TAKE CHARGE

Electrifying Experiences in the Greater Capitol Area

SacEV.org

ELECTRIC CARS ARE HERE

"While 2011 brought the first mainstream electric cars to the market, it wasn't until 2012 that we started seeing a wide variety appearing, not just in the show room, but in our neighbors' driveways," says Guy Hall, President of the local chapter of the Electric Auto Association. Throughout the Sacramento Region, individuals, families and businesses have quietly taken the leap to Electric Vehicles, from full-size cars such as the **Tesla Model S** on the front cover to electric motorcycles, and from screamingly fast roadsters to work trucks. Along with this growth, plug-in stations have appeared around our communities from Elk Grove to Rocklin. You'll find them at hospitals, shopping centers, work places, public garages, drug stores, casinos, hotels, and grocery stores. More are springing up in our region every month. While some locations bill at a rate slightly lower than gasoline, the electricity cost is so low, that many businesses and employers offer charging for free as a perk or for your patronage. Of course, most drivers enjoy the convenience of home fill-ups while they sleep at a small fraction of the cost of gasoline.

The reasons people are charging ahead and making the switch are as varied as the models they choose. Local individuals, families and businesses are finding electric is simply better.

GRETA AND HER FRIEND DAISY

Beth says, "I love Nature, and I love animals. I needed plenty of back seat and cargo space for outdoor gear, my dog, Greta, and her friend, Daisy. As certified therapy dogs, they needed to be able to get in and out easily, and be comfortable during trips."

"Friend by friend, and home by home, my neighborhood is switching to greener cars: LEAFs, Volts, and high mpg hybrids. Where I work, 20 electric drive commuters added up their e-miles in honor of the 4th of July. They drove over 160,000 miles in 15 months, saving more than $18,000, with no tailpipe emissions."

"It is so fun to drive, and I value that it doesn't pollute the places I love."

Beth keeps a gas car for occasional long trips. Realizing she didn't fill up with gas for 6 months, she's now considering options to rent instead.

BECKY IN ROSEVILLE

"As electricians, we were often installing garage chargers for our customers. One convinced us to go the Sullivan dealership and check out the Chevy Volt. Once I drove it, I knew we had to have one. Even though we couldn't afford one, I knew we had to get it." Then Becky looked at the total cost, including fuel, oil, brake pads and other maintenance items, and discovered the Volt was quite affordable and far less a hassle.

The VOLT was the right car for them. Becky and Phil get the equivalent of about 150 miles per gallon while driving electric. "Since we bought the car six months ago, we have only had to fill up the 9 gallon tank three times. Roseville electricity for the car costs us about $35 a month." No less important to Becky is that "I don't want to be dependent on foreign oil."

BONNIE'S LOOMIS ROADSTER

"I didn't plan to buy an electric car when I went looking to replace my accident totaled BMW. In fact, believing it was the responsible thing to do, I bought a Prius, but I was never satisfied with its ride. Then I saw pictures of the Tesla electric car and took the Roadster on a test drive. I fell in love with it," so much so that Bonnie has already ordered a second Tesla, the crossover Model X.

"I added solar electric on my roof and I will have free fuel for life. I'll never buy a gas car again. I can't see any reason to."

EV'ers in Sacramento use PVs on their rooftops and now have free, clean fuel for life. 42% of EV owners also have PV Solar Arrays (UC Davis study, 2013).

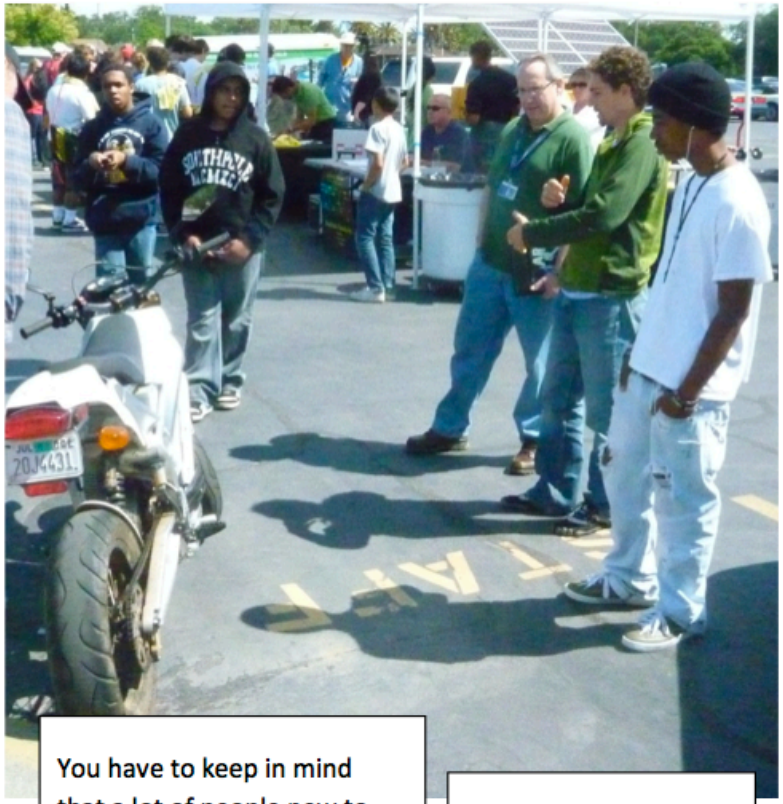
ELECTRIC TEACHER

David's middle school students have been required to research alternative fuel vehicles for the past 19 years. "I had read nearly everything available about EVs since the early 1970s, but I was unhappy that they could only be leased. "

What would you miss in an all–electric car? How about no ignition, gas tank, oil filter, catalytic converter, transmission, muffler, valves, tailpipe, distributor, starter, clutch for starters. There's less to go wrong, so less to service and a longer life.

In 1998, David and Susan purchased a natural gas Honda, meeting many of their clean & green requirements, but it was still not electric. "Today," he points out, "there is an expanding diversity of plug-in electric vehicles available, each with it's own strengths. It is great to finally have a choice. We are now owners of an all electric 2012 CODA sedan with a full size trunk and a 110-mile range."

MOTORCYCLE MAN



You have to keep in mind that a lot of people new to EVs only look at the money they're saving on gas. There are also no valve adjustments, smog checks, clutch problems, or oil checks. "All those things don't exist with electric cars," according to Elia, owner of a 2010 Zero Electric Motorcycle and RAV4 EV.

"The wonderful surprise to me, is that the drive train is so quiet. I can hear the other parts of the cycle, and if they are in order or not."

SOME HELP FROM OUR FRIENDS

Buying an electric vehicle simplifies life; no more driving to the gas station and waiting in line while juggling for position to get to the next available pump. Most EV drivers have their cars filled up during their sleep. Using a circuit with a capacity similar to an Electric Dryer, an electrician can easily install your own garage charging station. Charging station connections are standardized, so this charger will provide fuel for not only your first EV, but also all those in the future.

SMUD™ Greenergy®

SMUD, like other regional utilities, provides EV Information and installation advice. Bill Boyce, of SMUD says, "If we can encourage most consumers to charge their EVs at night, we can easily provide the electrical power needed to roll out EVs across our community. We also provide special low rates for EV charging at night off-peak hours.

GOVERNMENT INCENTIVES

Right now, the Federal government and the State of California are paying you money to help clean the air and break our dependence on foreign oil. Depending on the EV model, you get back between $8,000 and $10,000 dollars from the Federal government and the State of California.

TWO EV FAMILY

"Wow!" That was Thomas' reaction during his first all-electric EV1 test-drive in 1997. The EV grin never left his face. "The acceleration, smoothness, and instant response sold me right away. The EV1 was really fun to drive. "

"We had two EV1s for a while and later a Chevy S-10E EV pickup, a Ranger EV pickup, and two RAV4 EVs. Now we have a Nissan LEAF for around town and the Chevy Volt for both short and long trips."

Tom's experience supports the claim that low maintenance is a major advantage of an EV. "We've experienced that first-hand over the last fourteen years with much, much less hassle, time and money spent on maintenance: no oil changes, no smog checks, no spark plugs, no tune-ups. Best of all, there are no gas station visits...well, once every month or two for the Volt. We have gone as far as 1,000 miles between fill-ups."

EVs have 90% - 95% fewer moving parts than typical gasoline engines.

STYLE, FUNCTION, AND FUN

When looking to replace his old Corolla, Chris wanted something functional and at least in the "eco" range of 40 mpg, but liked to joke about the fun of sporty models, too. A friend said, "You might really like the Chevy Volt. It's eco-friendly AND it's sporty. It handles both pure electric and long distances, which you sometimes need. Why don't you test drive one?" He did, and he came home with it! It's stylish and Chris tells people that "it's a blast to drive".

With added roof racks, the Volt carries his canoe and long lumber for woodworking projects.

Now his 20 miles of commuting is all electric and Chris likes to do everything he can to avoid using ANY gasoline. "After 7,000 miles of driving, I'm averaging close to 250 mpg."

Like Chris, you can buy your electricity via SMUD's "SolarShares" solar photovoltaic farm, so it's truly emission free!

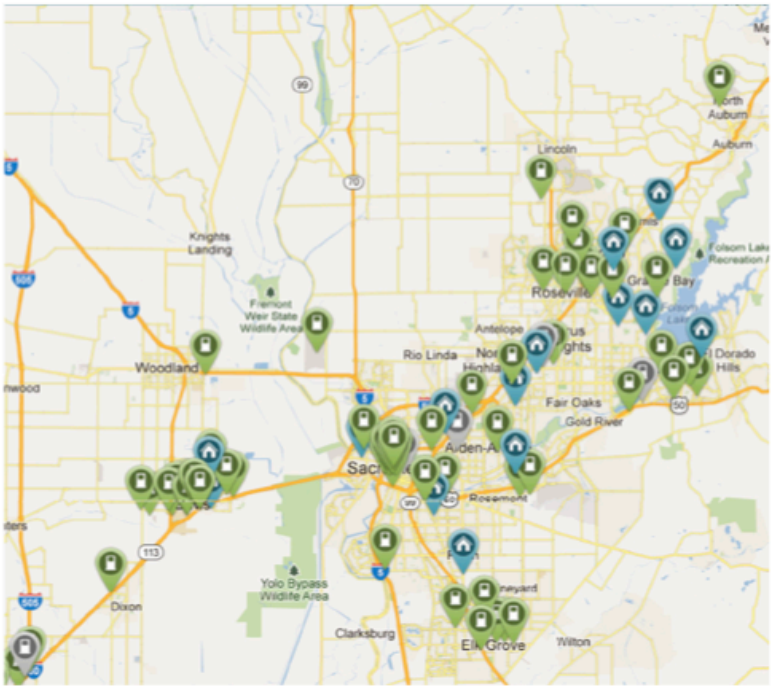
THE WEST COAST ELECTRIC HIGHWAY

This is an extensive, tri-state network of EV fast-charging stations along Interstate 5 and other highways. Starting at the Canadian border, public fast-charging stations are being installed every 25 to 60 miles. Over the next couple years, California will be adding similar stations in its communities and major traffic corridors completing the West Coast Electric Highway to the Mexican border. Currently, only Nissan LEAFs and Mitsubishi iMiEVs are able to use these fast-chargers. Expanded versions are coming by early 2014.

WEST COAST ELECTRIC HIGHWAY

Bruce Sargent charges LEAF in Central Oregon. Photo Credit: AP

CHARGING HERE, THERE, EVERYWHERE



www.PlugShare.net Screen

This map gives you a starting point to understand the prevalence of public charging stations, but they are being added so quickly that any paper map is quickly outdated. Tools on smart phones, the internet, and on EV display screens show you the latest surrounding charging stations. The web sites www.plugshare.net and www.recargo.com are being continually updated with new chargers.

"Your grandchildren will likely find it incredible - or even sinful - that you burned up a gallon of gasoline to fetch a pack of cigarettes!" - Paul MacCready, Jr.

"There's so much pollution in the air now that if it weren't for our lungs there'd be no place to put it all." -Robert Orben

INFLUENCED BY DEEPWATER

Bill made the decision to get his all-electric car while oil was gushing into the Gulf of Mexico. Bill has found ways to take his LEAF on all sorts of coastal and mountain adventures using the numerous free chargers on the way. He also recently circumnavigated the entire American River Parkway in one day and on one charge, putting his canoe in at favorite spots along the way, while writing a zero-emission travelogue.

According to the June 2012 edition of the NADA Official Used Car Guide, the 2011 Nissan Leaf had an average trade-in value of an impressive 95%. Compare that with the Prius of 88%.

Our car choices and their fuel connections are among the hardest impacts on the planet. Bill's LEAF is powered by clean, renewable SMUD Greenergy.

WHAT DO OTHERS SAY?

"I took delivery of my Volt on Dec. 1 last year," Mr. Leno said in a telephone interview with the New York Times. "and I've never had to put gas in it yet."

Photo from Jay Leno's Garage

He uses his Volt for errands and commuting between his home in Burbank and the studios. So far, he has totaled around 11,000 miles and stopped at no gas stations!

"They gave it to me with a full tank of gas," Leno said. "I've used less than half of that. It's my daily drive. It really is. I commute in it to work every day. My commute, and all my other daily running around, totals less than 35 miles."

How is the car overall? "It's a real breakthrough. I know people probably get tired of hearing me say that, but it really is."

ONE YEAR OLD CAR TRADE IN VALUE

According to the 2012 June edition of the NADA Official Used Car Guide, average trade-in values were:

- 2011 Nissan LEAF (95%)
- 2011 Chevy Volt (90%)
- 2011 Prius (88%)

IT'S A COMPANY STATEMENT

High quality printing, while maintaining air quality, is a mantra for our business. We have an EV fleet that represents our commitment to clean air and we save money.

Gil puts it plainly. "It doesn't make sense to invest in printing equipment to capture harmful gases, and then drive your product to the client in a smog belching gasoline car."

"The BMW ActiveE is an absolutely amazing machine. All that instant torque makes you forget it's a company car."

STOCKTON E-CYCLIST

David started with the electric Vectrix scooter in 2007 and loved the concept, so earlier this year he bought an all-electric Zero Motorcycle.

Sometimes, people ask him at the stoplight, "Do you need a motorcycle license for that?" He replies, "Yep, this will go over 85 mph" as he takes off in complete silence, jumping ahead of the traffic.

David finds the Zero is like free transportation. Like other EVs, the maintenance cost is very low. The electricity costs about a penny or two per mile. As David discovered, "I haven't seen a change in my electric bill since I bought my Zero."

David finds, "There are 120v outlets at most places I visit. It is easy to hook-up and charge. One guy thought an electric cycle was so cool he brought out an extension cord for me."