According to Consumer Reports’ largest-ever nationally representative survey, 71% of Americans express interest in buying or leasing an electric-only vehicle. Consumer Reports found that more than one third of American adults would “definitely” or “seriously” consider buying or leasing an electric-only vehicle if they were to buy a vehicle today.

WHAT TYPES OF ELECTRIC VEHICLES (EVs) ARE AVAILABLE?

- EV refers to electric-only vehicles.
- EVs can also be referred to as battery electric vehicles (BEVs). BEVs are fully electric vehicles and get all of their power from motors that use batteries charged with electricity. BEVs produce no tailpipe emissions.
- HEVs are hybrid electric vehicles. An HEV runs on both a gasoline engine and an electric motor powered by a battery. The battery in an HEV is charged through regenerative braking. HEVs cannot be plugged in.
- PHEVs are plug-in hybrid electric vehicles. Like HEVs, PHEVs have both a gasoline engine and an electric motor powered by a battery. In PHEVs, the battery is charged by plugging into a power outlet rather than regenerative braking. Once the battery is depleted, PHEVs switch to gasoline power.
- FCEVs are fuel cell electric vehicles that run on compressed hydrogen. They have zero tailpipe emissions because they only emit water vapor. FCEVs have a tank where pure hydrogen gas is stored. The hydrogen gas is converted to electricity which is then used to power the vehicle.

HOW FAR CAN I DRIVE ON A SINGLE CHARGE?

EV range is commonly ~ 250 miles, which is far more than the 35 miles most people typically drive each day. Overnight charging at home with a regular 120V outlet can satisfy most drivers’ needs. The most advanced models can drive about 400 miles between charges. Consumer Reports found that experienced EV owners consider range to be much less of an issue than non-owners — 27% versus 56%.

WHERE DO I CHARGE MY EV?

EV chargers are classified into three categories:

- Level 1 (120V): All EVs can be changed via standard 120V wall outlet — a great option for overnight home charging. A 120V charger will typically add between 30-60 miles of range overnight, enough for many Americans’ daily driving needs.
- Level 2 (240V): Includes most public charging stations, or a good 240V wall-mounted home charging unit. This option can deliver a full charge for a 300-mile range battery in about 6-8 hours. Many states have rebates for home installation.
- Level 3 (direct current or DC fast charging, 480V-1000V): These quick chargers can add 200 miles of range in 20-45 minutes, depending on the vehicle. You will only find Level 3 chargers in public charging stations.

There are more than 51,000 public EV charging locations in the U.S., but low- and moderate-income communities need greater access.