



Maryland
Department of
the Environment



Maryland
Energy
Administration

Guidelines for Maryland Electric Corridors Grant Program

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Maryland Electric Corridors Grant Program (ECGP) Guidelines

I. Overview

In September 2015, the United States Environmental Protection Agency (EPA) and California Air Resources Board (CARB) notified Volkswagen AG of violations of the Clean Air Act, alleging that Volkswagen diesel vehicles sold between 2009 and 2016 were equipped with defeat devices that allowed these vehicles to emit multiple times more nitrogen oxide (NOx) emissions than were legally allowed. The Partial Consent Decree (hereinafter referred to as the Settlement Agreement) that settled this violation created an Environmental Mitigation Trust fund of \$2.7 billion to remediate the excess NOx emissions from the affected vehicles. Maryland, as a beneficiary to the settlement, is eligible to receive approximately \$75.7 million to use on specific projects to reduce diesel emissions from the transportation sector.

The Settlement Agreement limits the use of funds for Zero Emission Vehicle (ZEV) infrastructure investment to 15% of the total state allocated funds. This Plan proposes to use the full 15%, approximately \$11.3 million, for the deployment of ZEV infrastructure to facilitate the state's adoption of battery electric and plug-in hybrid vehicles. As part of the settlement, The Governor designated the Maryland Department of the Environment (MDE) as the Lead Agency responsible for administering these funds. MDE, in its role as Lead Agency, will oversee the Electric Corridors Grant Program (ECGP) in coordination with the Maryland Energy Administration (MEA).

II. Program Description

The ECGP is one of two programs that will be created from the VW ZEV infrastructure investment allotment. The ECGP will distribute funds to facilitate interstate and intrastate travel with ZEVs. To achieve this goal, funds will support projects to enhance and extend the ZEV infrastructure network on high-traffic routes between population hubs. Specifically, funds will be used to deploy Direct Current Fast Chargers (DCFC) along Federal Highway Administration (FHWA) designated alternative fuel corridors, which can be found in Attachment A. For updates to this list please go to:

https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/all_corridors/

III. Type of Grant Program

Grant funds will be awarded on a competitive basis. Each successful applicant will be awarded a grant amount, which is determined as specified under (Section V) "Cost Share." This is a reimbursement program and award recipients must provide their own funding to cover expenses as they are incurred. A grantee will be reimbursed for eligible costs only after work is completed and all necessary supporting documentation has been submitted to MDE.

The ECGP will release funds over 3 funding rounds; the program schedule described in these guidelines pertains to the first funding round. Subsequent funding rounds are expected to open

after the award notice for the previous funding round. More guidance will be made available at a later date.

IV. Program Budget

Up to 1/3rd of MD's total VW EVSE budget allocation, approximately \$3.77M, will be available for this funding round. This allotment will be shared between both this program and the Workplace and State EVSE Program (see separate RFP). MDE reserves the right to increase or decrease the program budget.

MDE reserves the right to reduce the grant amount specified in a grant agreement to an amount deemed appropriate based on the availability of program funds. MDE also reserves the right to partially fund a proposal by funding only a portion of a proposed project. In this event, the grantee and MDE shall work to reach an agreement on a reduced scope of work commensurate with the level of available funding.

V. Cost Share

Applicants may request funds to cover up to 80% of the cost to purchase and install light-duty electric vehicle supply equipment that will be available to the public. Funding requests are calculated on a per charger basis. Applicants may request up to \$150,000 per 150 kW charging port and up to \$100,000 per 50 kW Charging port (Dual port charging station with both a SAE CCS and CHAdeMO port with count as one port if they can't be used simultaneously) with the total amount awarded per project site limited to \$600,000. For the purpose of this program, a charging station with multiple ports will be considered one charging station, unless these ports can be used simultaneously. Any leveraged funds/resources, and their source, must be identified in the proposal application. Cost share may only be met with eligible and allowable costs. State incentive programs, including MEA's Clean Fuel Incentive Program (CFIP), are prohibited from being used to meet any provided cost share. The recipient is legally obligated to meet any proposed cost share that is included in the approved project budget. If the proposed cost share does not materialize during grant performance, MDE may reconsider the legitimacy of the award and take appropriate action as authorized.

VI. Eligible Applicants

Only businesses and/or incorporated non-profits are eligible to apply to the ECGP. Applicants must be in good standing with the Maryland State Department of Assessments and Taxation. Regulated utilities, state, local and federal government agencies are not eligible to apply for funding under this program.

To be considered for award, an applicant must submit a complete application and the proposed project must comply with the requirements outlined in (Section VII(1)) "Technical Specifications.

VII. Project Requirements

1. Technical Specifications

To be eligible for grant award, a proposed project must be for DCFC charging infrastructure at new or existing charging locations. At a minimum, all DCFC projects must:

- Be completed, and reimbursement paperwork submitted to MDE, within 12 months of grant agreement execution with the option of a six month discretionary extension.
- Include a minimum of two DCFC per site, configured with at least two Combined Charging System (CCS) dispensers and two CHAdeMO dispensers.
 - Higher quantity of chargers per project site that demonstrate higher levels of redundancy will receive higher scoring under the Innovative Technology evaluation criterion.
- Deliver at least 150 kW per charger if located in the following counties: Anne Arundel, Baltimore City, Baltimore County, Carroll, Cecil, Frederick, Harford, Howard, Montgomery, and Prince George's

or

50 kW if located in the following counties: Allegany, Charles, Garrett, Washington, Calvert, St. Mary's, Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester

- Application must clearly state the projects anticipated power output.
 - Higher power levels (of both equipment and/or of pre-wiring for future installs) will receive higher scoring under the Innovative Technology evaluation criterion.
 - Equipment capable of enabling dynamic power management to optimize power output per station will receive higher scoring under the Innovative Technology evaluation criterion.
 - Equipment employing a scalable architecture, or other future-proofing technologies, will receive higher scoring under the Innovative Technology evaluation criterion.
 - MDE acknowledges that CHAdeMO cables are not currently rated above 100kW. Applicants shall clearly explain the maximum power output of both the CHAdeMO and SAE CCS connectors.
- Utilize an open communication standard that allows charging stations and central systems from different vendors to communicate. The stations must be capable of switching networks without technological, contractual, or other unreasonable restrictions.
 - Include user interfaces that are legible in both day and night time conditions.
 - Be certified through a Nationally Recognized Testing Laboratory (NRTL) program to demonstrate compliance with appropriate product safety standards.
 - Be certified to operate outdoors in extreme weather conditions.

- Include adequate cord length, protection and storage.
- Include hardware and software that allows for diagnostics, “remote start” of charging equipment, and to collect and report usage data.
- Effectively communicate to drivers, when using a charging station and/or searching for a charging station, when the station is not working (through a mobile app, text alerts etc).
- Be protected from vehicle collision and other damage to ground and wall-mounted equipment (guard posts, wheel stops, curb protection, wall-mounted barriers etc).
- Stations must contain adequate lighting for all weather conditions.
- Stations must remain operable and accessible year round and be maintained to be free of both manmade and natural obstructions.

2. Project Siting

The State wishes to facilitate the deployment of DCFC infrastructure that will enable travel and the movement of goods to and through the State from the surrounding region as well as within the State. Moreover, each proposed location must be of strategic importance to extending the range and reach of EV’s along transportation corridors and meet the following requirements:

- Sited within Maryland at a fixed location.
- Publicly accessible and open twenty-four hours a day, seven days a week without restrictions.
 - Restrictions include club memberships card access restrictions, or site limitations such as gated fences or parking lots that require a fee to enter.
- Each applicant must be able to secure necessary property rights, easements, right of way and access to the property for the station.
- Stations must be within a short walking distance, not to exceed a quarter mile, to restrooms and retail or service establishments such as restaurants, coffee shops, convenience stores or tourism destinations.
- Each proposed location must be located no more than 5 miles from a FHWA designated EV corridor.
 - The closer a proposed location is to a corridor, the higher score the proposal will receive under the evaluation criteria.
 - Proposals for infrastructure along “Signage-Pending” corridors will receive a higher score under the evaluation criteria. Proposals for infrastructure along “Signage-Ready” corridors will receive a lower score under the evaluation criteria.
- Once stations are completed, grantee is required to register sites on the [DOE AFDC Station Locator](#) and are encouraged to list on other additional charging station location mapping platforms.

3. Payment Accessibility

The DC fast charging stations must require payment from users. Payment options are at the discretion of the grantee who will operate and maintain the stations, but chargers must ultimately allow payment by credit card. Accessibility and payment options shall be offered without restriction based on network membership or subscription. Payment options may include credit/debit card, subscription methods, smart cards, or smart phone applications. Proposal should clearly identify which payment options are to be provided. Real-time pricing and fee information shall be displayed on the unit, payment screen or associated phone application.

4. Compliance with Americans with Disabilities Act/Accessibility

Stations installed under this grant are public accommodations and must be accessible to all drivers. Each successful applicant must demonstrate that the installation will meet the accessibility standards outlined in the Americans with Disabilities Act.

5. Commitment to Operations and Maintenance

All grantees are required to operate and maintain the charging stations for at least 5 years. In order to ensure that the installed equipment remains in good working order, each successful applicant must submit an operations and maintenance plan/schedule as part of the application. The original owner, as well as any successors, will be responsible for complying with the operations and maintenance plan throughout the duration of the equipment's use at the site. Operation and maintenance plans must address customer support service that is accessible and responsive 24-hours, seven days a week.

6. Signage

While federal highway signs have been developed for EV charging, wayfinding and site-specific signs are at the discretion of the jurisdiction or property owner. In order to enable EV drivers to locate and identify charging sites, wayfinding and site signage is required for each charging station location funded through this program. Each application must include a plan for installing signage approved by the Maryland Department of Transportation (MDOT) and its modal agencies (e.g. State Highway Administration (SHA) and Maryland Transportation Authority (MTA), as appropriate). The project shall include signage which shall be displayed on the grounds of the project site(s) as follows:

- General Requirements: Signage complies with all applicable local, state, and/or federal laws, ordinances, regulations, and standards.
- On-Site: Clearly identifies the location(s) of the charging stations. On-site signage should identify parking is reserved for electric vehicles only.

Additional information on the governance of signage on Maryland roads can be found in the 2011 Manual on Uniform Traffic Control Devices (MUTCD) with the Maryland Supplement. This document can be found at:

<http://www.roads.maryland.gov/Index.aspx?PageId=835>

7. Project Timeline

September 10, 2020	-Grant Program comment period announced and posted to MDE/MEA website for comment period of 30 days
December 8, 2020	-Grant Program announced and posted to MDE/MEA website ("Program Announcement").
March 5, 2021	-Applications must be received by MDE by 5:00 PM EST. -Confirmation will be sent to each applicant verifying receipt of application.
Winter 2021	-Evaluation of grant applications.
Spring 2021	-Award notification: notification of grant award or denial will be made to all applicants.
Spring 2021	-Grant agreements sent to grantees that received award notifications.
Summer 2021	-Executed grant agreements signed by both parties must be received by MDE. -Project initiation can begin following execution of grant agreement by both parties.

8. Eligible Costs

Eligible costs under this grant program include those costs directly attributable to the site design, equipment installation, labor, site preparation, upgrade for utility connections, signage and equipment necessary to implement and operate the proposed DCFC(s). Ineligible costs include mobile refueling equipment, the purchase of electricity to fuel the equipment, and any ongoing equipment and site maintenance costs.

Only costs incurred after the Program Announcement shall be eligible for funding. Costs incurred prior to Program Announcement are not eligible for funding and will not be reimbursed. Costs incurred after the Program Announcement but prior to execution of the grant agreement are made at the applicant's risk and might not be reimbursable.

VIII. Application Process

1. Application Instructions

Each interested party must complete an application and send it, along with all required attachments to mde.vw@maryland.gov

If applicant has any problems with submitting their proposal, please contact either Justin Mabrey at justin.mabrey@maryland.gov or Tim Shepherd at tim.shepherd@maryland.gov

***Due to COVID19, all applications should be sent via email.**

All applications must contain the name, mailing address, and email address of a representative able to receive communications related to this program.

Applications can be obtained at:

<https://mde.maryland.gov/programs/Air/MobileSources/Documents/VolkswagenApplication.pdf>

2. Application Contents

Applicants must complete the ECGP application form found on the program webpage. **Applications, including all attachments, may not exceed 10 pages.** All applications must include the following:

- Information demonstrating that the project meets the requirements identified under Section VII Project Requirements.
- General project narrative, including any innovative technology integration, concepts, or partnerships. Project narratives should include any partnerships between the applicant and any business or government.
- Description of the project location, including the specific street address of the proposed station. Description should include the following information for each proposed site:
 - An aerial map(s) (i.e. Google Maps – Satellite view) of the station location and location in relation to other charging stations. Descriptions should discuss the proposed station's proximity to other public DCFC.
 - Number of chargers.
 - Identify geographic area served.
 - Identify distance from corridor.
 - Discuss accessibility and proximity to amenities, such as restrooms, food, local restaurants, retail shopping, wi-fi, and cellular service.
- Documentation regarding ownership of potential properties must be provided.
- Letter(s) of support from the charging station site host(s) is required. Nonbinding site host agreement (fully secured siting agreement) is preferred. If site host agreement is not provided with application, one must be provided to MEA within 60 days of award notification.
- Detailed explanation of the business model towards ensuring sustainability of the charging station(s).
- Total estimated project cost and the specific grant amount the applicant is seeking to complete the project.
- Draft budget with a breakdown of utility infrastructure (i.e., upgrade for utility connections), dryer, filter, storage, gas compressor, dispenser, engineering, permitting and labor costs as well as any other relevant expenses.

- Implementation timeline.
- Documentation of financial commitments from banks or investors.
- Operations and maintenance plan/schedule.
- Signage plan.
- Narrative describing any experience installing, operating, or maintaining DCFC.
- Biographies of key project personnel.

3. Grant Selection

If an application is selected for grant award and approved by the VW Trustee, a grant agreement between MDE and the applicant will be prepared that establishes the terms and conditions of the grant. Once the grant agreement is fully executed by both MDE and the applicant, the grantee may begin project work. A grant agreement is considered to be fully executed when the agreement has been signed by both MDE and the applicant as well as date stamped by MDE. The grantee may invoice MDE for grant funds after the project is completed. Once MDE receives the invoice (s), it will review and then send the invoices to the Volkswagen Trustee (Wilmington Trust). The Trustee will then send a check directly to the grantee.

In addition, please note that this Program provides a fixed grant award amount, and as such, cost overruns will not be reimbursed.

IX. Application Evaluations

As stated earlier, an MD ECGP Review Team will be assembled to make grant award recommendations. This team will consist of members from MDE and MEA.

MDE may request supplemental information from an applicant to assist with evaluation of the application.

The MD ECGP Review Team will evaluate and score applications on a scale from 0-100 based on the following criteria:

- Cost Effectiveness (VW\$/amount of GGE reduced per year). (up to 20 points)
 - Cost effectiveness can be increased by providing matching funds/reducing requested VW funds. Applicants should provide and explain their methodology behind the estimates, which should include projected kWh consumption. Displacement estimates should be provided in Gasoline Gallon Equivalent (GGE) units. For the purpose of this grant all applicants must use the AFDC methodology of 1kWh=33.7 GGE.
- Corridor Served (up to 10 points)
 - Signage Pending: 10 points
 - Signage Ready: 5 points
- Distance from Corridor (up to 15 points)
 - Less than 1 mile: 15 points
 - 1.1-3 miles: 10 points

- 3.1-5 miles: 5 points
- Distance to other DCFC sites (up to 15 points) (excluding dealerships or Tesla Supercharger locations, using data from [US DOE AFDC Station Locator](#))
 - Over 50 miles: 15 points
 - 49 to 26 miles: 10 points
 - Less than 25 miles: 5 points
- Project Readiness (up to 10 points)
 - Site host agreement- legally binding agreement between the applicant and the host site owner: 10 points
 - Letter of support (required)- nonbinding agreement between the applicant and the owner of the site where the proposed DC Fast charging station would be located: 5 points
- Innovative technology, concepts, and partnerships. (up to 10 points)
 - This may include, but is not limited to, project elements that enable future expansion and increased charging/fueling capabilities.
- Project Sustainability (up to 10 points)
- Benefits to communities that bear a disproportionate share of the air pollution burden (up to 10 points)

X. Reimbursement Process

Grant payments will be disbursed as reimbursements after the work is completed. MDE reserves the right to conduct verification site visits to photograph the completed installation. Requests for reimbursement can occur after each individual station is installed or after all stations are installed for multi-station projects. Before reimbursement, awardees must submit the information listed below after project completion. After MDE approval of the final documentation, MDE will process the application for payment. Required documentation includes: All information will be sent to the Trustee and they will send a check directly to the awardee. Required documentation includes:

- Provide a signed payment request, on letterhead, for the amount to be reimbursed. Request should contain payee contact information.
- Copies of detailed invoices of all eligible project costs.
- Proofs of payment of all eligible project costs associated with the project.
- Photos of each EVSE unit (one photo of the installed EVSE and one photo of the EVSE serial number).
- Certification that the station infrastructure is fully operational.

All documentation required for reimbursement should be completed and submitted to the MDE as soon as possible, but no later than the date specified in the grant agreement with MDE.

XI. Terms and Conditions

1. Reporting Requirements

All project award recipients will be required to submit quarterly construction reports on the status of their project to MDE until the project(s) are completed. Quarterly reports must be submitted to MDE within 15 days after the end of each reporting month (March 31, June 30, September 30 and December 31). A template for the quarterly report will be provided by MDE to the award recipients.

All award recipients will be required to submit semi-annual operation reports for five years beginning the first period after project completion. Semi-annual reports will be submitted to MDE within 15 days after the end of each period. Reporting periods end June 30 and December 31. A template for the quarterly operations report will be provided by MDE to the award recipients. Failure to submit quarterly reports is considered a violation of the terms and conditions of the signed contract.

The reporting information submitted to MDE will identify the previous three months of DCFC utilization data, as well as cumulative utilization data going back to the in-service date. The following information will be requested from each host site. Report quarterly usage, and operations data from VW funded sites to include but not limited to the following:

- Location: site name, EVSE ID number, address, city, zip, county
- In-service date
- Operational uptime
- Number of charge events
- Number of unique vehicles
- Average charge time per event (minutes)
- Average kW per charge event
- Total kWh consumed
- Gallons of gasoline and/or diesel fuel displaced (confirm displacement calculation methodology)

2. Communication with MDE

The grantee shall notify MDE of any problems, operational changes, or ownership changes from the original project proposal. Any notification made in compliance with this condition should be made to MDE either by written letter or electronic email and should be provided within 10 days of the problem or change.

Any time extension requests shall also be submitted to MDE in writing via letter or electronic email.

3. Site Visits

Grantee shall allow MDE, or an MDE-authorized representative, to conduct project site visits during normal business hours. It is MDE's intent to give reasonable notice to the grantee of any

proposed site visit at least 24 hours in advance of the visit. To the extent provided by State law, neither the State, MDE nor its agents, representatives, or employees, shall be liable for any property, product liability, personal injury, or any other types of claims, including claims based on the negligence of MDE, its agents, representatives, or employees, arising out of or related in any way to the activities of MDE, its agents, representatives, or employees at the project site.

4. Permits

Grantee is responsible for identifying and obtaining all local, State and federal permits and licenses necessary for the implementation and operation/execution of a project.

5. Additional Grantee Responsibilities

The grantee will be responsible for the additional responsibilities listed below:

- day-to-day customer service actions such as managing driver access and providing driver support and station uptime monitoring,
- prompt maintenance and repair, and
- marketing

6. Confidentiality of Information

MDE and MEA will treat information clearly and reasonably identified by the applicant as confidential commercial information or as a trade secret in accordance with Maryland's Public Information Act (PIA) as set forth in Title 4 of the General Provisions Article of the Annotated Code of Maryland.

XII. Contact Information

Any questions regarding these guidelines and applications should be directed to:

Mde.vw@maryland.gov or:
Tim Shepherd
MDE Mobile Sources Division Chief
TEL: 410-537-3236
FAX: 410-537-4435
tim.shepherd@maryland.gov

Attachment A

Corridor	Length (Miles)	Starting Point	Ending Point	Fuel	Designation
I -270	34.5	I-70	I -495	Electric	Corridor-Ready
I -495	16.1	VA State Line	VA State Line	Electric	Corridor-Ready
I-68	79.9	Jan-70	WV State Line	Electric	Corridor-Pending
I-695	31.8	-	-	Electric	Corridor-Ready
I-70	64.6	I-695	I-81	Electric	Corridor-Ready
	26.5	I-81	PA State Line	Electric	Corridor-Pending
I-795	31.8	I-695	MD 140	Electric	Corridor-Pending
I -81	12	PA State Line	VA State Line	Electric	Corridor-Ready

I-83	32.9	PA State Line	Fayette Street	Electric	Corridor-Ready
I-95	108.1	DE State Line	VA State Line	Electric	Corridor-Ready
I-97	18.2	I-695	US 50	Electric	Corridor Ready
US 1	27.7	PA State	Baltimore-Harford County Line	Electric	Corridor-Pending
	57.03	Baltimore-Harford County Line	DC Line	Electric	Corridor Ready
US 13	42.2	DE State Line	VA State Line	Electric	Corridor-Pending
US 301	67.1	DE State Line	MD 5	Electric	Corridor-Ready
	22.6	MD 5	VA State Line	Electric	Corridor-Pending
US 50	139.7	DC Line	MD 528	Electric	Corridor-Pending
MD 100	16.8	US 29	MD 177	Electric	Corridor-Ready
MD 140	3.5	I-795	MD 91	Electric	Corridor-Ready
	30.5	MD 91	PA State Line	Electric	Corridor-Pending
MD 32	30.3	I-70	I-97	Electric	Corridor-Ready
MD 4	58.8	DC Line	MD 235	Electric	Corridor-Pending
MD 5	12.8	DC Line	US 301	Electric	Corridor-Ready
	40	US 301	MD 712	Electric	Corridor-Pending
MD 528	8.6	DE State Line	US 50	Electric	Corridor-Pending
MD 295	30.53	Russel Street	DC Line	Electric	Corridor-Ready