

California Hydrogen Business Council August 2004 Report

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1. CHBC Dinner Meeting new date of August 12

Meeting is from 4:30 to 9 p.m. at Quantum Technology Inc.'s Lake Forest facility, 25242 Arctic Ocean Drive, Lake Forest, CA 92630. Highlights include presentations on Quantum's alternative fuel, hydrogen and hybrid electric vehicle programs. Attendees will have an opportunity to take a mini-tour of the facility and to see several alternate fuel vehicles. Registration will be held from 4:30 - 5 p.m. followed by the brief tour and presentations. Dinner will be held at the nearby Hilton Garden Inn Irvine East/Lake Forest, 27082 Towne Center Drive, Foothill Ranch, CA 92610. Additional speakers will be on the evening program. Registration is \$75 for members, \$100 for non-members.

<http://www.californiahydrogen.org/page.cfm?content=20&display=9>

2. California Hydrogen Business Council meeting at CARB on September 17

Mark your calendar for CHBC's biggest meeting of the year. Key legislators, government officials, and hydrogen industry executives are invited. Eileen Tutt from CARB will discuss the impact of a hydrogen economy on CARB's role. Dr. Shannon Baxter will provide an update about the Hydrogen Highway. Dr. Paul Scott with ISE will present the HICE bus program. Jack Broadbent, the Exec. Dir. of BAAQMD will speak on their hydrogen plans and activities. Dr. Peter Lehman of Cal State Humboldt will speak on his hydrogen activities over the last 10 years. Terry Tamminen helped sponsor this meeting and was to be a speaker, but he will not be able to be there. There will be a panel with

speakers discussing various aspects of hydrogen generation from steam methane reforming, electrolysis, and PEM systems. To see the full agenda and register: http://www.californiahydrogen.org/page.cfm?content=45&event_ID=5

3. John Deere to use Hydrogenics fuel cells

Fuel cell developer Hydrogenics has signed a deal with John Deere to research and develop hydrogen-fuelled commercial vehicles. Under the five-year agreement Hydrogenics will collaborate with the American farm and heavy equipment giant on fuel cell development and engineering.

<http://www.canada.com/national/nationalpost/news/story.html?id=f29ee6e3-ad01-45b6-a095-7188f1f024be>

4. Praxair puts 2 more hydrogen plants into operation

Praxair started two new hydrogen plants in Texas City and Port Arthur, Texas. The plants produce a total of 200 million cubic feet per day of hydrogen, increasing "We expect demand for hydrogen to increase more than 20% per year for the next several years as our refining customers invest in new processes to meet the clean-fuels requirements of the U.S. Environmental Protection Agency," said Dan Yankowski, vice president. Praxair operates 28 steam-methane reformers and seven hydrogen pipeline systems that deliver more than 700 million cubic feet per day of hydrogen.

<http://www.cleandedge.com/>

5. SCAQMD Hydrogen Conference

"Hydrogen – Fueling the Clean Air Future" will be held August 16-17, 2004, at the J.W. Marriott Desert Springs Resort, in Palm Desert, California. For more information, please visit <http://www.aqmd.gov/tao/new-events/hydrogen-conference.htm>.

6. Ballard changes relationship with DaimlerChrysler and Ford

Ballard agrees to focus on the heart of the fuel cell engine (the fuel cell stack) while DaimlerChrysler and Ford focus on the more conventional vehicular fuel cell system components, or balance-of-plant technology and vehicle integration. Ballard remains the exclusive supplier of automotive fuel cells and fuel cell technology to DaimlerChrysler and Ford through 2021. Ford will reduce its stockholding in Ballard.

<http://www.ballard.com/news.asp?pgid=15&dbid=0>

7. Plug Power sells 55 systems in one quarter

PlugPower announced increased sales through increased channel partners. Expanded channels for GenCore product distribution were signed with providers of equipment and service solutions to premium power markets. Partners now include Tyco Electronics Installation Services, Pianeta of Italy, GE Fuel Cell Systems, DTE Energy Technologies,

Vaillant GmbH, Honda R&D Co., Ltd., Engelhard Corporation and Pemeas GmbH (formerly Celanese Ventures).

<http://www.plugpower.com/index.cfm?vid=429552&liak=57051056>

8. Toshiba shrinks DMFC fuel cell to 2 inches with engineering breakthrough

At a compact 22 x 56 x 4.5mm (maximum of 9.1mm, for the fuel tank), the slim prototype DMFC is as long and wide as a woman's thumb, a size advantage that will give greater design freedom for developers of handheld electronic devices. The latest prototype, with its total weight only 8.5g, is small enough for integration into a wireless headset for mobile phones, but still efficient enough to power an MP3 music player for as long as 20 hours on a single 2cc charge of highly concentrated methanol. The new fuel cell outputs 100 milliwatts of power, and can continue to do so, non-stop, for as long as users top up its integrated fuel tank—a process that is as simple as it is safe.

http://www.toshiba.co.jp/about/press/2004_06/pr2401.htm

9. Hydrogen from sodium chlorate plant for Canada's BC Hydrogen Highway

QuestAir Technologies Inc. will participate in the BC Hydrogen Highway(TM) by supplying hydrogen purification technology to a vehicle fueling and power generation project. QuestAir is one of six companies in a consortium developing an integrated hydrogen fuelling and demonstration project. Sustainable Development Technology Canada (SDTC) is contributing more than \$5.8 million dollars towards the estimated \$18 million cost of the project, which will be fully operational in 2005. The project will become one of seven fueling and demonstration depots on the BC Hydrogen Highway(TM), announced by Prime Minister Paul Martin.

<http://www.newswire.ca/en/releases/archive/July2004/13/c2345.html>

10. Fuel Cell and Hydrogen Permitting Guide

A new guide was developed through a collaborative effort involving the National Fire Protection Association (NFPA), the International Code Council (ICC), Pacific Northwest National Laboratory (PNNL), and the National Renewable Energy Laboratory (NREL) for use by code officials and building owners interested in regulations pertaining to fuel cells and hydrogen. The guide includes an overview and two modules – one on stationary fuel cell installations and the other on hydrogen motor fuel dispensing facilities.

http://www.pnl.gov/fuelcells/permit_guide.stm

11. Catherine Rips is appointed new Managing Director for CHBC

To provide added service to our members, the Board of CHBC appointed Catherine Rips to be your Managing Director. She is now active in communicating with members, potential members, and the hydrogen community. She can be reached at 760-341-2924 or [info@ CaliforniaHydrogen.org](mailto:info@CaliforniaHydrogen.org).

12. CHBC Silver Members

California Hydrogen Business Council gives a big thanks to these Silver Members who are major contributors to our growth and success.

<http://www.californiahydrogen.org/page.cfm?content=33>

13. CHBC Board of Directors

<http://www.californiahydrogen.org/page.cfm?content=10>

To contact the board, please click info@californiahydrogen.org

14. Be a member of the California Hydrogen Business Council

Be part of the organization that is on the “leading edge” of making the hydrogen economy a reality. The California Hydrogen Business Council (CHBC) provides the link between hydrogen-technology developers, businesses, energy leaders, government, and infrastructure providers. CHBC is a non-profit organization. You are invited to join the California Hydrogen Business Council (CHBC). 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. Individual membership is \$200 per year. Organizations can send five people per meeting at lower rates, plus benefit from added marketing visibility, being Silver Members for \$1,000 per year. To join visit our web site or call 760-341-2924 with your credit card.

We welcome important news from our members for inclusion in next month’s report.

Thank you for helping build a great organization.

CHBC Report Publisher and Membership Chairman

John Addison

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www.CaliforniaHydrogen.org