INSTALLING EV CHARGING STATIONS

WANT TO INSTALL AN ELECTRIC VEHICLE CHARGING STATION? HERE'S HOW:

DRIVE ELECTRIC COLORADO

Visit driveelectriccolorado.org

02

ABOUT US

Drive Electric Colorado is a public resource for consumers to learn all about electric vehicles. Our Drive Electric Coaches can help you navigate everything-EV including how to choose an EV model that fits your lifestyle, how to charge, busting common EV myths, and connecting you to local EV dealerships in Colorado.

DRIVE ELECTRIC COACHES

Contact a Coach

Gabriella Perkins, Denver Metro
gabriella@denvermetrocleancities.org
Sonja Meintsma, South Central
sonja@drivecleanco.org
Diego Lopez, Northern Colorado
adlopez@nccc.org
Laurie Dickson, Southern Colorado
laurie@fourcore.org
Stefan Johnson, Western Slopes
sjohnson@cleanenergyeconomy.net

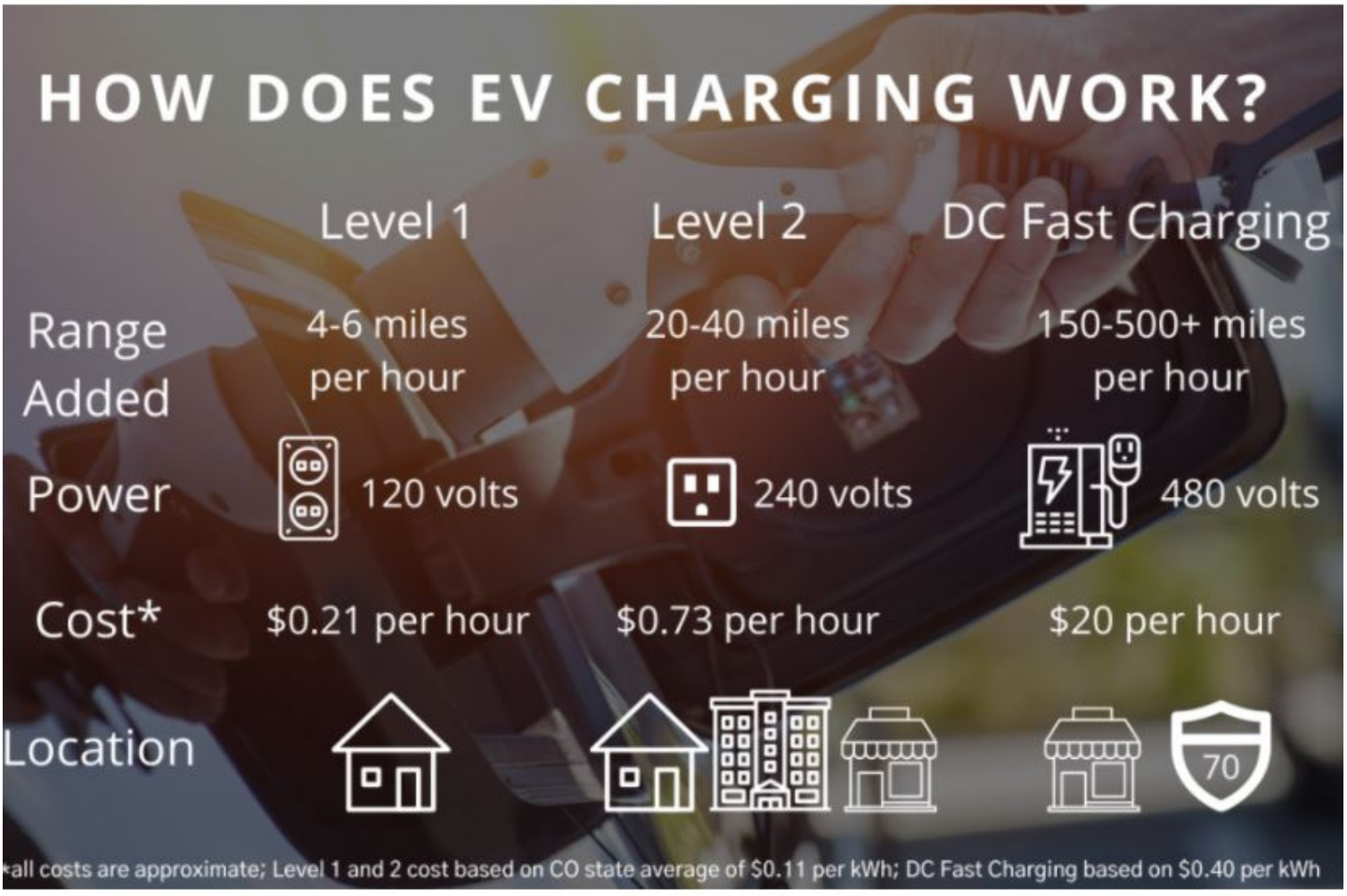
02

THE LINGO

EVSE - Electric Vehicle Service Equipment (i.e. charging stations)

DCFC - Direct Current Fast Charging (Level 3 charger)

ADA - American Disabilities Act



03

STEP 1: CHOOSE A SITE

The best placement for an EV charging station is in a high frequency area / area of high use. Make sure your space is well-lit and perceived as a safe environment.

You need to allocate at a minimum two parking spaces for EV charging. These parking spaces are reserved only for EV charging and are often located in “prime” locations, though this is not a requirement.

Click here for more information on Colorado’s EV Charging Station Parking Enforcement Implementation Recommendations

You can also allocate a handicap parking space for EV charging but need to make sure the charger is handicap accessible. At least three feet per space is required for ADA compliance.

Sites are best placed near your electrical supply so as to minimize electrical retrofits when putting in infrastructure. Placing it close to the electrical supply is the best way to reduce installation costs. This may differ from the “prime” location.

Workplaces and Multi-Family Housing –Have a plan for sharing the chargers between employees, residents, and/or visitors and encourage turnover of the station once charging is completed.

Retail and Restaurants – Locate near the front entrance and think about adding a charger to an ADA compliant handicap space.

04

STEP 2: IDENTIFY YOUR NEED

Workplaces – Level 2 chargers are best fits for workplaces, which have longer dwell times. This allows employees to charge their vehicles for 2-4 hours a day before heading home.

Multi-Family Housing or Lodging – Level 2 or even Level 1, depending on the use case

- Level 2 is ideal for staff and visitors
- Level 1 should suffice for residents, who can charge overnight, however, Level 2 stations will likely be necessary for vehicles with longer range batteries.

Retail – Level 2 or Level 3 depending on how long customers typically spend in a retail location.

Restaurants – Level 2 is ideal for diners.

Highway Corridors – Level 3 DCFC chargers are a best fit for highway corridors, which see frequent travel and short dwell times.

Dealerships – Level 2 for inventory, Level 3 for customers.

Gas Stations - Level 3 DCFC chargers are ideal to limit dwell time.

Public Services (parks, trails, etc) - Level 2 are ideal for nature-seekers

05

STEP 3: SURVEY THE SITE

Work with a certified installer or electrician to survey the site.

Location – Check where your electric power is located and if it is easily accessible for your needs.

Identify if you need work done to increase the capacity of your electric availability.

Identify cost estimates to complete a preliminary budget.

Plan “make-ready” infrastructure to more easily accommodate future needs, i.e. put in extra conduit for future expansions.

Learn more about site design for EV charging stations by clicking here.

06

STEP 4: TALK TO YOUR LOCAL UTILITY

MAKE SURE YOU HAVE THE ELECTRIC CAPACITY TO SERVE YOUR CHARGER (PARTICULARLY FOR DCFC STATIONS)

Do you have existing electric facilities on site or will they need to be constructed? If construction is required, inquire about an application for new service with your utility.

Check the capacity of your existing electric facilities (transformers, breakers, etc). Your electrical contractor or electrician will be able to help guide you.

Rates - Many utilities offer time-of-use or special EV rates. Find the most cost effective rate to use for your chargers by speaking with your local utility.

Rebates - Some utilities offer rebates or assistance programs for non-residential chargers- be sure to contact your utility to see if you qualify.

Click here to learn more about Utility EV programs, rebates, and incentives.

STEP 5: IDENTIFY REQUIRED PERMITS OR PERMISSIONS

WHAT ARE THE ADDITIONAL COSTS?

Common additional costs include EV-specific signage, parking lot markings, bollards, and handicap accessibility accommodations.

You may also need to apply for city or municipal permits, special access permits or HOA permits.

Learn more about costs associated with EV charging stations by clicking here.

STEP 6: CHOOSE A CHARGER

Speak with charger manufacturers to find the best fit for your needs.

Click here to browse common electric vehicle service equipment vendors in Colorado.

STEP 7: DECIDE IF YOU WILL CHARGE FOR USE

If the charger is open to the public, will you charge payment for the use? How will you determine the price?

STEP 8: APPLY FOR FUNDING RESOURCES

Charge Ahead Colorado: Receive grant funding for charging stations through this program. Funding varies depending on the technology installed. Please refer to the website here for more information.

Utility rebate programs: Check your local utility to determine rebate offers for public level 2 and level 3 EV chargers.

Federal tax incentives: Receive 30% or up to $30K in tax credits towards an EV charging station through Dec. 31, 2021. Please consult with your tax advisor for more information.

Additional Financing: Need help meeting your cost-share? Be sure to check out green loan programs and local credit unions in Colorado for more financing options!

09

STEP 9: INSTALL THE DEVICE!

Work with your chosen manufacturer and utility to install the device at your site.

STEP 10: REGISTER YOUR CHARGER & CELEBRATE

Be sure to register your charger on various charging apps including Google Maps, PlugShare, and the Federal Alternative Fuels Data Center.

Hold a ribbon-cutting ceremony and promote your charger to make sure the public knows it is available for use!

Educate your employees and residents by conducting EV 101 webinars and workshops.

Contact a Coach today to help you celebrate your new EV charger!

11

NEED MORE INFORMATION?

CONTACT DRIVE ELECTRIC COLORADO TODAY!

installing an electric vehicle charging station does not need to overly complicated. Electric vehicles are some of the best vehicles on the road in Colorado today. We want to help you support our statewide goal of reaching 940,000 EVs on Colorado's roads by 2030. If you have a question about this guide or you just want to talk about EVs, please contact us at driveelectriccolorado.org/contact

This document was created by Drive Clean Colorado as part of our partnership with Drive Electric Colorado. Partners are free to disseminate and share with interested audiences.
©Drive Clean Colorado