

California Hydrogen Business Council

February 2006 Report

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1. Welcome New Members

We'd like to extend a warm welcome to two new Silver members: WestStart-CALSTART and Shell Hydrogen, as well as new Individual members Judy Bishop and Rick Ruiz. Don't forget -- our membership drive is still underway. If you bring in a new member, you'll get free registration to your next General Meeting.

<http://www.calstart.org>

<http://www.shell.com/home/Framework?siteId=hydrogen-en>

2. Pre-Reg Ends Feb 2 for CHBC Meeting in SF

Just a few days left to pre-register for CHBC's next General Meeting, February 10, hosted by Bay Area Air Quality Management District and co-sponsored by EmeraChem. Register now and save \$50. Featured speakers and topics include: Jared Blumenfeld, Director, Department of Environment, City of San Francisco; SF Hydrogen Vehicle Program; Karl-Heinz Ziwick, BMW's Hydrogen Programs; Chris Bordeaux, DOE International Partnership for the Hydrogen Economy; Analisa Bevan, CARB, California Hydrogen Highway Program;

Nick Beck, Natural Resources Canada, Canada's Hydrogen Efforts; Daniel Sioui, Hyradix Reformers in Use; Paul Scott, ISE Corp. Hydrogen Internal Combustion Engine Test Program; Pana Ratanabanangkoon, Shell Hydrogen's Projects; Shimshon Gottesfeld, PhD, MTI Micro Fuel Cells, Direct Methanol Fuel Cells for Portable Power Applications; Jack Broadbent, BAAQMD Clean Transportation and Clean Energy Initiatives.
http://www.californiahydrogen.org/page.cfm?content=17&event_ID=42

3. Hank Wedaa Wins NHA Meritorious Service Award

Congratulations to CHBC's President and Program Chair Hank Wedaa on winning NHA's 2006 Meritorious Service Award. The award will be presented at the 2006 Conference in Long Beach, March 12-16. CHBC is an Endorsing Sponsor of the event, which is expected to draw over 1,000 attendees and hundreds of exhibitors. Highlights include technical workshops on industry issues, high-level international keynote speakers, and a "Ride 'n' Drive" event featuring hydrogen ICE and fuel cell vehicles. Don't miss this important conference, or the chance to see the presentation of Hank's much deserved award!
<http://www.hydrogenconference.org>

4. Riverside H2 Station Opens

On January 25, Riverside, CA became the first city in the Inland Empire area to run a 24-hour hydrogen-vehicle fueling station that's open to the public. The station will mainly provide fuel for five city-owned Toyota Prius gasoline-electric hybrid cars that were converted by Quantum Technologies to hydrogen use. The vehicles and station are part of a \$7 million South Coast Air Quality Management District pilot program to reduce air pollution in the region. Other cities include Burbank, Santa Monica, Ontario and Santa Ana, which was dedicated earlier in January.
http://www.pe.com/localnews/corona/stories/PE_News_Local_D_hydrogen26.182e6243.html

5. Proton Energy Systems' HOGEN Generators Exceed 3 Million Hours

Since their introduction in 2000, Proton Energy Systems' family of HOGEN laboratory hydrogen generators have accumulated more than 3 million hours of use for separation and materials analysis, production and safety control in industries and applications as diverse as environmental compliance testing, pharmaceutical hydrogenation, petrochemical quality assurance and combustible gas detection. More than 400 HOGEN GC lab hydrogen generators currently supply hundreds of research and production facilities worldwide with dry, pure hydrogen.
<http://www.protonenergy.com/products/hogen-gc-series.html>

6. PSA Peugeot Citron to use Intelligent Energy Fuel Cells

Intelligent Energy has announced a program with PSA Peugeot Citron, whereby Intelligent Energy's automotive fuel cell systems will be tested and integrated within PSA Peugeot Citron's electric vehicles.
http://www.intelligentenergy.com/index_article.asp?SecID=15&secondlevel=798&artID=3727

7. Plug Power Sells 80 GenCore Systems

The International Finance Corp., the private sector arm of the World Bank Group has awarded a \$3 million grant to IST Holdings (PTY) Ltd and Plug Power Inc., to install 400

fuel cells in remote locations and cities of South Africa over the next three years. Plug Power will produce the 5-kW fuel cell systems which IST will import, distribute, install, and maintain. The project is worth a total of \$14 million.
<http://www.plugpower.com/news/press.cfm>

8. Shell to Open H2 Station in China

Tongji University, Shell Hydrogen BV and Shell (China) Limited have signed an agreement to build Shanghai's first hydrogen filling station for fuel cell vehicles. The partners will build the new station at Shanghai International Automotive City, working together on the design, construction, maintenance and operations. The station, to be completed by the end of 2006, is part of the Ministry of Science and Technology's national program to develop electric vehicles in China.

http://www.shell.com/home/Framework?siteId=media-en&FC2=/media-en/html/iwgen/leftnavs/zzz_lhn2_2_0.html&FC3=/media-en/html/iwgen/news_and_library/press_releases/2005/dir_2005_pressreleaseindex_0701200

9. Hyundai Delivers FCVs to AC Transit

Hyundai Motor Company delivered the first of 10 Hyundai and Kia Tucson Fuel Cell Electric Vehicles (FCEV) to AC Transit. The delivery marked the beginning of a five-year demonstration and validation project designed to evaluate fuel cell vehicles and hydrogen infrastructure technologies. Hyundai plans to place two additional Tucson FCEVs with AC Transit in early 2006, and will round out the fleet with six Kia Sportage FCEV models in late 2006 and 2007.

http://worldwide.hyundaimotor.com/common/html/about/news_event/press_read_2005_32.html

10. Fuel Cell Resurfacers Takes the Ice

The first ever hydrogen fuel cell-powered ice resurfacers, the eP-ICEBEAR, made its world debut last month in ice hockey-crazed Grand Forks, North Dakota. The vehicle is powered with a Nuvera Fuel Cells 5-kW PowerFlow fuel cell power module and was developed by ePower Synergies, Inc. and the Resurface Corp.

http://www.nuvera.com/news/press_release.php?ID=11

11. SHEC Labs Opens First Solar Hydrogen Production Station from Landfill Gas

Solar Hydrogen Energy Corporation will deploy the world's first Solar Hydrogen production station using methane from city landfills. The station will be in the City of Regina, Saskatchewan and will have the capacity of producing 1.2 million kg of renewable hydrogen per year.

<http://www.shec-labs.com/press/releases/2005Dec7press.php>

12. Hydrogen from Wind Opens in Greece

The first hydrogen refueling station in Greece using renewable energy sources was opened in Athens, Greece. The station uses wind energy to generate clean electricity to generate hydrogen and will be the fueling source for a hydrogen-powered scooter, car and minibus.

http://www.tropical.gr/pages/view_product.php?product=HRS-A

13. Connecticut Clean Energy Fund (CCFE) makes \$21 million available

This program is designed to encourage businesses, factories, hospitals, and universities to install electric generators based on sustainable resources. The strategic initiative behind CCEF's programs works to support Connecticut's Renewable Portfolio Standard (RPS). Fuel Cell Energy, UTC, Proton Energy and others are actively competing for funded projects. Increases have been promised by this legislation to reach sustainable energy sales of 10 percent over the next four years.

http://www.conntact.com/article_page.lasso?id=39631

14. States Allocate Millions for Hydrogen

NYSERDA will administer a \$5 million program to continue the development of a hydrogen vehicle infrastructure and conduct research to convert internal combustion vehicles to be able to use hydrogen as fuel, which is a promising energy technology. This is part of a broad set of initiatives to promote E85, B20, hybrid vehicles, and other technologies that support a transition to energy independence. South Carolina's governor's budget earmarks \$2 million a year for the International Center for Automotive Research (ICAR) in Greenville. Another \$1 million would be funneled to the University of South Carolina's hydrogen fuel cell research program based in Columbia. The state's newly formed Hydrogen and Fuel Cell Alliance would get approximately \$368,000 annually.

<http://www.cleaneedge.com/news-listing.php?end=10>

<http://www.fuelcellsworks.com/Supppage4361.html>

15. Toyota and Aisin Developing Residential Fuel Cells

Toyota Motor Corp. and Aisin Seiki Co. are jointly developing 1-kW residential fuel cell systems, with the goal of offering the systems commercially in the next few years. Toyota is currently working with Toho Gas Co. to test a residential fuel cell cogeneration system in homes in central Japan.

<http://www.aisin.com/csr/envi/development.html>

16. Hydrogenics First CHBC Gold Member

Hydrogenics is now a Gold Member of the California Hydrogen Business Council. The company's long-time leadership supports CHBC's continued growth and participation in the successful implementation of California's hydrogen transportation, power, infrastructure and production projects. Hydrogenics' expanding technology platform positions the firm as a world leader in the introduction of hydrogen and fuel cells into fully-operational, commercial products, starting with today's early adopting markets.

<http://www.hydrogenics.com/default.asp>

17. Gold Membership Offers New Benefits

In January, the CHBC board of directors voted to create new benefits for Gold Members. Now, two associates from a Gold Member firm may attend CHBC meetings free of charge and five others may attend at the discounted member rate. Gold Members also have a number of ways to increase their visibility through presentations at CHBC meetings, on the CHBC website and in the monthly newsletter. For full details, contact Managing Director Catherine Rips, (760) 341-2924, info@californiahydrogen.org.

18. CalStart Clean Heavy Duty Vehicles Conference

CHBC is a Support Sponsor of CalStart's Clean Heavy Duty Vehicles Conference 2006, to be held February 22-24 at the San Diego Hilton Resort. The conference asks the question, "Clean Technologies and Fuels -- Are We There Yet?" Before the conference begins, a one-day symposium co-presented with CHDV on Hydrogen Internal Combustion Engines (HICE) technology gives what might be the answer!
<http://www.calstart.org>

19. National Hydrogen Financing Forum

National Hydrogen Financing Forum (NHF2), March 16 in Long Beach, CA is a specialized forum showcasing competitively selected hydrogen-related companies that are seeking capital, strategic partners and other relationships as well as greater public recognition. CHBC is a support sponsor of this event. Speakers will include Terry Tamminen, Special Assistant to the Governor, Energy and Environmental Technologies, and Alan Lloyd, PhD. If your company is interested in presenting, contact Gelvin Stevenson, Ph.D., at Gelvin@nhf2.com and 718-863-4156.
<http://www.nhf2.com>

20. Cleantech Venture Forum IX Mar 21-23 in SF

This is a premier networking and deal-flow venue for the clean technology sector. Cleantech Venture Forums draw together clean technology entrepreneurs and investors, as well as corporate executives, professional advisors, and senior policymakers in an exchange of information about cleantech business and investment opportunities. It is a venture capital forum designed specifically to facilitate the financing of companies engaged in commercializing clean technologies.
<http://cleantech.com/documents/SF%20Forum%20IX%20Overview%20Jan%2003%2006.pdf>

21. Future CHBC Meeting Dates - Save These Dates

February 10, 2006 hosted by Bay Area AQMD San Francisco, CA; May 19, 2006 General Meeting at South Coast AQMD; September 15, 2006 General Meeting location tbd; December 7, 2006 Special Dinner Meeting and Holiday Party, location tbd

22. CHBC Gold and Silver Members

CHBC gives a big thanks to Gold Member Hydrogenics and to our growing list Silver Members, all major contributors to our growth and success.
<http://www.californiahydrogen.org/page.cfm?content=61>
<http://www.californiahydrogen.org/page.cfm?content=33>

23. 2006 CHBC Board of Directors

President - Henry Wedaa; Vice President - Paul Scott, ScD; Managing Director - Catherine Rips; Secretary - Josh Mauzey; Treasurer/Communications Chair: Jerald Cole; Membership Chairman - Mark Abramowitz; Northern California Membership Chair & Newsletter - John Addison; Central California Membership Chair - Gene Johnson; Program Chairman - Henry Wedaa; Director at Large - Gary Dixon; Director at Large - Jon Slangerup; Director at Large - John Williams, PE; Ex-Officio Government Liaison - Shannon Baxter-Clemmons, PhD. To contact the board, please email: info@californiahydrogen.org.

24. Join CHBC Today!

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. To join, visit our website or call (760) 341-2924 with your credit card.
<http://www.californiahydrogen.org/page.cfm?content=6>

25. Send Us Your News!

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

*CHBC Report Publisher, John Addison
Editor, Catherine Rips*