



## **ELECTRIC VEHICLE ASSOCIATION OF SAN DIEGO (EVAOSD)**

An affiliate of the ELECTRIC AUTO ASSOCIATION (EAA), 2031 Ladera Ct., Carlsbad CA 92009 Ph: 760.753.2949

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**Regular Meetings:** 4<sup>th</sup> Tuesday of every month (January thru November), at 7:00 pm,

**Location:** San Diego R.T.C. (Pearson Kia), at 4001 El Cajon Blvd. and Interstate 15

**Place:** In the Autorium

**Next Meeting:** Tuesday, January 22, 2008 @ 7 p.m. (the 4<sup>th</sup> Tuesday)

**Topic #1:** Hi-Torque Electric Motors by Keith VanSickle

**Topic #2:** Electric Dragin' Event [www.electricdragin.com](http://www.electricdragin.com) by EVAOSD Steering Committee

## **The President's Message**

Happy New Year for 2008, I trust that our December brake gave you a chance for family time and of course time to catch up on the project list of things to do. But before we charge into 2008 I would like to acknowledge the advancement that EVAOSD made during 2007. As a group we accomplished more than in any of the sixteen previous years that EVAOSD has been together. Later in this newsletter I will make an effort to list most of our milestones; for now I want to thank EVeryone for their contribution to our collective success. As a result of your work and contribution I was awarded the Green Innovation Award for our region by Assembly Member Lori Saldaña; it is an honor to be associated with you and contributing to a better world.

Since our last EVAOSD meeting in November we have been busy and I have seen many of you during our travels. It was great having your support during our participation in EVS23, Solar Week, San Diego Auto

Show and promoting the Electric Dragin'. We are almost ready for the first exclusive electric-drive event in the world and many are coming to our event. What better way to start 2008 than to have a car show with the cars actually moving around.

During our January EVAOSD meeting we will be discussing a Hi-Torque motor that was made especially for the Electric Dragin' event. Many of you may know about Hi-Torque and the vehicles that use these custom-built motors. We will also be discussing the final logistics for the Electric Dragin' event with T-shirts and Programs. If anyone would like for their vehicle to be transported to the event area let me know; Bob Van Gorder has offered to transport from the EVAOSD meeting to Ramona close to the track.

I look forward to seeing you at our meetings, perhaps in an EV. Be safe and FUEL good.

Bill Hammons, President EVAOSD

# The EV Grin

"EV'ers know about the grin that someone has just after driving an EV." Here are some notes for the San Diego EV Community.

## Calendar of Events:

1/22/08 EVAOSD Meeting Electric Dragin' Final Plans

1/25/08 Barona Drag Strip Move-In

1/26-27/08 Electric Dragin' EEvent  
[www.electricdragin.com](http://www.electricdragin.com)

1/31/08 Clean Car Show UCSD during nationwide environmental teach-in

2/14/08 Determining Your Carbon Footprint - CCSE

2/25 - 27/08 Faster Freight Cleaner Air; L.A.C.C.

3/2/08 "Out of Gas or All Charged Up?" EV Show Congregation Beth Israel from 8 to 1:30 p.m.

4/2/08 Greater San Diego Science & Engineering Fair Judging EV projects for awards.

4/20/08 San Diego EarthFair Clean Car Caravan & Exhibit

4/22/08 EV Car Show SDSU - Earth Day

5/11-14/08 Alternative Fuels & Vehicles Nat'l Conference & Expo "Clean Cities" Las Vegas



**Electric Dragin'** @



in behalf of the



**Membership** to EAA & EVAOSD just got better. YES, Everything is going up with higher cost except for membership to our group. EAA (which includes EVAOSD membership) has started a student/senior membership category for \$25 per year; that is a reduction from \$34 per year for many of us. And your EVAOSD is still held to the original fees of the 1990s except it includes membership benefits with SDRCCC (San Diego Regional Clean Cities Coalition). So join today and start saving while you are supporting EV.

**Note that checks or PayPal payments for EVAOSD need to be made out to EAA with memo indicating that funds are intended for EVAOSD. Our day-to-day function stays the same EAA is helping with our banking and non-profit status.**

To prepare this newsletter we use items that we find on the internet and to share the knowledge. In accordance with Title 17 U.S.C. Section 107, this material is distributed without profit to those who have expressed a prior interest in receiving the included information for research and educational purposes.

## **EVAOSD Gives Thanks to all that help us down the road...**

Turn by turn we appreciate your experience and support throughout the year as we drive into the future. Thanks to the EVAOSD Steering Committee for all of their hard work and planning. Thanks to Dave Stall, Jeff Tarlton and Bob Chabot for another 2 hr. Radio Show devoted to E-drive. We appreciate everyone that is helping us with and supporting the Electric Dragin'. Thank you for your contribution to our success so we can charge ahead.

Following our commitment to not reprinting news stories I need your reports of accomplishments for the next newsletter.

## 2007 San Diego EVAOSD Review:

During 2007 EVAOSD has conducted 11 monthly meetings with as many as 64 attendees each meeting is preceded with a monthly Newsletter that is sent out to more than three hundred individuals. During the year EVAOSD members have supported Clean Car Shows for the City of Poway, Mission San Luis Rey, UCSD, Altadena, Ramona, San Diego High School, Balboa Park Earth Fair and the Balboa Park (parade) Clean Car Caravan. Additionally EVAOSD partnered with the 2<sup>nd</sup> & 3<sup>rd</sup> (40 students each) summer two week EV Conversion Class titled C2EC2T; where an EV was actually built by students from as far away as Juarez, Mexico and New York. The EV Conversion Workshop turns conventional cars into NICE cars (No Internal Combustion Engine).

Through EVAOSD our region has vehicles with lithium batteries and a vehicle that holds the ¼ mile NEDRA record for Extreme Street Legal; we have plug-in hybrids new and some that are over eight years old with other PHEV that are bio-diesel. So much that is printed in the news for our future in say 2010 we have been working with for years and in some cases for over a decade. Yes we have the Chevy Volt concept (series hybrid with generator and electric-drive) and it has worked well for over eight years. We have a 1933 Rolls Royce that was driven until the parts gave out restoration was out of the question; so we turned it into an EV and it worked so well that we had to go back and upgrade the brakes.

Our public outreach is extensive from our meetings, interactions and as we drive our cars from day-to-day. We have participated in judging

## The San Diego EV Scene by Dave Cutter

Far enough away from the hustle, the bustle, and the smoggy ruins of Los Angeles there is a simmering pot of great EV ideas and creations that are changing the world as we know it today.

Sedately settled twixt the pearl blue Pacific Ocean and the forbidding deserts of southwest America, is where a quiet revolution is developing into something quite timely, full of life and purpose. Take San Diego County and its brave and wildly eccentric group of grass-roots EV enthusiasts, scientists, engineers, movers, shakers and candlestick makers who see opportunity and promise in the rapidly growing electric vehicle industry.

The Electric Vehicle Association of San Diego (EVAoSD) would be a good first point of reference for anyone wanting to marginalize their carbon footprint by converting a gas-powered car to run on pure electricity. Saving money on travel might be the chief interest most people would share in such an enterprise. As gas prices go up, interest in alternative ways and means will go up too. Monthly EVAoSD meetings have grown significantly in attendance numbers due in large part to public response to two very important documentary films - Who Killed the Electric Car and An Inconvenient

and recognizing students during the Grater San Diego Science & Engineering Fairs for the past 5 years. Additionally we have hosted two each two radio talk shows this year with calls from Florida, Oregon, Kansas, Arizona and the San Diego Region; we were recognized in the 12/17/07 San Diego Business Journal for the San Diego Auto Show Edition.

EVAOSD is a strong supporter of renewable energy including solar as many of our members have solar power supporting their EV.

Looking towards 2008 EVAOSD is planning the 1<sup>st</sup> Ever exclusive electric-drive racing event in the world the Electric Dragin' [www.electricdragin.com](http://www.electricdragin.com). This is a public awareness event to demonstrate that electric-drive is clean, fast, fun and available now. The Electric Dragin' consists of NEDRA sanctioned drag racing, SCCA sanctioned e-motocross, Electrathon (a marathon for EV), Show N' Shine (car show) and Vendors Row this event is held on behalf of San Diego Environmental Foundation.

During 2007 EVAOSD was involved with numerous other events supporting SDRFC meetings, SDG&E PHEV Conversions and Clean Transportation Program, Plug-In Conversions PHEV Conversions, EcoCenter Movie Nights, volunteer staffing for CCSE's Street Smart Transportation, provided booth during AltCar Expo in Santa Monica, San Diego Auto Show and took the initiative to provide chargers for out-of-town guest during CARB Hearings in San Diego.

Dave Cutter has another prospective on our EV scene and I will pass the pen to him.

Truth. During recent years Southern California has played a significantly huge part in helping to blaze the revolutionary trail forward to a new and exciting electric car future.

From AC Propulsion in San Dimas, L A County, to Aptera Motors in Carlsbad, CA, where I live, and from Hollywood (where I was born), to San Diego, where I am currently part of the steering committee for an industry first, the Electric Dragin Family EVent (scheduled for January 26-27, 2008), amazing things are taking place at a quick march pace.

And with good reason, I might add. Not everyone knows exactly what's going on with climate change but we all need to know the facts, and here they are:

Experts were stunned this past summer by the loss of Arctic sea ice. An area almost twice the size of Great Britain disappeared in a single week.

The Greenland ice cap is melting so fast that it is triggering minor earthquakes as pieces of ice weighing several billion tons break off the ice sheet and slide into the sea. The West Antarctic Ice Sheet is also melting faster than predicted.

If we cannot curb CO2 emissions quickly enough to save these two huge ice sheets, we are told that sea level will rise 39 feet, inundating many of the world's coastal cities and creating over 600 million rising-sea refugees.

There are real and pressing reasons why we all must do very specific things in order to begin to address worldwide climate change effectively. We need to learn to live with the new climate change reality that will only grow worse if we ignore the consequences and do nothing.

A global mobilization to save civilization seems like a good idea to me.

"We need to pool our technology, know how, technical skills, resources and finances. Many hands will do the job sooner." – Abran Quevedo San Diego EV conversion expert. Abran is a retired high school car shop teacher who has mobilized car conversion instruction courses and is currently seeking assistance in setting up a San Diego EV Conversion co-op garage where people could get help and more converting their cars from gas to electric.

This approach inspires me more than all the promises of one day soon because it makes lots of sense that everyone can learn to build an electric car, or make their own bio-diesel, or get solar panels for the home for that matter. If we add to those great ideas the concept of generating our own power at home and even grow our own crops in rewardingly productive raised-bed gardens. "The choice of vehicle that you drive has a greater effect on the environment than any other choice you make as a consumer" - Union of Concerned Scientists

### Burn Rubber, and NOT Gas, Baby.

I love retelling the story how I was first to be test-driven in the famous Tesla Roadster immediately after Arnold Schwarzenegger's hair-raising quarter mile streak along the tarmac of the Santa Monica Airport runway. Arnold (and sons) had flown in specially to experience the EV's amazing acceleration rush. Once the test-ride was over, the Governor got some laughs when he stepped out of the car grinning ear to ear, brushed his hair back into place, and parodied himself by saying, "I'll be back!" ...and off he went to do some more governing.

Meanwhile, I was signing a waiver where I think I agreed to donating my body parts to science if the car happened to come unstuck while having my mind bent at warp speed or some such. Anyway, now it was my turn to feel the force, The G-Force that is. I was about to find out what a super-fast electric sports car could really do full out over a quarter mile stretch. What does zero to 60mph in 4.2 seconds feel like, I wondered? I climbed down into the low slung sports car with no hesitation and a smile on my face, then cheekily inquired of the driver why my seat felt so wet?

"Is it?" says he with an astonished look on his face. I looked back at him with a knowing smile waiting for the penny to drop. As his face lit up and he realized I was making a joke we both had a good laugh and then prepared for takeoff down the quarter-mile airport runway marked by orange and white safety cones. A few nervous hiccups and I think I'm A OKay!

The driver tells me to buckle up my racing-harness and adds by the way that I can change the radio station if I want different music. I'd already decided a long time before that 'accordion music' was truly not my favorite kind of music and

an oxymoron after all. So just as I'm gamely reaching forward to change the channel, the driver flashes me this wild-eyed look of sick evil madness as he stomps on the 'electrolizer' and off we jet in that little roadster at such a speed I think maybe now I shouldn't have made such light fun at the governor's mishap, you know, for fear of maybe having a moment of my own if I wasn't careful.

I gripped on hard as I watched the road being eaten up beneath us at a frightful burst of high-velocity acceleration that makes me wonder for one split second, are we gonna make it? And are those my fingernail prints embedded on the dashboard? The G-force kept me firmly in my seat which made me and the driver laugh even more before making the reverse trip!

Oh boy, that was fun! (No wonder Tesla successfully took nearly 200 orders that night, at \$80K - \$100K a pop). The Tesla Roadster is unquestionably going to be one of the fastest cars money can buy. You could easily tell by the EV Grins on faces and by the blown back hairstyles who had taken their test ride and hadn't got rid of the grin yet. I decided I had to have one, some how, some way. But where or where does one get the one hundred grand?

I cannot leave Tesla Motors without remarking specifically about their talented team of young visionaries, leaders, engineers and creative designers, a tremendous source of inspiration to me personally and others as well. Tesla Motors is doing something quite extraordinary, positive, and in so doing, are leading the way forward to a more energy-efficient future. Elon Musk, and Richard Eberhard's vision for Tesla has been to design and build the very best electric roadster (car) possible while competing head on with Big Auto as a fully qualified competitor and rival.

'V' is for Vectrix

Village Energy's EV Rider reports from Santa Monica (11.13.07)

Take California's sun-soaked Santa Monica Pier, mix generous amounts of fresh air, blue sky, beautiful babes and balmy beach breezes, and you my friend have discovered the perfect place to test ride the all-electric Vectrix Maxi-Scooter.

The Vectrix Zero Emission Vehicle (ZEV) resembles a motorcycle more than a scooter; however the similarities end there. Changing the standard for electric travel, the Vectrix ZEV is a highway legal, zero-emissions luxury vehicle with a built-in rechargeable li-ion battery that recharge from any 110 Volt socket. The scooter's sleek, sporty design is not only attractive to the green set, but is a money-saving means of travel for anyone seeking a practical, smart, fuel efficient way to zip around town.

Vectrix is the first ZEV to offer performance and style along with a clean, efficient, electric motor. It was designed to provide reliable and affordable transportation for commuting and recreational needs, help relieve traffic congestion and pollution, and mitigate parking hassles and chronic traffic congestion. The patented DAaRT regenerative deceleration system feature enables acceleration and braking to be controlled by one hand using a bidirectional throttle, resulting in recovered energy and an extended battery life. The scooter reaches a top speed of 62 MPH using no gears, or clutch, and can go in reverse from a standing start.

Some interested spectators stopped by to watch the Vectrix going through its silent paces and wanted to know more. We list here some clear advantages for Vectrix owners and potential customers:

Electric vehicles do not pollute

With a scooter you can reduce travel time by as much as 20% to 45% compared to a car.

Maintenance costs are lower for a scooter than for a car.

Driving a scooter give a sense of freedom.

A scooter can be as much as 50% smaller than a car while moving and while parked.

Scooters are a practical and economical way to avoid traffic jams.

Watch a video preview. <http://www.myvectrix.com/vectrixexperience/VectrixExperience.swf>

Vectrix scooters are now available in California from British Motor Cars. A Santa Monica location is opening soon. Stay tuned for upcoming celebrity endorsements and events. Please go to [www.vectrix.com](http://www.vectrix.com) for more info.

The Vectrix ZEV retails for \$11,000.

\*All photos accompanying this story by David Cutter of Village Energy <http://www.pleiades-enterprises.com/>.

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