

# The Facts About Electric Cars

**FACT: Electric Vehicles keep the air cleaner, even with coal generated electricity**

- \*Electric vehicles emit less CO2 even if coal supplies the power
- \*Plug-in hybrid EVs reduce greenhouse emissions "significantly"
- \*Only 3% of PG&E, 0% of SMUD power is from coal, and <6% statewide (2016)



**FACT: Americans want electric cars... EV Sales Topped First-Year Hybrid Sales Despite Recession**

- \*Nissan LEAF and Chevy Volt had higher first year sales than Toyota Prius
- \*40% of Americans are "extremely or very interested" in purchasing an EV
- \*Gasoline production receives major Fed support, but EVs save considerable \$\$ over gasoline cars



**FACT: EV Range Is More Than Enough For Most Drivers**

- \*Studies show 72% of drivers travel less than 40 miles a day, 90% less than 50 miles
- \*Average driver travels 29 miles per day
- \*All-electric vehicles can travel 80 to 330 miles and >90% are charged at home
- \*Plug-in hybrids offer unlimited range using efficient gasoline engines to assist the electric motor
- \*Over 16,000 EV charging stations in USA & over 34,000 individual chargers



**FACT: EVs Are Unlikely To Strain Grid, Particularly With Good Planning**

- \*Studies indicate that plug-in cars won't strain the grid with most recharging taking place at night
- \*Utilities and regulators can institute policies to smooth demand
- \*Electric utilities are already preparing for a surge in electric car charging
- \*Electric cars could provide backup power for the electric grid and individual homes



**FACT: Electric Vehicles Are Safer than Conventional Cars**

- \*Over 200,000 gasoline vehicles catch fire every year, with 500 - 1,000 fatalities
- \*Zero EV fire fatalities
- \*Lithium battery fires are rare and allow significant time to exit the vehicle
- \*Heavy battery packs often fit below passenger compartment, greatly improving handling
- \*Most electric vehicles have much higher safety ratings than comparable gasoline versions



**FACT: EV Battery Recycling Efforts Are Underway**

- \*EV batteries are not toxic, unlike conventional lead-acid car batteries
- \*Recycling firms & automakers are already building infrastructure to repurpose used EV batteries
- \*Greenwire: Certain battery components are "far too valuable to send to the landfill"
- \*EV batteries could be used for stationary energy storage



**FACT: Electric Vehicles Save Money**

- \*Electric cars cost about five times less than conventional vehicles to operate
- \*Study: Battery costs have declined an average of 8% annually. Multiple manufacturers have cut costs even further
- \*Tax credits for EVs have bipartisan history
- \*Tax credits contribute to development of American industry and jobs
- \*EVs have 95% fewer moving parts and can be charged by sunlight



**FACT: Electric Cars are getting Less Expensive**

- \*Eight EVs currently cost <\$20K after federal and state incentives
- \*Used EVs cost less than gas cars
- \*Many 3 year old used EVs cost <\$8K

