

## **California Hydrogen Business Council February 2005 Report**

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### **1. Welcome New Members**

CHBC welcomes new Silver member ISE Corporation, [www.isecorp.com](http://www.isecorp.com). We appreciate your support!

### **2. CHBC Meeting on February 25, Sponsored by Honda**

Come early - enjoy a continental breakfast while you network. Stay late - possibly win one of three great prizes (a digital camera, gift certificate to Best Buy and free registration to our next General Meeting), tour Honda's hydrogen facilities, and ride in or drive an FCX. Additional highlights include presentations by Daniel Bonawitz and Steve Ellis, American Honda; Stan Ovshinsky, ECD-Ovonics; Dr. Alan Lloyd, Secretary, CalEPA; Pierre Rivard, Hydrogenics; Mark Sperry, Plug Power; Dan Rabun, Air Products and Chemicals; Shannon Baxter, California Hydrogen Highway; Alison Grigg, Canadian Hydrogen Highway; Allan Bedwell, Florida Department of Environmental Protection, and others. Register now and save \$\$.

[http://www.californiahydrogen.org/page.cfm?content=45&event\\_ID=18](http://www.californiahydrogen.org/page.cfm?content=45&event_ID=18)

### **3. CHBC-Sponsored Pre-Meeting Workshop on Building Alliances**

Building Successful Alliances in the New Energy Economy  
February 23-24, 2005 in Torrance, California

A key skill in the New Energy Economy is an understanding of how to build systems, which requires tapping other peoples' talents and resources and building adaptive alliances. The program will focus on this central question: How effective is your present SYSTEM for negotiating, structuring, and managing these alliances? The goal is provide a practical system that will give you a competitive edge in all your alliances anywhere in the world.

This program will include some fascinating presentations by leading practitioners, including a panel on innovation acceleration technologies by Zion Bar-el, chairman of Ideation International, and a special case involving co-generation where you can test your alliance mediation skills. To register, click

[http://www.californiahydrogen.org/page.cfm?content=45&event\\_ID=26](http://www.californiahydrogen.org/page.cfm?content=45&event_ID=26)

#### **4. California Stationary Fuel Cell Collaborative Strategic Plan Update**

Many industry experts believe fuel cells will first achieve commercialization in stationary power applications. To advance the technology, define and solve technical issues, and facilitate strategic deployment, on February 3 in Sacramento, the California Stationary Fuel Cell Collaborative will present a Roadmap to an Updated Strategic Plan to industry leaders that includes a proposed new membership structure. For information, contact Executive Director Ron Friesen, [rfriesen@casfcc.org](mailto:rfriesen@casfcc.org).

#### **5. CHBC Support Sponsor of CalStart Heavy Duty Vehicle Conference**

Clean fuels supporter/advocate Congresswoman Mary Bono joins an outstanding group of conference speakers who will discuss the connection between emissions, efficiency and energy security at the upcoming WestStart/CalStart Clean Heavy Duty Vehicle Conference, February 22-24, 2005, at La Quinta Resort, La Quinta, CA. Sessions will focus on potential solutions and pathways to move us away from the existing "transportation as usual" attitude and into a cleaner, more efficient and secure energy paradigm. CHBC is a support sponsor of this event. For details, please visit <http://www.calstart.org>.

#### **6. Anuvu Fuel Cell Engines in 1000 ZAP Smart Cars and World Cars**

Anuvu has booked the largest order to date for fuel cell engines from vehicle distributor ZAP Motors. The Anuvu engines will be used to provide a fuel cell power option to the current ZAP Motors offering of the electric World Car and the 60 mpg Smart Car. The \$10 million order is for an initial order of 1100 Anuvu Fuel Cell Engines to be delivered over the next 24 months.

[http://www.zapworld.com/about/news/news\\_smartorders122004.asp](http://www.zapworld.com/about/news/news_smartorders122004.asp)

#### **7. 30 Fuel Cell Companies Expected to have Commercial Products in 2005**

The Houston Advanced Research Centre (HARC) released its annual Fuel Cell Industry Assessment Report profiling the activities of 92 fuel cell developers and system manufacturers located worldwide. With 57% of the companies located in the U.S. and Canada, North America is the primary location for technology developers. Another 38%

of the companies are located in Japan and Europe. The report finds that 44% of companies are pursuing PEM technologies, 26% are pursuing SOFC, and 15% are pursuing DMFC. With 40% of companies developing portable products to recharge or replace batteries, the portable power market seems to be a promising area for developers. About one-third of the companies profiled are expected to have products on the market in 2005, including the first commercial SOFC products.  
<http://www.fuelcelltoday.com/FuelCellToday/IndustryInformation/IndustryInformationExternal/NewsDisplayArticle/0,1602,5408,00.html>

### **8. New York City To Get 13 GM Fuel Cell Vehicles**

General Motors (GM) will provide 13 fuel cell-powered vehicles to the metropolitan area, and Shell Hydrogen intends to establish a portable hydrogen refueling module at an area Shell service station in 2006.  
<http://renewableenergyaccess.com/rea/news/story?id=21639>

### **9. BusinessWeek Reports on BMW's H2 Bi-Fuel Progress**

At the January auto show in Los Angeles, U.S. car enthusiasts got their first look at the H2R, a racecar from BMW. Building it took just 10 months, but the race it's designed to win will last for the next 10 years and beyond. BMW is taking a shortcut that addresses limited public access H2 fueling. Its H2R racecar has an ordinary internal-combustion engine -- but it burns hydrogen. It's basically the same engine used in the carmaker's 760i luxury sedans. Running on hydrogen, it develops 286 horsepower and propels the H2R from zero to 60 mph in under six seconds. And the car hit 187 mph last September at the Miramas racetrack in France.  
[http://www.businessweek.com/magazine/content/05\\_04/b3917097\\_mz018.htm](http://www.businessweek.com/magazine/content/05_04/b3917097_mz018.htm)

### **10. MTI DMFC Ships Commercial Product**

MTI MicroFuel Cells Inc. (MTI Micro), the developer of Mobion™ cord-free, rechargeable, portable power technology and a subsidiary of Mechanical Technology Incorporated (NASDAQ:MKTY), announced its first production shipment of an integrated micro fuel cell product, powering a portable electronics device. MTI Micro's first Mobion™ micro fuel cell product has been integrated into a portable radio frequency identification (RFID) reader from Intermec Technologies Corporation. This award-winning Mobion™ based product was developed to deliver two important user benefits: instant cord-free re-charging, using a replaceable fuel cartridge, and extended run times between charges from three to five times longer when compared to existing Li-Ion battery technology.  
<http://www.mtimicrofuelcells.com/news/article.asp?id=197>

### **11. Nature Climate Simulation Warns Temperatures May Rise by 11 degrees C**

A new study is reported in scientific journal Nature. The greenhouse effect could be far more severe than experts had previously predicted, according to results from the world's biggest climate-modeling study. In the worst-case scenario, doubling carbon-dioxide levels compared with pre-industrial levels increases global temperatures by an average of

more than 11 degrees C. The results are the first from climateprediction.net, a grid computing project that harnesses over 90,000 computers to run global climate simulations. A doubling of carbon-dioxide levels could eventually lead to an increase in worldwide temperature of anything between 1.9 degrees C and 11.5 degrees C, the project's researchers report in this week's Nature. That is a far greater level of uncertainty than the 2-5 degrees C rise predicted by the Intergovernmental Panel on Climate Change. <http://www.nature.com/nature/links/050127/050127-6.html>

### **12. Winning the Oil Endgame: Innovation for Profits, Jobs, and Security**

This comprehensive 300-page report from RMI is available as a free PDF, or may be ordered in paperback. It offers a coherent strategy for ending oil dependence. This roadmap is independent, peer-reviewed, written for business and military leaders, and co-funded by the Pentagon. It combines innovative technologies and new business models with uncommon public policies: market-oriented without taxes, innovation-driven without mandates, not dependent on major (if any) national legislation, and designed to support, not distort, business logic. An excellent read.  
[www.oilendgame.org](http://www.oilendgame.org)

### **13. Clean Cities 2005 and Fuel Cell Technology Institute**

CHBC is support sponsor of two key events to be held May 1-6 in Palm Springs, CA. The 11th Annual Clean Cities Conference & Exposition, <http://www.afvi.org/palmsprings>, will be held May 1-4. Immediately after, and at the same location, the National Fuel Cell Research Center the University of California, Irvine will present the Fuel Cell Technology Institute and optional Hydrogen Workshop, May 4-6, <http://www.nfccr.uci.edu/fcti2005>. The events are held concurrently to reduce travel costs. Attend all three to prepare yourself for coming transitions in clean power and transportation.

### **14. Florida To Make Major Hydrogen Announcement**

The State of Florida will be making a major hydrogen announcement at the Orlando International Airport Complex on February 18th. Florida recently entered into an agreement with Ford Motor Company for the use of eight hydrogen internal combustion engine E-450 shuttles, and officials will announce the project and plans for use of the vehicles. Additionally, Florida entered into an agreement with ChevronTexaco for construction and installation of a hydrogen energy station to support the shuttles and additional vehicles deployed in the airport area. The event will serve as an announcement and groundbreaking for the energy station. Finally, officials say they will be making "an announcement regarding the Florida's future in hydrogen energy."

### **15. CHBC 2005 Meeting Dates - Save These Dates**

February 25 – American Honda building in Torrance, May 20 – CalEPA building in Sacramento, September 16 – Location TBD, November 18 – Location TBD

**16. CHBC Silver Members**

CHBC gives a big thanks to our growing list Silver Members who are major contributors to our growth and success. To learn about our Silver Members, <http://www.californiahydrogen.org/page.cfm?content=33>

**17. 2005 CHBC Board of Directors**

President - Henry Wedaa  
Vice President - Paul Scott, PhD  
Secretary - Josh Mauzey  
Treasurer - John Williams, PE  
Managing Director - Catherine Rips  
Membership Chairman - Gene Johnson  
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Program Chairman - Henry Wedaa  
Director at Large - Gary Dixon  
Director at Large - Jon Slangerup  
Ex-Officio Government Liaison - Shannon Baxter, PhD

To contact the board, please click [info@californiahydrogen.org](mailto:info@californiahydrogen.org).

**18. Be a Member of the California Hydrogen Business Council**

Be involved with the leaders in making the hydrogen economy a reality. CHBC is a non-profit organization, which offers a common meeting ground for discussing the technologies, methodologies, and opportunities in the hydrogen economy. Silver Membership is \$1,000 per year and allows organizations to send five people to each meeting at reduced member rates, plus provides valuable marketing opportunities. Individual membership is \$200 per year. To join, visit our website or call (760) 341-2924 with your credit card.

We welcome important news from our members for inclusion on our website and in next month's report. Please send to: [info@californiahydrogen.org](mailto:info@californiahydrogen.org). Thank you for helping build a great organization.

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Editor, Catherine Rips*