

ELECTRIC VEHICLE CHARGING 101

THE BASICS



Battery Electric Vehicles (BEV): operates with an electric motor that is powered by a rechargeable battery.



Plug in Hybrid Electric Vehicle (PHEV): powered by two motors and fueled by gasoline and a rechargeable battery.



Electric Vehicle Supply Equipment (EVSE): the unit controlling the power supply to one or more vehicles during a charging session.



Connector: a piece of equipment that connects to a BEV or PHEV port. A standard connector required for Communities in Charge is the Society Automotive Engineers (SAE) J-1772.

Looking to learn more about electric vehicle charging infrastructure?

Use this guide to learn the basics about EV charging.

TYPES OF EVSE

AC LEVEL 1 CHARGERS

USE ALTERNATING CURRENT (AC) AND MAY BE PLUGGED INTO ANY STANDARD GROUNDED 120V OUTLET.

1-3 MILES RANGE PER HOUR

AC LEVEL 2 CHARGERS

USE ALTERNATING CURRENT (AC) AND REQUIRE A 208/240V CONNECTION.

10-20 MILES OF RANGE PER HOUR

DIRECT CURRENT FAST CHARGERS (DCFC)

ALLOW FOR HIGHER CHARGING SPEEDS AT HIGHER POWER LEVELS

80% CHARGE IN 30MIN-1HR



THE BENEFITS OF EVS AND EV INFRASTRUCTURE



FOR THE SITE HOST

ATTRACTS NEW PEOPLE TO YOUR BUSINESS OR COMMUNITY

PROVIDES NEW STREAM OF INCOME TO OFFSET ELECTRICITY COSTS

SHOWS COMMITMENT TO THE NEEDS OF YOUR COMMUNITY



FOR THE COMMUNITY



REDUCED FUELING COST



CLEAN AIR



REDUCED VEHICLE MAINTENANCE



COMMUNITIES IN CHARGE



communitiesincharge@calstart.org



www.thecommunitiesincharge.org/