

# Charged Up



## ELECTRIC VEHICLE ASSOCIATION OF SAN DIEGO (EVAOSD)

An affiliate of the Electric Auto Association (EAA)

2755 Dos Arons Way, Suite A, Vista, CA 92081

Ph: (760) 670-3388 Fax: (760) 266-9505 Email: [EVAOSD.Newsletter@DriveGasFree.com](mailto:EVAOSD.Newsletter@DriveGasFree.com)

Website: [www.evaosd.com](http://www.evaosd.com)



And we're on Facebook (<https://www.facebook.com/EVAofSanDiego>)

### Officers:

President: Joseph S. Gottlieb

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:**  
**Center for Sustainable Energy**  
**9325 Sky Park Court, Suite 100**  
**San Diego, CA 92123**  
**Wednesday, 27 January 2016, 7:00 P.M.**

**Program: News, Projects, and future events**

### Inside this issue:

- 1 Newsletter Topics
- 2 Message from the President
- 3 Faraday Future Concept
- 4 Carlos Ghosn inspects the Bolt
- 5 VW BUDD-e Van
- 6 Local EV Builders and Offer
- 7 Subscription

### Newsletter Topics:

#### Electric Bat Mobile



#### Bolt Strikes Nissan



#### Electric VW Bus?



## Message from the President

Hi All,

Happy New Year! I'm excited to see what this year will bring. The Chevy Bolt is making some good waves with range and performance. Tesla is going to have a heck of a time going after that price/performance. Fisker is back in the mix and there is a solid market space for the EV. So what is next? What will the Apple EV look like? How is the deployment of DC fast chargers going to get the kick it needs? Are there new subsidies in the mix? Are we every really going to see a deployment of V2G (Vehicle to Grid)?

All great questions to be answered this year and I hope all of you will keep your eyes out there and keep propagating the EV message. Again, this year we will need some more help from our members to keep the group alive and well.

-Joseph



**What an APPLE CAR look like?**

## You probably won't be able to afford Faraday Future's first car

Cadie Thompson, <http://www.techinsider.io/> , Jan. 15, 2016

The secretive electric car company Faraday Future won't make electric vehicles for everybody — at least not at first.

Faraday's first production car, which is expected to launch sometime before 2020, will be a luxury vehicle, competing with the likes of Tesla's Model S. In other words, it will not be cheap.

"We are working on more than one car, the first car does fall into the premium side of the market," Richard Kim, the company's lead designer told Tech Insider in an interview at CES.

However, Kim was quick to point out that Faraday plans to eventually roll out more cars and that the company already has more than one test vehicle on the road.

"We are testing mules as we speak... And our surfaces have been released for manufacturing, so we are very far in the process," he said. ("Mules" is an industry term for test vehicles on the road that are disguised to look like normal cars.)

Considering that the electric car space is getting more crowded, it makes sense that Faraday aims to have a diverse portfolio of cars.



Faraday Future's FF Zero 1

Tesla, of course, already offers its high-end Model S (which starts at \$75,000) and Model X (which starts at around \$80,000). But Elon Musk is aiming to begin production of his first mass market car, the Model 3, by 2017. The Model 3 will price at about \$35,000 and have a range of more than 200 miles, Musk has said.

General Motors also plans to begin selling its all-electric Chevy Bolt by the end of this year. The Bolt is estimated to have a range of more than 200 miles and cost about \$30,000 after incentives.

Faraday has only shared a handful of details about what its first production vehicle will be like

In fact, about the only thing the company has confirmed about its first car for consumers is that it will be built on a modular electric platform and that it will be a high-end vehicle. Details regarding the design and the actual range of the vehicle remain vague.

The company revealed its first concept car, the FFZero1, earlier this month, but the high-tech race car is not going into production and does not directly resemble what the company will actually produce.

But the company may keep some aspects of the FFZero1, Kim said.

"With the FFZero1, you guys saw a snapshot in time," Kim said. "And I think a lot of those characteristics, the form language, the DNA elements, we like them and we are going to incorporate that in our production cars."



**FF Zero 1 at CES**

## Carlos Ghosn's Face Shows Nissan's Reaction To 2017 Chevy Bolt EV

John Voelcker, [www.greencarreports.com](http://www.greencarreports.com), Jan 19, 2016

Carlos Ghosn has never really been known as a man with frequent warm and ready smiles for all comers. Under most circumstances, the man who runs not only global automaker Nissan but the Franco-Japanese Renault-Nissan Alliance displays a serious, thoughtful countenance. But, as he inspected the 2017 Chevrolet Bolt EV during last week's Detroit Auto Show, more than one observer suggests that he did not look particularly happy.



As photos posted on Facebook by Gary Lieber of the San Francisco Bay Area Nissan Leaf Owners indicates, Ghosn displayed a visible frown while chatting with Larry Nitz, GM's executive director of global electrification. Ghosn's "Power 88" business plan for Nissan, announced in June 2011 and lasting through this year, requires the company to achieve 8 percent of global market share and an operating profit of 8 percent (hence the "88").

As the company's first battery-electric vehicle, the Leaf program would likely break even--at best--over what now appears to be a seven-year lifespan, starting in 2011 and ending with a 2017 model year. According to industry insiders, every Leaf model sold in the U.S. (starting at \$28,060) takes the company further away from that 8-percent operating profit.

General Motors, on the other hand, has bragged that it will pay only \$145 per kilowatt-hour for the Bolt EV's cells when production starts late this year. And, at a starting price of \$37,500, the company could easily afford to subsidize the car until volume increases and economies of scale come into play to cut losses on the program over its life.

All of that was likely running through Ghosn's mind as he congratulated a smiling Nitz on the launch. Electric-car advocate and BMW i3 driver Tom Moloughney happened to be on the Chevy stand as Ghosn came to look at the Bolt EV. "Carlos Ghosn and his entourage were escorted onto the platform behind us to have a private look at the Bolt on display," he wrote on InsideEVs.

"I couldn't hear exactly what they were talking about," Moloughney said, "but he wasn't smiling."

In April 2014, Nissan's then-product chief Andy Palmer told Green Car Reports that the next generation of Nissan Leaf would have multiple battery pack options, with ranges that could go as high as 150 miles. In September of that year, Palmer left Nissan to become CEO of British sports-car maker Aston Martin.

But if a maximum range of 150 miles is still the plan, the 2018 Leaf would launch with a lower range than the Bolt EV, which will undoubtedly have an EPA-rated range of at least 200 miles. More likely is that the next Leaf will offer at least one battery option to equal or surpass the Bolt EV--as will BMW in at least one battery-electric model, Volkswagen, and others.

Last summer, Ghosn showed an "Advanced R&D Electric Vehicle" using a current Nissan Leaf as a test mule. Its announced range of 544 km (338 miles) on the Japanese test cycle would likely exceed 200 miles in EPA testing, and perhaps run as high as 250 miles.

Still, we're betting Carlos Ghosn was doing the sums in his head as he gazed at the car that will obsolete his prized Nissan Leaf within a year or so.

Since the second generation of the Leaf is expected to earn its keep by turning a profit (just as the second-generation Toyota Prius hybrid ultimately did), that process can't have made him happy.



**New 60 kWh Battery Found In IDS Concept Fits Snugly Into Almost The Same Space As Current 30 kWh Version**

## Volkswagen BUDD-e Concept: A groovy electric van

Emme Hall, [www.cnet.com/roadshow/](http://www.cnet.com/roadshow/), 5 January 2016

Those who were hoping that the much-anticipated Volkswagen electric concept van would resemble the company's fabled air-cooled vans of yore may be disappointed by what they see here. The BUDD-e (yes, that's the name. Don't you want to just give it a hug?) has a two-tone color scheme, but its bull nose looks more like a Scion xB than an old Type 2 VW Kombi.

Which may be a good thing. Do really you want your memory of the old beloved Microbus infused with the newest, slickest tech on the planet?

Like the Bulli concept before it, the BUDD-e evokes some of the same proportions as VW's old air-cooled bus. For a brand currently mired in lawsuits and scandal over Dieselgate, nostalgia could play a huge part in getting people back to the brand. While crash test standards have put the kibosh on the traditional flat-front nose, it still sports the long wheelbase and short overhangs that many remember from the old Microbus, and the style lines along the front come together not in a sharp point, but rather in a way that harkens back to the original, while still looking towards the future.



VW predicts that by 2019, batteries will be able to charge to 80 percent capacity in 15 minutes. The 101-kWh battery in the BUDD-e can go an impressive 373 miles between charges, based on the New European Driving Cycle. When the EPA drive cycle is used, the BUDD-e rates 233 miles per charge. Regardless, the battery powers the front and rear wheels to propel the all-wheel drive electric van to speeds of up to 93 mph.

Arguably more important than those range and performance metrics is what all of that technology sits atop: A new Modular Electric Toolkit architecture specifically designed for battery-powered vehicles. The theory is that the toolkit can be used to underpin a variety of different types of electric vehicles -- not unlike VW's existing strategy with its gas- and diesel-powered vehicles.

The BUDD-e uses touch, voice and gesture control to operate large infotainment panels. Stepping up from the gesture system unveiled in the Golf R Touch concept at CES last year, the BUDD-e can recognize movements without an explicit instruction to activate. A wave of the hand opens the sliding door, a kick of the foot opens the tailgate.

Directly in front of the driver is a three-paneled Active Info Display with navigation, vehicle status and infotainment. Passengers can plan the route on the separate head unit or access music, points of interest or connected home functionality.



Yes, Volkswagen's BUDD-e can connect you to your home or workplace, allowing drivers to remotely control lights and air conditioning. The van can also display images from cameras located in or around your home. You can even see who is at your front door from BUDD-e and let them inside.

Volkswagen is going so far as to imagine a world where the BUDD-e can order and receive its own replacement parts. No word on if it will change its own tire, though.

There is one particular feature on the BUDD-e that may actually make driving safer, not just more convenient. The concept's e-Mirror replaces side mirrors with two digital displays fed by external cameras. The driver's side 7.0-inch panel and a smaller, passenger-side 5.9-inch panel essentially eliminate the blind spot found in conventional mirrors and also make for better aerodynamics. This isn't a new idea -- automakers have been playing with this idea since the 1980s. US law still mandates physical side mirrors, but automakers have been lobbying the Department of Transportation to amend these laws for some time now.

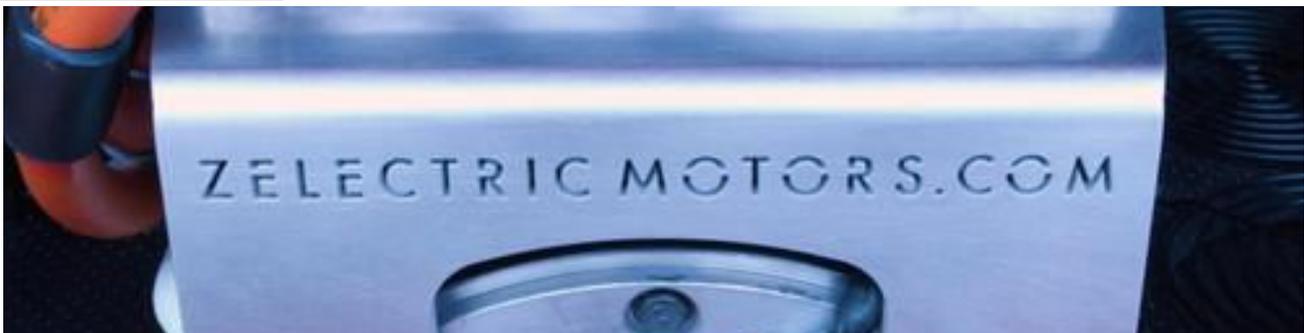
So, if you've ever wanted an electric vehicle with room for your friends and the ability open the front door of your house, spy on your kids, potentially accept packages, and, oh yeah, also drive places, then... rejoice! Volkswagen has your concept BUDD-e van all ready.

**FOR SALE:**

Saturn  
Conversion  
For Sale  
very cheap.

For Details,  
Contact Eric,  
951-387-0013

\$3,000, 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

e-CE  \$35 USA & other Countries  \$25 Student  \$25 Senior (>65-USA/Canada only) birth year

paper CE  \$45 USA  \$48 Canada  \$52 World  \$29 Student  \$29 Senior (>65-USA/Canada only)

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

I support the \_\_\_\_\_ EAA Chapter (additional chapters, \$10 each) \_\_\_\_\_

(\$10 each ) Additional Chapters or Special interest group (other than the one that comes with the membership)

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>

New Member  Renewal

Name  email

Mailing address (Apt. #)  Home phone

Mailing City, State & Zip-8  Work phone

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.

Current subscribers have borrowing privileges for the association's video tape and publications library. Subscribing to the newsletter is optional and is not a requirement for membership. EVAOSD meetings are always open to any and all interested parties. New Subscribers, please use this form to register to receive the EVAOSD Newsletter. Current Subscribers, please use this form to send us any change in your details.

Please make check or money order payable to: EAA and reference EVAOSD. Send this form and payment to: Richard Rodriguez, EVAOSD Treasurer; 2755 Dos Aarons Way, Suite A, Vista, CA 92081

EVAoSD Newsletter  
 2755 Dos Aarons Way, Suite A  
 Vista, CA 92081

Address Correction Requested