

June 2020 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

This month's meeting is on Friday June 19, 2020 and will be VIRTUAL ONLY (NOT AT CCC) due to the Coronavirus outbreak for the purposes of "social distancing"

We are using the Zoom video-conferencing platform to hold this ONLINE meeting. Zoom runs on all computers and phones. Some setup is required prior to your first use of Zoom on your device of choice. Connect to the meeting a bit early (6:45pm earliest) by using the link below to test your connection. Please call Ted Lowe (630-260-0424) if you want help getting Zoom installed on your device of choice. You can also dial-in on your telephone to have an audio-only connection (see phone number and meeting ID below). The audio on your device will be automatically muted upon entering the call to avoid disrupting the call.

Pre-meeting setup check starts at 6:45pm.

Meeting starts at 7pm and will run until 9pm.

Use this information to connect during these times:

Topic: FVEAA June 2020 Monthly Meeting (VIRTUAL ONLY)

Time: Fri June 19, 2020 6:45 PM CST (pre-meeting setup check), Meeting 7:00 PM

Join Zoom Meeting

https://zoom.us/j/95901481473

Dial-in for audio-only users: Call: 312-626-6799 Enter Meeting ID when prompted: 95901481473#

Participant ID: (blank, just #)

*6 mutes/unmutes your line, *9 raises your virtual hand

Agenda

- 6:45 Virtual Meeting Starts (to test connections)
- 7:00 Introductions
- 7:30 Bruce will compare CO2 emissions between ICE and EV in Naperville
- 8:00 Break
- 8:10 Jeff M Various solar options with EV's and Real Time pricing
- 9:00 Close up

President's Words

Jeff Miller

May meeting

Thanks for Hal and Tracey for showing us around community solar and Marc for the overview of his upcoming installation. They were both excellent presentations and I hope everyone found them useful.

June meeting

During introductions I am going to ask everyone in attendance If you had / have a Model 3 or Model Y with Full Self Driving on it, would you put it in the Tesla Fleet of autonomous vehicles to earn money? Feel free to discuss if you would just use your personal car or if you would buy a dedicated car for the purpose.

Bruce Jones is going to take us through CO2 emissions of an EV plugged into the Naperville grid, which is mostly coal, and compare that to a gas burning car.

I will be doing a presentation looking at the dollars and cents around Comed RRTP in combination with the various residential solar options. Should you cover your whole electric bill with solar capacity while owning three EV's? Let's crunch some numbers and try to find out! Disclaimer: energy prices are guaranteed NOT to be the same in the future.

Be SAFE

PLEASE be safe, stay home, keep your hands clean and follow the guidelines provided by the CDC.

It is easy to look outside right now and see the sun shining and think this pandemic is wrapping up, but in Illinois we are still seeing roughly the same number of new daily cases and daily deaths that we were seeing in March. Many other states have opened back up, and now Arizona is seeing very high ICU utilization. About half the states in the country are seeing peaks above what they saw earlier in the year. This is far from over. We are now allowed to do more things and some more businesses are open, feel free to utilize those resources, however a facemask is critical for safely interacting with the world both for your protection and for the protection of the people around you.

http://www.dph.illinois.gov/news?page=9 Reference for number of cases per day in Illinois.

My recent projects

I still own my Model S, the buyer wasn't able to complete the deal. I don't currently have it listed as work is very busy right now.

I have outfitted the Bolt with a basic roof rack to hold a two person Kayak. Jessica and Sam like to go Kayaking together and the Bolt handles that very well. I have also discovered that the Bolt takes the bike rack we bought for our 2013 Mitsubishi Outlander. It is sort of wild to see a "small" vehicle take the bike rack from a larger SUV. This means the hatch is roughly the same height between the two of them. We have been roaming around and biking and kayaking in the area lately using the Bolt as the "sag wagon" and kayak transportation.

My son and I started and completed the second large subwoofer for the theater in the last month. As of writing this I still need to wire it up. Two subwoofers should even out the frequency response of my theater room, it will also be somewhat louder, but it is already quite loud in there. Each of these contain four 12 inch woofers and stand 48 inches tall with a base that is 28 by 28 inches. The total for the materials is about \$500 for the pair of them so it is an excellent high output at low cost system. Hopefully by now you have noticed I am a fan of overkill and high performance to cost ratio projects. This setup meets both of

those criteria.

The present

Three months of isolation have come and gone, and I think I still have my sanity, but it is getting hard to tell. I still encourage you all to stay safe as best as possible. Please keep your risks low as we venture out again. WEAR A MASK!

Articles I found interesting

https://www.reuters.com/article/us-autos-tesla-batteries-exclusive/exclusive-teslas-secret-batteries-aim-to-rework-the-math-for-electric-cars-and-the-grid-idUSKBN22Q1WC

https://finance.yahoo.com/amphtml/news/million-mile-battery-china-could-210000866.html

We see a couple of articles this month around the "MIlion Mile Battery". That is a pretty tall order, but the statement of it being game changing is quite true.

https://jalopnik.com/volkswagen-has-bungled-the-launch-of-its-most-important-1843986608

https://www.reuters.com/article/us-autos-electric-vans-exclusive/exclusive-gm-plans-electric-van-for-business-users-in-bid-to-pre-empt-tesla-idUSKBN23B1G1

https://www.cnbc.com/amp/2020/06/10/ford-itroducing-all-electric-f-150-pickup-and-transit-van-by-mid-2022 .html

The race is on for work/delivery vans. We have all heard about Rivian / Amazon working on an Amazon van, but the legacy makers are starting to notice that gap in Tesla's announced products.

https://jalopnik.com/chrysler-says-not-to-park-some-pacificas-in-a-garage-or-1844017865

https://jalopnik.com/cadillacs-electric-future-is-coming-into-better-focus-1844010364 https://www.automobilemag.com/news/cadillac-design-director-brian-smith-says-future-electric-cars-look-fantastic-lyriq-celestiq/

https://jalopnik.com/think-twice-about-those-discounted-tesla-horsepower-hac-1844000952

I am excited to see these options appearing but I would be reluctant to do this on a car under warranty still. 10 years from now, who knows.

https://www.teslarati.com/tesla-cybertruck-vs-ford-f150-ev-release-date-upgrades/amp/

They are pretty optimistic about tesla beating Ford to market, the Cybertruck is a pretty big deviation from existing Tesla vehicles.

https://arstechnica.com/cars/2020/06/please-dont-describe-us-as-a-tesla-killer-ars-talks-to-lucid-motors/Lucid is back

https://electrek.co/2020/06/06/tesla-battery-degradation-replacement/amp/

This article goes into some more details around the 400K mile Model X. Just remember replacement packs are only supposed to be as good as the pack being removed. If the pack coming out had 200 miles of range before it failed, they only have to give you a 200 mile pack. From what I have been hearing Tesla has gotten better at locating packs that meet this criteria especially on cars that are approaching the end of their warranty. It isn't like the old days when you almost always got a new pack.

https://jalopnik.com/nio-has-completed-500-000-ev-battery-swaps-1843891655

Nio has went down this path where Tesla has backed off. Only time will tell how that goes for Nio and Tesla. It could be just down to market differences too.

https://jalopnik.com/at-4-050-could-this-2012-mitsubishi-i-miev-get-you-to-1843853598

This imiev was voted as a good deal at \$4000!

https://gizmodo.com/on-this-day-in-1899-the-first-speeding-arrest-happened-1579044541

Humorous article about an EV driver getting arrested for speeding in 1899!

https://jalopnik.com/this-british-startup-may-have-solved-urban-ev-charging-1843572897

Not sure about solved, but a nice solution for a place that rarely has freezing temperatures.

My somewhat off topic article of the month

https://arstechnica.com/science/2020/06/plastic-rain-is-the-new-acid-rain/

The headline doesn't really give the article the credit it deserves. They collected substantial data in the field and came to some interesting conclusions on just how pervasive plastic, nylon, and polyester fibers are. This goes beyond bottles and packaging, and into clothing.

I do not hold any interest in any car manufacturer or any of their subsidiaries

Upcoming EVents Rich Hirschberg

Tracey McFadden brings us news of a Webinar

Tuesday June 23rd at 1400 hosted by Plug in America. Here is an overview:

Plug In America has invited our colleagues at similar EV driver associations in the Netherlands, Norway, and Scotland to join us for a discussion about how EV adoption is taking place in different countries and what we can learn from one another. We will look at policies, the EV market, charging infrastructure, and consumers' attitudes toward electric vehicles.

This is the link to register for the webinar:

 $\frac{https://pluginamerica.org/webinar-international-ev-associations/?eType=EmailBlastContent&eld=753e86}{c6-6d1f-4570-a2c2-28d3e73e7421}$

POSTPONED by the City of Elgin The 2020 Midwest Green Car Expo (MGCX)

For the Chicago, Illinois Metro area – USA.

The Fox Valley Electric Automobile Association is hosting a huge Alt-Fuel Vehicle expo planned for later this year when it is safe to gather in large groups. We are hoping to make this the largest gathering of EVs, Hybrids, and AFVs in the Midwest.

Web site: https://the2020MidwestGreenCarExpo.weebly.com/

Date: TBD 2020.

Location: 240 N. Grove Ave. (old library lot), Elgin, IL 60120.

Times: 10 am to 4 pm.

Don't forget to check out https://DriveElectricEarthDay.org/index.php

At the MGCX, make sure to vote for your EAGL Awards recipients. Also check out the Ride-n-Drives and the many businesses, clubs, and organizations that support AFVs.

Contact Rich Hirschberg, MGCX@yahoo.com, Car Expo Chairman about booths, registrations, and sponsorships via email.



President Jeffrey Miller presides at the 2nd virtual FVEAA meeting. The DJ voice is sounding great!



Hal Sprague Community Solar Coordinator, Trajectory Energy Partners presents on Community Solar programs



Tracey McFadden explains why he chose Community Solar..
And introduces Hal Sprague



Board Member, Fox Valley Electric Automobile Association



Clearway Community Solar



Howard Hansen sporting a Tron like backdrop



Benjamin Nelson mentioned his 24 panel solar array



Sue attended the FVEAA meeting for the first time. Welcome!

Illum Soldr **Vivint Solar** Sun Badger Sun Run Copley **Roofing - GAF** system Company Size Single Owner Family Regional Large - 2nd Largest Installer in the Business Largest U.S How I found Friend referral Contacted Neighbor has They knocked Costco on my door them them about their system Roof **Solar Panels** 42 x 335W= 36 x 360W= 34 x 390W= 47 x 315W= 55 x? 13,260W 14,805W 14,070W 12,960W **Panel Mfgr** Hanwha Solaria JA Hanwha REC Central Micro Central Micro Inverter Central Solar Edge Solar Edge Enphase Solar Edge Enphase 10kw 10kw 10kw Annual KW-HR 20,414 kw-hr 17,956 kw-hr 16,502 kw-hr 17,129 kw-hr 17,502 kw-hr

Marc Stettner presented his rooftop solar panel project and excellent analysis of the various vendors.



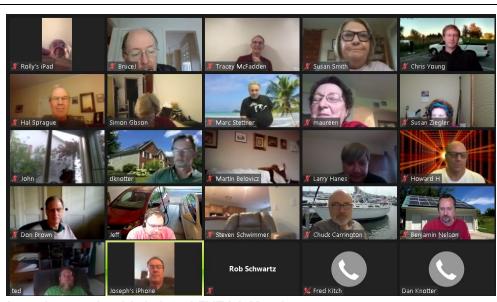
	Illum Solar	Copley Roofing - GAF system	Sun Badger	Vivint Solar	Su No
Annual KW-HR Usage	20,408 kw-hr	20,408 kw-hr	20,408 kw-hr	20,408 kw-hr	20,408 kw-hr
Annual KW-HR Production	17,956 kw-hr	16,502 kw-hr	17,129 kw-hr	17,502 kw-hr	20,414 kw-hr
Percent Offset	88%	81%	84%	86%	100%
Initial Solar System Cost	\$35,886	\$40,130	\$45,727	\$43,674	\$38,521
Tax Rebate @26% Solar+roof	\$11,930	\$13,033	\$14,489	\$10,261	\$12,615
SREC Credit	\$16,195	\$12,556	\$13,814	\$14,208*	Included
Final Solar System Cost	\$7,761	\$14,541	\$17,424	\$19,205	\$25,906
20 Year Production	359,120 kw-hr	330,040 kw-hr	342,000 kw-hr	350,040 kw-hr	408,280 kw-hr
Cost per KW-HR	2.1 Cents	4.4 Cents	5.1 Cents	5.5 Cents	6.3 Cents

SITE ASSESSMENT

42 Huahuey Qcells QPEAK DUO 335 W

1 Solaredge Inverter P340, 10kW





Attendees at the third virtual FVEAA Meeting

Hi Folks, If you haven't logged in to our new website already, please check your email for instructions and login as soon as you can! Please let me know if you have any questions. Thanks, ted



Website Registered User Statistics

Statistic	Value
Total Users	58
Users Never Logged In	25
% Active Users	56.9%
Ave. Days Since Last Visit	101.3 days

FVEAA On Facebook - Join Us! Like Us!

Ted Lowe

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 86 members as of 3/11/19. 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 supplements 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/

Grant Gerke started **FVEAA's Facebook Page**. Like Us!

https://www.facebook.com/FoxValleyElectricAutoAssociation

We currently have **51 active paid-up** members. Four members have already taken advantage of the multi-year renewals offered by the new website! **Please renew & recruit new folks in 2020!!!**



Count of Members by Type

Membership Type	Count	Paid Up
Business	2	1
Family	4	4
Individual	46	44
Lifetime	2	2
Totals	54	51

Other Statistics

Statistic	Value
% Paid Up	94.4%
Avg. Paid Up Days	264.5 days
% With Email	94.4%

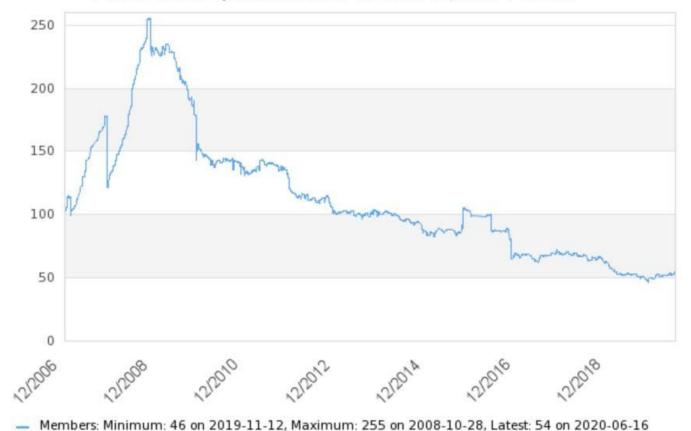
Encouraging Our Membership To Grow in 2020 and Some History

Ted Lowe

Happy 2020 EVeryone! 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 255 members in October 2008 when gas was nearing \$5 per gallon. We were also attending lots more invitational EVents with our converted EVs. The first Tesla Roadster was just coming into being. **Let's get out there and grow the FVEAA in 2020!!!**

FVEAA Paid Up Members as of June 16, 2020 7:02am



Monthly Treasurer Reports

Ted Lowe

As Treasurer, I am publishing a brief Treasurer's Report to our forums around the time our monthly newsletter is published.

i am publishing our various cash balances (Money Market, Checking, PayPal) to this location: FVEAA Committees > Finance > Treasurer Reports

This area of the forums can only be seen by FVEAA members. As an IL Non-Profit corporation, we have no requirement to publish our assets or financial statements publicly.

Feel free to contact me if you have any FVEAA financial matters to discuss.

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):

https://www.fveaa.org/renew

THANK YOU for your continued support of the FVEAA!

FVEAA Meeting

- The Zoom meeting conference call was started by Ted Lowe at approximately 6:45 p.m.
- Jeffrey Miller opened the meeting at 7:05 with introductions all around
- Rivian in downstate IL will be delayed selling their electric truck probably until early 2021 due to the pandemic
- Benjamin Nelson noted his solar array is 24 solar panels, rated at 260 watts each, paired with Enphase M215 micro-inverters.
- Joseph, Do you have any contacts to get us a tour of Rivian?

Community Solar

- Tracey McFadden presented on why he chose Community Solar to provide electricity for his house.
 - He then introduced Hal Sprague
- Hal Sprague is Community Solar Coordinator,
 - Hal presented on why community solar makes so much sense for many people
 - Reach him at hal@trajectoryenergy.com (847) 204-4170
 - Other links
 - o <u>www.clearwaycommunitysolar.com/lp/wilmette-solar/</u>

BREAK - we held a 10 minute break

Solar Project

- Marc Stettner presented "Solar Project Experience Sharing" and provided an excellent comparison of solar vendors
- Marc is a neighbor of Jeffrey Miller
- Thanks Marc for the excellent vendor comparisons and sharing your experience

The meeting adjourned at 9:55 p.m.

Membership Form Ted Lowe

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 ab	out 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

FVEAA Business Members

Best Hybrid Batteries

Michael Bradley 18600 IL-59

Shorewood, IL 60404 Phone: 708-669-9402

Email: besthybridbatteries@gmail.com

Web: www.besthybridbatteries.com



Best Hybrid Batteries is a technology company dedicated to providing a flexible, lower-cost approach to defective or worn out hybrid car batteries. Founded by an engineer, a professor, and a long-time hybrid enthusiast, we are committed to using the latest technology to bring costs down and get you safely back on the road. Our solutions were developed through years of testing, and our employees undergo extensive safety training. We fully back all of our work with one of the strongest warranties in our industry

EV Converters LLC

Rolly Waller 1401 Burr Oak Rd, Unit 208 C Hinsdale, IL 60521 Cell: 630-865-5744

Email: rollywaller@gmail.com



EVC will become a Franchisor (when the US government approves the conversion rebate) to appoint Franchisees (eg, service stations, oil change shops, transmission shops, independent mechanics, etc.) to convert Internal Combustion Engine (ICE) vehicles to electric vehicles (EV).