



April 2017 FVEAA Newsletter

Fox Valley Electric Auto Association

The FVEAA is a Not-For-Profit Illinois Corporation and the Chicago-area chapter of The Electric Auto Association

Next Meeting

April 21, 2017 7:00 p.m. to 9:30 p.m.

Community Christian Church

1635 Emerson Lane
Naperville, IL 60540

[Google Map](#)

Agenda

- 6:30 Doors open -> Sign-in Sheet
- 7:00 Call To Order, Welcome Introduction
- 7:15 Jeffrey Miller: Building with Composites. Includes test demonstration/destruction of composite.
- 8:15 Break
- 8:30 Club news and business.
- 8:45 Michael Willuweit - World of EVs: What to look for in 2017 and beyond
- 9:15 Close

President's Words

Michael Willuweit

What a scramble it was to get a meeting place after getting late notice that the CC Church couldn't host us last month. Big thanks to Bruce Jones and Rich Hirschberg who came through in the clutch to secure the Kane County Forest Preserve board room at the Fox Valley Ice Arena. While there we were treated to a great presentation by Stephan Cutter on G-ride, a sustainable ride sharing program. I really hope G-Ride finds the funding it needs to get the wheels rolling. If you missed the presentation please look them up.

About three years ago I gave a talk on the future of the Porsche 944 club car I had just purchased and an audience member asked what I would make the new battery boxes out of. I told him that I'd probably use steel. He asked me, "Why not composites?" I didn't really have a reply as I didn't really know what he was talking about. But that audience member, our own Treasurer Jeffrey Miller, explained the benefits of composites and I was sold. The composite boxes we built have been great in the Porsche offering durability, toughness, insulation, all the while being incredibly lightweight. Ted Lowe has since made boxes for his Dakota conversion project and the time has come for Jeff to make believers out of any doubters still out there. I can't wait for his presentation as we impact and weight test some composite pieces he has put together just for the club.

Lastly, I write this message on Easter weekend, which for me, started with a good Good Friday. I drove and charged up the Porsche 944, put another effortless 50 miles on the i-MIEV, and then met my 2014 Toyota Rav4 EV that I'll be buying at the end of the month. Three great EVs, all with their own quirks and all supplying wonderful EV grins. Unfortunately, I will have to start selling some of them, first of which will be the i-MIEV. So if you are in the market...



Stephen Cutter presenting on G-ride (visit them at <http://www.gogride.com/>)

<https://www.facebook.com/FoxValleyElectricAutoAssociation>

In October 2015, i created a Facebook group for the FVEAA and invited all the past and current FVEAA members i know that are on Facebook. There are 47 members so far. If you're on Facebook but not in the group, yet please join us! If you're not on Facebook yet, please consider joining so you can join our group there! This group will help to replace our forums because it is much easier to use, read, post pictures and videos and get notifications. Please let me know if you have any questions/comments/suggestions. Hope to see you there! <https://www.facebook.com/groups/889497691136309/>

A curious new set of vehicles has been announced by Hyundai, and it will demand a significant upgrade in our EVSE. Let's talk about the new cars first.

Hyundai has been viewing the electric market for some time, and did enter with a hybrid although it has not been widely advertised (at least, YET). That's about to change as they roll out the three powertrain choices for their 2017 Ioniq. In the Ioniq body, they will offer a Hybrid powertrain, a plug in hybrid powertrain and a full EV. Both hybrids will carry a 1.6 liter Atkinson Cycle 4 cylinder which, by itself has 104 HP. This is a state of the art motor, with aluminum block and head, and 4 valves per cylinder. The Hybrid has a 32 kW electric motor (43 HP) and uses 240V, with a battery that is 1.56 kWh. The Plug-In Hybrid has a 44.5 kW electric motor (60 HP) and uses a 360V system, and the battery size is increased to 8.9 kWh. The full EV uses the 360V system voltage, a larger 88 kW motor, and a battery capacity of 28 kWh. They are certainly covering the market with this array. Hybrids will all have a 6 speed dual-clutch transmission, and the EV will have a single speed with a reduction gear. They advertise the Plug-In Hybrid to have a range of over 27 miles, and the EV with a range of 124 miles. Recharge times on Level 2 equipment are 2.5 hours for the Plug-In Hybrid and 4.5 hours for the Ioniq Electric. The EV will be able to get 80% of it's charge in 30 minutes on 50 kW, and 80% of it's charge in 23 minutes on 100 kW. Manufacturers suggested retail price for the Hybrid starts at \$22,200, and the Electric (the EV) at \$29,500. Pricing for the Plug-In Hybrid has not been announced yet.

All the full EV models will come equipped with fast charging. This will mean using the CCS standard, and is the first US EV with the CCS 100 kW compatibility. Excluding the Tesla Superchargers, we have very few places for commercial charging at over 50 kW. Starting with the Hyundai Electric, we should see a new implementation in some areas, more infrastructure, different connectors, and much greater understanding (and some misunderstanding). Your colleagues are going to ask if the Hyundai can charge 80% in 30 minutes on 50 kW, why does it take much more than half that time to charge at 100 kW? And is it worth it? The answer lies in the real ratings; these are peak power ratings, and the batteries can safely accept the peak power for only a very few minutes before damage begins. Someone may ask you, "What good is 100 kW if only one car can use it, and it can only use it for a small portion of it's charge?" The answer will be in the next car with a larger battery, and next year's car with a new battery technology. We ARE GOING to need it.

We currently have **63 active paid-up** members, **down 5** from last month! Please renew and recruit new folks!



FVEAA Membership Report

as of 2017-04-17 04:58:05

Count of Members by Type

Membership Type	Count	Paid Up
BusinessStd	1	1
Family	6	6
Individual	55	53
LifetimeInd	3	3
Totals	65	63

Other Statistics

Statistic	Value
% Paid Up	96.9%
Avg. Paid Up Days	190.7 days
% With Email	93.8%

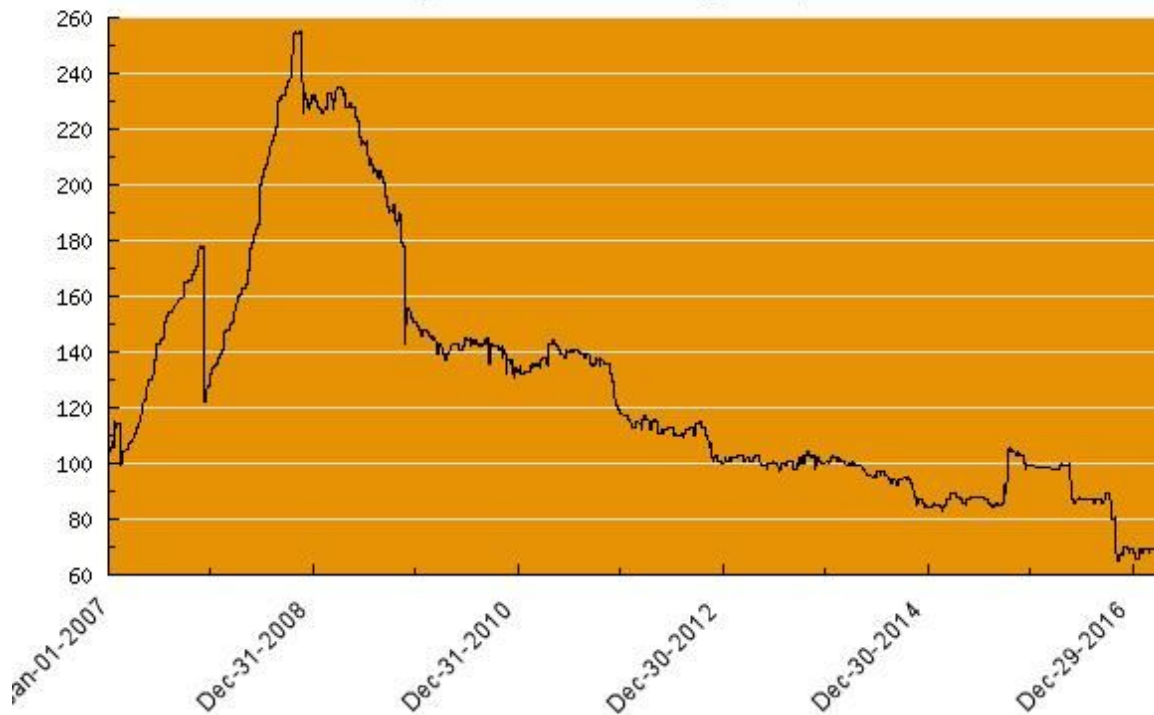
Encouraging Our Membership To Grow in 2017 and Some History

Ted Lowe

We live in a large metro area with 8 million people and EVs are the latest buzz so we should be able to grow the FVEAA! **Please invite your friends, neighbors, family, colleagues, etc.** to FVEAA meetings and EVentS. Volunteer to attend EVentS on behalf of the FVEAA (with or without an EV)! Your ideas on how to help grow the FVEAA are welcomed at anytime, thanks! Howard Hansen had a **great idea**... giving an FVEAA membership as a gift!

Here is a time-varying graph of our membership size from 2007 to now. Note that we peaked at about 255 members in the Summer of 2008 when gas was nearing \$5 per gallon. We were also attending lots more invitational EVentS with our EVs. **Let's get out there and grow the FVEAA in 2017!!!**

FVEAA Paid Up Members as of April 17, 2017 8:01 am



Membership Renewals

Ted Lowe

Our membership system sends out “renewal reminder emails” before your membership is due. You will receive up to 3 before being marked “not renewed” (inactive). The sooner you renew, the fewer emails you will receive :)

So please pay attention to your email from the FVEAA and renew online using this link (for the easiest approach for all of us):

<http://www.fveaa.org/renew>

THANK YOU for your continued support of the FVEAA!

Meeting Minutes - Mar. 17, 2017

Bruce Jones

We met at the Fox Valley Ice Arena after a last minute notification that CCC was having an event.

G-RIDE

- Stephen Cutter founder of G-Ride came and talked about his green approach to ride sharing
- He is an entrepreneur and hopes to make a positive change in society by starting a whole new altruistic ride business. It is structured as a hybrid for-profit and non-profit going to an LC3
- He wants to reduce driver dissatisfaction currently in the Uber-type marketplace with better driver Benefits, equity options, vehicle payment plans, tip options
- They have pre-planned medical rides – versus the Medicare, Medicaid paper mess,
- Stephen is looking for 650k funding and he can be contacted at
- 815-274-6777 or gogride@gmail.com or see www.gogride.com

The group talked about other meeting locations in the event we have to find another space at the last minute., MCC McHenry County College – Simon, Marty Belovitz and Harper College

UPCOMING EVENTS

Rich Hirschberg talked about the upcoming Green Fairs, Festivals & Events exhibiting Electric Vehicles

- Midwest EVOLVE (Stands for Electric Vehicle Opportunities: Learning, EVents, and Experience) dates tbd
- Driving Electric: Get to Know Electric and Hybrid Vehicles – Paige Fitton Thursday, March 23, 2017, Start Time: 7:00 to 8:30 PM Location: Main Library – Elgin Room 270 N. Grove Ave., 60120,,
- Geneva Earth Day Celebration Date: Saturday, April 22 Time: 11 am to 3 pm Location: Peck Farm Park 4038 Kaneville Rd., Geneva
- Aurora GreenFest Date: Saturday, June 10 Times: 10 am to 4 pm Location: 150 W. Illinois Ave., 60506
- IREA Sustainability Fair (IL Renewable Energy Assoc.) Date: web site not current Location: Oregon, IL 61061
- National Drive Electric Week Dates: Sept. 9 to 17 Locations: Naperville & northern location Times: TBD

LEAF WORKDAY 2 - 2/18/2017

- Bruce Jones then presented the second Workday on his 2011 Nissan Leaf
- Michael Bradley had completed analyzing the 24kW pack and replacing four cells.
- Now time to re-install the batteries!
- Thanks to everyone who showed up to help, and to Bob Baker for the use of his garage in Lake Barrington – Bob’s Hillview Auto
- And also to Mike for the awesome job on the batteries at Best Hybrid Batteries and sending them from Shorewood to Lake Barrington

FVEAA Membership Application Form - Version 2014-01-01

Name: _____

Address: _____

City, State Zipcode: _____

Phone: _____ Phone Type: Home ___ Work ___ Cell ___

Email: _____

Please check one: New Member _____ Renewal _____

How did you hear about the FVEAA ? _____

Membership Types and Annual Dues (please circle one):

Individual	\$20
Business	\$100
Premier Business	\$250
Charter Business	\$500

Newsletter Delivery Type (please circle one): No Newsletter Electronic

Please make checks payable to "FVEAA" and postal mail it with this membership application form to:

FVEAA

PO Box 214

Wheaton, IL 60187-0214

Attn: Membership



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CHARGE YOUR VEHICLE FOR LESS WITH HOURLY ELECTRICITY PRICING

It is great having near zero, or sometimes even negative, rates to fill up my car for nearly free or even better!

—Daniel H., Hourly Pricing participant since 2015

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