM-033-2024) 

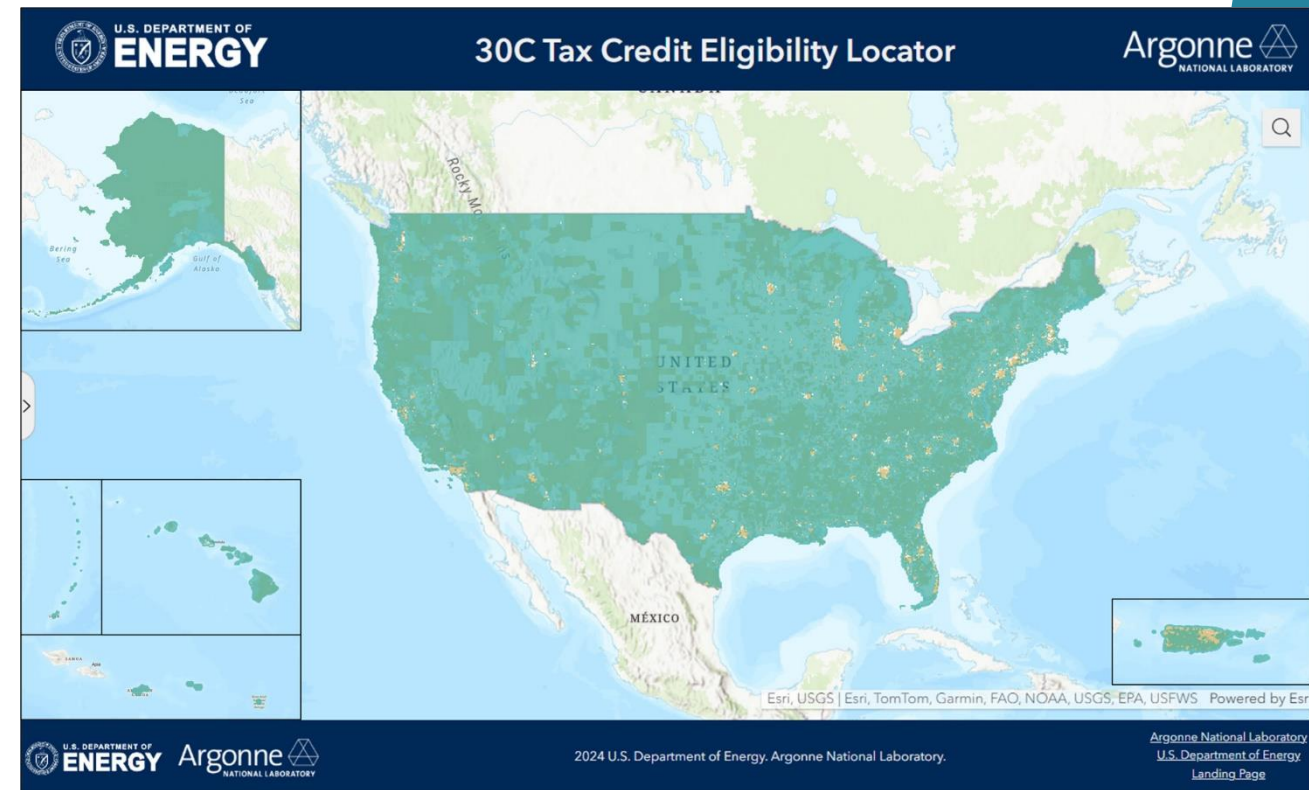
DC Fast Chargers

1. CFI Corridors (EM-034-2024)
 - Bar Harbor, Bethel, Bingham, Boothbay, Carrabassett/Eustis, Saco/OOB, Wells/Ogunquit
2. CFI Community (EM-035-2024)
 - Auburn, Augusta, Bangor, Biddeford, Dover-Foxcroft, Lewiston, Norway, Oxford, Portland, Sanford, South Portland, and Westbrook



Alternative Fuel Vehicle Refueling Property Credit (30C)

- Federal tax credit for both residential and commercial
- Residential: 30% up to \$1,000
- Commercial: 30% up to \$100,000
- Must be in eligible census tract

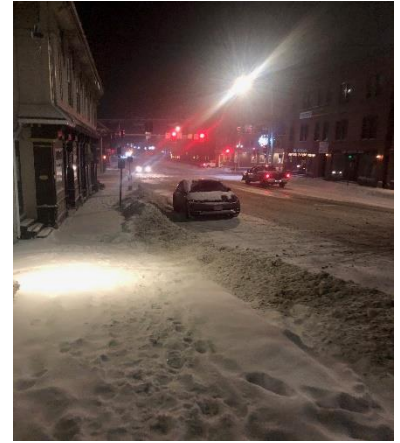


Medium/Heavy-duty Battery Electric Vehicle Pilot

- Maine businesses with <500 employees
- Class 3-7 battery electric vehicles
- Incentives
 - 40-50% of total vehicle purchase price up to \$x depending on class
 - Cap ranges from \$40,000 for Class 3 to \$120,000 for Class 7
 - \$3,000 per Level 2 port
 - Up to \$15,000 towards sub-contracted professional services
 - E.g., consultant, electrician
- Round 1 applications due November 1
 - Two additional rounds if funds remain



Conversation with Maine EV drivers





GEO's Clean Transportation
webpage



MAINE GOVERNOR'S
Energy Office

Thank You

emma.cost@maine.gov

www.maine.gov/energy



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email newsletter



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