



April 2023 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 **April 21, 2023**
7:00 p.m. and will be IN-PERSON and on Zoom

Location:

102 S 2nd St, Geneva, IL 60134

MAP: [Unitarian Universalist Society of Geneva](#)

Note for those needing charging: Plugshare shows 1 Tesla HPWC Destination Charger, up to 64A, and 1 ClipperCreek J1772.EVSE about three blocks east of the Unitarian facility at 15 S River Lane, behind the Police Station - near Atwater's restaurant by the river.

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

Topic: FVEAA Monthly Meeting

Time: Fri April 21, 2023 6:45 PM CT (pre-meeting setup check), Meeting 7:00 PM

Join Zoom Meeting:

<https://us02web.zoom.us/j/95901481473?pwd=UnpJVUJOUmVPOFZqR013ZFpPbzM0UT09>

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

Contact us if you need the password for audio only calls.

Agenda

- 6:45 Doors Open
- 7:00 Introductions
- 7:40 University of Chicago SAE team on their eBaja Project
- 8:20 Break
- 8:30 Martin Belovicz on Additive Manufacturing (3D printing)

Greetings fellow EV enthusiasts,

Our January and February FVEAA meetings were well received. Attendees seemed to enjoy the new venue at the Unitarian Universalist church in Geneva for its central location and comfortable room. We will meet in the same room in March. The address is 102 South Second Street, Geneva IL 60134. Parking is on 2nd street or on James Street.

<<UPDATE on the Electric Vehicle Charging Act!! thanks to everyone who contacted their representatives. >>

<<Bruce Notes - in IL there is a new bill SB0040 that replaced HB3125 for residential charging. We need workplace charging however and that is something to press for.>>

Here is the Senate Bill and updated summary

<https://www.ilga.gov/legislation/billstatus.asp?DocNum=0040&GAID=17&GA=103&DocTypeID=SB&LegID=142908&SessionID=112>

*Electric Vehicle Charging Act
As Proposed on January 20, 2023*

SUMMARY

The Electric Vehicle Charging Act (IL SB0040) will require electric vehicle (EV) charging infrastructure in parking areas of new or renovated residential buildings. Local governments will be responsible for enforcing this act within development permits.

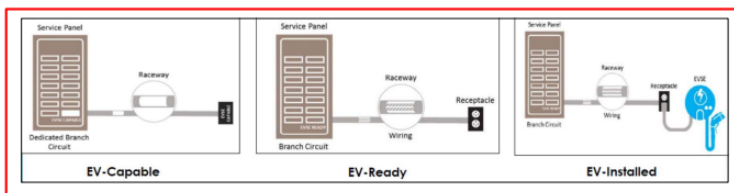
Affordable housing developments and renovations and large multi-family renovations have differing requirements. Provides the right to chargers for condominium owners and renters.

Development Type	EV Capable	EV Ready	EV Installed
Single Family	1		
Small Multi-Family Residential (2 to 4 units)	1 per unit		
Large Multi-Family Residential (5 units or more)			
1 - 6 parking spots		100%	
7 - 23 parking spots	100%	20%	
24 or more parking spots	100%	5 or more*	1 or more

* For each spot with EV Installed, EV Ready can be decreased by 2%.

DEFINITIONS

- **EV Capable:** Electric panel capacity with a dedicated branch circuit and a continuous raceway from the panel to the parking spot installed.
- **EV Ready:** Electric panel capacity and raceway with conduit to a junction box or 240-volt charging outlet installed at parking spot.
- **EV Installed:** Level 2 or 3 charging station installed at parking spot.



INFORMATION SOURCES

- <https://www.ilga.gov/legislation/103/SB/PDF/10300SB0040lv.pdf>
- <https://www.chargedfuture.com/ev-capable-ev-ready-and-ev-installed/>



Confluence Climate Consulting LLC (C³)

ConfluenceClimate@outlook.com

Global Change.
Local Action.

June Meeting

The June meeting will be on FRIDAY MORNING 9 AM at **Argonne National Laboratory**, make sure you clear your calendar. See Bruce's post below for instructions on how to attend. I remember going to this many years ago and how much fun it was. Make sure you register in advance and follow the instructions.

March Meeting

Thanks to Sydney Vaughn from MUSE Community + Design on her overview on the charging and installation programs. Hopefully we didn't overload her with ideas and suggestions. If you are interested in helping her on additional charging station siting considerations, in Cook County, contact her at Sydney@musecommunitydesign.com

A follow up note from Sydney:

"Sydney VanKuren from MUSE Community + Design is working with Cook County on a public EV charging station program in suburban communities. Up to 75 chargers (mostly Level 2, a few DC fast) will be installed in the coming years and the County wants community input on where they should be located. [Please fill out this survey](#) to have your ideas about charger locations included in the study! Additionally, if you are interested in participating in a focus group or upcoming event, please see the attached opportunities! Also, the project team is hoping to have an EV present at an event coming up on May 1 at South Suburban College. If any of you are interested in bringing your EV and talking with people about being an EV owner and letting people see "under the hood" of your vehicle, we would love to partner with you on that!"

Thanks to Bill Koehl for the very informative information about the CO2 pipelines being built across the central US ultimately leading to Central Illinois.

April Meeting

The University of Chicago SAE (Society of Automotive Engineers) eBaja Project, where they design an FSAE Electric rules-compliant powertrain for one of their old Baja off-roading vehicles. I am excited to hear from the UIC SAE group on their eBaja drivetrain project.

Martin Belovicz on additive manufacturing (3d printing), that has made its way into high volume car production. There are upsides, and downsides, tune in to hear them both.

IRS Guidance has been updated (again)

It appears that US Senator Manchin might be reading our newsletter, and he took issue with the implications of the language change on the IRS website. He threatened to sue the US Government to force them to implement the law as written, and they responded by implementing the law as written.

This site was updated on April 17th with the new tax credits. If you bought a vehicle before April 16th you can still go back and select that option on the webpage.

<https://fueleconomy.gov/feg/tax2023.shtml>

There is also a statement on the government sites to check with the dealers for the information on the tax credit. I don't like relying on the dealers to tell us what cars qualify for which value of rebate. I agree they should know, but I am not one to rely on dealers to tell me about IRS policy.

Articles I found interesting

<https://highways.dot.gov/newsroom/biden-harris-administration-announces-latest-steps-deliver-national-network-convenient>

JUNE 16, 2023 MEETING AT ARGONNE NATIONAL LABORATORY

Bruce Jones

Our Friday **JUNE 16th** Meeting will be a **morning 3 hour tour of Argonne National Lab.** **We will NOT be having an evening meeting!**

Put this on your calendar as it is a MORNING tour and we have a 20 person group limit at the moment. Aim to Arrive at 8:30 a.m. and tour is 9am – 12pm. **The tour starts promptly at 9 a.m.**

EV and Charging Research - Mike Duoba, who works at Argonne, hosted part of the tour in 2015 and is a former FVEAA member who will lead us on the custom half the tour with the EV, Battery and High Speed Charging areas. Specifically, Building 371 high bay with vehicle dynamometer for testing all kinds of vehicles especially EVs, and Building 300 with equipment for charging infrastructure development and standards work.

Then we'll tour another area of the Lab, the national facility for nuclear structure research, the **Argonne Tandem Linac Accelerator System (ATLAS)**, the world's first superconducting linear accelerator for heavy ions at energies in the vicinity of the Coulomb barrier.

Let Bruce Jones know you are attending and/or send an email to him at bjone35@aim.com so we can get an attendee list. **You must PRE-REGISTER and have an access badge mailed to you from Argonne prior to the visit.** Here are instructions from Argonne:

Thank you for your interest in touring Argonne National Laboratory! Argonne can host the Fox Valley Electric Auto Association members on Friday, June 16th, 2023, from 9:00 a.m. until 12:00 p.m. Please read this email in its entirety as it contains important information on your upcoming visit. We will be requesting an Argonne bus for transportation on-site as you will be arriving via personal vehicles. Note required tour attire: long pants and flat, closed-toed shoes; no sleeveless shirts. A group of 20 participants is anticipated.

Please have everyone in your group complete this [registration link](#) by Friday, May 19th, in order to receive a visitor pass for entry into the Lab.

1. All visitors, 16 and older, must present a state or federal photo I.D., such as a driver's license or passport to be issued a gate pass.
2. **REAL ID compliant identification** will be required for you to gain access to Argonne National Laboratory for individuals 18 years of age or older. For a list of acceptable identification please click <https://www.anl.gov/site-entry-requirements>
3. Visitors should register their name as it appears on their photo I.D.
4. There is an approval process for non-U.S. citizens, including legal permanent residents, that can take up to seven to ten business days. Copies of INS documents, such as permanent resident card or passport, visa, and any supporting documents, if applicable, can be uploaded directly in the visitor registration form.
5. Answer all mandatory questions and submit the form.

Everyone must prominently display their pass while on-site and all vehicles entering the site are subject to search.

DIRECTIONS

The tour guide will meet your group at 9:00 a.m. at the Argonne Information Center which is located off Northgate Road. We will start promptly at 9:00 a.m. so please provide ample time

when arriving at the Lab as we cannot guarantee a tour outside of the confirmed time.

The Laboratory is located at South Cass Avenue & Northgate Road, Lemont, Illinois - from I-55 take exit 273A (South Cass Avenue) to Northgate Road (main entrance); follow Northgate Road to the Argonne Information Center. Note: Northgate Road is approximately ¼ mile from I-55. (Best not to follow GPS once on Cass Avenue, as it usually takes people to our old entrance further south.)

Argonne's Code of Conduct sets expectations for everyone in the Argonne community. Please [click here](#) to review Argonne's Code of Conduct before your visit.

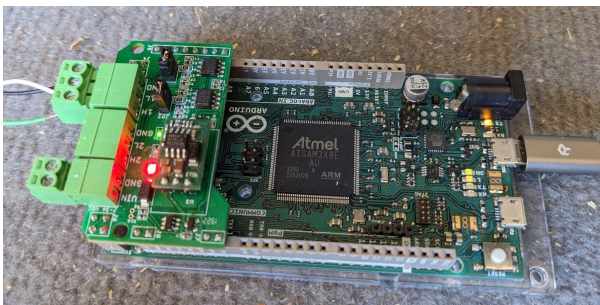
Gibson's Garage

Simon Gibson

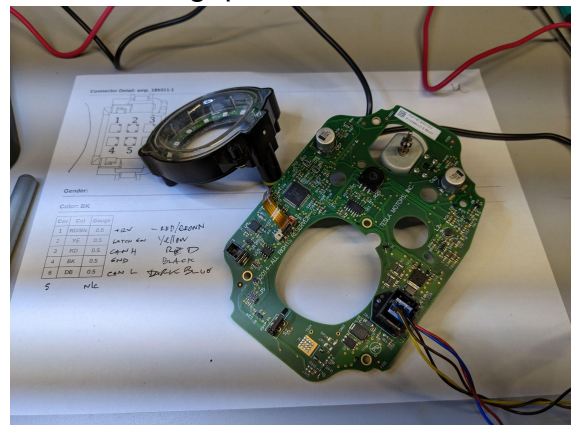
I usually start my day if I'm WFH, finishing my coffee and pursuing YouTube videos of everything EV that's of interest. Particularly the actual nitty gritty of enthusiast self repair. One YouTuber, Dala's EV Repair [62kWh isolation problem \[part 1\]](#) He describes that he has a problem with the 62kWh pack with cell voltage problem and poor isolation fault. So this is the point where we realize that purchasing second hand EVs it's very important that the battery and other major components be properly evaluated. In the case of the Nissan Leaf, using a tool such as Leaf Spy is very important. In Dala's teardown he discovers that one pack is the problem with isolation and indeed there is a dent in the battery shell. And, this is important, obvious shifting of the internal modules. This is probably one of the reasons insurance companies are quick to write off an EV due to the potential for a battery fire... The downside is the insurance is more expensive despite the EV overall safety ratings. The upside is more EVs become available for us as a source of spares and conversion projects. So inspecting a vehicle for dented battery packs is important. The analogy; when you're grocery shopping do you avoid the dented cans? Yes, the contents may have been compromised!

The CAN Bus journey continued:

The Arduino with dual CAN Connections.

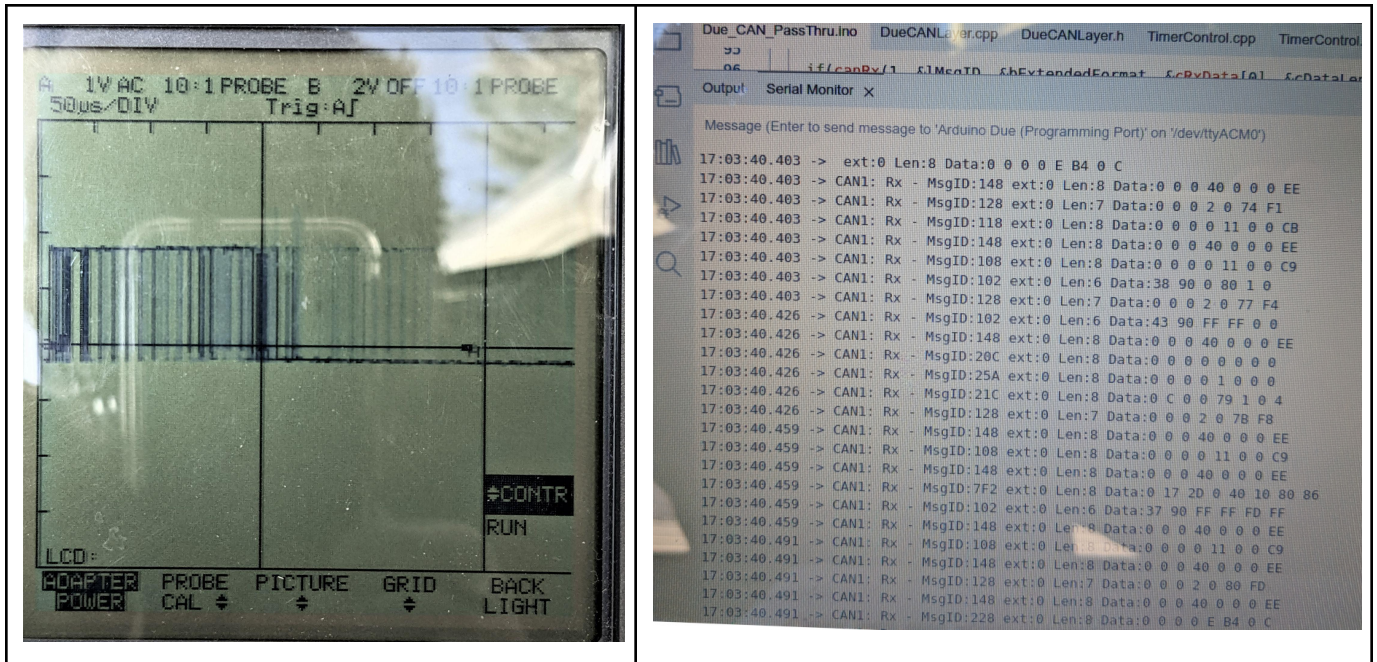


A Tesla Chargeport circuit board



Scope trace showing CAN Bus Signals

CAN Bus Traffic from an EV...



So this is a relatively simple task for someone to achieve. The addition of a scope may not be necessary if you have a decent multimeter you can measure the CAN Bus voltage as it swings between its asserted '0' state and '1' state resulting in a voltage that goes from 0V when there is no traffic to a value which will change. There are plenty of articles on how to start investigating CAN Bus!

Upcoming EVents - Spring 2023

Rich Hirschberg

EVENT 1:

Earth Day at Peck Farm Park - Geneva
Sat., April 22nd ---- Set up by 10 am
Open 11 am to 2 pm - ALL AGES WELCOME!
The event is FREE.

4038 Kaneville Rd., Geneva, IL 60134

Come Celebrate the Earth!

FVEAA Members: Please get people thinking about collecting items for recycling: textiles, shoes, #6 styrofoam, etc. will be collected that day.

ACTIVITIES:

RECYCLING OPPORTUNITIES: SHOES, COTTON CLOTHES, SMALL ELECTRONICS, HOLIDAY LIGHTS, TVs (\$25 OR \$35 DEPENDING ON TV SIZE)

food vendors, kid's activities & chalk art, nature crafts & demos.

Tree Planting - 50 TREES WILL BE PLANTED AT PECK FARM. ARE YOU INTERESTED IN PLANTING WITH US?

REGISTRATION REQUIRED - USE CODE 2611306-01

Questions?

VISIT GENEVAPARKS.ORG OR CALL 630-232-4542

EVENT 2:

Earth Day Green Fair - Aurora

Sat., April 29th, 9 am to 3 pm

Our Cost: FREE

Our Lady of Mercy Catholic Church, 701 S. Eola Rd., Aurora

Last year was big with many vendors, this year should be bigger.

They'd love to have us there with some member EVs

Call Tim Keefer for more info - 815.603.4089

If you can make it, please let me know so I can coordinate how much space our club needs.

EVENT 3:

The Elgin Earth Summit - Elgin

Sat., April 29th, 9 am to 1 pm

Our cost: FREE

Organized by the Elgin Sustainability Commission

Elgin Community College's Business & Event Center (Bldg E)

Many businesses & organizations attending.

Sustainability speakers (dining room) - 15 min talks

Kane Cty hosts an hour-long Community Listening Session for their Climate Action Plan

After the event, networking at the Grumpy Goat Tavern, 1:15 pm for lunch & drinks (for purchase)

As with the other events, if you can make it, please let me know so I can coordinate how much space our club needs.

EVENT 4:

11th Annual GreenFest - Aurora

Sat., May 13th, Open: 10 am to 4 pm. Set-up: tbd

Our cost: FREE

Prisco Community Center, 150 W. Illinois Ave., Aurora 60505

Sooo many activities

If you plan to exhibit your vehicle, you MUST register at www.GreenFest.com/exhibit

This way they know how many spaces we need.

www.AuroraGreenFest.com --- 630.605.9244 --- AuroraGreenFest@gmail.com

EVENT 5:

The 6th Annual Summer Celebration Car, Truck & Cycle Show

A fund-raising event for the local VFW Post 5151 and the Schaumburg Township Food Pantry

The Schaumburg Home Depot

Sat., July 22nd, 10:30 am to 3:30 pm

100 Barrington Rd., Schaumburg, IL

Bigger & better than last year (weather dependent)

5 food vendors, custom trophies, door prizes, silent auction, music, Home Depot vendors, contractors and charity partners

RAIN DATE: Sat., July 29th

Website: www.HomeDepotVehicleShow.weebly.com

EVENT 6:

Cary United Methodist Church Annual Car Show

Sat., July 29th, 9:30 am to 1:30 pm

500 First St., Cary, IL 60013

Local food vendors, games, family fun, judging, and awards

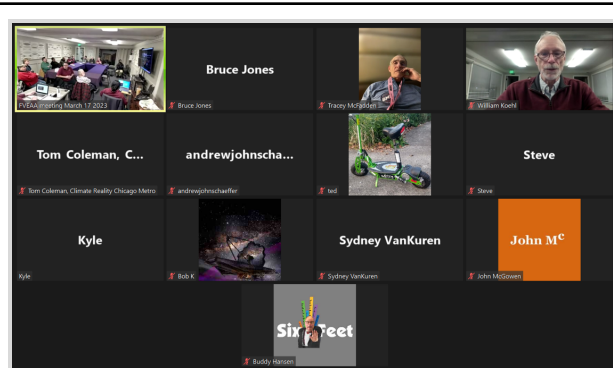
For more info, contact Bob Baker - 847.525.5348

Take care,
Rich Hirschberg
FVEAA Outreach Director

Bruce Jones

Photos of our Meeting Mar 17, 2023

FVEAA On-site attendees (below) and On-line attendees (right)



Cook County EV Education & Outreach

Sidney VanKuren

FVEAA Monthly Meeting

March 13, 2023



Sydney VanKuren with Muse, presented on planning for EV charging stations in Cook County. Looking for our input. Thanks Sydney!

Project Overview

Address areas with low/no electric vehicle (EV) charging access in suburban communities.

Obtain public feedback on where public EV stations should be prioritized.

Where do you see EV in your life?

As where you want, charge where you need.

Carbon Capture

Fox Valley Electric Auto Association
March 17, 2023

William Koehl

OUT OF CONTROL
The Deadly Impact of Coal Pollution

February 2008

SIERRA

Bill Koehl presented on Carbon Capture efforts and efforts by fossil fuel entities, corporations, government funding to install them ... quickly before regulations can be put in place.

Map of CO2 pipelines into Illinois

Regional Footprints for the Regional Carbon Sequestration Partnership (RCSP) Initiative

Welcome the FVEAA's new Charter Business Sponsor!

Ted Lowe

Say welcome to our new sponsor: **Chicago Area Clean Cities** (CACC)! CACC sponsored the north NDEW Event with the help of Rich Hirschberg and Samantha Bingham. Our website sponsor's page (<https://www.fveaa.org/sponsors>) has been updated as well as the sponsors listing in this newsletter. Thank you for your support and welcome aboard!

FVEAA business cards available!

Ted Lowe

See one of the officers to get some cards to hand out to people at various Events and daily life to promote EVs and our organization!

Fox Valley Electric Auto Association

PO Box 214
Wheaton, IL 60187-0214

630-260-0424
contactfveaa@fveaa.org

Free Yourself From The Pump^{fm}



Join Us and Discover How!

Check fveaa.org for
details about our
monthly meetings!



Login to our FVEAA website for access to lots of member-only tools!

Ted Lowe

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



FVEAA Web Report

as of 2023-04-18 04:58:11

Website Registered User Statistics

Statistic	Value
Total Users	102
Users Never Logged In	38
% Active Users	62.7%
Ave. Days Since Last Visit	567.5 days

FVEAA On Facebook - Join Us! Like Us!

Ted Lowe

The **FVEAA Facebook group** has 119 members as of 1/17/22! 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/>

Here is the **FVEAA's Facebook Page**. Like Us!

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

FVEAA On YouTube - Check out our videos!

Ted Lowe

The **Fox Valley Electric Auto Association** has a YouTube channel! Subscribe to us and check out our videos! We've had this channel for many years but we're going to start using it more to attract new members and promote EVs. Please let me know if you have some FVEAA-related videos to post.

https://www.youtube.com/channel/UCg_Pgp6q-HEuMICWMO2akPw

We currently have **71 active paid-up** members. Many members have taken advantage of the multi-year renewals offered by the new website! **Please renew & recruit new folks!!!**



FVEAA Membership Report

as of 2023-04-18 04:58:11

Count of Members by Type

Membership Type	Count	Paid Up
Business	1	1
Charter Business	1	1
Family	4	4
Individual	64	63
Lifetime	2	2
Totals	72	71

Other Statistics

Statistic	Value
% Paid Up	98.6%
Avg. Paid Up Days	371.2 days
% With Email	97.2%

Encouraging Our Membership To Grow and Some History

Ted Lowe

We are growing! 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 any time, 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!!!**

FVEAA Paid Up Members as of April 18, 2023 8:12pm



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!

- The FVEAA meeting started at 7:04 p.m.
- Jeff waited until the end of the meeting to hold Introductions

Charging Station Installations in Cook County - by Sydney VanKuren

- Sydney is a Senior associate at Muse Design in Chicago
- She is working with ComEd on charging station locations/ installations in Cook county, and looking for input from our group of EV experts on how to increase access to public EV charging.
- 75 charging stations are being planned currently using stimulus money. Cook county will pay for the installations over (up to) 5 years
- The stations will be run and be managed by 3rd party operators
- They are addressing areas with low, no EV charging access in suburban communities (apartments, townhouses, multifamily dwellings) and obtaining public feedback on where public EV stations should be prioritized.
- She is looking for input on where to install EVSE generally, and specifically. Our (non-shy) attendees provided input and recommendations
- If you are interested in helping her on additional charging station siting considerations in Cook County contact her at
- Sydney@musecommunitydesign.com
- Thanks Sydney!

Bill Koehl on Carbon Capture and the Prairie State Energy Campus

- Bill Koehl, a local expert on coal based electric generation, the Prairie State Energy Campus and environmental issues, presented on Carbon Capture.
- Coal-based power plants and other fossil fuel interests are pushing carbon capture as a green way to sustainability, but such efforts are thinly veiled efforts to just keep burning fossil fuels.
- Pipelines are being planned to push CO2 into the heart of Illinois to be pumped underground
- Carbon Capture projects are being funded by the government as they are not economically or fiscally viable
- CIEL the center for international and environmental law is good site for the truth.
- See the recreation of an 8" CO2 pipeline explosion here
- <http://www.dnv.com>
- Great presentation Bill!

Break

- The meeting convened in introductions, various sustainability, and EV conversations
- And ended after the discussion roundtable ended

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

FVEAA Charter Business Members

Chicago Area Clean Cities	 The logo for Chicago Area Clean Cities features a blue oval containing a stylized cityscape with skyscrapers and a sun. The words "CHICAGO AREA" are arched above the oval and "CLEAN CITIES" is arched below it.
Samantha Bingham 2 N LaSalle St #950 Chicago, IL 60602 Email: info@chicagocleancities.org Web: https://chicagocleancities.org	
<p>Chicago Area Clean Cities (CACC) is a 501(c)(3) not-for-profit working to promote the use of clean fuels for clean air in the Chicago area and throughout Illinois. Our coalition includes people from private business, academia, government, scientific research and energy and environmental services. Our main goal is to help with the adoption of cleaner transportation options.</p>	

FVEAA Business Members

EV Converters LLC	 The logo for EV Converters LLC features a stylized black and yellow lightning bolt on the left, a black electrical plug on the right, and the text "EV Converters LLC" in a bold, sans-serif font below them.
Rolly Waller 130 Windsor Park Dr, C121 Carol Stream, IL 60188 Cell: 630-865-5744 Email: rollywaller@gmail.com	
<p>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).</p>	