

Session I: Growing Public EV Charging Networks

Facilitator: **Jay Kamm**

Senior Planner, Northern Maine Development Commission

Joyce Taylor

Chief Engineer, MaineDOT

Johannah Blackman

Executive Director, A Climate to Thrive

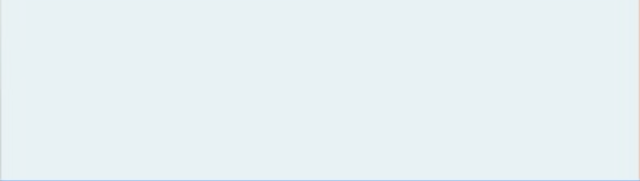
Peter Jamieson

Town Manager, Town of Millinocket

Michael Stoddard

Executive Director, Efficiency Maine Trust





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Session 1/ Growing Public EV Charging Networks
Joyce Taylor, Chief Engineer,
Maine Department of
Transportation

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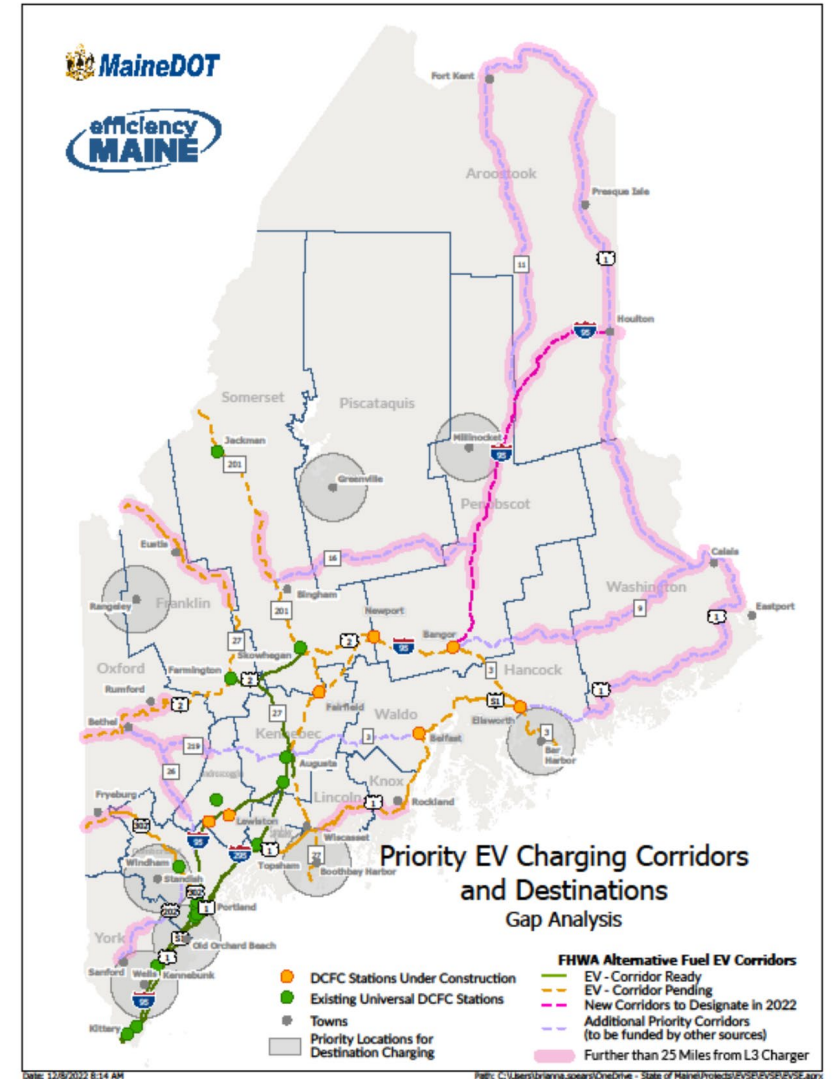
The Challenge

- To support recommendations in *Maine Won't Wait*
 - Strategy A: Embrace the Future of Transportation
 1. Accelerate Maine's Transition to Electric Vehicles
- Thoughtfully build-out EV charging network across the State to enable EV drivers to travel N-S and E-W
- Encourage the use of electric vehicles and lower emission vehicles to meet light-duty EV targets in *Maine Won't Wait*



Process

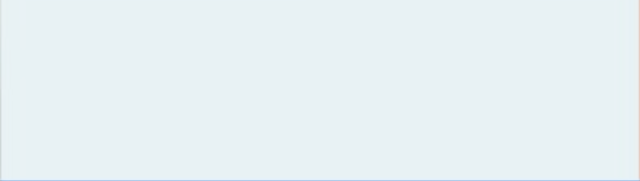
- Develop the Plan for Electric Vehicle Infrastructure Deployment
 - “A convenient, reliable, affordable, and equitable charging experience for all users”
 - Targeted areas and timeline
 - Level 2 and DC fast chargers
 - Competitive solicitation
- Final Rule
- Charging and Fueling Infrastructure discretionary grants



Solutions/Results/Insights

- Installed more than 24 DC fast charger ports and 186 Level 2 ports
- Recharging Maine - Plan for Electric Vehicle Infrastructure Deployment
- Funding (MJRP, NEVI, potential discretionary)
- Collaborating with Efficiency Maine
- MaineDOT Climate Initiative website
<https://www.maine.gov/mdot/climate/electrification/>





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Johannah Blackman, Executive
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The Challenge

- EV chargers sited to expand access to year-round residents, such as renters
- Community-driven siting process
- Need to reach both early EV adopters and those with no EV experience to plan for the future



Process

- Siting meetings with town volunteer committees & leadership
- Surveys to community members
- Importance in finding “next-best” option if ideal site was not feasible

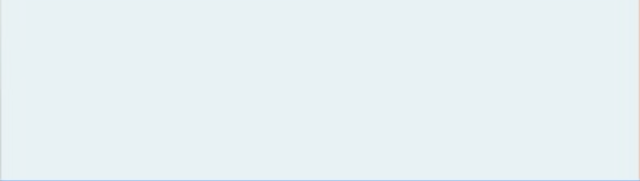


Solutions/Results/Insights

- Sites in each town that are truly focused on year-round residents & expanding access to EV charging
- Siting process as a tool to increase understanding of EV technology & adoption
- Importance of speaking to both enthusiastic adopters and skeptics alike



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**Peter Jamieson, Town Manager,
Town of Millinocket**

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The Challenge

A Barrier to Visitors in Tourism Destination

- Lack of universal EV charging access in region
- Increase in EV visitation
- Who takes action and how?



Process

An open door!

- Introduction to Efficiency Maine EV Charger Program
- Recognize opportunity > Establish plan
- Municipal parking + EM/CDBG/TNC = Solution!



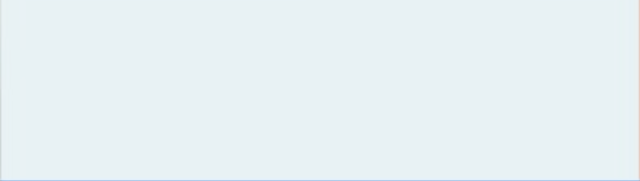
Results/Insights

Importance of Readiness & Education

- Plan ahead for community education – clear message: “Why & How”
- Ongoing needs assessment & “shovel-ready projects”
- Municipally owned, revenue producing infrastructure at ZERO COST!



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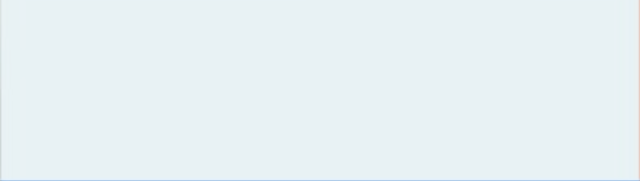
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Session 1/ Growing Public EV Charging Networks

**Michael Stoddard, Executive
Director, Efficiency Maine Trust**

Resource Wrap-Up: Electrification for Vehicles in Your
Community



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Electric Vehicles

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The Opportunity -- Switching to EVs

1. Reduced energy costs
2. Lower maintenance costs
3. Quieter
4. More fun to drive
5. Cleaner
 - No tailpipe emissions of NOx, SOx or CO2
(no tailpipe at all !!!)

Portland Water District introduces new electric, meter-reading vehicle

Story by WABI News Desk • Feb 15



The electric-powered mustang costs around \$32,000 and can travel around 200 miles per day.
© Provided by Bangor WABI-TV

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Federal Tax Credit

- Businesses and **tax-exempt organizations** that buy a qualified commercial clean vehicle may qualify for a clean vehicle tax credit of up to \$40,000 under Internal Revenue Code (IRC) 45W.
- The credit equals the lesser of:
 - 15% of your basis in the vehicle (30% if the vehicle is not powered by gas or diesel)
 - The incremental cost of the vehicle
- The maximum credit is:
 - \$7,500 for qualified vehicles with gross vehicle weight ratings (GVWRs) of under 14,000 pounds and
 - \$40,000 for all other vehicles.
- The vehicle or machinery must also either be:
 - A plug-in electric vehicle that draws significant propulsion from an electric motor with a battery capacity of at least:
 - 7 kilowatt hours if the gross vehicle weight rating (GVWR) is under 14,000 pounds
 - 15 kilowatt hours if the GVWR is 14,000 pounds or more; or
 - A fuel cell motor vehicle

FMI: <https://www.energymaine.com/additional-ev-financial-incentives/>

www.fueleconomy.gov



Efficiency Maine Rebates for Gov't Entities

New Battery Electric Vehicle (BEV)	\$7,500
New Plug-in Hybrid Electric Vehicle (PHEV)	\$2,000
Level 2 Charger	\$350

- Requires pre-approval on [Efficiency Maine Website](#).
- Maximum of 5 EV rebates per entity/organization per 12-month period, of which not more than 2 may be for leased EVs.
- FMI: <https://www.energymaine.com/electric-vehicle-rebates/>



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Personal Electric Vehicle Rebates

- Instant rebate at Maine participating dealers
- Mail-in rebates for Tesla, Polestar, Fisker, and Rivian

	Any Income	Moderate Income	Low Income
New Battery Electric Vehicle (BEV)	\$1,000	\$3,500	\$7,500
New Plug-in Hybrid Electric Vehicle (PHEV)	\$500	\$2,000	\$3,000
Used PHEV or BEV	N/A	N/A	\$2,500

FMI: <https://www.energymaine.com/electric-vehicle-rebates/>



www.energymaine.com/EV

1. Guidebooks
2. Videos
3. Charger Locator
4. Vendor Locator
5. Dealerships Locator



Search Participating Dealerships - Updated 4/25/2023

Map Satellite

Arundel Ford
1561 Portland Rd
Arundel, ME 04046

Map data ©2023 Google 50 mi Terms of Use



How to Find EV Chargers

There are more than 500 public charging plugs in Maine. Learn how to find them with the help of an app.

[▶ Watch Now](#)

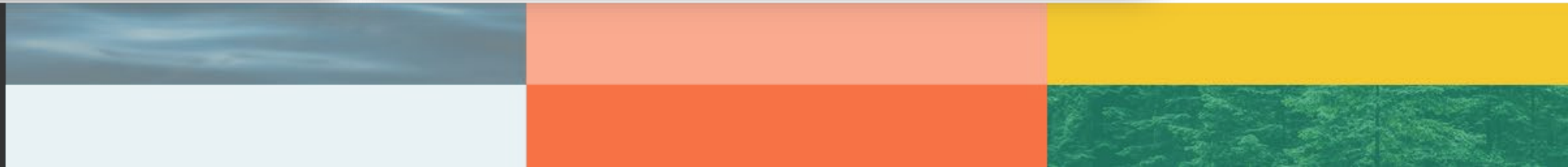


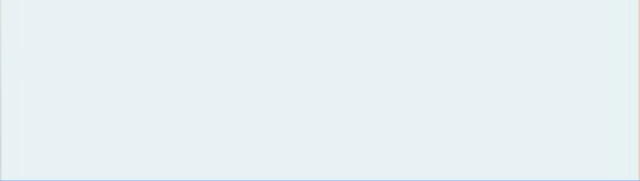
Home Charging

This video will show you some handy tips for installing your own home EV charger.

[▶ Watch Now](#)

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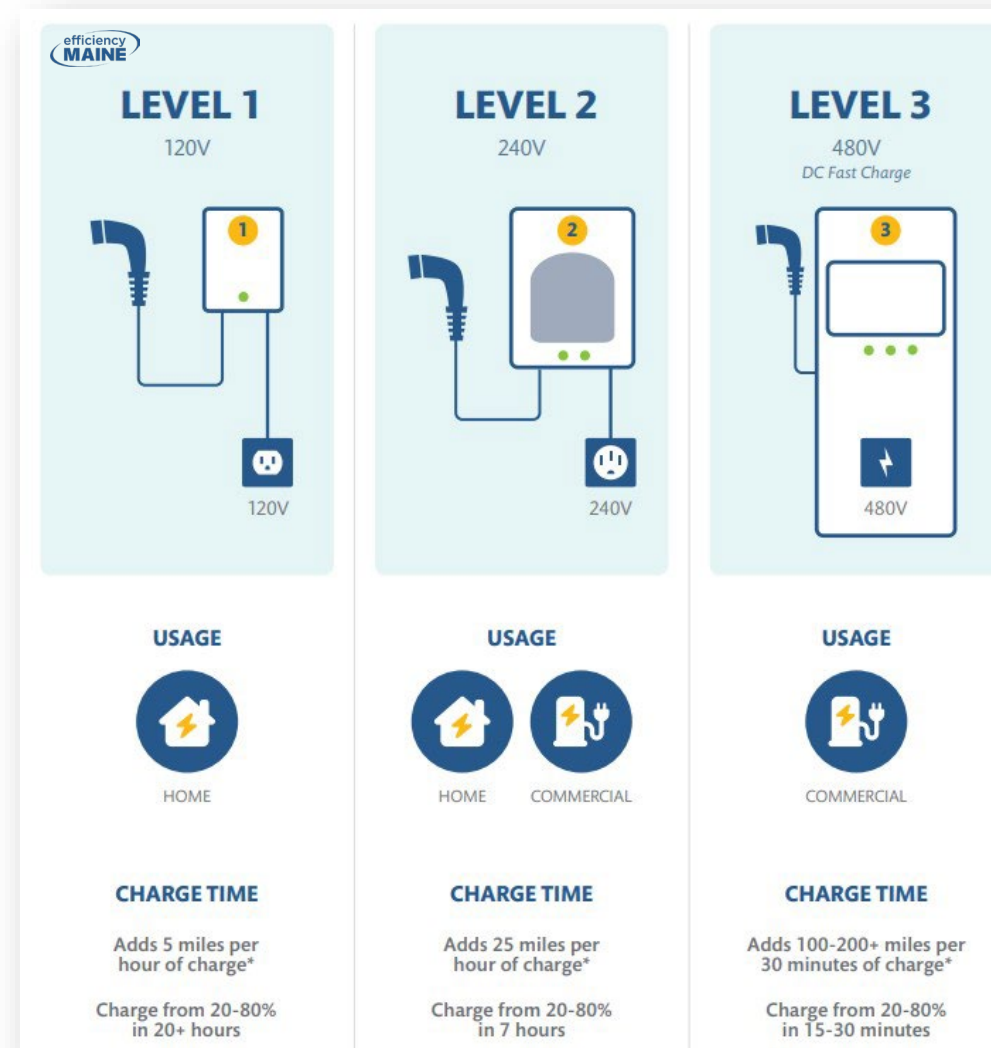
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EV Chargers

Types of Chargers

- 3 Levels of Chargers
 - Speed: slow, medium, fast
 - Cost: low, medium, high
- Private (municipality) vs. Public
- Considerations for Public
 - Will payment be required for use of chargers?
 - Will it be accessible 24x7?
 - Will it be ADA compliant?



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Level 2 vs. DC Fast Charging

Level 2

- For extended (2-12 hour) charge times
- Best at workplaces, residential, hotels, recreational facilities
- Relatively low cost (\$5k-10k per plug)
 - As low as \$1k-2k per plug for private use

DC Fast Charging

- Charge in <1 hour
- Serve travelers on long trips
- Serve local businesses and residents needing a quick charge
- Often found at gas stations, highway service plazas, and retail locations
- Higher cost (\$100k+ per port)



Available Now – Incentives for Public Level 2 EV Charging



Funding Opportunity Notice (FON) 002-2023

- Local governments and public libraries: **90% of project cost up to \$8,000 per port**
- Businesses and other organizations: **80% of project cost up to \$5,000 per port**
- Non-Networked: **90% up to \$2,000**
- Open to public in rural areas in Cumberland and York counties

Application deadline: **June 30, 2023**

FMI: efficiencymaine.com/opportunities

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Grants for Level 2 EV Charging in Rural Towns

Round 1 - closed January 17, 2023

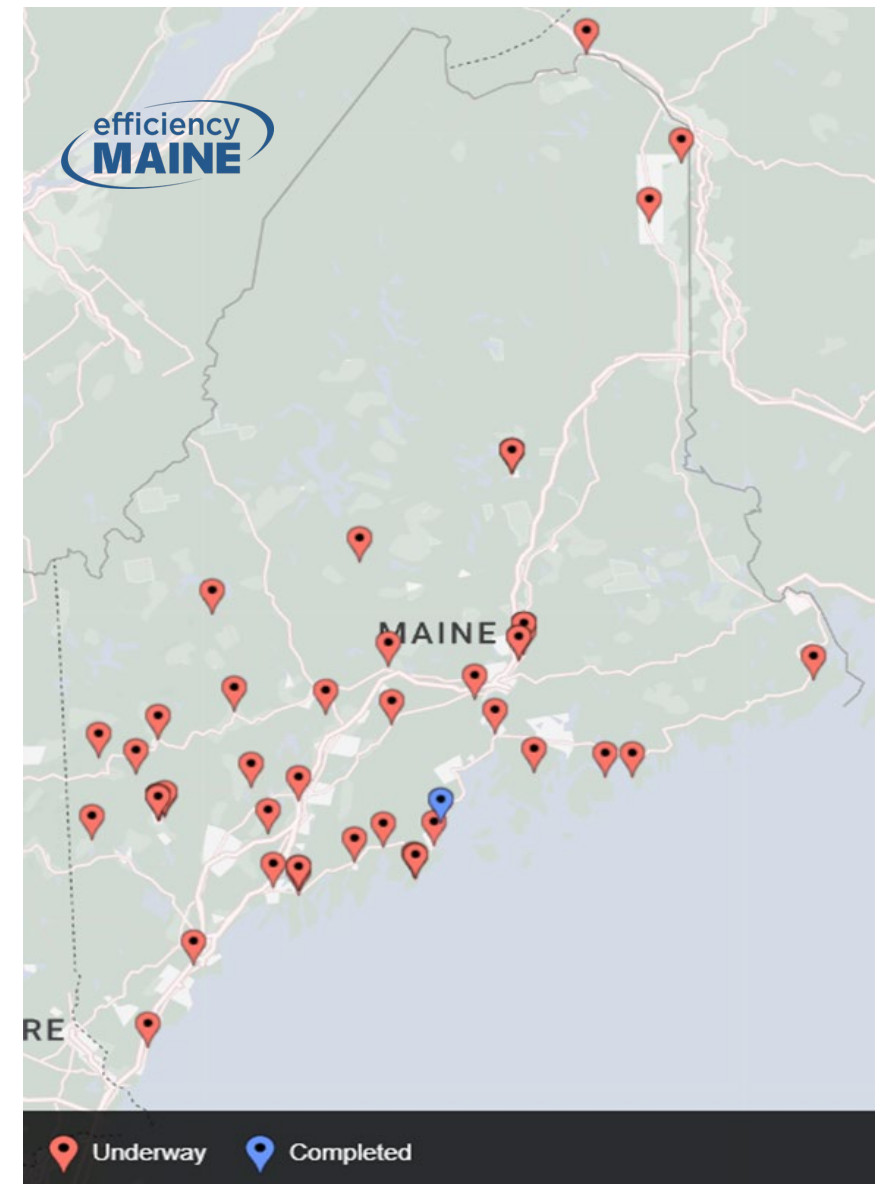
- 14 northern counties:
 - 49 sites / 119 ports
 - \$629,021 awarded by EMT

Round 2 - open March 1 - June 30, 2023

- Cumberland & York Counties



<https://www.energymaine.com/opportunities/>





COMING SOON: Charging and Fueling Infrastructure (CFI) Grant Program

Priority Locations for Maine CFI Grant Application

1. Communities with a high concentration of MUD

- Prioritize top 8 towns in the state with the highest number of multi-unit dwellings (MUD)
 - Portland, Lewiston, Bangor, South Portland, Auburn, Biddeford, Augusta, Westbrook

2. Regional Service Centers

- Service center towns not included in the MUD category above
- Prioritize service centers serving economically disadvantaged communities

3. Alternative Fuel Corridors (AFC)

- DC fast charging sites on AFC that will not be funded by the NEVI Formula program

4. Large Workplaces

- Workplaces with a large hourly/retail workforce

5. Libraries and Other Municipal Buildings

- WIFI available in charging spaces;
Open 5+ days per week

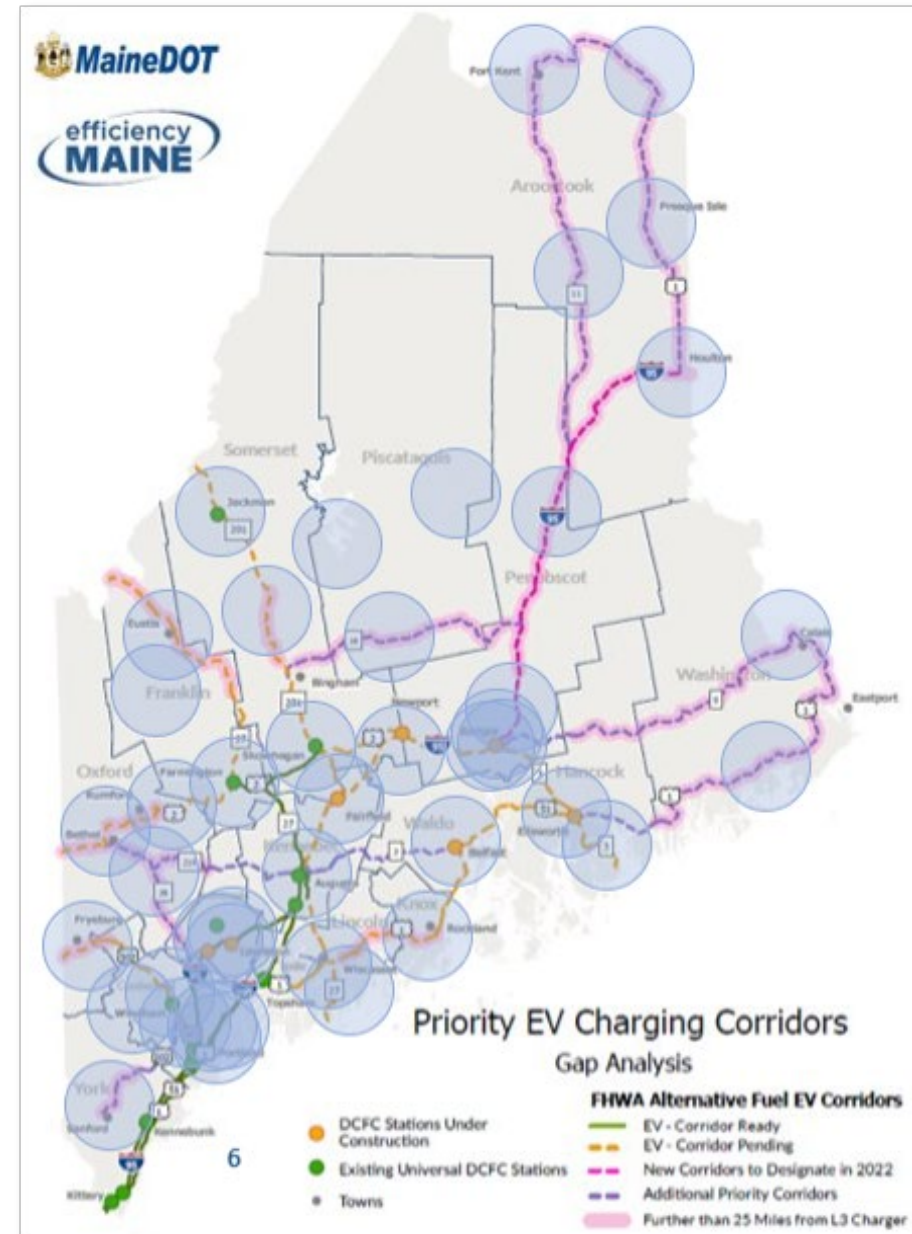


State Plan for Fast Charging

Planned DCFC locations in Maine EV Infrastructure Plan

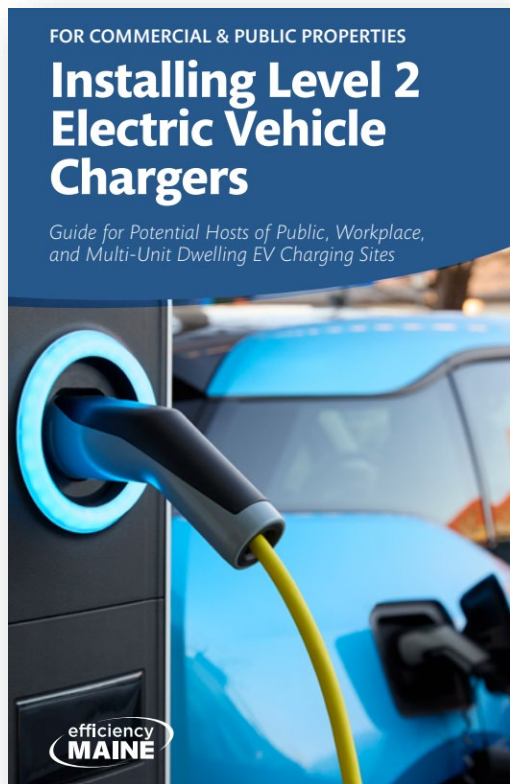
- 50 miles or less between DC fast chargers along key travel routes
- Key destinations for commerce, tourism and local traffic
- Budget = +/- \$47 million
 - Funded by federal grants & NECEC settlement
 - No Maine taxpayer funds; no electricity ratepayer funds

*Planned new or upgraded DCFC described
in Maine EV infrastructure plan*



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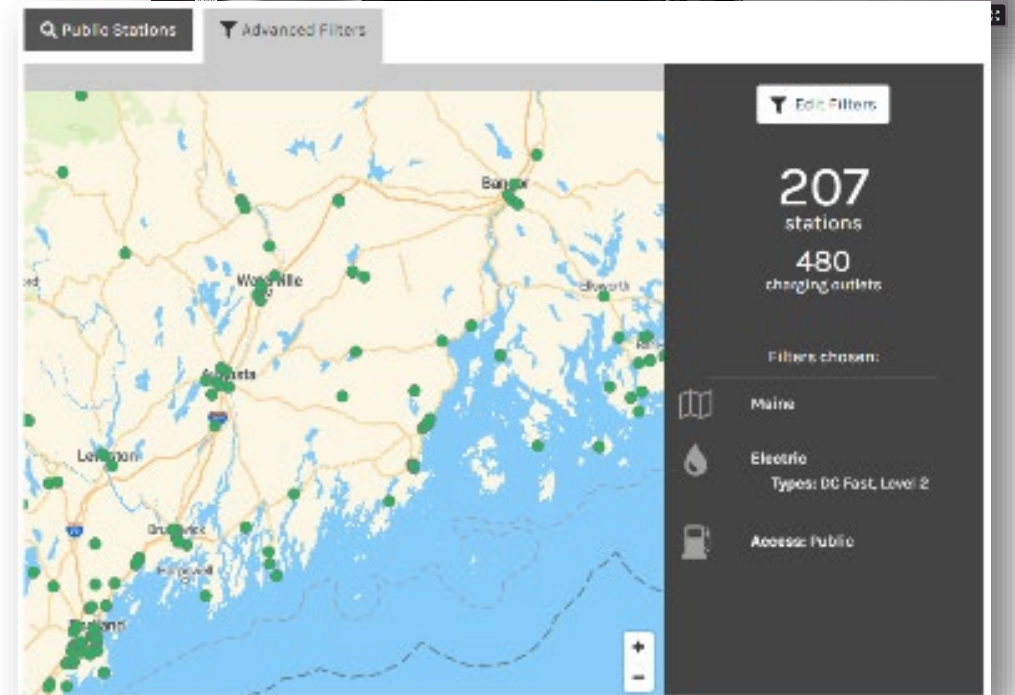
“Installing Level 2 EV Chargers” Guidebook



EVSE Website Resources

1. [Guide to Installing Level 2 EV Chargers for Commercial and Public Properties](#)
2. [Video series on installing public EV chargers for property owners](#)
3. [List of EV charging service providers in Maine](#)
4. [Links to resources from the US Department of Energy and other states on workplace charging, MUD charging, and more](#)
5. [Charging Station Locator](#)
6. [Vehicle Cost Calculator](#)
7. [Background on Efficiency Maine's Electric Vehicle Initiatives](#)

efficiencymaine.com/ev



Small Group Discussion Instructions (until 10:45am)

See instructions and prompts on the pink sheet of paper at your table.

Discussion Prompts

1. **Introductions:** Introduce yourself to your tablemates.
2. **Quick round robin:** Share what your town is working on related to the panel topic. Where are you in the process? What's going well? Where are you stuck? If this topic is new to you, what opportunities come to mind?
3. **Funding resources:** Reflect on the funding resources presented. If you have used this resource, please share your experience. What other resources, technical assistance, grant programs, or tools are you using or exploring?
4. **Learning partners:** I wish I could have a thought-partner to work through _____ in our project.
5. **Community engagement:** How are you engaging your community with your project? What input do you need from the community to make this project a success? What do you want the community to know?

