EV 101

Which EV is right for me?

With more than 40 electric vehicles to choose from, there is an EV for every lifestyle and budget. To help select the right EV for you, EV guides are available from:

Electric Car Insider - Buyer's Guide & App (***FREE*** at the Show for new members)
www.electric-car-insider.com

Plug In America
www.PlugStar.com

Sierra Club - EV Guide
www.sierraclub.org/evguide

BEV - Battery Electric Vehicle (or just EV). BEVs are all electric and run exclusively on a battery.

PHEV - Plug-in Hybrid Electric Vehicle
PHEVs run on batteries for a short period of travel and then switch to gasoline. All of these vehicles have plugs.

How far can I drive?
PHEVs have a range dependent on gas tank size and electric miles. BEVs have ranges of 70 – to 370 miles, dependent on battery size. Efficiency depends on the vehicle and your personal driving habits.

Charging
It may sound complicated, but it's actually easy and much like charging your mobile phone.

How?
All EVs come with a 120-volt charger that can be plugged into a standard household outlet. Faster charging can be achieved at home by using a 240-volt outlet (similar to an electric dryer outlet). Even faster public quick charging and DC fast charging stations are available in many convenient locations and more are being added locally, and around the world, every day.

Where?
90% of EV drivers charge at home (typically at night) avoiding the weekly trip to a gas station which is required with a gas vehicle. In addition, there are charging stations at work places, schools as well as over 1200 public charging stations in the San Diego area and more are being installed every day. Some are even free to charge! Your on-board GPS system in your EV can direct you, or you can find a public station through the app **www.plugshare.com**. If you buy a Tesla, you can use Tesla's

supercharger stations which are conveniently located across the country and around the world. **Tesla US Superchargers**.

How Long?

Level 1 - 120 Volt ~ 5 miles of range per hour
Level 2 - 240 Volt ~ 10-27 miles of range per hour
DC fast Charging or Tesla Superchargers ~ 80% charge in <30 minutes

Electric costs - compared to gas?

Many power companies offers lower electric rates from midnight to 5 am called “time of use rates” (TOU). These lower rates make EV energy costs significantly cheaper than cost of gas. Gasoline can often cost 4 times more than clean electric “fuel”.
Imagine the energy cost savings over the life of the vehicle.

Maintenance costs - EVs compared to gas?

EVs have additional cost savings compared to gas vehicles because an EV has far fewer moving parts. **EVs never need** oil changes, engine spark plug tune-ups, timing and serpentine belt replacements, oil and engine air filter replacements, oxygen sensor replacements, smog checks, etc, etc, etc. Also, EVs wear brake pads less because an EV can use the electric motor to slow the car down for most of the breaking process. This type of breaking even adds electricity back into the battery as the car slows. This is called regenerative breaking and it captures much of the energy that would have been lost to friction and heat.

Incentives and Rebates

Federal tax credits are dependent on battery size and car manufacturer, ranging from $1500-7500. Currently, General Motors and Tesla tax credits are phasing out due to their success in selling over 200,000 EVs. However other car maker credits are still in force. State, Local and power company incentives may also be available. From the MSRP listed on the sticker you may reduce your real purchase cost by as much as $12,500.

EVs are better, safer, faster, cleaner, and cheaper to own and operate.
Simply… a better technology.

Electric Auto Association®
Since 1967

The oldest and largest global non-profit with more than 80 chapters throughout North America, whose members educate their communities on the benefits of driving electric vehicles.
www.ElectricAuto.org