

HOW TO INSTALL ELECTRIC VEHICLE CHARGING STATIONS AT YOUR APARTMENT OR CONDO

Building Resident



When you consider how sleek, silent, and fun they are to drive—and the fact that they help reduce pollution by nearly 75% over petroleum-powered vehicles—it's easy to see why people are getting so excited about **plug-in electric vehicles (PEVs)**. With federal and state tax incentives, they're getting more affordable every day. Best of all, PEVs are easy to fuel. Just plug in at any location that offers access to electricity.



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<http://images.nrel.gov/>

FUEL UP AT HOME

According to the U.S. Department of Energy and ComEd, the home is the primary charging location for most people. In Chicago, where 69% of residents live in multi-unit dwellings, or MUDs, providing a location to charge your PEV can be a big opportunity. That's why Mayor Emanuel and the City of Chicago in partnership with Chicago Area Clean Cities (CACC) have launched Drive Electric Chicago to help PEV owners and their building managers find the best solution for making charging PEVs easy and cost-effective.

ELECTRIC VEHICLES SAVE MONEY

Not only can PEVs save you time in fueling, they can also save you hundreds of dollars in fueling costs, too! Consider this hypothetical example—If you were to drive 12,000 miles in a year, compare:

- \$1,920 for fueling a gas-powered car traveling at 25 miles per gallon (at \$4 per gallon)
- \$286 for charging a PEV using Level 1 charging at off-peak hours (at 7¢ per kWh)

That's a savings of \$1,600 per year!

An initiative of:



Rahm Emanuel,
Mayor

Supported by:



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DIFFERENT TYPES OF RESIDENTIAL CHARGING OPTIONS

There is considerable diversity in cost and electrical requirements among different types of charging options. Residential charging can be broadly separated into three groups:

Charging Station Type	Power Supply	Charge Time	Miles Gained From 1 Hour of Charge	Installation Cost	Equipment Cost	Impact on Environment
Level 1 Outlet	120V	6 to 18 hours	2 to 5 miles	\$0 to \$250	\$0 to \$1,000	1.2 kW (Equivalent to one toaster)
Level 1 Station	120V	6 to 18 hours	2 to 5 miles	\$1,000 to \$1,500	\$500 to \$700	1.9 kW (Equivalent to 1-1/2 toasters)
Level 2 Charging Station	208V to 240V	3 to 8 hours	10 to 20 miles	\$2,000 to \$10,000	\$400 to \$11,000	3.3 kW to 7.2 kW (Equivalent to 3 to 6 toasters)

THE INSTALLATION PROCESS

- Get permission** 1
Tenants or unit owners should contact their building management or homeowners association to request installation of charging equipment.
- Hire electrical contractor** 2
Consult an electrical contractor about existing electrical capacity, metering options, and physical layout of parking and determine the most appropriate charging level and location of charging stations.
- Consult with Rebate Program** 3
Consult State's EV Infrastructure Rebate Program for eligibility criteria.
- Consult with building manager/HOA** 4
Discuss existing policies and constraints (eg, deed restrictions) with building management or homeowners association.
- Agree on ownership and maintenance** 5
Work with building management to agree on terms of ownership and maintenance.
- Obtain permit** 6
Obtain an electrical permit from the City of Chicago. Your electrical contractor can do this on your behalf. The City of Chicago offers an Easy Permit Process program, where permits can be processed within 1 day.
- Install outlet or charging station** 7
Have your contractor complete the installation. Your contractor can also arrange for the City of Chicago to inspect the new outlet after installation.
- Register your vehicle** 8
Register your PEV with ComEd so the utility can assess the electrical load needs in your area.

INSTALLATION AND PAYMENT OPTIONS

If your building management installs a public PEV charging station, they may decide to recoup the cost of the additional electricity usage from PEV owners with a fixed monthly rate or charge you based on readings from a submeter. If your building owner decides not to install a public charging station and you choose to install your own residential 120V or 240V residential charging station, you'll need to pay for your own installation and equipment.

There's plenty of financial help available

Government Entity	Incentive type	Benefit	Rebate Source
Federal government	Electric vehicle	\$2,500 to \$7,500 tax credit, depending on battery size	IRS tax credit www.irs.gov
State of Illinois	Electric vehicle	80% rebate up to \$4,000	Illinois Green Fleets www.illinoisgreenfleets.org
State of Illinois	Charging station	Rebate of 50% of installation cost, up to \$3,000 per nonnetworked station	Electric Vehicles in Illinois www.illinois.gov/dceo
State of Illinois	Electric vehicle registration fee	Discount to \$18 for PEVs (compared with \$99 for a conventional car)	Secretary of State Vehicle Registration www.cyberdriveillinois.com

To learn more, visit us online at www.DriveElectricChicago.org and contact sustainability@cityofchicago.org with any questions.