Electric vehicle charging in commercial and residential developments in New York State - by Victoria McGarril

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In the last decade electric vehicle (EV) registration in New York State has been increasing, causing a demand for EV charging stations in commercial and residential developments. Equipping developers and property managers with information on this emerging technology, incentives available, and best practices for installation can support the successful implementation of EV charging technology.

EVs offer many benefits: they have better fuel efficiency, no tailpipe emissions, and are less expensive to operate. These benefits positively impact the communities where EVs are driven. The presence of public charging infrastructure further encourages EV purchases and support current EV drivers. Including EV charging in developments can attract EV drivers to local businesses and retail centers and can encourage local spending. EV charging stations can also help attract and retain tenants in both commercial and residential developments, allowing drivers to charge at work, home, or while patronizing local businesses. Investing in EV charging will attract EV drivers and prepare communities for this emerging transportation technology.

EV charging stations are most heavily used in workplaces, higher education, medical campuses, retail settings, and municipal lots that provide access to various businesses. According to the Atlas EV Hub there are currently over 4,000 charging ports spread across over 2,000 locations in New York State, most located in suburban and metro areas. Depending on the type of development and typical driver behavior, some level of charging is more suitable than others. EV charging stations are classified by the form of electricity (alternating current [AC] or direct current [DC]) and power delivered to the vehicle battery. These determine the approximate time to charge. The most common level of charge is AC Level 2, which uses 240 volt power and provides 10-20 electric miles per hour of charging. The lower level, AC Level 1 chargers uses 120 volt power and provides 2-5 electric miles per hour of charging. DC fast chargers which typically need a 480 volt power supply provide the fastest charge, supplying over 50 electric miles of range in only 20 minutes of charging.

Now is a great time in New York for developments to consider EV charging in their current and future projects. There are several incentives available for the installation of EV charging stations, as well as purchasing electric vehicles. Through the Charge Ready NY Rebate, the New York State
Energy Research and Development Authority (NYSERDA) is currently offering up to $8,000 per station installed. There are also tax incentives available to commercial installations and other rebates for municipalities that install EV charging stations. Along with the financial incentives to install EV stations, several sustainability rating systems recognize EV charging stations in their score or rating system.

Along with financial incentives for EV charging stations, costs of installation can be significantly reduced by planning for EV charging in the early stages of development. Using data from NYSERDA supported EV charging stations between 2012 and 2016, it was found that costs can be reduced by over 30% at sites that prepare for EV charging. While costs of station hardware are decreasing, preparing sites for EV charging further reduces costs and can future-proof developments.

To learn more about EVs and EV charging, join Energetics on Thursday, March 19th, at 11:30am for a webinar presentation. The presentation will review the basics of EVs and EV charging technology, incentives available, and best practices for installation.

To register for this webinar, please contact me at vmcgarril@energetics.com or by following this link: https://global.gotomeeting.com/join/960906317

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