



ecology center

Drive Electric on a Budget

Electric Vehicles factsheet

Electric vehicles (EVs) are more affordable than ever. With competitive prices, rebates, discounts, and low fueling and maintenance costs, EVs are a great choice for the environment and your budget. As of 2020, over 125,000 EVs are registered to Bay Area drivers, and California's moderate climate optimizes their range.

Electric Vehicle Options

There are 2 kinds of electric vehicles:

- **EVs** (all-electric vehicles) run on electricity alone.
- **PHEVs** (plug-in hybrid electric vehicles) run on electricity, then switch to gasoline once the battery is low or the car goes above 60 mph.

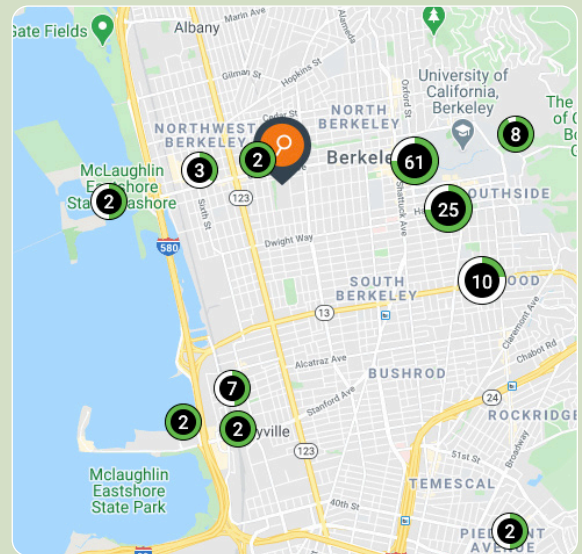
Benefits of Electric Vehicles

- **Fueling** is cheaper. EV fueling costs one third the cost of fueling a gasoline-powered sedan.
- **Maintenance** is cheaper. EVs do not need oil changes, transmission repairs, spark plug replacements, or tune-ups, and don't wear out consumable parts like brakes as quickly.
- **Unrestricted access** to the carpool lane and reduced bridge tolls for EVs.
- **Utility companies discounts** for charging during off-peak hours (like night-time).
- **Electricity prices** are lower and more stable than gasoline prices.
- **Pollution:** EVs produce 54% less lifetime carbon pollution than gasoline-powered vehicles and have no tailpipe emissions, resulting in cleaner air quality.
- **Parking perks:** Some hotels and commercial buildings offer free and/or prime parking for EVs.
- **Longer life:** EVs are estimated to have a lifetime of 1 million miles, compared to gasoline-powered cars, which are built to run 200K miles.

Charging Options for EVs

- **Level 1 Charging Station** comes standard with every vehicle. It's basically an extension cord that plugs directly into the car on one end and a standard electrical socket on the other end. Fully recharging a low battery takes 10–20 hours.
- **Level 2 Charging Station** reduces charge time to less than 5 hours. It may require an electrical upgrade at your home. Hardware and installation cost around \$1,000.
- **Level 3 Charging Station** can restore the batteries of newer EVs to 80–90% in 30 minutes. All Teslas use a proprietary "supercharger."
- **Public Charging Stations** can be located using [Chargepoint.com](https://www.chargepoint.com), [Plugshare.com](https://www.plugshare.com), or [OpenChargeMap.org](https://www.openchargemap.org), also available as mobile apps.

Public Charging Stations from [Chargepoint.com](https://www.chargepoint.com)



Tax Credits, Rebates, and Discounts

- **Federal Tax Credit** of up to \$7,500 when you buy a new EV or PHEV: fuelconomy.gov/feg/taxevb.shtml
- **California Rebate**—up to \$7,000—for the purchase or lease of a new EV or PHEV. Low-income applicants are prioritized: cleanvehiclerebate.org
- **Tax Credits for Level 2 Charging Stations:** chargepoint.com/station-incentives/
- **Discounts for Level 2 Charging Stations:** bayareasunshares.org/discounts
- **Price Buy-Down Grants** reduce monthly loan payments for residents of low-income communities: dcap.communityhdc.org
- **Clean Air Vehicle Decal** enables carpool lane access at all times: dmv.ca.gov/portal/dmv/detail/vr/decal

Range: How Far Can You Travel on a Full Charge?

From Consumer Reports, the ranges you can drive on a single charge in EVs and PHEVs:

- 2020 e-Golf range, 123 miles
- 2019 Fiat 500e range, 84 miles
- 2020 Nissan Leaf range, 149 miles
- 2020 Chevrolet Bolt range, 259 miles
- 2019 Chevrolet Volt, 420 miles (53 all-electric miles)
- 2020 Toyota Prius prime, 640 miles (25 all-electric miles)
- 2017 Ford C-Max Energi: 570 miles (20 all-electric miles)

Leasing Electric Vehicles

Most EV drivers lease rather than buy. Monthly lease payments are low. The EV tax credit is passed on through the dealership in the form of lower monthly payments. Leases typically do not include maintenance or repairs. EV technology is changing rapidly, and a lease will not lock you in to outdated technology. You'll have the option to upgrade to an EV with a greater range once the lease ends. California offers substantial rebates for leased electric vehicles, prioritizing low-income drivers.

Buying Used Electric Vehicles

Car dealers tend to have a wide variety of used EVs. You can also find great options on pre-owned car sales websites such as cars.com and craigslist. The LEAF is the most common EV on the used market; many are

available for under \$10,000 with clean driving histories and less than 40,000 miles. Other affordable options include the Mitsubishi i-MiEV with a range of 62 miles and average price of \$10,000, and the 2017 Smart Fortwo with a range of 70–80 miles and average price of \$8,000–\$11,000. Used 2015 & 2016 VW e-GOLFs sell for \$15,000–\$18,000. Check Kelley Blue Book for values.

National Drive Electric Week

National Drive Electric Week, held annually in September, is a nationwide celebration to heighten awareness of today's widespread availability of plug-in vehicles and highlight the benefits. They are cheaper and more convenient to fuel than gasoline vehicles, better for the environment, promote local jobs, and reduce our dependence on foreign oil. Drive Electric Week events are a great opportunity to learn about models, rebates, and discounts, and to talk with EV owners about their experience.

Recommended Resources

EDMUNDS ELECTRIC CAR BUYING GUIDE & REVIEWS

Rates the top 10 EVs and PHEVs in 2020 and 2021
www.edmunds.com/electric-car

PLUG IN AMERICA

General info about EVs, PHEVs, and charging
www.pluginamerica.org

SIERRA CLUB'S ELECTRIC VEHICLE GUIDE

Covers both new and used EVs
content.sierraclub.org/evguide

DRIVE CLEAN BAY AREA

Provides free online resources to make it easier to drive clean
<https://drivecleanbayarea.org>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

EV information about plug-in electric vehicles, charging stations, and more
<https://www.baaqmd.gov/plans-and-climate/bay-area-pev-program/ev-resource-center>

CLEAN VEHICLES ASSISTANCE PROGRAM

Grants and affordable financing for income-qualified Californians for EV's and PEV's
<https://cleanvehiclegrants.org/>