

Charged Up



ELECTRIC VEHICLE ASSOCIATION OF SAN DIEGO (EVAOSD)

An affiliate of the Electric Auto Association (EAA)

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 Vice President: Lloyd Rose
 Treasurer: Richard Rodriguez
 Secretary: David Crow
 Program Chairman: Staff
 Newsletter Editor: David Crow
 Webmaster: Russ Lemon
 Librarian & AV: Lloyd Rose

Monthly Meetings: During the 4th week of the month, day depends on venue.
 (No Meeting in December).

Meeting Location, Date and Time:
Coleman University, Hopper Hall
8888 Balboa Ave
San Diego, CA 92123
Tuesday, 22 Sept 2015, 7:00 P.M.

Program: News, Projects and Coleman meet

Newsletter Topics: Teenage EV Drivers



Drive Electric Day



New EV History Book



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Message from the President

Hi All,

I went to the Battery show in Novi, MI. It was a cornucopia of on-board chargers, EVSEs, chemistry experts, and a newer section called critical power. I have really come to the conclusion, for my purposes, that my LEAF would be the ultimate battery pack for my house backup. It's the ultimate in portable power pack systems with the price representing true economies of scale. I can get a LEAF for less than an entire storage container of batteries with the same energy density and power. When my LEAF gets old and the range is low, I think I will just take the tires off, park it on the lawn, and have at least 15KWh of usable energy in-case of emergency. Now, it's not the most space efficient solution, but it would take me a few Tesla units on the wall and a lot of dough to make the same thing. Maybe I can cut the roof off and make it into an outdoor seating area with a fire pit in the middle.

As always, the association needs your help. We need to grow again. Dave Crow has been doing an OUTSTANDING job! Let's give him some help and support to keep the chapter alive.

-Joseph



Nissan and Nichicon “Leaf to Home” system offered in Japan

Are EVs The Best First Car For Teenagers?

April 8th, 2015 by Steve Hanley, GAS2.org

Getting your first car has always been a right of passage, but we can all agree that some vehicles are better for new drivers than others. The folks at The Truth About Cars say there are three reasons why teens should drive an electric car: driving range limitations, cost of ownership, and safety.

Driving range limitations

A teenager can drive 300 miles or more in a gasoline powered car during the course of a normal date and still be home in time for breakfast. Not so with an electric car, which (unless you're planning to gift them with a Tesla P85D) usually has a maximum range of around 80 miles or so. Giving them an electric car to drive is like putting a tether made of electrons on them. They have enough range to get to school and back, or pick up a shift at work. There's even enough to get to the library to "study", something a lot of teenagers use as an excuse to get out of the house on school nights.

Driving an electric car also requires a certain amount of planning, a skill most teens could use some practice doing. The lack of range provides both an invisible leash, and a life lesson in planning ahead.



Cost of ownership

Every car costs money. New or used, you need a down payment to buy or lease one and that's just the tip of the iceberg. Add in monthly payments, fuel, insurance, maintenance, repairs, taxes and depreciation and the total can be quite shocking.

An electric car can save you money on fuel. The federal government estimates that driving 25 miles in an electric car costs about \$1.00. Even with gas at an 8 year low, there are very few gasoline powered cars that can match that figure. If your choice is to lease a new EV or pass down that 10 year old Civic sitting in the driveway, which one do you think will cost more to repair and maintain?

Insurance for an EV is usually substantially less, an important consideration when it comes to adding a teenager to the family insurance policy. Best of all, many EV's come with very attractive lease rates. A new Nissan LEAF can be had for just \$199 a month for 36 months with \$2,399 due at signing. If you live in California or Oregon, FIAT will lease you a 500e for only \$139 a month with just \$1,999 down. That's doable even on McDonalds wages.



Safety

Sure that old Civic or Corolla you have is already paid for, but is it as safe as a new car? Safety standards are improving all the time. Newer cars are just better made than older cars. The Chevy Spark EV and Ford Focus Electric are Top Safety Picks by the Insurance Institute of Highway Safety. The LEAF and 500e got marked down after a new small overlap frontal crash test was added in 2014, but lots of other cars got caught out by that new addition to the testing protocol. You can bet every manufacturer is working furiously behind the scenes to fix that issue.

Add it all up and The Truth About Cars crowd thinks leasing a new EV for your teenage driver makes a lot of sense. Not only are lease payments low, but a new EV will have virtually no maintenance or repairs to pay for, it will cost less to drive, save money on insurance and protect your precious cargo as well or better than any other car on the road.

That's a pretty powerful argument, but one thing I'd like to add is that early exposure to EVs could help accelerate electric car adoption in the coming years. If teens get used to the idea of not paying for gas, then going from an EV to a gas car could be quite the culture shock. Once those teens turn into graduates with money to spend on a new car, EVs should be at the top of their list. Half of Nissan LEAF owners have already sworn off gas for good. What if we could convince an entire generation to go electric?

San Diegans plug into Electric Vehicle Day

Fifth annual event part of a national push to heighten awareness of all-electric vehicles

Michael James Rocha, Union Tribune, | 2:30 p.m. Sept. 19, 2015

POINT LOMA — Julia MacPete loved her Nissan Leaf electric car so much that when it was time to upgrade to a newer model, it was a no-brainer that she'd go with a Nissan Leaf yet again. "I love it still, even after all these years," the North Park resident said of the five-door hatchback that Nissan first introduced in the United States and Japan in 2011. "It would be 1,000 percent better if it had a 200-mile range," MacPete said of the Leaf, which averages about 80 miles per charge. But no matter: The other family car is the Toyota Prius hybrid, which they use for long-distance driving.

MacPete was among more than 1,000 electric-vehicle owners and possible prospective owners who participated in the fifth annual Electric Vehicle Day — San Diego, held at Liberty Station Saturday as part of a national push to heighten awareness of all-electric vehicles.

San Diego has one of the highest concentrations of electrical vehicles in the country, with more than 18,000, according to San Diego Gas & Electric, which co-sponsored the event with the Center for Sustainable Energy and CleanTech San Diego. "This county is really invested in the state's goal of increasing the number of electric vehicles on the road," said Eugene "Mitch" Mitchell, the vice president of state governmental affairs and external affairs for SDG&E. "That means making sure everyone has access to charging stations throughout."

Mitchell, who now drives the electric hybrid Cadillac ELR, calls himself a convert: "I didn't think I could make it work — driving using only electric power — but I love the fact that now I'm an all-electric road warrior." More than a dozen manufacturers brought their electric vehicles to Liberty Station to be test-driven, and here's a snapshot of what some drivers thought about the gas-less cars.



Fiat 500e

Facts: First introduced in 2013, this zippy car has a range of 87 miles. Price: Starts at \$31,800.

Most surprising: "It's roomier than you would think," said South San Diego resident Elisa Esparza, who drives a Lexus hybrid. "And it has a very good acceleration."



BMW i3

Facts: Manufactured in BMW's wind-powered Leipzig plant in Germany, this vehicle entered the market in 2014 with an average range of 81 miles. Design-savvy drivers will love the sleek lines, and nature lovers will love the wood trim, highlighted by responsibly sourced eucalyptus. Price: \$41,350.

Most surprising: "The technology is impressive," said Rancho Peñasquitos resident Ferdie Mazon, who's looking to add a second electric vehicle to the household. "It blew me away — the touch-sensitive presets, the smart cruise control, the auto park feature."

Smart Fortwo ED

Facts: Now in its third generation, the Smart electric vehicle was first introduced in 2013 and has a range of 68 miles. Price: \$25,750

Most surprising: "They're cute, easy to park and drives really smooth," said Anita Mareschal of Allied Gardens. "But I was surprised the most by how spacious it is. I even think I can fit my golf clubs in there without any problem."



Volkswagen e-Golf

Facts: Now in its seventh generation, the Golf serves as Volkswagen's entry into the electric vehicle market in the United States. Introduced in 2014, the e-Golf has a range of 83 miles. Price: \$35,445

Most surprising: "This would be a very easy transition from gas to electric," said Laurie Keen of Coronado, who attended Saturday's event with her husband, Jim, and daughter, Samantha. "The controls are very similar to the gas version."

Nissan Leaf

Facts: As of December 2014, Nissan had sold more than 70,000 in the United States alone, making the Leaf the most popular electric vehicle in the market. It has a range of 84 miles. Price: \$28,980

Most surprising: "I've been keeping my eye on it for a while," said Skylar Hayes of San Diego, "but I've never had a chance to drive it until today. It's very luxurious for its size. There's a lot of room in it — it's deceiving from the outside. It's not as fast as the Kia, but it's pretty fast."



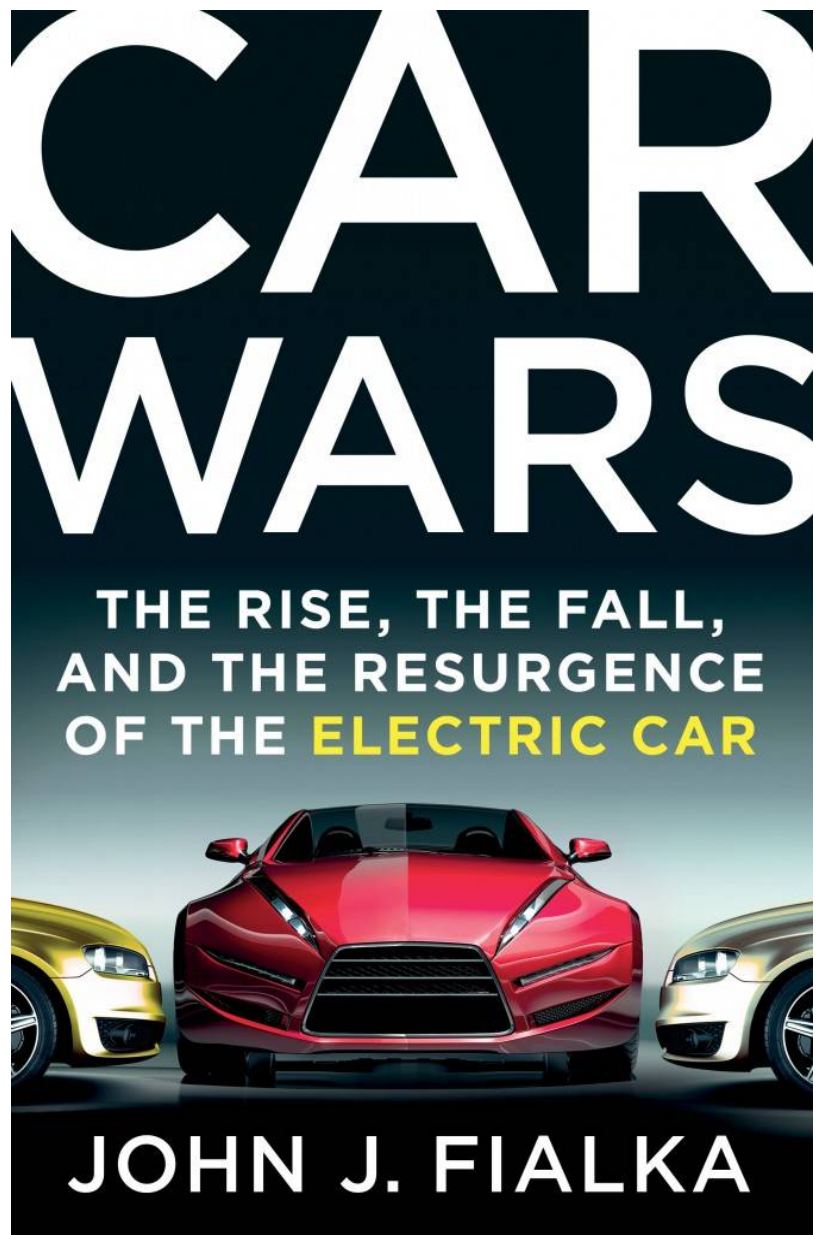
A Brief History of Electric Cars: What A Long, Electric Trip It Has Been

David Reichmuth, senior engineer, Union of Concerned Scientists, Clean Vehicles, September 16, 2015

This week, thousands of people across the U.S. are checking out the future of driving at [National Drive Electric Week](#) events. You can find events near you—and get a chance to ride in or drive an electric car—by [checking the event website](#). The event has grown since the first Plug-in Day in 2011 as the number of electric models on sale has gone from 3 to about 20.

So how did we get here? Electric cars have seen big advances in the past five years, but the journey to today's electric cars stretches back a century, and it's a fascinating story. The details are laid out in the new book "Car Wars" by John Fialka, a former Wall Street Journal reporter and the founder of ClimateWire.

In the early 1900s, both gasoline and electric cars shared the nascent automobile market. Ironically, one of the chief reasons that the gasoline car was able to win out over the early electrics was the [invention of the electric starter motor](#). The starter motor eliminated one of the major drawbacks of the gasoline car: the need to start it with a hand crank at the front bumper (which could be tiring, messy, and downright dangerous). Gasoline cars were also cheaper; by about 1920, electric cars virtually disappeared from U.S. roads.



The “Cars of the Future” ?

From there, Car Wars picks up in late sixties, with a bet between MIT and Caltech. The challenge was to race across the country to each other’s campus using electric vehicles. From the West Coast, a VW Microbus loaded with lead-acid car battery headed east, while a Chevy Corvair loaded with state-of-the-art nickel-cadmium batteries set off from MIT. It took almost 9 days for the winner to arrive at MIT. Both teams struggled with technical problems that were bound to arise from pushing batteries and motors to their limits and beyond. However, they did show that electric cars could be the “car of the future”.



It took another race, this one in the late 80’s between solar-powered cars in Australia, to lead to commercial EVs on the road in the U.S. The winning “Sunraycer” entry eventually led to General Motors developing the EV1, the first mass-produced electric vehicle from a major automotive company. While the demise of the EV1 has been documented elsewhere, Car Wars traces how the push for electric cars continued, both in the big car companies and through start-ups and inventors that birthed companies like Tesla. Throughout the book, Fialka does a nice job of both explaining the technologies responsible for the current EV revolution as well as the people and personalities involved.



EVs Are Here to Stay

There are almost as many setbacks as triumphs in the stories told in Car Wars. But by the end, it’s obvious that electrification is here to stay. Sales of EVs in the U.S. now total over 350,000 cars, electric vehicles are starting to make inroads in motorsports like the Formula E races, and research and development in EV technology is moving quicker now than at any other time. Check out your local Drive Electric Week event to see some of the winners from Car Wars yourself!



FOR SALE: 1998 VW Golf EV Conversion
Range: 50-60 miles, driver dependent
Azure Dynamics Motor/Controller
97 X CALB 60 AH Cells, 19 Kwhr Batt Pack
5-Speed Manual Transmission
Power Brakes, Power Steering
Displayed at SD Intl Auto Show
Contact Dave Crow, (619) 846-5358 (cell)
deekcrow@yahoo.com
\$4,900 or OBO



Electric Auto Association (EAA) Membership Application Form

Fill out this form, attach a check, money order or use PayPal, in US funds only, payable to 'Electric Auto Association'. CE = Current EVents newsletter

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\$120 (supporting level-1) \$240 (supporting level-2) \$500 or more (high voltage) _____ do not list my name

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You can fold this form as indicated and mail it with your payment enclosed. Use tape to seal the form, **on the sides** , before you mail it or send an e-version of this form, through PayPal using <http://electricauto.org/eamembership.html>

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Electronic version of Current EVents, paperless only, link sent by email, if your membership was for the e-version, that is what you will receive

Do you own or Lease an electric vehicle (plug-in) production conversion bicycle hybrid or None

please include miles driven and type of vehicle

All information in this application is for the exclusive use of the EAA and not sold or given to any other organization.

Please identify your primary areas of interest relating to the EAA (check as many as your wish

- Owner/Driver Hobby/Builder Professional/Business Competition (Rallies, Races, Records) Plug-in Hybrids
- Environmental/Govt. Regs Social (Rallies, Shows, Events) New Technology & Research Solar & Wind Power
- Promotion & Public Awareness of EVs Student or General Interest Electrathon/Bicycle/Scooter/Other

The Electric Auto Association is a non-profit, 501(c)(3) for the promotion of electric vehicles. Your donations are tax deductible and with your membership you will receive the EAA publication, "Current EVents". All information and statistics in this application are for the exclusive use of the EAA and is not sold or given to any other organization or company. Your membership dues include a percentage goes to the EAA Chapter you support for public Electric Vehicle promotion EVents like rallies, shows and EV rides.

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