

# Electric Auto Association 2010 Annual Meeting



Slides for this meeting at:

<http://electricauto.org/files/AnnualMeeting/ea-2010.pdf>



February 27, 2010

[electricauto.org](http://electricauto.org)

Charging into the Future



1967

Over 43 Years of Progress

2010

# Welcome!

Ron Freund, EAA Chair

As a courtesy (we can hear you):

- **Mute** your phone with \*6
- **Un-mute** phone with #6



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# 2010 EAA Annual Meeting

- Overview & Intro
- Treasurer Report
- Election Results
- Publications Report
- Membership Report
- Infrastructure Report
- Plug-In Report
- Awards
- Open Member Comments
- Summary
- Board of Directors Mtg



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# 2009: Prelude to the Year of the Plug

- Steady membership, growing chapters, change in the air
  - Manufacturers begin to adopt EV technology for the future
  - Prototypes en masse, pre-production testing continues
  - Outreach by chapters and individuals with EVs
  - EAA, PlugInAmerica Workshop w/ 3<sup>rd</sup> parties on Charging Infrastructure results in agreement to collaborate



# 2009: A year of Progress

- Tesla ships all nearly 1000 Roadsters
- ACP delivers eBox, scores acceptance with BMW in the eMini
- Fisker Prototype unveils luxury PHEV
- Electrification Coalition, RMI and other efforts to prepare for public plugging in
- PlugInAmerica & CalCars continue successful outreach and advocacy



# 2009 - Year in Turmoil & Upheaval

- Major US mfg's declare bankruptcy, reorganize, trim down, pieces sold off
- Encouraging outcome means new projects with plugs



# 2009 - Year of Commitments

- More road-based prototype tests started  
BMW e-Mini widely accepted
- After years of waiting, major manufacturers will be offering consumers choice in showroom
- Firm commitments and dates for products to arrive in showrooms
  - \* GM Volt
  - \* Nissan Leaf



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# 2009 - Breakthrough Year

- Conversions still prosper: EVDL forum and EValbum.com
- Exciting battery news!  
Lithium power offers lower TCO than lead
- \$0.50 per watt-hour





# 2009 – Year of Speed

- 4<sup>th</sup> NEDRA event at Portland International Raceway
- Zombie does 11's, Killacycle 7's
- NEDRA Design News May issue
- 'Zilla production returns
- Jr . Dragsters permitted to try for records



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# 2009: EAA Milestones

- EAA Special Funds created for Tesla HPC opportunities in
  - Yosemite, LA-SF, LA-LV
- Brokerage account created for member stock donations
- Continued Advertisement: Home Power Magazine and termination
- First membership dues increase since 1998, with two options: print e-copy
- On-line Membership DB planned with special fund
- EAA members have driven over 11.5 million ZEV miles



# 2010: Looking Forward

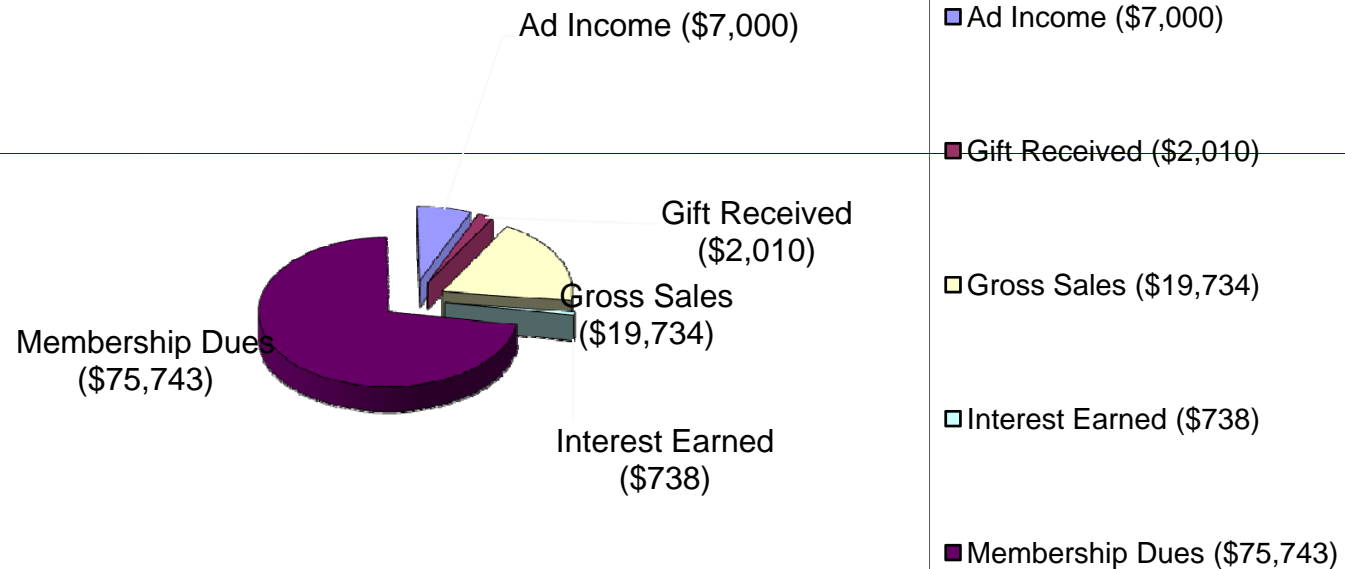
- GM's Chevy Volt rollout
- Nissan Leaf rollout
- New charging infrastructure buildup
- Electrification of transportation attracting general public
- On-line database testing to begin shortly to save resources



# Treasurer Report: Income

Lisa Ireland

**2009 EAA Income: \$105,225**

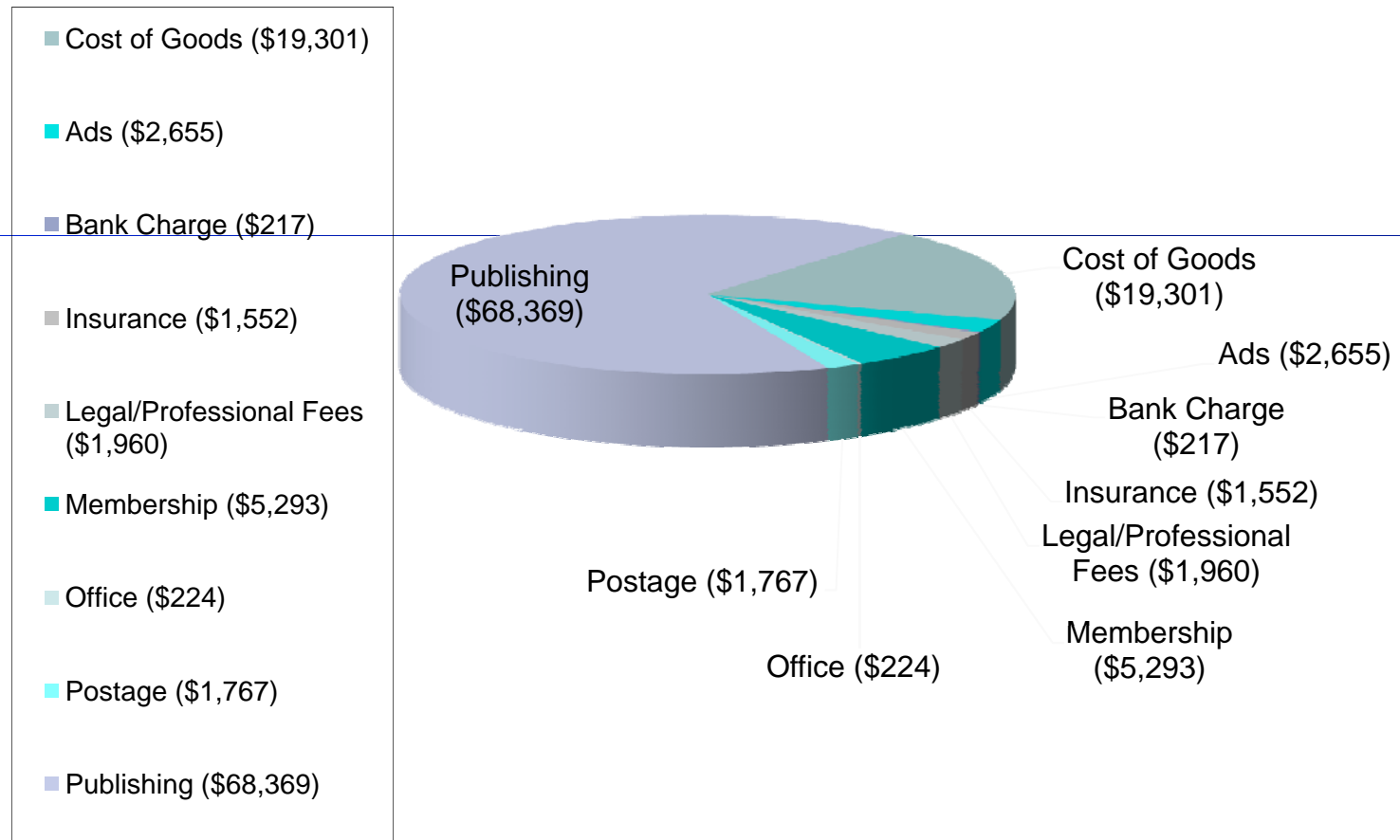


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# Treasurer Report: Expenses

Lisa Ireland

## 2009 EAA Expenses: \$101,338



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# Secretary Report

Dennis Brandenburg

- Election Results – Karen Jones
- Current EVents Newsletter – Ron Freund
- Membership Update – Will Beckett
- PIA Update – Marc Geller
- CalCars update – Felix Kramer
- Charging Infrastructure - Tom Dowling



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# Election Results

Karen Jones

## 2000+ ballots sent out, 434 returned (21%)

- EAA ELECTION RESULTS as of 2/8/08:
- 434 ballots received.
- 401 ballots supported the full slate.
- 33 ballots did not support the full slate.

## TALLY:

- 
- |                   |                      |     |
|-------------------|----------------------|-----|
| • Will Beckett    | Central Coast EAA    | 279 |
| • Ken Clayton     | EV Club of the South | 213 |
| • Ron Freund      | SJ EAA               | 367 |
| • Tom Sidle       | SVEAA                | 157 |
| • Doug Stansfield | NJEAA                | 335 |
| • Larry Tuttle    | MI EAA               | 306 |
- The following write-ins each received one vote:  
John M. Brendel (MI), John R. Brendel (NJ), Damon Thayer (CA)



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# 2010 EAA Board\*

## Returning:

- Jerry Asher
- **Will Beckett (re-elected)**
- Dennis Brandenburg
- Don Francis
- **Ron Freund (re-elected)**
- Marc Geller
- Lisa Blair Ireland
- Earl Killian
- Joseph Lado

\* Terms are three years

## Newly Elected:

- Doug Stansfield
- Larry Tuttle

## Stepping Down:

- Karen Jones
- Arthur Keller





# Election Comments

Karen Jones

- Generally very positive comments
- Members appreciate the newsletter
- Thank you particularly for all the cooperative efforts with other individuals & groups supporting plug-in cars
- Thank you for your advocacy and hard work!



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# 2009 EAA Board Appointees

- Jim Manetta, Webmaster
- Tom Dowling, Infrastructure
- Terry Wilson, Awards
- Daryl McMahan, Historian
- Robert Cooley, Electrathon

## Open Positions:

- CE Ad Manager
- Grant Writer
- Accounting Specialist



# CE Publications Report

Ron Freund

- **Expanded coverage – delivered 12 issues!**
- **Hit new record page count (impact felt)**
- **Print and e-copy option introduced**
- **Introduced Web-based reader option**
- **Free web access for older issues (pdf)**
- **Wish list: Create Index for CE Archives**



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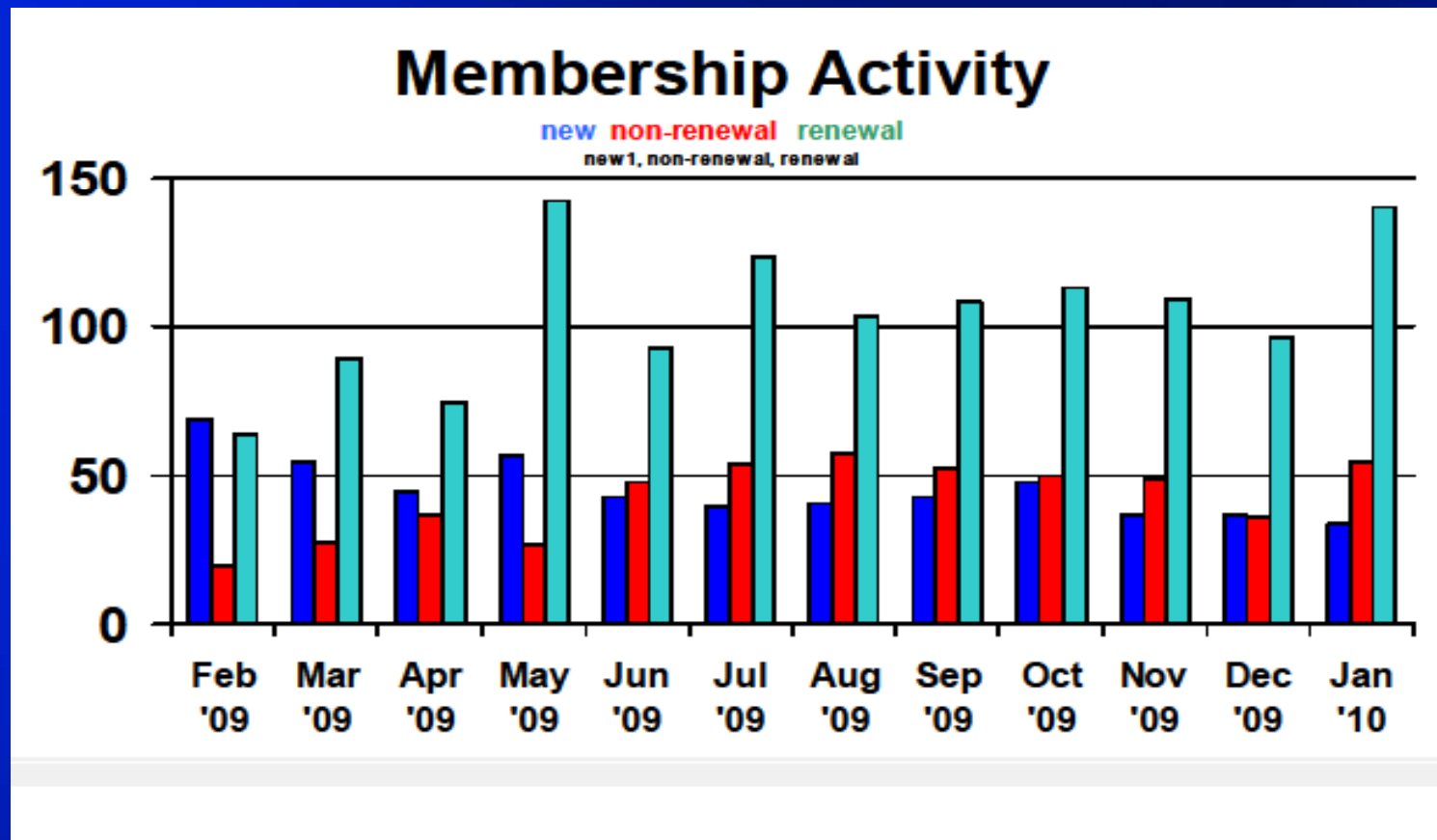
# Membership Report

Will Beckett

15 (+1) countries,  
five continents!

67 Chapters!  
(+10)

~2100 Members,  
in all 50 states!



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# Membership Fee Structure

Will Beckett

USA w/ online newsletter (e-copy)	\$35
USA w/ postal newsletter	\$45
Canada w/ online newsletter (e-copy)	\$35
Canada w/ postal newsletter	\$48
International w/ online newsletter (e-copy)	\$35
International w/ postal newsletter	\$52
Student w/ online newsletter (e-copy)	\$25
Student w/ postal newsletter	\$29
Senior w/ online newsletter (e-copy)	\$25
Senior w/ postal newsletter	\$29
Supporting Level I	\$120
Supporting Level II	\$240
Support for High Voltage	\$500
Support for any purpose	> \$500



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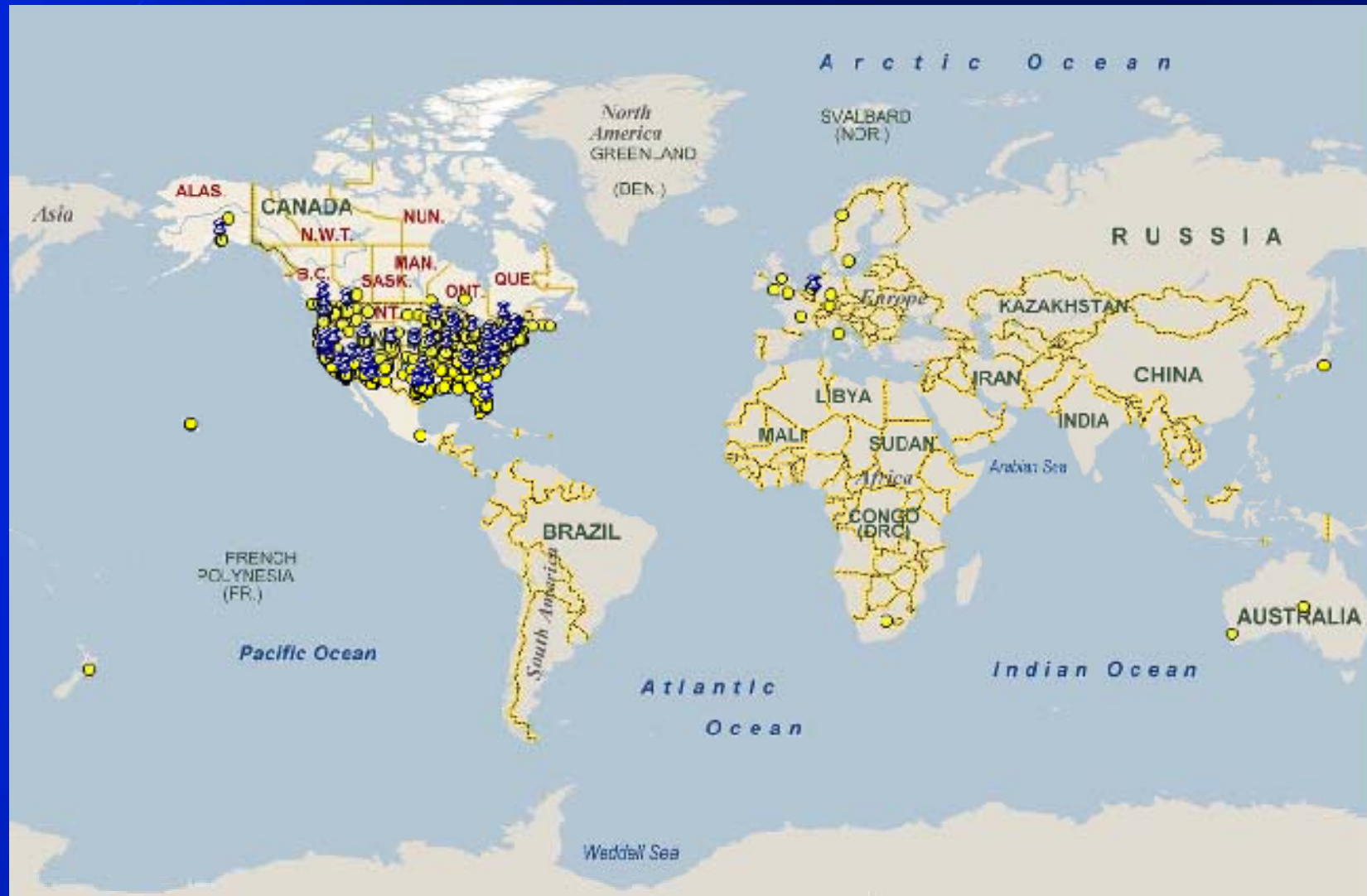
# Membership locations



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## Membership locations



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# Membership Report

Will Beckett

## Chapter Member Count

### Growth Year to Year

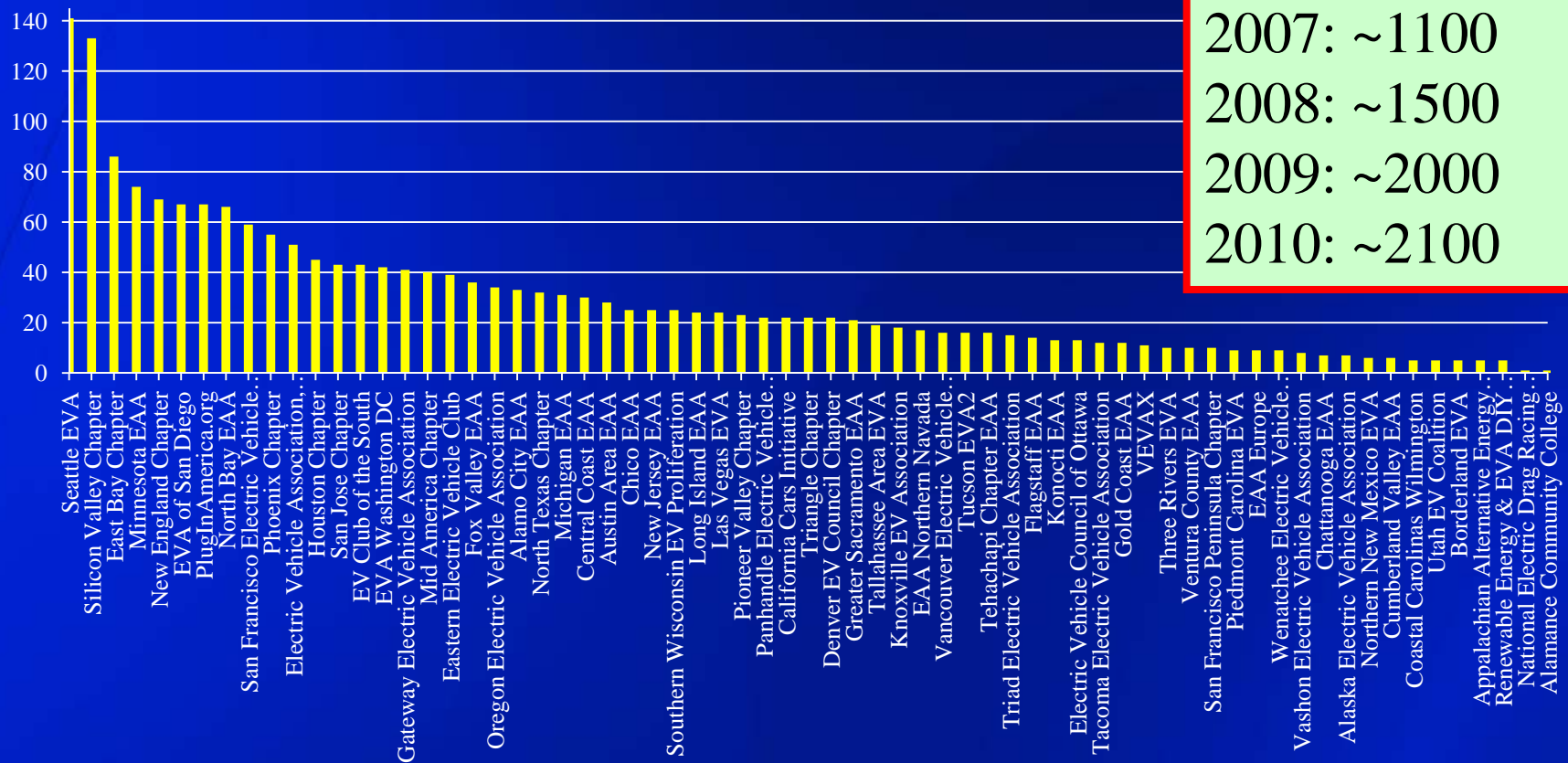
2006: ~870

2007: ~1100

2008: ~1500

2009: ~2000

2010: ~2100



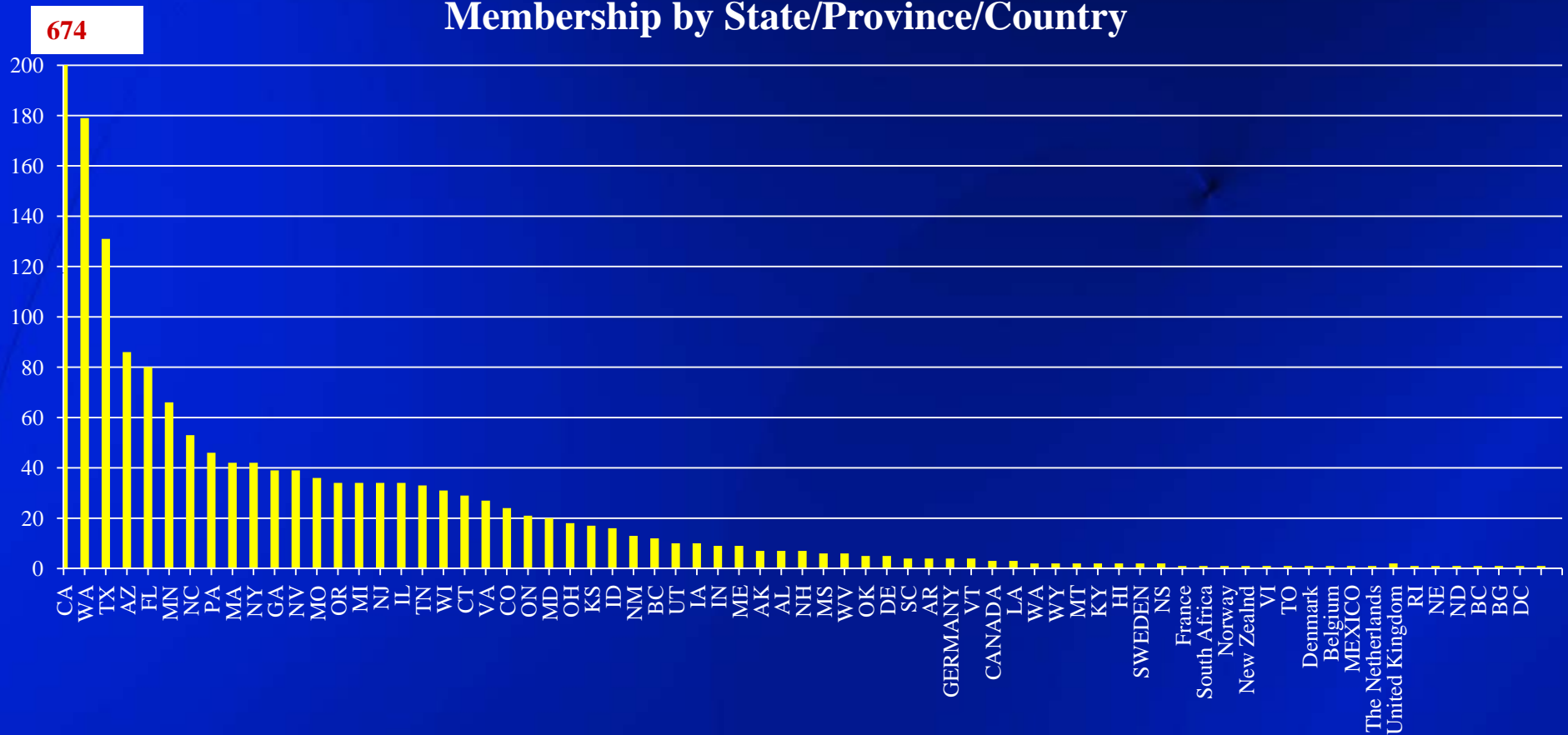
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# Membership Report

Will Beckett

## Membership by State/Province/Country



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# Break



## 5 minutes



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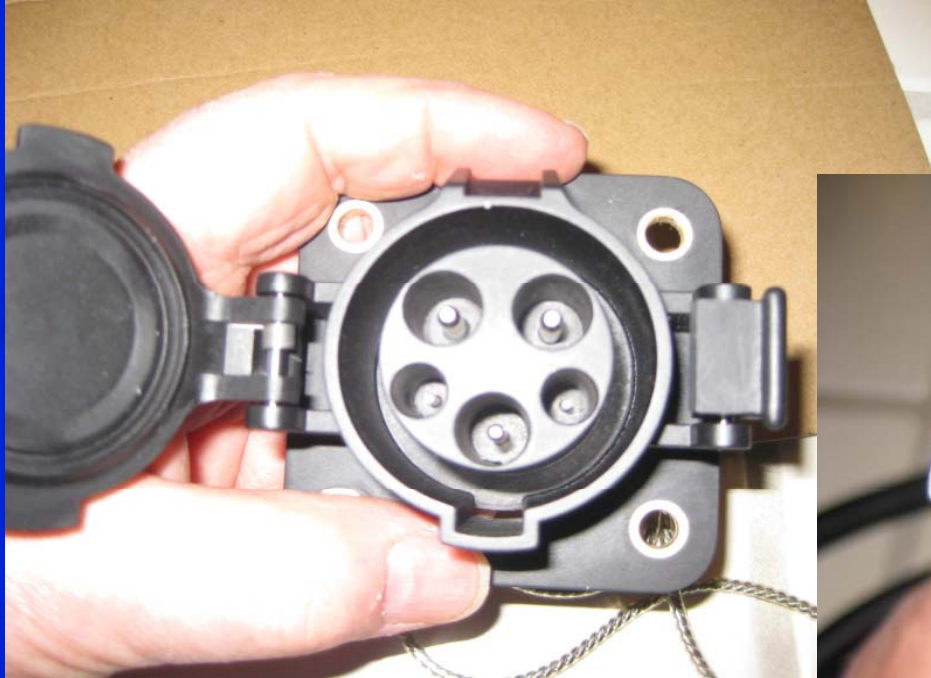
# Infrastructure Report

Tom Dowling



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# SAE J-1772™



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# NEMA 14-50 to SAE J-1772™ adapter prototypes: old and new



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# Infrastructure Report

Tom Dowling

- Lingering impression with charger site hosts that EVs are gone
- New infrastructure being created
- Maintenance becoming an issue (vandalism)
- Parts in short supply (prod. discontinued)
- New conflict arising: interoperability. EAA to convene a vendor workshop during Spring 2009 to bring together players.



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# Infrastructure Report

Tom Dowling

- Established and maintained relations with Tesla, Coulomb, Clipper Creek and others, including the Oregon Department of Transportation and Sacramento Municipal Utility District, to make sure that the EAA has a voice in charger specifications and deployment.
- Established a new charging site, inductive and conductive, at the West Custom House garage in Monterey, CA. EAA supplied the equipment from our used equipment inventory.
- Assisted Electronic Arts in establishing a new inductive and conductive charging site in Redwood City, California, at Electronic Arts. EAA located a used inductive charger and sold it to Electronic Arts.
- Repaired and replaced chargers at several public locations. Worked with utilities and others to effect repairs in several other public locations.
- Saved some locations from threatened removal by site owners, but lost the battle at some other locations.



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# EVChargerNews.com

Tom Dowling

- EVChargernews.com is not an EAA-sponsored or funded Web site. It's owned, operated, and funded by Tom Dowling, and not supported by any user fee, advertising, or any other type of sponsorship or revenue. Strictly a low-budget operation, with lots of input and assistance from the EV community.
- EVChargermaps.com is a companion site that uses Google maps to assist with locating chargers. Evchargermaps.com also hosts the comment system, which allows user comments and "I Was There" reports for each charging site.
- The comments and reports are more important than ever. Be sure to send in your comments every time you visit a charging station. (If you use a charging station often, we'll let you off with one comment per week.)
- When planning a trip, always check the comments for charging stations you may use. The comments are posted instantly, so they are the best source of latest condition information for a given charging site. Credible comments trump the database. If there is a conflict between the database status flags and the comments, go by the information in the comments.



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# EVChargerNews.com

Tom Dowling

- Comments can be posted from your iPhone, or from your Blackberry. One great thing to do while charging: send in your comments! (If you wait until you get to your destination, you are likely to forget.)
- “There's an App for that!” Search the Apple App Store for EV Charger Finder. Done in cooperation with evchargernews.com by Jeff Lander, a Mini-E driver, it uses the evchargernews database. In some ways, it's more powerful than the desktop version.
  - \* We intend to keep enhancing this App.
  - \* You can use this App to find locations.
  - \* It can link to EVChargermaps.com, where you can submit comments.
- Coulomb Technologies has also come out with an App. For theirs, search the App Store for ‘chargepoint’. Right now, all the charging stations shown are 120V Level 1 only. Their App covers only their charging stations. [www.evchargernews.com](http://www.evchargernews.com) intends to "cover the waterfront," including all types and brands of 208-240V charging stations, even including selected RV parks.
- If your chapter would like a demo of the charger apps at one of your meetings, contact me.



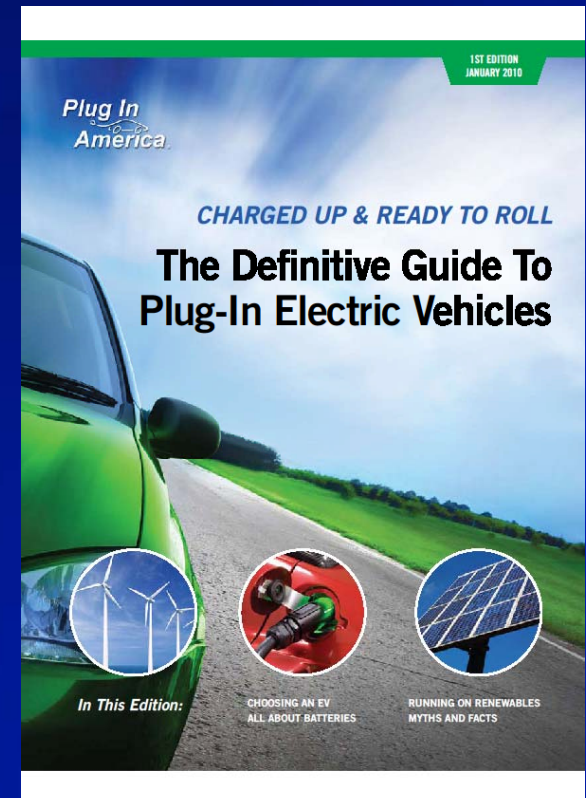
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# PlugIn America Report

Marc Geller

- Fastest growing, largest affiliated chapter in EAA, currently over 26,000 active supporters
- Successful fundraiser in August called ‘Plug-ins Pinots and Progress’ with Aptera, Tango, & multiple Tesla’s present.
- We have available today print copy of our Resource Guide:  
***CHARGED UP & READY TO ROLL* The Definitive Guide To Plug-In Electric Vehicles**



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# PlugInAmerica Report

Marc Geller

- Active participation
  - at conferences and events.
  - in Sacramento, Washington, DC meetings with CARB, CEC, CA state and Federal legislator staff and members.
- Monitoring of legislation in State Capitol to represent plug-in vehicle interests.
- Monitoring state of RAV4 EVs to ensure parts availability and Toyota service continuity
- PIA electronic newsletter and action alerts; website includes Podcasts and News Center



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# CalCars Report



Felix Kramer, Founder  
The California Cars Initiative  
[info@calcars.org](mailto:info@calcars.org)

- CalCars is an EAA affiliated organization
- Close coupling between two continues
- EAA formed a Special Interest Group (SIG) with website [www.EAA-PHEV.org](http://www.EAA-PHEV.org)
- His theme: 'Beyond New Plug-ins'



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# Beyond New Plug-Ins: Fixing Gas Guzzlers

For updated PDF of this  
presentation:  
[www.calcars.org/downloads](http://www.calcars.org/downloads)



2008: First preview of a new industry  
*Ali Emadi, Felix Kramer, Andy Grove, Andy Frank*

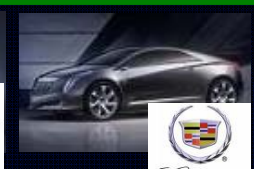


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20+ carmakers interested; races to be first; first timetables (*see CalCars Carmakers page summary*)



*Volt 2010; Converj next;  
Ampera; blended PHEV SUV?*



*2011 first  
sales to  
consumers*



*if & when:*

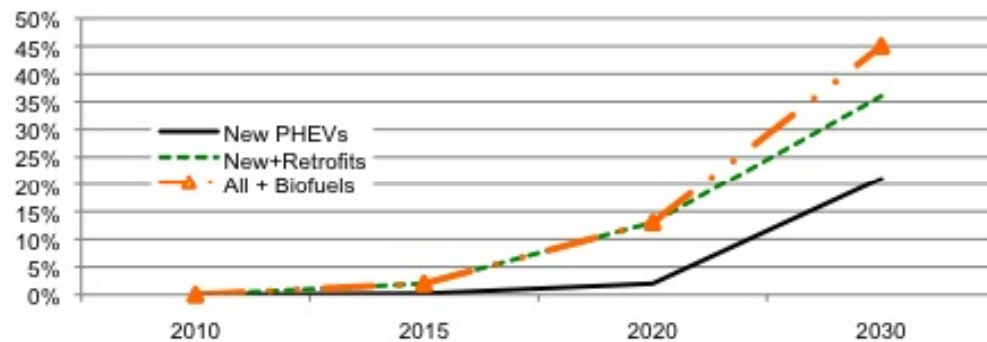


# For near- & mid-term impacts, need retrofits

Virtually all near-term oil consumption benefits come from retrofits for a decade.

Maximum long-term CO<sub>2</sub> reduction requires a combination of new vehicles, retrofits, and sustainable biofuels.

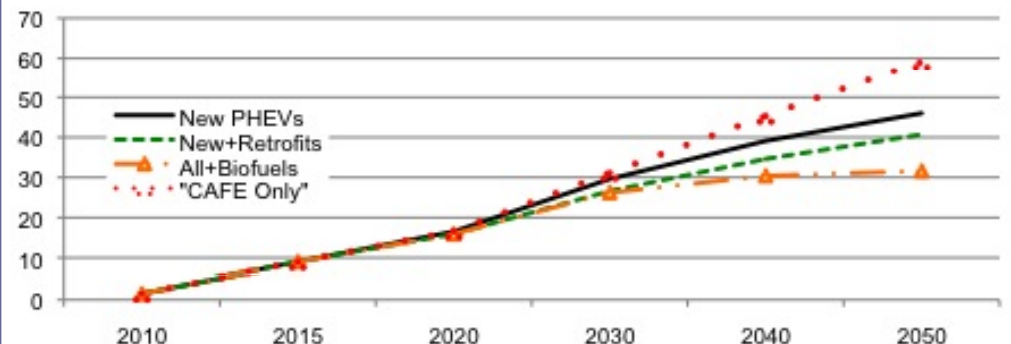
Oil Consumption Percent Reductions in U.S.



Source: White Paper, "*Cash For Clunkers Paves the Way to Retrofit Gas Guzzlers*" from CalCars Home Page.



Cumulative Gigatons of CO<sub>2</sub> Increase in U.S.



# Hybrid Electric Vehicle Technologies, Inc.



World's First Plug-in Hybrid Electric Pickup Truck, [hevt.com](http://hevt.com) Chicago IL

- Founder: IIT Prof. Ali Emadi  
leading power electronics expert
- 40 million trucks/buses in U.S; 2 million added annually
- F-150 prototype design scales to F-250, 350, school and transit buses
- Simple payback: 2-5 years

- Uniquely converting America's most popular pickup truck, the Ford F-150, to a plug-in hybrid; more than 15 months of testing
- Up to 30 miles all-electric range; up to 40% MPG improvement as a hybrid (beyond all-electric range)
- Up to 90 tons of CO2 savings in 12 years; V2G capability; increased low-speed torque for better towing
- ESTIMATED COST IN VOLUME PRODUCTION: \$15,000 OR LESS
- Seeking investment funding



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# Rapid Electric Vehicle Technologies, Inc.



[rapidelectricvehicles.com](http://rapidelectricvehicles.com)

Vancouver British Columbia

- Developing partnerships with Canadian dealers
- All-electric and PHEVs starting with Ford trucks and SUVs
- Contracts pending with public and private fleets
- Seeking investment funding



**REV 300ACX**  
Pure Electric

[Vehicle Details](#)

Max Speed: 100mph / 160 kmh  
Range: Up to 200 km's  
Acceleration: 0-100 <7 seconds  
Charge time: 3.5 hrs at 240V



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# Bright Automotive

[Brightautomotive.com](http://Brightautomotive.com)

Anderson, Indiana

- Interim demonstration of technologies in future Bright “IDEA”
- Platform is VW Transporter (world vehicle, not in US)
- Company beginning first prototype
- Future partnership with VW possible
- Rocky Mountain Inst. spinoff



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# LincVolt/HLine Conversions



[lincvolt.com](http://lincvolt.com)

Woodside, CA

[hlineconversion.com](http://hlineconversion.com)

Wichita, KS

- Combines demonstration project and development of new business line
- Neil Young: singer, advocate, technology experimenter; (current CD, “Fork in the Road,” about getting off gasoline); forthcoming documentary, “Neil Young Truck Show,” about converting his 1959 Lincoln Continental
- Jonathan Goodwin: ICE conversions, including Hummers and other vehicles



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# 2010 Awards

Terry Wilson

- Lifetime Achievement:
  - **Oliver Perry, EEVC**
  - **Pete Cleaveland to present**



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# The EAA Needs Your Help

- CE writing resources
  - Document your conversion
  - Unique problem sharing
  - Photos help tell the story
- Chapter activities
- **⇒ [board@eaaev.org](mailto:board@eaaev.org)**



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# Member Comments

- Open forum for member comments
  - Your name and chapter
  - Questions, suggestions
- Please limit your comments to 1 minute



# Summary & Close

Ron Freund

- Summary of comments from members
- Contacting us:  
E-mail addresses in newsletter CE, or  
Website (<http://electricauto.org>)



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# Thank You



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# 2010 Board of Directors Meeting

- Call to order
- New members introduced
  - Roles and responsibilities identified
- Review roster of appointees
- Next meeting scheduled for March 20, 2010, 8-9 am PDT
- Adjourn

