Be Part of the Solution

Install Electric Vehicle Charging Stations in Multi-Unit Dwellings

As more and more consumers purchase electric vehicles (EVs), demand will increase for residences that can accommodate these zero emission vehicles—particularly in the northeastern United States where nearly one third of all residents live in multi-unit dwellings, often without a dedicated parking space.

Access to EV charging stations is an important step for EVs to be widely adopted, and is a critical part of the larger solution to help reduce U.S. dependence on oil.

Options for Homeowners Associations, Developers, Building Managers and Property Owners

Multi-unit dwelling stakeholders should explore options for EV charging station use and installation.

Charging Station Options

- Allow access to preexisting Level 1 chargers (standard outlets) for EV charging.
- Install Level 2 charging stations that can serve multiple EVs.
- Pre-wire new buildings for EV charging stations, or rewire buildings during renovation.

Billing Options

- Install a separate meter for charging station(s).
- Charge EV drivers a fee to access the charging station. This can be done through property management or through the charging station provider.
- Charge a premium for parking spaces with access to chargers.

Siting Options

- Install charging equipment near a parking space with plenty of room for the charging equipment.
- Reserve parking spaces near the charging equipment for EV drivers only.

Steps for Installing and Using EV Charging Stations in Multi-Unit Housing

The steps below were adapted from the California Plug-In Electric Vehicle Collaborative's *Multi-Unit Dwelling Communication Guide*.

- 1. Assess the current demand for EV charging and determine anticipated level of demand in the future.
- 2. Consult the electric utility on existing service capacity, metering options, and rates.
- 3. Assess the physical layout of the parking structure and the existing capacity of electrical panels serving individual units and common areas.
- 4. Evaluate existing policies and constraints.
- 5. Evaluate charging options and select charging equipment.
 - Level 1 vs. Level 2 charging stations
 - Shared charging vs. individual EV chargers

- 6. Revise policies and procedures as needed to accommodate EV drivers.
 - Check state laws to ensure compliance with all laws governing multi-unit dwellings and homeowners associations.
- 7. Establish approval process for tenants and cost recovery structure.
- 8. Establish an installation procedure and approve charging station installation.
- 9. Obtain permit, install equipment, and obtain local jurisdiction inspection.
- 10. Get recognition for your efforts by notifying the Northeast Electric Vehicle Network and by signing the network's EV Support pledge at www.northeastEVs.org.

Case Study

In 2011, the Bozzuto Group, a residential real estate company, unveiled Maryland's first public electric vehicle charging stations for a multi-unit dwelling at the Fitzgerald, an apartment community located in Baltimore's Mount Vernon District. The apartment complex offers two Level 2 charging stations to residents and the public. The garage has the capability to support two additional stations as demand increases.

Additional Resources

Northeast Electric Vehicle Network, Siting and Design Guidelines: www.northeastEVs.org

U.S. Department of Energy, Alternative Fuels Data Center (AFDC), Guide for Charging Station Hosts: www.afdc.energy.gov/pdfs/51227.pdf

AFDC, State Incentives: www.afdc.energy.gov/laws/state

Clean Cities Coordinators Contact Information: www.cleancities.energy.gov

Go Electric Drive: www.goelectricdrive.com

California PEV Collaborative, Multi-unit Dwellings Communication Guide: www.evcollaborative.org/sites/all/themes/pev/files/Comm_guide7_122308.pdf

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