



Bidders' Informational Webinar

Request for Proposals for DC Fast Charging Stations – Maine Phase 5

April 5, 2023

Efficiency Maine Introduction

- Runs the State's energy efficiency programs
- Provides rebates, financing, technical information, and registry of vendors
- Funded by electric and natural gas ratepayers, Regional Greenhouse Gas Initiative, ISO New England Grid, grants, and other sources
- Board appointed by the governor and confirmed by the legislature

Policy Framework for EVs in Maine

- **Public Law, Chapter 259 (2019), An Act To Increase Electric Vehicles in Maine**
 - 2 new funds established at the Efficiency Maine Trust:
 - Electric Vehicle Fund – to transform markets toward the adoption of electric vehicles and to support the purchase of electric vehicles
 - Electric Vehicle Charging Infrastructure Fund – to increase the availability and effectiveness of electric vehicle charging infrastructure
- **Maine Climate Action Plan (2020)**
 - Achieve emissions reductions goals by putting 219,000 light-duty EVs on the road in Maine by 2030
- **Efficiency Maine Triennial Plan V (2023-2025)**
 - Estimated 1,400-1,900 new Level 2 plugs by 2025 to meet demand
- **Maine Plan For EV Infrastructure Deployment (2022)**
 - Identifies goals, priorities, and strategies for EV infrastructure deployment in Maine
 - Outlines plans to fund 100 public DC fast charging plugs and 1,000 Level 2 plugs by 2026



Maine Plan for EV Infrastructure Deployment – “Recharge Maine”

Statewide initiative to expand public EV level 2 and DC fast charging

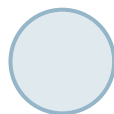
- Statewide plan developed by MaineDOT, Efficiency Maine, Governor’s Office of Policy Innovation and the Future, Governor’s Energy Office
- Identifies goals, priorities and strategies for EV Infrastructure deployment in Maine
- Outlines plan for use of:
 - Maine Jobs and Recovery Plan (using federal ARPA funds),
 - Infrastructure Investment and Jobs Act (IIJA) formula funds,
 - CFI discretionary grants, and
 - Other funding sources
- Updated each year
- Plan available at efficiencymaine.com



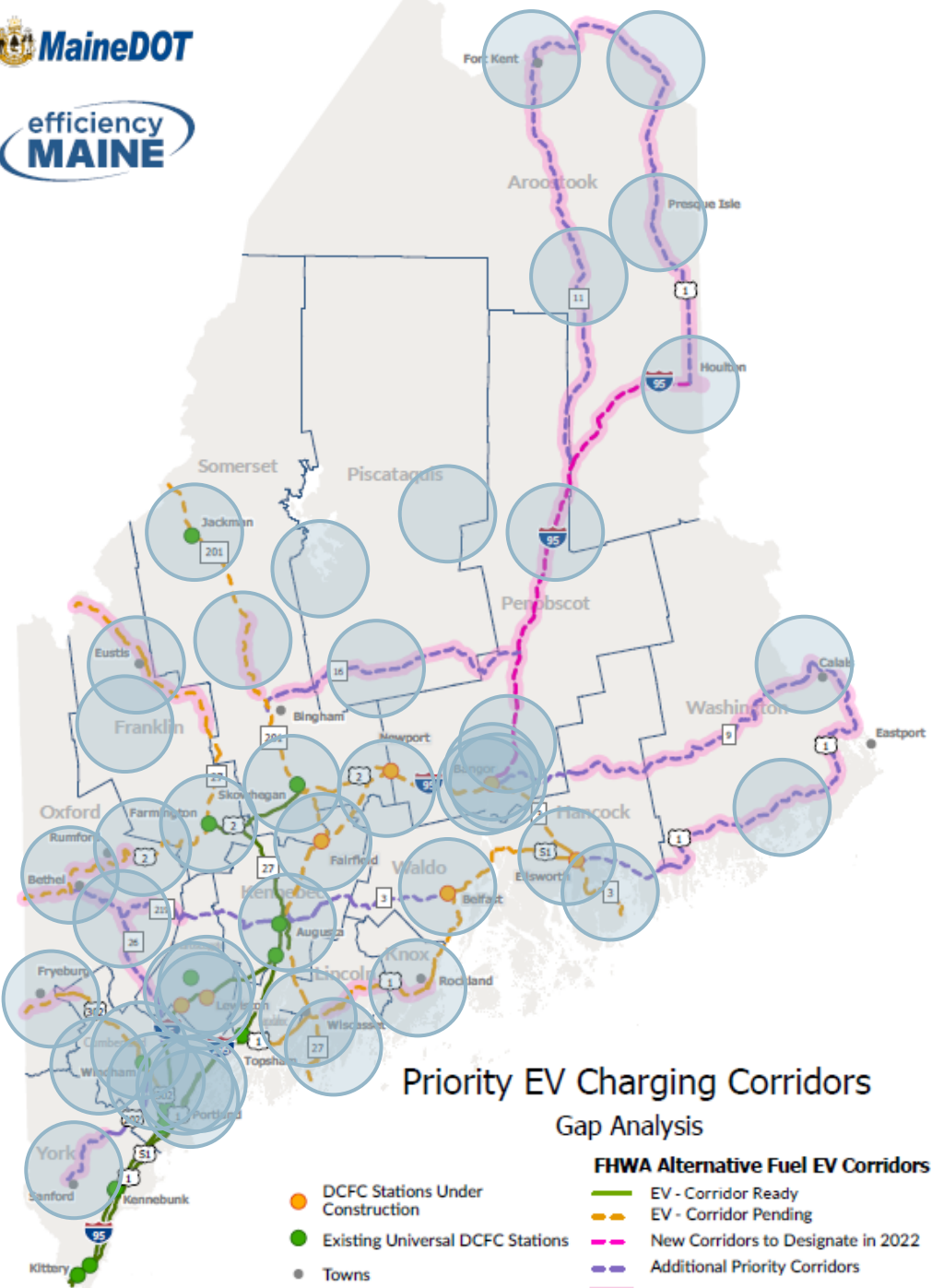
Expanding DC fast charging (DCFC)

Planned DCFC locations in Maine EV Infrastructure Plan

- Target distance of 50 miles or less between DC fast chargers along key travel routes in Maine
- Chargers at key destinations for tourism and local traffic



Planned new or upgraded DCFC described in Maine EV infrastructure plan



“Maine Phase 5” RFP for DC Fast Charging

Purpose of this RFP

- Fill gaps in public DC fast charging (DCFC) network up the Maine coast
- Add capacity in heavily trafficked areas
- Attract commerce and tourism
- Serve long-distance drivers and local drivers
- Allow rural communities to transition to electric transportation

Funding Available for this RFP

- National EV Infrastructure (NEVI) Formula funds
 - \$6,900,000 from MaineDOT through FHWA for capital incentives and demand charge incentives

Incentives

- **Capital Incentive**: 80% of eligible project costs net of expected federal tax credits and state, private, and federal grants
- **Demand Charge Incentive**: 20% of actual utility demand charges for the first five years of operation
- **Final incentives will be the lesser of what is requested in the proposal, or the actual costs**

RFP Schedule

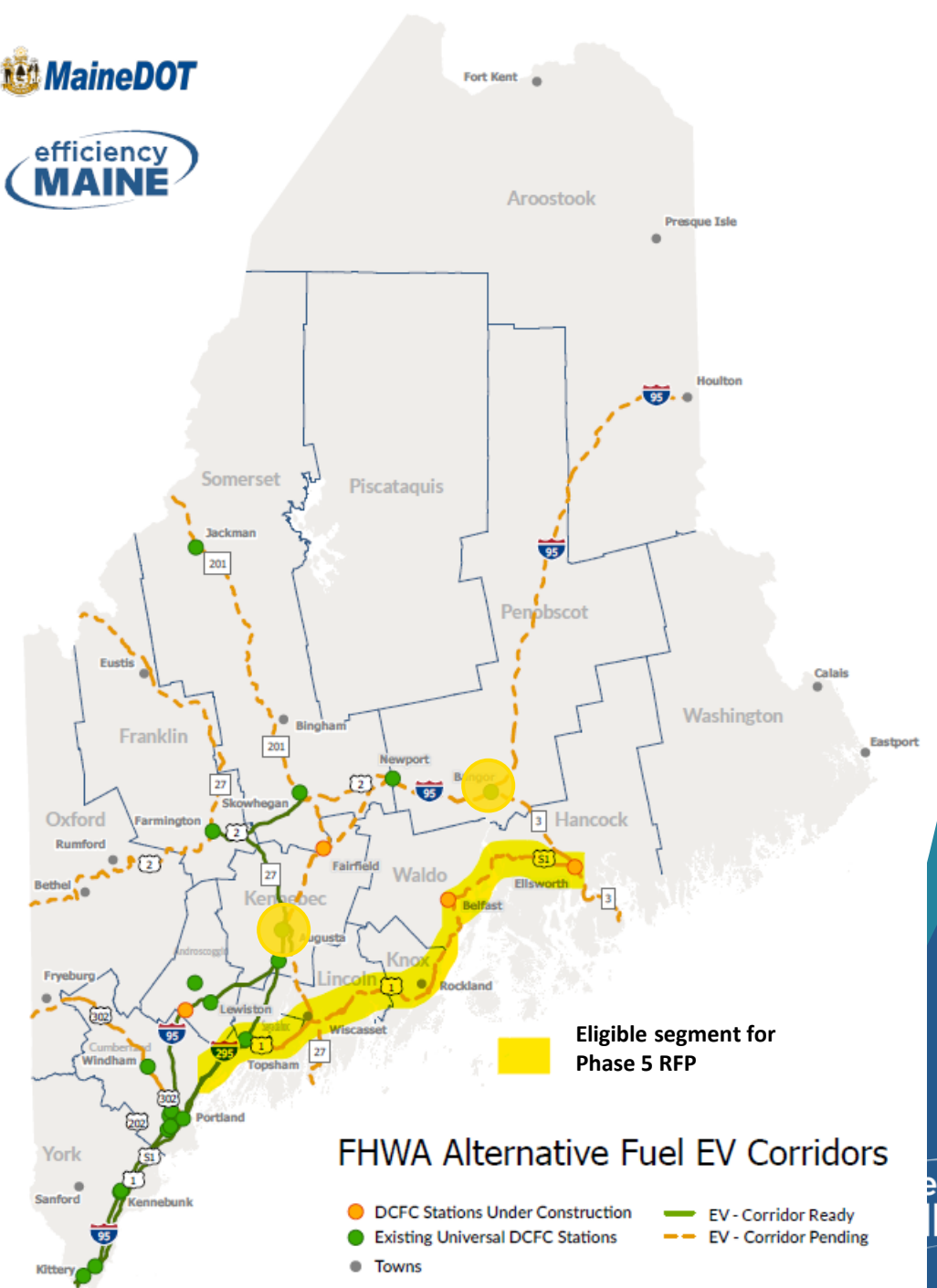
RFP Issued:	March 23, 2023
Bidders' Informational Webinar #1:	April 5, 2023
Questions Due:	April 19, 2023
Answers to Questions Posted:	April 26, 2023
Bidders' Informational Webinar #2:	May 10, 2023
Proposals Due:	June 22, 2023
Anticipated Award Date:	July 27, 2023
Anticipated Contract Start:	August 31, 2023
Anticipated Project Completion Deadline:	August 31, 2024

Note: Schedule subject to change

Eligible Locations for This RFP

Alternative Fuel Corridor	Segment or Location	
Interstate 95 (I-95)	#1	From Exit 180 in Hampden to Exit 187 in Bangor
	#2	From Exit 109 to Exit 113 in Augusta
US Route 1	#3	From Freeport to Ellsworth

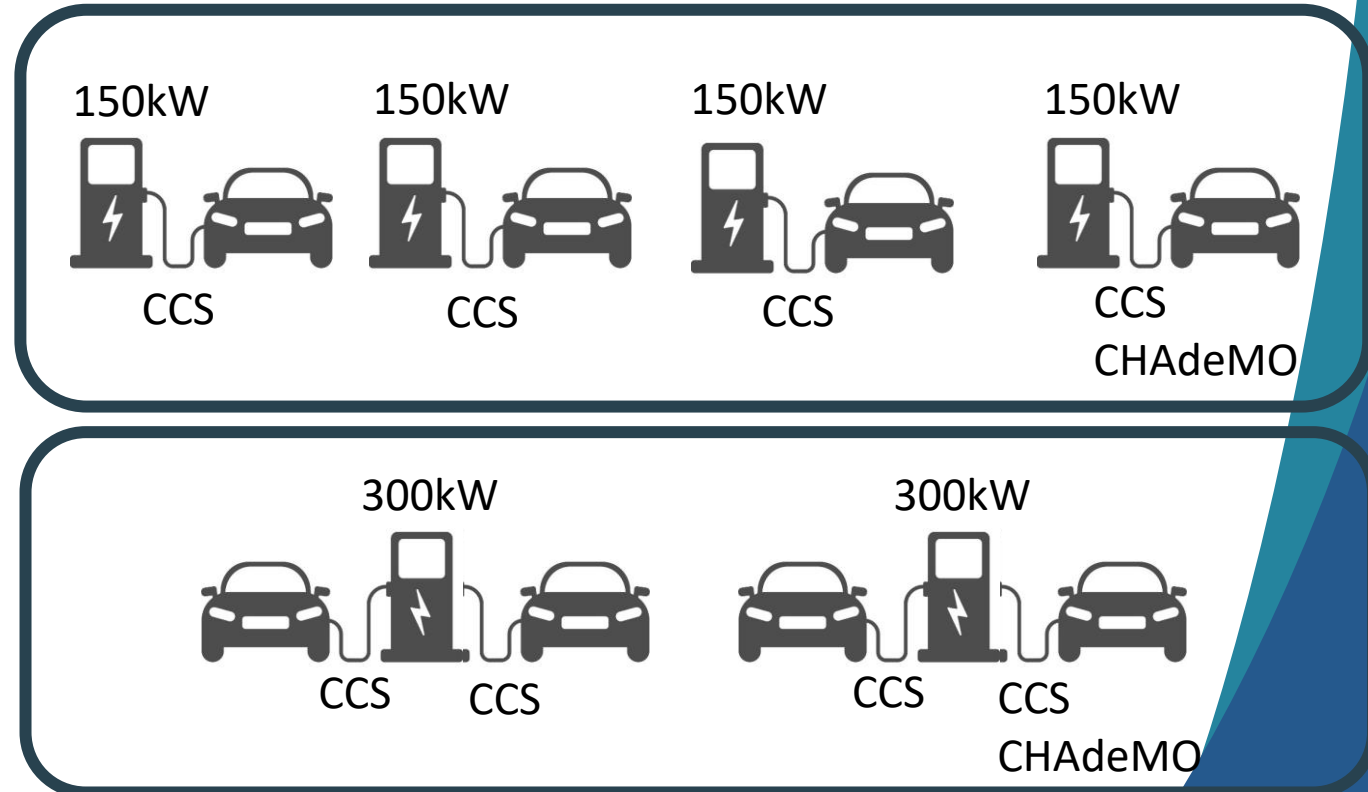
- Within one mile of an Eligible Segment
- Available to the public 24/7



Charging Equipment Requirements

- Not less than four and not more than eight DCFC ports
- Each port must be able to serve EVs using the CCS standard
- Optionally, one (1) port may also be able to serve EVs using the CHAdeMO standard (extra points awarded)
- Each site must be able to deliver at least 150kW to four (4) vehicles simultaneously

Example Configurations



For illustration only- other configurations are possible!

Requirements for Accessibility and Availability

- Available to the public 24 hours per day, seven (7) days a week, year-round
- Accessible from a paved or hardscaped parking space that is clearly marked to designate the spaces as reserved for EV Charger parking
- Number of parking spaces reserved for EVs is equal to the maximum number of EVs that can be charged simultaneously from the chargers
- Have dusk-to-dawn area lighting
- Accessible to persons with disabilities, which will be satisfied if at least one of the parking spaces meets ADA requirements and is accessible according to U.S. Access Board Design Recommendations for Accessible Electric Vehicle Charging Stations (<https://www.access-board.gov/tad/ev/>) (it will not be necessary for the ADA spaces to be ADA reserved)
- For eligible segments #1 and #2, include at least one pull-through lane for charging medium/heavy duty vehicles and vehicles towing trailers
- Provide appropriate safety instructions for EV drivers regarding the proper use of the charging equipment.

Eligible Costs for the Incentive

Eligible Costs

- DCFC units (including the required number of CCS connectors and one optional CHAdeMO connector for each site as specified in Section 3.1.1), power conversion hardware, and associated equipment;
- Electrical system costs, not covered by the utility, of connecting the chargers to the panel and the utility distribution system;
- Other hard costs (concrete, conduit, wire, signage, bollards, other equipment and materials, etc.) directly related to the installation of the chargers;
- Services costs and personnel costs incurred for site design and preparation, charger design and engineering, permitting, and project management during the development, construction and installation phase but not after the chargers are put into commercial operation;
- Shipping of hardware;
- Extended warranties or maintenance contracts for a period not to exceed five (5) years when billed and paid as a single, upfront, lump-sum cost;
- Hardware and software used to make the chargers “networked,” plus networking subscription costs for the first five years of operation when billed and paid as a single, upfront, lump-sum cost;
- Battery energy storage systems (BESS) and related equipment that are dedicated to reducing the load associated with the chargers funded by this RFP;
- EVITP registration fees for licensed electricians involved in the installation of charging equipment funded by this RFP; and
- Utility “demand charges” for the first five years of operation.

Costs Not Eligible for the Incentive

Ineligible Costs

- Purchase or rental of real-estate;
- All operating costs including but not limited to electricity bills, management and legal costs, insurance, and snow removal;
- Costs related to DC fast charging investments that have been publicly announced;
- Costs related to DC fast charging investments that are required by an original equipment manufacturer (OEM) in order for a licensed motor vehicle dealer to sell EVs;
- Any costs claimed as creditable costs under the National ZEV Investment Plan as defined in Section 1.4 of Appendix C of the VW settlement partial consent decree. See APPENDIX C to PARTIAL CONSENT DECREE MDL No. 2672 CRB (JSC), available at <https://www.vwcourtsettlement.com/en/docs/DOJ/Approved%20Appendix%20C.pdf>; and
- Any costs claimed as eligible costs under a prior incentive award from Efficiency Maine for EV charging infrastructure.

Scoring Criteria

Each site will be scored against other sites on the same Eligible Segment in terms of (among other criteria):

- **Cost to the program (30 points)**
 - Total amount of grant (including both capital and demand charge incentives) requested per site
- **Quality of the proposed site, equipment, and systems (30 points)**
 - Convenience, accessibility, and amenities at proposed site
 - Ability of proposed site (or sites) maximize the distances between publicly available, NEVI-compliant DCFC along a designated Alternative Fuel Corridor without exceeding a distance of 50 miles
 - Total number of ports proposed
 - Inclusion of a CHAdeMO connector and pull-through lane (if not required)
 - Quality of parking area and charging equipment
 - Plan to meet uptime targets
 - If employing battery energy storage systems (BESS), ability of BESS and/or grid connection to meet future charging demand
 - Amount of Starting Rate being proposed
- **Qualifications, capacity, and readiness (30 points)**
 - Level of commitment of key participants in the project (host site, equipment provider, installation subcontractors, operator)
 - Likelihood of long-term sustainability
 - Timeline for project completion
- **Overall proposal quality and responsiveness (10 points)**

Application Requirements

- **Attachment A** - Project Cost Proposal Form for each site
- **Attachment B** - Standard Agreement proposed redlines (if applicable)
- **Supplement #1** - References
- **Supplement #2** - Resumes
- **Supplement #3** - Host Site Agreement or a letter from the property owner (if applicable)
- **Supplement #4** – Utility load form

Contract Riders

- Rider A – Statement of Work
- Rider B – Payment Schedule and Project Milestones
- Rider C – General Terms and Conditions
- Rider C-1 – Federal EV Funds Contract Requirements
- Rider D – Security Agreement
- Rider E – Conditional Assignment of Lease*
- Rider F – Option Agreement

*May be waived if Recipient and property owner are the same entity

Federal Regulations Governing this RFP

- **National Electric Vehicle Infrastructure Standards and Requirements - “NEVI Standards” (Title 23, CFR Chapter I, subchapter G, Part 680)**
 - Includes additional charging equipment standards, communications standards
 - Requires that NEVI-funded projects are installed by “Qualified Technicians”
- **Appendix II to 2 CFR Part 200 – Contract Provisions for Non-Federal Entity Contracts Under Federal Awards**
- **Federal Highway Administration (“FHWA”) regulations set forth in 23 C.F.R. §680.118 of the National Electric Vehicle Infrastructure Standards and Requirements, which include but are not limited to:**
 - Buy America Requirements – 23 U.S.C. §313. Pursuant to 23 C.F.R. §680.118(a), the Buy America requirements set forth in 23 U.S.C. §313 apply to EV charger projects using NEVI Program Funds
 - Davis Bacon Federal Wage Requirements – 40 U.S.C. 3141-3148; 29 CFR Part 5. Pursuant to 23 U.S.C. §109(s)(2) and 23 C.F.R. §680.118(b), projects to install EV chargers are treated as if the project is located on a Federal-aid highway and, therefore, Davis Bacon Federal wage requirements apply to the project. Statutorily prescribed wages must be paid for any project funded with NEVI Formula Program Funds
- **FHWA Form FHWA-1273 (Required Contract Provisions – Federal-Aid Construction Contracts)**

Payment Schedule

The Trust will disburse the Incentive Award to Recipient in installments upon full completion of each milestone as follows:

- **Milestone 1**
 - Reimbursement of up to 20% of the total capital incentive
 - E.g., secure Host Site agreement, site development and utility upgrades
- **Milestone 2**
 - Reimbursement of up to 80% of the total capital incentive
 - E.g., acquisition, installation and commissioning of all equipment and connection of utility and communication services at EV Charging Site
- **Milestone 3**
 - Reimbursement of actual utility demand charges minus any service credits for notable downtime events
 - Provide operations, maintenance and customer service for a five-year term


Service Credits and Service Level Agreement

- **Downtime for each charging port may not exceed 72 consecutive hours**
 - i. 15% credit of the quarterly Demand Charge Incentive for the first occasion during the quarter,
 - ii. 50% of the quarterly Demand Charge Incentive for the second occasion during the quarter,
 - iii. 100% of the quarterly Demand Charge Incentive upon the third occasion during the quarter.
- **Annual Uptime for each charging port must be 97% or greater**
 - Credit of 100% of the fourth quarterly Demand Charge Incentive in the event if the annual Uptime requirement is not met
- **Customer service and reporting**
 - 5% of the quarterly Demand Charge Incentive for each documented incident of the Recipient's failure to provide customer service in accordance with the service and performance levels required by this Agreement or fails to provide complete and timely reporting as required by the Agreement

Ways to Get Started

If you are a property owner or tenant:

- Fill out host site interest form at efficiencymaine.com
- Contact a vendor of EV charging equipment and/or services
 - See list of vendors at efficiencymaine.com
 - Many vendors can provide project management and grant application assistance




Installers, Suppliers, Project Management Assistance and Networking Services for EV Charging Stations

These companies have experience installing, supplying, providing project management assistance, and networking services for EV charging stations. Efficiency Maine has compiled this list to be a helpful resource and it does not endorse the services or products of any specific service provider that is listed. If you would like to be added to this list, please submit a [completed service provider application](#).

Name	Phone Number	Website or Location	L2 Charger Installation	L3 Charger Installation	L2 Charging Equipment	L3 Charging Equipment	Project Management Assistance	Networking Services
AB Electrical Services LLC	(207) 607-2420	http://www.abelectricalserv.com/	X					
A Climate to Thrive	(646) 996-3090	https://www.aclimatetothrive.org/					X	
Aetna Corp.	(617) 513-7153	https://aetnacorp.com/	X		X		X	
AmpUp	(833) 692-6787	https://ampup.io/						X
ANS Advanced Network Services	(518) 292-6521	https://www.anscorporate.com/ev-charging-stations-for-business	X		X		X	
Atom Power, Inc.	(914) 374-2020	https://www.atompower.com/	X		X		X	X
Augusta Fuel Company	(207) 623-3851	https://www.afcomfort.com/	X					

If you are an EV charging equipment vendor or installer:

- Contact an interested host site
 - See list of interested host sites at efficiencymaine.com



Sites Interested in Hosting DC Fast Chargers

The following list contains businesses and other commercial property owners (or tenants) that have indicated their interest in hosting DC fast chargers for electric vehicles (EVs) on their property as part of Efficiency Maine's [Phase 5 RFP for DC Fast Charging](#). Efficiency Maine has not vetted these sites to determine if they meet the eligibility requirements for the RFP. If you have an eligible property and would like to be listed here, please fill out the [Host Site Interest Form](#).

Organization/ Business name	Street address	Contact name	Contact email	Contact phone number
D&C Properties LLC	423 East Main St. Searsport, ME 04974	Danny Piper	danny@sundog.solar	(207) 512-0909
Family Dollar	124 US-1, Bucksport, ME 04416	Steven St.Peter Jr.	thehealthnut2014@hotmail.com	(120) 793-0068
Flight Deck Brewing	11 Atlantic Ave Brunswick, ME 04011	Nate Wildes	nate@flightdeckbrewing.com	(207) 776-4268
Freeport Library	10 Library Drive Freeport, ME 04032	Valy Steverlynck	valysteverlynck@gmail.com	(207) 423-1082
Freeport Town Hall	30 Main Street Freeport, ME 04032	Valy Steverlynck	valysteverlynck@gmail.com	(207) 423-1082
Hannaford Supermarket	370 Main St. Bucksport, ME 04416	Steven St.Peter Jr.	thehealthnut2014@hotmail.com	(120) 793-0068

Additional EV Charging Information

Types of EV Charging

\$



USAGE



HOME

CHARGE TIME

Adds 5 miles per hour of charge*
Charge from 20-80% in 20+ hours



USAGE



HOME COMMERCIAL

CHARGE TIME

Adds 25 miles per hour of charge*
Charge from 20-80% in 7 hours



USAGE



COMMERCIAL

CHARGE TIME

Adds 100-200+ miles per 30 minutes of charge*
Charge from 20-80% in 15-30 minutes

\$\$\$

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

More information at
efficiencymaine.com

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)

What Makes a Good DCFC Site?

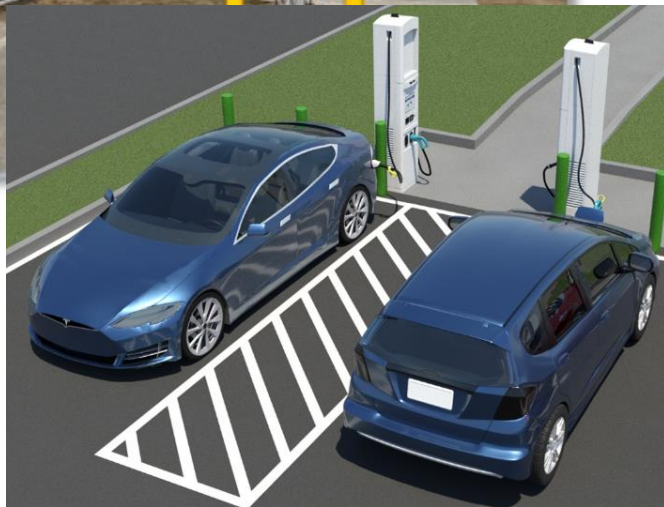


- Close to main travel routes (< 1 mile from route)
- Available parking spaces (1 space per DCFC plug)
- Amenities on-site or nearby (restrooms, food, activities)
- Open 24/7 or extended hours
- Adequate lighting, shelter, safety, paving, visibility
- Close to 3-phase power

Typical DCFC Site Configuration



Photo credit: Chargepoint, Inc.

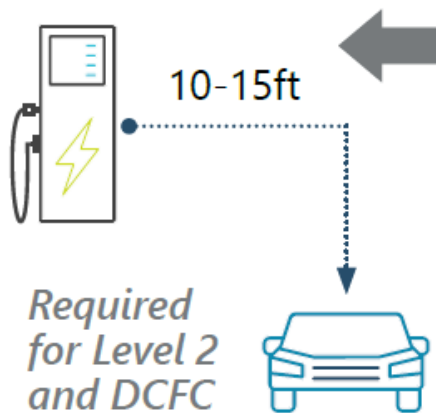


Accessible EV charging parking spaces. Source: www.access-board.gov/tad/ev/

- 4 DC Fast Chargers
 - CCS and CHAdeMO connectors
 - Each unit can charge one vehicle at a time
- Charging power at or above 150kW
 - Higher power = faster charging speeds
- Some chargers share power output between two ports
- Pad-mounted transformer
- One or more parking spaces fully accessible to persons with disabilities
- Bollards, signage, parking spaces labeled “EV Only”

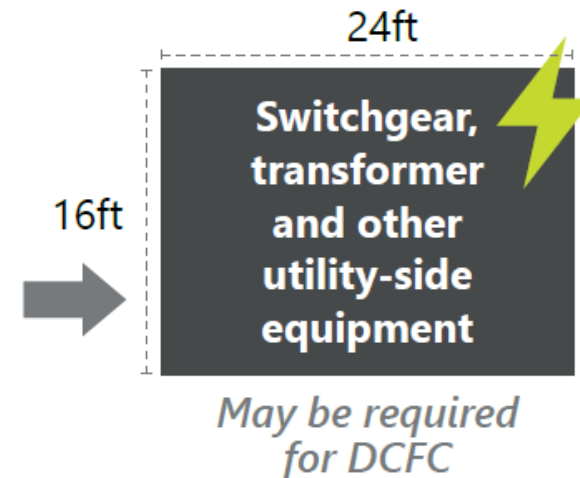
Electrical Requirements

- Charger voltage: 480V
- Pad-mounted transformer (500-1000kVA)
- 1600A 3-phase service



Charging stations are located near the parking stalls and must be located within approximately 10 to 15 feet of the vehicle.

The utility-side charging equipment for DCFCs will likely require a 16 feet by 24 feet enclosed area for the equipment.



Source: Florida's EV Charging Master Plan, Florida DOT, July 2021.

<https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/fto/fdotevmp.pdf>

Example Revenues for a DCFC Station



- Example user fee: \$0.45/kWh
- Average of 35kWh dispensed per session
- Potential revenue: \$15.75 per session
- 5 sessions per day = \$79 per day
- 10 sessions per day = \$158 per day

Example DCFC Costs (For Illustration Only)

SAMPLE Capital Costs (4 ports)

Power Level of Charger	Low Range	High Range
Charger Hardware	\$250,000	\$400,000
Utility Interconnection	\$60,000	\$80,000
Installation	\$250,000	\$600,000
Networking	\$8,000	\$25,000
Maintenance/extended warranty	\$45,000	\$100,000
Total Project Cost	\$613,000	\$1,205,000

Other Operating Costs (4 ports)

- Demand charges
 - Est. between \$4,000 and \$8,000 per month in CMP territory
 - Depends on power level and charger use
- Maintenance, plowing, etc.

Who is Involved in an EV Charging Project?

Name	Typical Role	Can own/operate chargers
Host site	Property owner and/or tenant who consents to host EV chargers for public use on their property during the contract term	Yes
EV charging equipment vendor	Provides EV charging equipment and warranty services	Yes
EV charging network vendor	Provides software to connect EV chargers to a network and accept payment	Yes
Electrical utility	Provides transformers, poles, and other work necessary to connect EV chargers to the grid	No
Installer	A licensed electrician who completes electrical work necessary to connect EV chargers to power supply	Yes
Construction company	Completes trenching, paving, and other site work	Yes
Efficiency Maine	Provides incentive funding for EV charging projects and ensures contract terms are met	No

Possible Business Models

1. **Site Host-Owned:** Charging infrastructure is purchased, installed, and maintained by the site host
 - Site host is responsible for all associated costs, including any maintenance or payment transaction fees
 - Each element of the project can be sub-contracted
2. **Third party-owned:** Charging infrastructure is installed and maintained by a third party (e.g., a charging network)
 - Site host may earn revenue by leasing the space occupied by the charging infrastructure to the third party

Source: US Department of Energy,

https://afdc.energy.gov/fuels/electricity_infrastructure_development.html

Resources

Web Resources

- [List of EV charging service providers](#)
- [Public charger installation videos](#)
- [Charging station locator](#)
- [Background on EV initiatives](#)
- [FAQs](#)

efficiencymaine.com/ev

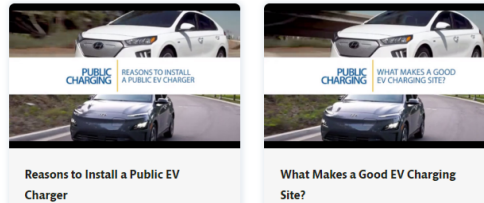
At Work: Electric Vehicles and Charging Solutions

Thinking about installing electric vehicle (EV) chargers at your business or switching your fleet to EVs? Our video library and other resources can help you understand how EVs work and why businesses in Maine and around the world are making the switch to EVs.

Funding for Public EV Charging Stations

Incentives are now available for public Level 2 electric vehicle (EV) chargers in rural communities. Local governments, businesses, tribal governments, and non-profits in eligible towns may apply for this Funding Opportunity Notice (FON). Projects at local government-owned properties, tribal properties, and public libraries are eligible for enhanced incentives. [Click here](#) to learn more about this opportunity. Applications are open until November 17, 2022.

EV Charger Installation Videos



ELECTRIC VEHICLE (EV) INITIATIVES

- ABOUT EV CHARGING
- ABOUT EVS
- EV TAX CREDITS AND OTHER INCENTIVES
- AT WORK: EVS AND CHARGING SOLUTIONS
- CHARGING STATION LOCATOR
- ELIGIBLE VEHICLES
- EV INITIATIVES BACKGROUND
- EV REBATES
- EV RESOURCES
- FAQS
- VEHICLE COST CALCULATOR
- PARTICIPATING ELECTRIC VEHICLE DEALER PORTAL

About Charging Connectors



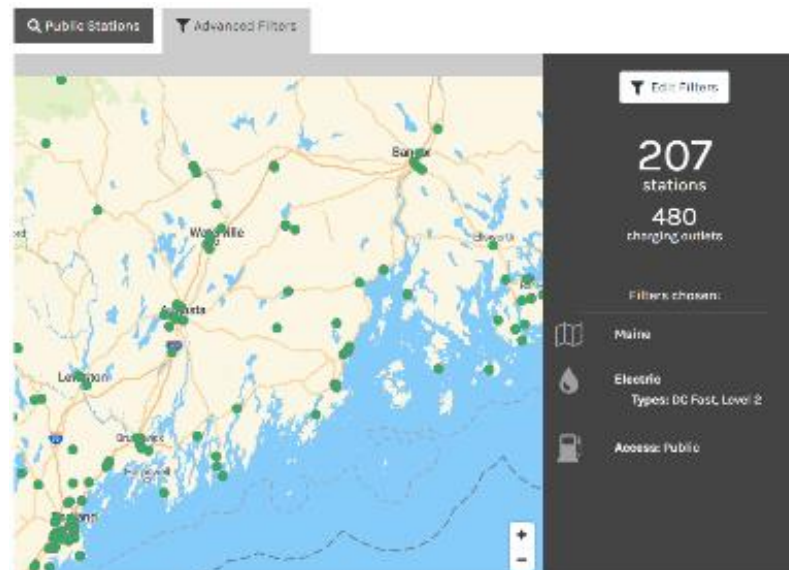
The most common connector for Level 2 charging stations is the SAE J1772. This connector is compatible with all EVs in North America, although Tesla cars require a SAE J1772-to-Tesla adaptor that comes with the vehicle. Fast chargers have three types of plugs – Combined Charging System (CCS), CHAdeMO, and Tesla. Most non-Tesla EVs use CCS, with the exception of the Nissan LEAF, which uses CHAdeMO. Both plug types work the same way.

EV Home Charger Installation Information

- **How to Select and Install a Home Electric Vehicle Charger:** Useful information and tips for current and prospective EV owners from Efficiency Maine.
- **Qualified Partners:** Find an Efficiency Maine Qualified Partner near you with experience installing Level 2 chargers. Select “Electric Vehicle Chargers” on the list of service options.

EV Charger Installation Information for Public Sites

- **List of Maine EV Charging Service Providers:** These companies have experience installing, supplying, and providing project management assistance for EV charging stations.
- **Qualified Partners:** Find an Efficiency Maine Qualified Partner near you with experience installing Level 2 chargers. Select “Electric Vehicle Chargers” on the list of service options.



Current and Upcoming Funding Opportunities

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 plug**
 - Businesses and other organizations: **80% of project costs up to \$5,000 per plug**
 - In publicly accessible locations in rural areas in Cumberland and York counties
 - Application deadline: **June 30, 2023**

Learn more:

efficiencymaine.com/opportunities

Upcoming Webinars

Webinar	Date
Phase 4-2 DC Fast Charging Bidder's Informational Webinar #1	April 3rd from 2-3:30pm, click to register here.
Phase 5 DC Fast Charging Bidder's Informational Webinar #1	April 5th from 1-2:30pm, click to register here.
Charging and Fueling Infrastructure (CFI) Grant Program in Maine	April 11th from 9-10am, click to register here.
Rural Level 2 Electric Vehicle Charging FON for Cumberland and York Counties	April 13th from 8-9am, click to register here.
Phase 4-2 DC Fast Charging Bidder's Informational Webinar #2	May 9th from 8-9:30am, click to register here.
Phase 5 DC Fast Charging Bidder's Informational Webinar #2	May 10th from 10-11:30am, click to register here.

For more information, visit our [opportunities page.](#)

Interested in hosting EV chargers?

Fill out host site interest form: www.energymaine.com/maine-electric-vehicle-ev-dc-fast-charging-host-site-interest/

Subscribe to EV Notices Email List:
www.energymaine.com/about/newsletter-signup/

Funding opportunities posted at: www.energymaine.com/opportunities/

ev@energymaine.com

www.energymaine.com

(866) 376-2463

Thank You!