CDTC & CDRPC Technical Assistance Program


Prepared by

Capital District Clean Communities Coalition
Capital District Transportation Committee
Capital District Regional Planning Commission

Prepared for
The Town of Colonie, New York

March 24, 2021
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Introduction
The Town of Colonie has requested technical assistance in investigating the feasibility of incorporating Electric Vehicle (EV) charging station requirements into the Town’s zoning and development codes. Recently, EV charging station requirements have become an area of interest to Town staff and Planning Board members, who advocate for the installation of electric vehicle charging infrastructure or electric vehicle supply equipment (EVSE) on most new developments in the Town. To date, there has been limited push back from developers in accommodating the installation of EVSE in new developments; however, the Town would like add consistency in the process by including language in Town codes that would better prescribe when, where, and how much EV charging should be required on a town-wide basis.

Existing Conditions
2.1 Electric Vehicles and Charging Infrastructure
Electric Vehicle ownership and presence of EVSE throughout New York State (NYS) has been increasing steadily since 2011. Currently, there are over 60,000 EVs on the road in NYS\(^1\) and over 5,600 combined public Level 2 and direct current fast (DC fast) charge outlets in the State\(^2\). To meet emissions goals set in the Climate Leadership and Community Protection Act (CLCPA), NYS has indicated targets of deploying 850,000 zero emission vehicles by the end of 2025. To support an EV fleet of this size, the NYS Department of Public Service (DPS) estimates between 20,000 and 50,000 additional public Level 2 charging outlets, between 35,000 and 80,000 additional workplace Level 2 charging outlets, and between 1,000 and 4,000 additional DCFC outlets will need to be installed statewide by 2025 (NYS Department of Public Service Staff, 2020).

Currently, there are just over 4,000 registered EVs in the Capital District, approximately 20% of which are within the Town of Colonie. Over 880 registered electric vehicles including Plug-In Electric Vehicles (PHEV), Extended Range Electric Vehicles (EREV), and Battery Electric Vehicles (BEV) are currently registered in Town zip codes and there are approximately 166 combined public Level 2 and DC fast charge outlets within Town limits. Table 1 shows the distribution of EV registrations by county in the Capital District and Table 2 shows the distribution of EV registrations and EV charging outlets by Town zip code.

Table 1: EVs on the Road in the Capital District

<table>
<thead>
<tr>
<th>County</th>
<th>PHEV/EREVs</th>
<th>BEVs</th>
<th>Total EVs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany</td>
<td>1,007</td>
<td>611</td>
<td>1,618</td>
</tr>
<tr>
<td>Rensselaer</td>
<td>336</td>
<td>215</td>
<td>551</td>
</tr>
<tr>
<td>Saratoga</td>
<td>711</td>
<td>454</td>
<td>1,165</td>
</tr>
<tr>
<td>Schenectady</td>
<td>449</td>
<td>292</td>
<td>741</td>
</tr>
</tbody>
</table>

\(^1\) NYSERDA Electric Vehicle Registration Map (January 2020) [https://www.nyserda.ny.gov/all-programs/programs/chargeny/support-electric/map-of-ev-registrations](https://www.nyserda.ny.gov/all-programs/programs/chargeny/support-electric/map-of-ev-registrations)

\(^2\) United States Department of Energy Alternative Fuel Station Locator (January 2020) [https://afdc.energy.gov/stations/#/find/nearest](https://afdc.energy.gov/stations/#/find/nearest)
### Table 2: Town of Colonie EV Registrations and Infrastructure by Zip Code

<table>
<thead>
<tr>
<th>ZIP Code</th>
<th>PHEV/EREV</th>
<th>BEV</th>
<th>Total EVs</th>
<th>Level 2 Outlets</th>
<th>DC Fast Outlets</th>
</tr>
</thead>
<tbody>
<tr>
<td>12205</td>
<td>56</td>
<td>36</td>
<td>92</td>
<td>48</td>
<td>7</td>
</tr>
<tr>
<td>12211</td>
<td>43</td>
<td>27</td>
<td>70</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>12189</td>
<td>32</td>
<td>33</td>
<td>65</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>12204</td>
<td>16</td>
<td>16</td>
<td>32</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12303</td>
<td>64</td>
<td>38</td>
<td>102</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12304</td>
<td>33</td>
<td>25</td>
<td>58</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>12309</td>
<td>151</td>
<td>125</td>
<td>276</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12047</td>
<td>45</td>
<td>38</td>
<td>83</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>12110</td>
<td>60</td>
<td>45</td>
<td>105</td>
<td>44</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>500</strong></td>
<td><strong>383</strong></td>
<td><strong>883</strong></td>
<td><strong>159</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

*Note: Electric Vehicle registration data is only available at the zip code level. The values above include all registrations for each zip code that falls with the Town’s boundaries and may include registered vehicles outside of the geographic Town boundaries. Data Source: Evaluate NY-March 2021.*

### 2.2 Clean Energy Communities Participation

The Town of Colonie became a designated Clean Energy Community in September of 2019 after completing four of ten High Impact Actions (HIA’s) in the New York State Energy Research and Development Authority’s (NYSERDA) grant program, the Clean Energy Communities Program (CECP). In January 2021 NYSERDA relaunched the Leadership Round of the CECP which has additional incentives tied to municipal completion of specific HIA’s including installing municipally owned or leased, publicly available Level 2 and DCFC charging stations. Another component of the CECP’s Leadership Round is incorporating light, medium, and heavy duty electric vehicles into the municipal fleet. By completing these actions the Town will position itself for match-free grant funds for clean energy projects.

### 3 Comprehensive Plan & Zoning Audit

#### 3.1 Comprehensive Plan

Including language that supports EVs in local comprehensive plans makes it easier to establish specific EV policies, ordinances, and regulations in other areas of local code and helps lay the foundation for EV adoption in a municipality. Electric Vehicles can be supported in the comprehensive plan directly or in a more general way through the identification of broader environmental and sustainability goals of the municipality (Energetics, a division of Akimeka, LLC, and WXY architecture + urban design, 2019, p. 35).

The following provides a summary of goals and recommendations by category in the Town’s existing Comprehensive Plan that support EVs by identifying efforts related to sustainability, energy efficiency, and response to a changing climate.
Open Space, Recreation and Environment

**Goal** – Continue to evaluate opportunities where renewable energy systems, coupled with energy efficiency measures could be incorporated into Town buildings and facilities to reduce fossil fuel use, reduce the Town’s carbon footprint and stabilize or reduce the Town’s energy costs.

**Implementation Recommendation: Short Term Goal (1-2 Years)** –

- Incorporate provisions in zoning for the use of green infrastructure / low-impact design techniques to address stormwater management. Incentivize or require the use of these techniques as appropriate.
- Continue participating in the New York State Department of Environmental Conservation’s (NYSDEC’s) Climate Smart Communities program and actively seek certification in the New York State Energy Research and Development Authority’s (NYSERDA’s) Clean Energy Communities program.
- Encourage applicants for new commercial projects to incorporate and follow Leadership in Energy and Environmental Design (LEED) standards, and seek LEED certification for all new buildings.
- Implement LED contract to change approximately 4,000 street lights to LED for cost and energy savings.
- Continue to purchase hydroelectric power to reduce utility costs in Town facilities and promote green energy credits.

Development and Redevelopment

**Goal** – Ensure an efficient and fair development approval process that is predictable, transparent, and protective of the Town’s environment and the residential character of its neighborhoods.

**Implementation Recommendation: Short Term Goal (1-2 Years)** – The Town’s zoning should be refined following adoption of the Comprehensive Plan Update. In addition to subjects discussed elsewhere in this list of preliminary recommendations, some of the specific zoning items that have been identified for further consideration include:

- Revising parking requirements to reduce the amount of parking required and to encourage shared parking
- Review the sign regulations to address newer technologies such as LED signs
- Consider amending the Land Use Law to move the sign review and approval process from the Sign Review Board to the Planning Board for new, major projects.
- Reevaluate the Planned Development District (PDD) regulations to ensure that the Town is obtaining desired benefits in return for the development flexibility and higher potential densities that PDDs provide. As discussed above, ensure that existing neighborhoods that adjoin proposed PDDs are adequately protected.

Services and Resources

**Goal** – Continue to maintain and enhance the Town’s extensive water, sewer, and local roadway infrastructure. Work with utilities and providers of fiber optic and other communications infrastructure to ensure that high-quality services are available to meet the growing needs of residents and businesses.
Consider adaptation strategies to ensure the resiliency of the Town’s infrastructure in response to a changing climate.

**Implementation Recommendation: Mid-term Goal (3-5 Years) –**

- Continue to work with Albany County on the Albany County Hazard Mitigation Plan.
- Implement the next 5-year paving plan in 2020, and continue long-term plans for Latham Water and Pure Waters.
- Continue to evaluate cell, fiber and communications infrastructure to meet growing needs while ensuring a plan for obsolescence, uniformity, location and other impacting issues. Reevaluate the Wireless Telecommunications Local Law to ensure compliance with FCC regulations and to protect the residents from any negative impact associated with radio emissions.

Although the Town of Colonie Comprehensive Plan Update (June 2019) does not have any specific implementation recommendations regarding EVs or EVSE, sustainability and energy efficiency is a clear emphasis of many goals throughout the plan, and perhaps most notably in the 2019 Town of Colonie Vision Statement (pg.1) which states:

“It (The Town) protects its natural resources, promotes environmentally-sustainable development practices, and carefully guides development and redevelopment in its existing commercial and industrial areas to support the tax base and create and retain jobs.”

Based on the existing language in the comprehensive plan, changes to Town zoning and development regulations to require EVSE – Ready development would be consistent with the comprehensive plan.

### 3.2 Zoning

A brief review of the Town’s existing zoning and land use code was conducted to determine whether it included any language supportive of EVs and / or EVSE. To determine this, three initial questions were asked.

1. **Are Electric Vehicles and EVSE defined in Zoning Code?** – No, Electric Vehicles, Electric Vehicle Supply Equipment, and Electric Vehicle Charging Infrastructure are not included in §190-6 Definitions.
2. **Is EVSE listed in Zoning Use Tables?** – No, Electric Vehicle Supply Equipment, is not included in §190 Attachment 1 Permitted Use Table.

After initial review it was determined that the Town’s existing zoning and land use code does not include specific ordinances supportive of EVs and EVSE. Recommendations for how to better support EVs through zoning can be found in the following section.

### 4 General Recommendations & Best Practices

Municipalities have the ability to support the local adoption of EVs by tailoring local zoning, codes, permitting and parking requirements to allow, require, and streamline the installation of EV charging stations. The following sections detail general zoning and code recommendations that the Town could...
implement to help transition from the existing voluntary EVSE installation program to requiring EVSE as part of new development. Each recommendation is paired with at least one best practice example of the recommended change.

**Recommendation** – *Adopt zoning language that specifically defines the terms associated with EV charging and does not unnecessarily restrict the installation of EVSE.*

Zoning codes can be used as a tool to streamline the EVSE installation process in a municipality. By proactively including definitions of EVs and EVSE, and setting clear zoning standards, the Town can influence the amount and location of new EVSE installations (WXY Architecture + Urban Design for NYSERDA and TCI, 2012). As noted in the previous section, the Town does not currently include definitions for EVs or EVSE in the existing zoning code. As a first step of better incorporating electric vehicle charging into new developments, the Town should add a new section to the zoning code to specifically define electric vehicle charging levels, the difference between public and private use stations, permitted locations, and other design standards associated with the installation of EV charging. The Town of Brutus, New York has implemented similar language that may be used as an example.

**Best Practice – Town of Brutus, NY**

In 2016, the Town of Brutus in Cayuga County, New York added an article to the existing zoning code to address alternative energy and the installation of EVSE in the Town. §125-110 of the zoning ordinance specifically defines EV charging levels, the difference between public and private use EV charging, and outlines permitted locations for each level of EV charging. The Town worked with Cayuga County Planning Department and Central New York Regional Development Planning Board to develop and implement the zoning language. For specific language used by the Town of Brutus see the Town’s zoning code [https://ecode360.com/32542091](https://ecode360.com/32542091).

For more information on the implementation of the zoning article in the Town of Brutus contact Angela Skellington, Town Clerk (P. 315-834-9398).

**Recommendation** – *Establish EVSE-Ready building regulations that require the installation of EVSE in new developments and / or require the installation of EV provisions to reduce the cost and ease the installation of future EVSE.*

Local “EVSE-Ready” requirements can build upon basic inclusion of EV charging in zoning to reserve certain parking spots for future EVSE installation, require pre-installation of conduit to specified parking spots (EV provisions), or in some cases, require the complete installation of EV charging to a specified percentage of new parking spaces (U.S. Department of Energy, 2015). These requirements are typically added into the site plan application review process and can be as prescriptive or as flexible as the Town desires. Although there is no official general guidance on the recommended number of EV charging stations that should be required in new commercial or residential developments, examples from New York State range from 2%-5% of new parking spaces, and other examples from around the country can

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3 Town of Brutus Zoning Code - [https://ecode360.com/32542091](https://ecode360.com/32542091)
require EV provisions in up to 25% of new parking spaces\textsuperscript{4}. Leadership in Energy & Environmental Design (LEED) certification requirements can also act as a guide for recommended amounts of EV charging infrastructure in new development. LEED v4.1 Building Design and Construction standards award points to new buildings that “Install electrical vehicle supply equipment (EVSE) in 5% of all parking spaces used by the project or at least two spaces, whichever is greater.” or “Make 10% of parking spaces or at least 6 spaces, whichever is greater, EV Ready.”\textsuperscript{5} To ensure development within the Town includes the appropriate amount of electric vehicle charging, the Town should add language to the zoning code that details minimum requirements for EV charging or EV provisions in development. More detailed information is outlined below on municipalities in New York State that have already adopted EVSE-Ready requirements.

**Best Practice – Town of Clifton Park, NY**

In 2016, the Town of Clifton Park in Saratoga County, New York added a standard note to the application review process of new commercial and retail buildings within the Town of Clifton Park. The note reads:

“The property owner agrees to as an aspect of the new construction, accommodations to install the conduit under the pavement to designated parking stalls for preparation of future EV Charging Stations. Such infrastructure accommodations at the time of new construction will further the goals of the 2016, “Capital District Electric Vehicle Charging Station Plan”. The costs to run conduit at the time of new construction greatly decreases costs to install EV Charging Stations in the future since pavement within the parking area will not need to be torn-up to run electrical connections.”

This note is written as a suggestion that property owners of new developments should consider the location of electrical panel boxes and pre-install the under pavement conduit to decrease the cost of future EV charging stations. The final number and location of EVSE-Ready parking locations recommended by the Town is based on market demand and determined on a project to project basis. Feedback from local developers has been positive with nearly full compliance of providing EVSE-Ready parking, with the few exceptions being high turnover retail locations that may not make sense for customers to use Level 2 charging during their visit. Since implementation of this language, approximately 80 new EV charging outlets have been installed in developments within the Town of Clifton Park.

For more information on the implementation of the EVSE-Ready guidance language in the Town of Clifton Park contact John Scavo, Town Planner (P. 518-371-6054).

**Best Practice – City of Saratoga Springs, NY**

The City of Saratoga Springs in Saratoga County, New York is currently in the process of developing a Unified Development Ordinance (UDO), which is a tool that replaces traditional zoning codes and combines zoning and subdivision regulations with other development standards in one simplified

\textsuperscript{4} City of Palo Alto, CA EVSE Ordinance - [https://www.cityofpaloalto.org/civicax/filebank/documents/42838](https://www.cityofpaloalto.org/civicax/filebank/documents/42838)

reference document. Once implemented, this simplified document will reduce conflicting codes and help streamline the permitting and approval process on new development\textsuperscript{6}. The City has used the update as an opportunity to include language on EV charging in two sections, “9.5 - Accessory Structure and Uses” and “10.5 - Required Off-Street Vehicle and Bicycle Parking Spaces”. Language in §9.5 H. specifically permits EV charging stations as an accessory use in all parking areas, references design guidelines recommended by NYSERDA in “Siting and Design Guidelines for Electric Vehicle Supply Equipment”\textsuperscript{7}, and also requires the maintenance and upkeep of stations once they have been installed.

Excerpts from §9.5 H. of the DRAFT UDO are included below:

§9.5 H. 1. – “Electric vehicle charging stations must comply with the standards of the New York State Energy Research and Development Authority’s manual, “Siting and Design Guidelines for Electric Vehicle Supply Equipment.””

§9.5 H. 2. – “Electric vehicle charging stations are permitted as an accessory use within any principal or ancillary parking facility, or gas station, located within the area of designated vehicle parking spaces.”

§9.5 H. 7. – “Charging station equipment must be maintained in good condition and all equipment must be functional. Charging stations no longer in functional use must be removed within 30 days of discontinuance.”

Additionally, language in §10.5 F. sets a 2% minimum requirement for all parking spaces in nonresidential and mixed-use parking facilities to be built to accommodate EV charging stations. Excerpts from §10.5 F. of the DRAFT UDO are included below:

§10.5 F. 1. – “For nonresidential and mixed-use parking facilities of 30 or more spaces, a minimum of 2% of the spaces, with any fraction rounded up, must be constructed to accommodate electrical vehicle charging stations. A minimum of one space must be ADA accessible. During site plan review, the required number of ADA accessible electric vehicle charging spaces may be increased.”

§10.5 F. 2. – “There must be a raceway system from the electrical panel to the spaces for electric vehicle charging. The associated electrical equipment room must have dedicated space to install the required equipment for electric vehicle charging.”

§10.5 F. 3. – “All for commercial parking facilities, all spaces and associated electrical infrastructure must be constructed for either level 2 charging stations or level 3 fast charging stations, or the equivalent if standard industry categorizations change.”

Language above was taken from the current DRAFT document dated September 2020 and is likely to change as the City finalizes the UDO. City staff noted the following changes are anticipated in the Final DRAFT.

§10.5 F. 1. –“Nonresidential and mixed-use” will be removed from the language to apply the requirement to all parking facilities

\textsuperscript{6} Saratoga Springs UDO - https://www.saratoga-springs.org/2077/Unified-Development-Ordinance
\textsuperscript{7} Siting and Design Guidelines for Electric Vehicle Supply Equipment - https://www.transportationandclimate.org/siting-and-design-guidelines-electric-vehicle-supply-equipment
§10.5 F. 1. — “...a minimum of 2% of the spaces, with any fraction rounded up, must be constructed to accommodate electrical vehicle charging stations.” will be changed to require a minimum of 2% of spaces to be constructed with installed EV charging, or a minimum of 5% of spaces to be constructed to accommodate electric vehicle charging stations.

As noted above, the document is currently still in draft form, however, a Final DRAFT is expected to be completed in mid-April 2021. For more information on the City of Saratoga Springs Unified Development Ordinance EV requirements contact Tina Carton, Admin of Parks, Open Lands, Historic Preservation, and Sustainability (P. 518-587-3550 x2534).

Best Practice – Town of New Paltz, NY

In 2014, the Town of New Paltz in Ulster County, New York introduced a new local law regarding EV charging infrastructure requirements. The law added language in the zoning code to include definitions for EV charging and set specific requirements for the full installation of EV charging stations in new residential and non-residential development. §140-52 (Site Plan Review) of the zoning ordinance was amended to specifically require electric vehicle charging installations for all new residential developments with more than three new dwelling units, and all new non-residential developments with over 20 required parking spaces. The Town of New Paltz requires that new residential developments with more than three dwelling units include at least one parking space with a Level 1 or 2 EV charger per dwelling unit, and new non-residential developments must include at least one parking space with access to an EV charger per every 20 required parking spaces (5%), unless there is “good cause” to waive this requirement. In cases where the requirements for full EV charger installation may be waived, the provisions for EV charging (underground conduit) will still be required. Excerpts from §140-52(2)(n) of the Town code are included below:

§140-52(2)(n) – “Any site plan for a residential use that proposes more than three dwelling units or a nonresidential use that proposes more than 20 parking spaces shall make provision for the installation and use of one or more electric vehicle charging stations (EVCS) in accordance with the following”

§140-52(2)(n)[1] – “Residential structures shall include at least one internal or external parking space with a Type I or Type 2 EVCS per dwelling unit”

§140-52(2)(n)[2] - “Office, business, commercial, recreational and other nonresidential uses, including civic, cultural and not-for-profit uses (for instance, libraries, day-care centers, schools, churches, etc.) shall provide at least one parking space with convenient and suitable access to an EVCS for every 20 automobile parking spaces”

§140-52(2)(n)[5] – “In the event that the Planning Board determines that the applicant has demonstrated good cause to waive the installation of EVCS facilities otherwise required by this section, it shall require that a sufficient number of spaces be provided with conduit and such other equipment as may be necessary to enable EVSE to be installed in the future with minimal inconvenience or disturbance of parking areas.”

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8 Town of New Paltz Zoning Code - [https://ecode360.com/9169253](https://ecode360.com/9169253)
Since implementation, the Town has seen an increase in the amount of charging infrastructure installed at restaurants, shopping centers, medical facilities, and residential uses.

For more information on the implementation EVSE zoning requirements in the Town of New Paltz contact Stacy Delarede, Building Inspector (P. 845-255-0102 x5).

**Recommendation — Establish a standardized, low-cost permitting process for residential and commercial EVSE installations.**

Simple online or form-based permitting applications with minimal fees allow for safer and more economical installation of EVSE for property owners and the municipality (Energetics Incorporated, 2013). The process can be streamlined by designating the installation of EVSE as “Minor Work”, providing a standardized online permit application, allowing self-inspections, and / or providing installation guidelines specific to the Town (Energetics Incorporated, 2013).

**Recommendation — Establish consistent standardized EV parking signage to be used throughout the Town.**

Establishing consistent town-wide EV parking signage will help drivers easily identify EV parking spaces and make EV charging more visible to non-EV drivers, increasing overall awareness of EVs. A signage theme that is clear and consistent should be developed based on the needs of the Town, but should also be consistent with standards set in the Manual of Uniform Traffic Control Devices. Important elements to consider when developing signage requirements are language, symbol design, color, and location of signage to maintain clear routes of accessibility. In addition to regulatory signage that designates the location of EV parking spaces; consistent wayfinding signage can also be implemented to direct EV drivers to the parking spaces from driveway locations (WXY Architecture + Urban Design for NYSERDA and TCI, 2012).

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9 MUTCD Memo on Regulatory Signage for EV Charging and Parking Facilities - [https://mutcd.fhwa.dot.gov/resources/policy/rsevcpfmeno/](https://mutcd.fhwa.dot.gov/resources/policy/rsevcpfmeno/)
5 Works Cited


Energetics Incorporated. (2013, April). *EV Charging Station Permitting Resources*. Retrieved March 5, 2021, from New York State Energy Research and Development Authority: https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Siting/EV-Charging-Station-Permitting-Resources


6
Appendix - National Grid Summary of Incentives and Credits For EV Charging Station Projects
Use this list of funding sources and credits to help plan your EV Charger project.
These incentives and credits are stackable and, as allowable, can be used alongside your National Grid EV Make-Ready Program. Always check with the funding provider for details since offerings are subject to change.

Questions?
General EV: EVNationalGridUNY@nationalgrid.com | Fleet EV: NGFleetProgram@nationalgrid.com

<table>
<thead>
<tr>
<th>Source</th>
<th>Light Duty Vehicles Level 2 Chargers</th>
<th>Light Duty Vehicles DC Fast Chargers</th>
<th>Medium/Heavy Duty Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Grid Make-Ready Program</strong></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Offers incentives and opportunities to install EV charging stations for light duty vehicles.</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>National Grid DCFC Per Plug Incentive</strong></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Offers incentives to save on electricity costs for DC fast charging stations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>National Grid Fleet Advisory Services and Fleet Make-Ready Program</strong></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Offers assistance creating a plan for converting fleets vehicles to electric alternatives and installing EV charging stations at lower cost.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>National Grid Medium/Heavy Duty Make Ready Pilot</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Offers incentives and opportunities to install EV charging stations for Medium and Heavy Duty vehicles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NYSERDA Charge Ready NY Program (PON 3923)</strong></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Offers rebates per charging port to public and private organizations that install Level 2 EV charging stations at public parking facilities, workplaces, and multifamily apartment buildings.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NYSERDA Truck Voucher Incentive Program (NYTVIP)</strong></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Provides vouchers, or discounts, to fleets across New York State that purchase or lease medium- and heavy-duty vehicles using certain advanced energy fuels and scrap a similar older diesel vehicle that is part of their fleet.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Federal Tax Credits</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Offers IRS tax credits for alternative fuel or EV charging installed for business or investment purposes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>State Tax Credits</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Offer NYS tax credits for alternative fuel and EV recharging property installation.</td>
<td></td>
<td></td>
<td></td>
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</table>
Incentives and Credits for EV Charging Station Projects
Upstate New York

Example Business Cases:

### Level 2 Charger — 2 Stations (4 plugs)

<table>
<thead>
<tr>
<th>Installation Costs</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Infrastructure Upgrades</td>
<td>Chargers</td>
</tr>
<tr>
<td>$20,000</td>
<td>$16,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Funding/Incentives/Credits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>National Grid (90% Infrastructure)</td>
<td>NYSERDA Charge Ready Program</td>
</tr>
<tr>
<td>$18,000</td>
<td>$16,000</td>
</tr>
</tbody>
</table>

Net installation cost to customer $4,400

*networking fees, signs, bollards

### DCFC Charger — 1 station / 1 parking space

<table>
<thead>
<tr>
<th>Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure Upgrades</td>
<td>Charger</td>
</tr>
<tr>
<td>$30,000</td>
<td>$50,000</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Funding/Incentives/Credits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>National Grid (90% Infrastructure)</td>
<td>National Grid per plug incentive</td>
</tr>
<tr>
<td>$27,000</td>
<td>$16,000</td>
</tr>
</tbody>
</table>

Net cost to customer $23,200

*networking fees, signs, bollards

The examples on this page are for informational purposes and do not represent all cases.