ELECTRIC VEHICLE ASSOCIATION OF SAN DIEGO (EVAOSD)

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Regular Meetings: **4th Tuesday of every month (January thru November), at 7:00 pm,**
Location: **San Diego Regional Transportation Center, at the corner of I-15 and El Cajon Blvd.**
Place: **In the Autotorium**
Next Meeting: **Tuesday, October 26, 2004 @ 7 p.m.**
1st Subject: **SUV development at SDSU as a part of Challenge-X www.challengex.org**
1st Speaker: **Dr. Jim Burns, Associate Professor of Mechanical Engineering, SDSU**
2nd Subject: **CA Fuel Cell Partnership Road Rally in San Diego**
2nd Speaker: **Kevin Taylor presenting a video.**

The President's Message

Our September meeting was well attended by 29 individuals. We had a full program with two presentations. Mitchell Campbell gave us an interesting view of the San Diego Trolley System from the past and well into the future. Then (thanks to Brad Waddell), we were able to view a new documentary titled "End of Suburbia". This film discusses lower fuel supplies verses a higher demand and the associated implications. More information can be found at www.endofsuburbia.com. This film is being shown around the world and will be shown again at the RTC at 7 pm on Wednesday, October 20, 2004. Kevin Taylor was able to handle our video requirements and set the equipment back to the ready for the next day.

Actually there are several other EVents going on this week that our members might be interested in attending. Friday, October 22, @ 10 am San Diego Regional Clean Fuels Coalition is having their quarterly meeting. Then during the weekend there are two EVents. EarthWorks (sponsors of the Earth Fair at Balboa Park), is having their GreenBuilt Tour of environmental friendly homes and business in our area. www.EarthDayWeb.org for information. And in L.A. this weekend there is another opportunity to see and drive the 2005 Ford Escape (the 1st SUV) hybrid vehicle. Call 1-800-647-7268 for more information.

For our October meeting we will again have two meetings in one. We are honored to have Dr. Jim Burns, Associate Professor of Mechanical Engineering, associates and students from SDSU to discuss their participation in a national competition sponsored by GM to develop the SUV of the future as their part of the Challenge-X. Also Kevin Taylor was able to film some video during the California Fuel Cell Partnership Road Rally that was in San Diego on September 19. 2004. We did not have time to show this video during our September meeting, so we are going to show the video during our October meeting.

I look forward to seeing you at our meeting on Tuesday, October 26, 2004 @ 7p.m. The meeting will be at the RTC (Regional Transportation Center), in the Autotorium located on the southeast corner of Interstate 15 & El Cajon Blvd.

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

10/20 "End of Suburbia" 7 pm @ RTC

10/22 SDRCFC Meeting Miramar College 10-1 p.

10/23 GreenBuilt Tour San Diego, CA

10/23 Escape Hybrid Tour; L.A., CA

10/26 EVAoSD Meeting SDSU Challenge-X

11/11 San Diego City Hearing on Segway use.

11/20-21 Georgia Rally. Jefferson, Georgia

11/23 EVAoSD Meeting Final meeting for 2004

Ford Escape Hybrid Experience Tour is making its way to Los Angeles, CA. This is your exclusive opportunity to drive the all-new 2005 Ford Escape Hybrid. Due to strong demand, we are moving to a **new venue in the Los Angeles, CA area** and would like you to join us!

City: Los Angeles , CA
Venue: The Grove at Calamigos Ranch
327 South Latigo Canyon
Malibu, CA 90265
Date: Saturday, October 23, 2004
Time: 8:00 a.m. to 6:00 p.m.

www.fordinnovationdrive.com/escapehybrid or call the Ford Escape Hybrid Experience Headquarters at 1-800-647-7268.

GreenBuilt Tour

October 23, 2004 EarthWorks will present its fourth annual GreenBuilt Tour a self-guided tour of 13 homes and businesses in San Diego County that feature sustainable building practices. These structures show that energy & efficient design & construction are the right way to build. Sites on the tour will include new construction as well as rebuilds and retrofits. EarthDayWeb.org or call 858-272-7370

"End of Suburbia"

Wednesday, October 20th 7:00pm at the RTC.The Documentary "End of Suburbia" will be screened. FREE - website for preview www.endofsuburbia.com. Film at 7:00pm

San Diego Regional Clean Fuels Coalition Meeting 10/22

Friday, October 22, 2004, 10 am. – 1 pm. At Miramar College, Room I 101-A/B. The meeting will contain four subjects: CA H2 Hwy; Canadus Corp.; SDRCFC Fuel Economy Program; and Coalition Board and Program Opportunities. These programs are attended by several of our EVAoSD members.

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Taking Turns '- - -,_ _ _ Messages from our members . . .

Paul Worlie reports… Legislative Alert on Segway Human Transporter

At our September 2003 meeting, many of you had a chance to test drive one of the newest electric vehicles in town, the Segway Human Transporter (HT). At the meeting, Segway HT owners and representatives showed us their self-balancing, two wheeled electric vehicles and discussed the social and economic benefits of this amazing new technology.

On November 11, the City of San Diego's Land Use and Housing Committee (LU&H) is holding a hearing to discuss and vote on legislation regarding the Segway HT. Some local groups are calling for an outright ban. If you would like your voice heard on the future of this innovative electric vehicle, please e-mail, write or call the LU&H members or your councilmember. Scott Peters is the LU&H Chair, Ralph Inzunza the Vice Chair. Also on LU&H are Michael Zucchet and Donna Frye. For contact information on City Council members, go to: http://www.sandiego.gov/city-council/

Larry Emerson reports… Global Warming Takes Toll in Alaska

Debate continues in the lower 48 states, but global warming is a fact of life to Inupiaq Eskimos on the coast of Alaska, reports Daily Grist. According to Time Magazine, the annual mean air temperature in Alaska has risen 4 to 5 degrees Fahrenheit in the last 30 years, the warm season now starts earlier and finishes later, and Arctic Ocean ice has shrunk 5 to 10 percent, making ice fishing more difficult, among other problems. In some locations, the coastline is disappearing, with some villages losing up to 300 feet. Many villages are facing the ultimate decision: "Is it practical to stand and fight our Mother Ocean? Or do we surrender and move?" asks Edith Vorderstrasse, mayor of Barrow, Alaska. A U.S. Army Corps of Engineers study estimated that relocating one small village of 380 people, Kivalina, would cost $100 million to $400 million -- at the top end, more than $1 million a head. If that sounds forbidding, ponder for a moment the cost of relocating, say, San Francisco. -

Cal Governor Vetoes Port Smog Bill

California Governor Arnold Schwarzenegger on Wednesday (9/29/04), vetoed a bill that would have forced the ports of Los Angeles and Long Beach to curb air pollution, reports The Los Angeles Times. The move angered environmentalists and residents who say the health of surrounding communities was being threatened by pollution from ships, trucks, trains and wharf equipment. The bill would have required the ports to keep air pollution at or below 2004 levels, a tall order in the fast-growing Los Angeles-Long Beach port complex, the largest air polluter in Southern California. John McLaurin, president of the Pacific Merchant Shipping Assn., welcomed the veto, calling the bill "clearly well-intended" but "vague in how it was to be implemented and flawed in its construction." Environmentalists accused the governor of turning his back on the cause of clean air. "I think he had a choice between clean air and big business," said Bill Magavern, a senior lobbyist for the Sierra Club. "And he chose big business. The air in the L.A. and Long Beach regions is never going to be clean unless we get a handle on port emissions." The Los Angeles-Long Beach ports account for 24% of diesel emissions in the region, and cargo moving through the facilities is expected to quadruple by 2025. Complaints from residents prompted Long Beach port commissioners Wednesday to rethink plans for expanding Pier J, citing health concerns.

Brad Waddell reports . . . New EV Concept Cars by AC Propulsion

http://www.evworld.com/view.cfm?section=communique&newsid=6638

Volvo, Venturi, Correges Design and an unnamed California manufacturer all are using AC Propulsion electric drives.

Last September, in Sonoma, California, AC Propulsion's tzero electric sports car earned the highest overall score at the 2003 Michelin Challenge Bibendum. The tzero beat every other car entered including hybrids, fuel cell vehicles and other electrics. Based on that performance, four companies developed plans for electric vehicles designed around AC Propulsion electric drive technology and Li Ion batteries. Now one year later, three of those companies are unveiling their all-electric creations.

Volvo and its California Monitoring and Concept Center have developed an EV concept and entered it in this year's Michelin Challenge Bibendum in Shanghai, China. Very much a Volvo in appearance, the Volvo EV concept carries an underfloor Li Ion battery to power an AC Propulsion drive system in a stylish, efficient, and lightweight package. Built and tested in California, the Volvo EV will make its world debut in Shanghai.

Monaco-based Venturi Automobiles introduced the Venturi Fetish concept at the Paris Motor Show 2002. This year at Paris Motor Show 2004, the Fetish is back as a fully functional high-performance, sports 2-seater prototype. Venturi marks its 20th anniversary of automobile production with a nod to the future. The Fetish is electric, powered by AC Propulsion.

Courreges Design of Paris had a good run with its electric bubble car in the Bibendum last year. Stylish, well-driven, and fundamentally sound, it made a big impression but suffered from lack of power.

Madame Courreges noted the tzero's performance and took bold action.

She ordered a complete tzero drive and battery system from AC Propulsion. She didn't put it in a tzero though, and it's not in the bubble car either. It's hard to describe. You'll have to see it in action in Shanghai at the Michelin Challenge Bibendum.

Each of these three cars reveals a different concept and style. All of them offer a vision of the future where cars run on electricity drawn straight from the grid, stored in lightweight, efficient, mass-produced Li Ion batteries, and delivered smoothly and efficiently to the drive wheels by AC Propulsion drive systems.

You may wonder about the fourth company mentioned above. It's too soon to give details but imagine a company that wraps Silicon Valley entrepreneurship and British racing heritage around AC Propulsion technology and plans to take the delightful result it to market. Stay tuned.

A year after its success in Sonoma, the first tzero continues to rack up miles – 75,000 total miles, 15,000 miles on the Li Ion battery installed in August, 2003. The second and third tzeros continue to make their owners happy. The tzero has made its case – EVs can be powerful, fun, and efficient – but progress marches on. These new vehicle concepts will supercede the tzero. Still there is one left. A fourth chassis awaits completion for an enthusiast who wants to own the last tzero.

Remember, electric vehicles equals transportation without petroleum.

Electric Cars Make Strong Showing at Sixth Michelin Challenge Bibendum

Source: Michelin
[Oct 14, 2004]

Fifty percent of competing vehicles were electric drive with majority of these powered by lithium battery technology, demonstrating 300 km ranges.

Out of 150 vehicles presented at Challenge Bibendum 2004, 74 competed, more than 50% of which were electric vehicles (battery- or fuel cell-powered) and a significant number of internal combustion engines using biofuels: 38 cars, 20 two-wheel vehicles, 1 truck and 15 buses.

China was strongly represented with 43 vehicles enrolled, including 20 two-wheel vehicles and 15 buses.

Vehicle performance was assessed on the basis of the following criteria and tests: acceleration, braking, slalom, rally, noise, fuel efficiency, local pollution, CO_2emissions, autonomy, crash tests (Please refer to the detailed table in annex).

Average energy consumption was less than 5 liters per 100 km (or equivalent) for cars, with some vehicles achieving 3 liters/100 km. Diesel was highly competitive in this field, just like diesel hybrid, while very good results were also recorded for gasoline-powered hybrids. In other words, what we are witnessing here is fuel efficiency convergence for the different technologies.

Meanwhile, electric vehicles continue to post remarkable progress notably on the back of lithium-ion batteries that deliver range in excess of 300 km.

The carmakers who attended Challenge Bibendum 2004 also showed they could optimize conventional engines as well as propose realistic alternatives. Most fuel cell-powered vehicles presented this year for example post significant progress in terms of performance, reliability and integration of technologies.

With respect to local pollution, the internal combustion engines achieved further substantial progress. It is worth noting that one gasoline vehicle and one 4X4 hybrid SUV achieved pollution emissions that are so tiny they are almost unquantifiable. Another strong message that came out of this sixth Challenge Bibendum was that three vehicles targeted at the Chinese market meet Euro 4 emission standards, which gives them a key competitive advantage at a time when the Beijing government is about to apply Euro 3 standards.

When taking a closer view at CO_2 emissions, overall performance data based on the well-to-tire cycle* (that takes into account the CO_2 emissions resulting from the production of the energy used), show that biofuels score particularly well. Turning to hydrogen and electricity, performance levels depend on the mode of energy production.

Noise was generally lower and silence is, in fact, no longer the preserve of electric vehicles.

Technical progress goes hand in hand with active safety improvements. Most Challenge Bibendum vehicles post excellent braking results, both for cars and buses.

Many two-wheel electric vehicles (a solution for the future of urban mobility - especially in China), as well as many electric buses on show at Challenge Bibendum posted outstanding results.

To conclude, current clean vehicles are efficient, safe and fun to drive. Once again, event participants confirmed that Challenge Bibendum is an outstanding experimental arena to compare different energies and technologies. An International Symposium will conclude this three-day event dedicated to sustainable mobility in Shanghai.

* We have chosen to use the expression “well-to-tire” as opposed to “well-to-wheel” more traditionally used by experts, since it expresses the very important role played by tires in road mobility and in the energy performance of a vehicle, and thus CO_2 emissions. Note that one out of five fuel tanks (in the case of passenger cars) is consumed by the phenomenon of tire rolling resistance, which highlights the significance of conducting research in this field.