



It Pay\$ to Plug In: NJ's Electric Vehicle Charging Grant Program

Overview and Instructions for

DC Fast Charger Community Solicitation March 14, 2022 – May 13, 2022





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1.0 Background

It Pay\$ to Plug In (Program) provides grants to offset the cost to purchase and maintain electric vehicle charging stations in New Jersey. This program is designed to expand New Jersey's growing network of electric vehicle infrastructure, allowing residents, businesses, organizations, and government agencies to purchase and drive electric vehicles (EVs). EVs reduce greenhouse gases and other pollutants and improve air quality.

1.1 Program Overview

The Program is a reimbursement program that reduces the cost of purchasing and maintaining DC fast charging stations at qualifying locations that provide public charging in Community locations. Public and private entities may participate in the Program, and applications are processed through a competitive solicitation.

Additional information about the Program can be found on the DriveGreenNJ website at www.drivegreen.nj.gov/communitydcfc.html.

1.2 Program Contacts

All Program questions should be directed to the Bureau of Mobile Sources:

Bureau of Mobile Sources Mail Code 401-02E PO Box 420 Trenton, NJ 08265-0420 Phone: (609) 292-7953

Email: <u>drivegreen@dep.nj.gov</u> (in the subject line of your email, include the phrase "Community DCFC Questions")

2.0 Definitions

A is Amps.

Applicant is the entity that owns or is responsible for the operation of the Charging Stations. The applicant is the recipient of the reimbursement grant.

DC Fast Charging Station (DCFC) is a protocol for rapidly charging EV batteries by supplying power directly to the batteries in the form of direct current voltage, rather than going through a vehicle charging circuit. Typical power outputs are several hundred VDC at several hundred amps. There are two different standard connectors used for DCFC: SAE J1772 CCS (combo connector) and CHAdeMO.

Electric Vehicle (EV) is a four-wheel light duty vehicle capable of highway speeds that is powered fully or in part by an electric motor and is rechargeable from a connection to an off-board electrical source.

Electric Vehicle Supply Equipment (Charging Station) is the physical location a vehicle will plug in to charge. It includes all hardware and software required to connect and electric vehicle to a suitable electrical supply. A typical charging station consists of a console wired into the electrical supply and a cable and connector to plug into the electric vehicle.







eMobility is shared mobility, such as electric taxis, car sharing, and ride hailing services. *In addition to chargers, eMobility projects may include vehicles, lot acquisition, and operational items such as education and outreach, and as such, are handled separately from the IPPI grant process. See our <u>eMobility webpage</u> for more information.*

Installation Date is the date on which the charging station is affixed to its permanent location, connected to the electrical source, and ready for use (including connection to a network if applicable).

Installation Location is a parking lot, flat lot, or designated area associated with the public place, workplace, multi-unit dwelling, or corridor. Projects that feature parking lots of immense area may be separated by building or entrance (ex. shopping malls, sports stadiums, etc).

Installer is the entity that installs the charging station. The Installer may or may not be the same as the Equipment Owner

It Pay\$ to Plug In (Program) is a program that provides incentives for the purchase and installation of electric vehicle charging stations in New Jersey. It is run by the New Jersey Department of Environmental Protection's Bureau of Mobile Sources.

kW is kilowatts.

Multi-Unit Dwelling (MUD) is multi-family residences, including apartments, condominiums, and townhouses. There must be a minimum of 5 units.

DEP is the New Jersey Department of Environmental Protection.

Port is one charging station connection to one vehicle, capable of supplying the full rated power of the charging station. In the case of DCFC stations, one port may include both a CHAdeMO and CCS connector if only one connector can be used at a time. If a charging station has multiple connectors but reduces the power to each connector when multiple vehicles are plugged in, then this counts as only one port.

Program Administrator is the Bureau of Mobile Sources which is responsible for receiving and reviewing applications for the Program, responding to questions from Program participants, and conducting other administrative tasks related to the Program.

SAE J1772 CCS or "combo connector" is the protocol standard that adds pins to the J1772 connector to allow DC fast charging. This connector is most commonly supported by North American and European EVs equipped for fast charging.

Site Owner is the owner of the site at which the charging station is installed. The Site Owner may or may not be the same as the applicant.

VAC is volts alternating current.

VDC is volts direct current.

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3.0 Program Eligibility

3.1 Applicant Eligibility

To be eligible for the Program, an applicant must meet the following conditions:

- Be licensed to do business in New Jersey, including businesses, government entities, non-profit
 organizations, educational institutions, and multi-unit dwellings (apartments, condominiums,
 and townhouses). Private residential dwellings other than multi-unit dwellings are not eligible
 for grants.
- The applicant must comply with the requirements in the Certification Checklist and the Deadlines Acknowledgement Form provided through the SAGE Portal.
- The applicant may be asked to provide access to the charging stations for site visits by program staff to verify installation.

3.2 Location Eligibility

Eligible locations include:

• <u>Community Locations</u>: Charging stations that are exclusively available to the general public in places where people live and work. Examples include, but are not limited to, charging stations in town centers, commercial areas, retail centers, and multi-unit dwellings.

3.3 Charging Station Eligibility

- Each charging station must be located at a parking space that is designated for electric vehicles only and marked with appropriate signage and floor paint outlining the parking spots. A dual-port charging station must have two EV-only parking spaces.
- Parking spaces shall be adequately lit from dusk to dawn and located safe from flow of traffic.
- Bollards shall be placed to protect the charging station equipment. Any stand-alone charging station bollards should be 3 to 4-feet high with concrete footings placed to protect the electric vehicle supply equipment (EVSE) from accidental impact and to prevent damage from equipment used for snow removal.
- Must be installed in New Jersey.
- Must be kept operational and in service at the grant-awarded project location(s) for a minimum of five (5) years.
- Charging station installation must meet Americans with Disabilities (ADA)-compliance guidelines
 and the New Jersey Uniform Construction Code (UCC) requirements and follow all applicable
 laws, ordinances, regulations, and standards. Please refer to the IPPI Program's Compliance and
 Best Practices Guidelines for Accessible EV Charger Installation. Must incorporate a cord
 management system or method to minimize the potential for cable entanglement, user injury,
 or connector damage.
- Charging station display screens shall be user friendly and easy to operate. Display shall be readable in direct sunlight and at night. Display must be protected from malfunctions due to condensation and normal local weather conditions.
- Must be capable of operating over an ambient temperature range of minus 22 to 122 degrees Fahrenheit with a relative humidity of up to 95%.







- Charging stations shall be certified to one of the following options:
 - Underwriters Laboratories (UL) 2594 (Standard for Electric Vehicle Supply Equipment);
 or
 - An equivalent Nationally Recognized Testing Laboratory (NRTL) program to demonstrate compliance with appropriate product safety test standards. A complete list of accredited NRTLs can be found online at: https://www.osha.gov/dts/otpca/nrtl/nrtllist.html.
 Supporting evidence must be provided.
- Charging stations must be networked and display real-time operational status on a smartphone application, with a thorough network-specific application or third-party aggregator.
- Public charging stations must be accessible by all drivers regardless of network memberships or subscriptions, and drivers must not be required to pay a subscription fee or otherwise obtain a membership in any network, club, association, or organization as a condition of using such electric vehicle charging station.
- For charging station sessions that require payment, real-time pricing and fee information shall be displayed on device or payment screen.
- Charging stations must maintain a 95% annual uptime requirement. Should repair be necessary, service must be contacted within 24 hours and the station up and fully operational within 48 hours to ensure a 95% annual uptime guarantee.

Resources for charging station hosts are available at https://www.drivegreen.nj.gov/dg-charging.html

DC Fast Charger Specific Requirements

- Must be located in a community location.
- The charging station must be exclusively available to the general public.
- Applicants must install a minimum of 2 charging ports per location.
- Applicants may only receive reimbursement for 2 charging ports per location. Additional ports may be installed, but they will not be covered by the grant program.
- Each charging station must offer both CHAdeMO and SAE CCS charging protocol connectors and shall be considered to be one port.
- Each port must be capable of providing a minimum of 50kW continuous to each vehicle that is charging. If multiple vehicles may be charged simultaneously at the same station or location, the power available to each vehicle shall not be less than 50kW.
- The charging station must connect to a network by wired ethernet, Wi-Fi, or cellular connection. (See Network Requirements below for more information.)
- The charging station shall use the latest approved version of the Open Charge Point Protocol.
- Charging stations that require payment must at minimum be equipped with a credit card reader
 that allows users to pay using credit and debit cards without incurring excessive fees,
 inconvenience, or delays compared to other payment methods. Multiple point-of-sale payment
 methods are encouraged; additional payment options may include, but are not limited to, pay
 per use subscription methods, RFID or smart cards, toll-free telephone numbers, and smart
 phone applications.
- Charging stations must be accessible to the general public 24 hours a day and 7 days a week. Charging stations must provide customer support service that is available 24 hours a day, 7 days a week via a toll-free telephone number posted on or near the charging station, and that is clearly visible to the user.



3.4 Network and Data Reporting Requirements

Network must provide the option for remote management and access control.

Stations shall collect usage data for data reporting, including, but not limited to:

- Charging data such as date and time of usage (start and stop times);
- Number of charging events;
- Total energy (kWh) per charging event;
- Total dollar amount charged to the user (if applicable);
- Station status and health in real time;
- Malfunction or operating errors;
- Unique ID for identifying the EVSE;
- Other non-dynamic EVSE information such as GPS ID; and
- Percentage or length of time of station downtimes.

Usage data shall be provided to the DEP Bureau of Mobile Sources on a quarterly basis. The grant agreement will provide specific data to be submitted and the required data format to be used.

4.0 Reimbursement Amounts and Eligible Costs

To ensure reimbursement under this program, DEP must approve the grant application and finalize a grant agreement with the applicant <u>before</u> the charging station equipment is purchased. DEP will notify the applicant that their work period has begun. Any "make-ready" electrical infrastructure may be purchased and assembled before the work period, but no charging equipment may be purchased or installed before the work period.

Eligible costs include the costs of the charging stations, associated delivery and activation fees, warranty, maintenance agreement and network subscription for up to five (5) years, and a leasing contract (if necessary). The following are not eligible costs: make-ready, installation, signage, floor paint or markings, purchase or rental of real estate, other capital costs (e.g., construction of buildings, parking facilities, etc.) or general maintenance (i.e., maintenance other than that of the charging equipment).

Upon completion of work in accordance with the eligibility criteria and grant agreement requirements, DEP will reimburse each applicant for eligible costs, up to a maximum of:

- 150kW+: \$200,000 per location (2 port minimum);
- 100 to 149kW: \$150,000 per location (2 port minimum);
- 50 to 99kW: \$75,000 per location (2 port minimum).

Reimbursement will not exceed payment receipts. Quarterly reimbursement may be requested, but 25% of the grant amount will be reserved for final payment. DEP will not reimburse applicants for final charging station costs until provided with proof that the charging station(s) has been installed and activated. Any costs incurred before or after the work period are NOT eligible for reimbursement.







Leasing Option:

Lease payments in accordance with the above maximum reimbursement amounts and applicable percentages are an eligible cost. Payments will be disbursed yearly for the length of a five-year lease or until maximum grant amount is reached.

Utility EV Charging Infrastructure Incentive Programs:

If the Applicant is participating in <u>It Pays\$ to Plug In and a utility EV charging infrastructure (i.e. makeready) incentive program</u> simultaneously, the Applicant must notify DEP and the appropriate utility program of dual-participation.

Supplemental Environmental Projects (SEP):

The DEP's Office of Compliance and Enforcement (C&E) manages and coordinates implementation of SEPs. A SEP is an environmentally beneficial project that a respondent voluntarily agrees to perform as a condition of settling an enforcement action. Additional information can be found on C&E's website here: https://www.nj.gov/dep/enforcement/seps.html#.

Public IPPI projects may be eligible to be covered in full by a SEP. As such, the IPPI program provides a monthly report to C&E of all public IPPI projects, that are either currently on our wait list awaiting funding or that were submitted as part of a solicitation but were not chosen for award of an IPPI grant, for posting on C&E's website here: https://www.nj.gov/dep/enforcement/sep-proposals.html.

If your project is not chosen for award following the closing of this solicitation but then is subsequently chosen for review as a SEP, you will be contacted by the respondent for additional information and to verify if your project is still viable, as this may be several months or up to a year later. There is no guarantee that your project would be chosen for a SEP review.

5.0 Approval and Selection Process

Applicants will be considered after the closing of the competitive solicitation period. Community DCFC locations will be evaluated on the following selection criteria:

County Tier: The DEP has grouped all NJ counties into 3 Tiers based on progress toward EV
charger infrastructure allocation-based goals. Projects in Tier 1 counties will be given priority,
followed by Tier 2 and then Tier 3.

Tier 1 Counties: Atlantic, Bergen, Cape May, Cumberland, Gloucester, Hunterdon, Salem, Sussex, Union, and Warren

Tier 2 Counties: Burlington, Camden, Hudson, Middlesex, Monmouth, Morris, Ocean, and Passaic

Tier 3 Counties: Essex, Mercer, and Somerset



- MJ Bradley Tract Score: MJ Bradley & Associates, a private energy and environmental consulting
 group, developed a tool called ILIT to evaluate what locations may be suited for electric vehicle
 fast charging infrastructure. The DEP utilized ILIT to produce a "suitability score" for each
 census tract within all NJ counties. Each tract was scored against other tracts within their
 respective county and given a score based on their population density and commercial activity.
 The higher the score, the better the suitability.
- Amenities within Walking Distance
- Distance from Existing/Planned DCFC
- DCFC Power Level: Chargers with power levels of 150 kW or greater are preferred.
- Other: May include other desirable parameters such as locations near concentrations of MUDs, attractions/destinations, or those with education value, equipment considerations such as battery storage or utilization of solar power, etc.

The DEP created an <u>interactive heatmap</u> to assist applicants in choosing project locations with a higher probability of being selected for award. The map displays the suitability score for each census tract within the State. This map also displays the locations of the noted existing and planned DCFC infrastructure.

6.0 Procedure

- Visit the <u>System for Administering Grants Electronically (SAGE)</u> to complete your application. View the Fast Charger SAGE Instructions for detailed instructions on how to submit your application via the SAGE Portal.
- 2. Obtain three (3) quotes for the EV charging stations
- 3. Submit all required documents via the SAGE Portal.
- 4. Once the application period closes, DEP will review the information submitted and rank all submitted applications based on the ranking criteria.
- 5. If the grant application is approved, DEP will provide and execute a grant agreement with the applicant via the SAGE Portal.
- 6. Within 3 months from grant execution, the applicant must provide proof of the following milestones:
 - a. Approval for new services from the utility at the power levels required, if not behind the meter
 - b. Detailed site design including site engineering, electrical, and signage plan
 - c. Fully-executed site host agreement (where the applicant is not the site host)
 - d. Evidence that applications for local permits and approvals have been submitted
- 7. Within 6 months from grant execution, the applicant must provide proof that all necessary approvals were obtained and physical construction has started.
- 8. Installation of the charging stations must be completed within 12 months of DEP grant execution with the option for a 6-month extension.



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- 9. After installation, the applicant must submit the following via the SAGE Portal:
 - a. Expenditure Report
 - b. Charger Information Form
 - c. Invoices
 - d. Proof of Payment
 - e. Installed Site Photo: photo of the charging station installed so the equipment is visible at its site
 - f. Display Screen Photo: photo of the display screen to verify the charging station is operational and connected to the network if applicable.
 - g. Serial Number Photo: photo of the serial number on each charging station
- 10. The applicant must also report the new station to the Alternative Fuels Data Center for listing on their website and maps (https://afdc.energy.gov/stations/#/station/new).
- 11. DEP will review these invoices to determine if costs are appropriate to the agreed upon project, and if so, issue a check for the approved grant amount not to exceed payment receipts. Although DEP will reserve funding for each application approved, reimbursement will occur only after the work has been completed in a manner that satisfies the DEP grant criteria and the charging station has been placed in service. DC Fast charger Grantees are allowed to request reimbursement on a quarterly basis for costs incurred during the quarter. 25% of the grant amount must be reserved for final payment.

7.0 Ongoing Requirements

Applicants must continue to own and operate the charging equipment at the grant-awarded project location(s) for a period of no less than five (5) years from the date of installation.

The applicant must provide usage data to the DEP Bureau of Mobile Sources on a quarterly basis for the duration of the five (5) years. Alternatively, the applicant must allow the Department to obtain data directly from the network provider, if requested by the Department. The data that must be provided will be described in detail in the grant agreement.

DEP may require applicants to participate in surveys and may request participation from applicants in other research efforts that support Program goals.

Grantees that fail to meet the requirements for years-in-service, up-time, and routine delivery of data may be declared ineligible for future charging stations grants from the DEP.

