

## CHBC News: February 2008

1. [Join Us Feb 1 at Honda in Torrance](#)
2. [Welcome New Members](#)
3. [Hydrogen Benefits as Fuel Becoming Obvious](#)
4. [MSRC Issues RFP for Hydrogen Infrastructure](#)
5. [Honda FCX Clarity Featured on Jay Leno's Garage](#)
6. [GM Unveils Eco-Friendly Concept Cadillac](#)
7. [Hydrogenics Assists in Development of Tribrid Emission-Free Bus](#)
8. [Hydrogen Bus Alliance Calls for Industry Support](#)
9. [Eden Energy to Install India's First Hydrogen Dispenser](#)
10. [Could River Power Lake Placid Cars?](#)
11. [UC-Berkeley Releases Report on Ammonia as Storage for H2 Fuel Cells](#)
12. [Zero Emissions Ship to Commence Operation in Germany](#)
13. [Icelandic Hydrogen Ship Heralds Fossil-free Future](#)
14. [NHA 2008 Held in Sacramento March 30-April 4](#)
15. [BNSF Railway and Vehicle Projects Develop Experimental Hydrogen Fuel Cell Switch Locomotive](#)
16. [Renewable Hydrogen Energy](#)
17. [Masdar and Hydrogen Energy Plan Clean Energy Plant in Abu Dhabi](#)
18. [Hydrogen-Powered Cell Phone Doubles Battery Lifetime](#)
19. [Millennium Cell and Horizon Fuel Cell Debut HydroPak\(TM\) Portable Power Product](#)
20. [New Facility For Hydrogen Pipeline Testing Made To Prompt Hydrogen Economy](#)
21. [HPI Announces Development of Advanced Fuel Technology](#)
22. [Abstracts Due Feb 4 for World H2 Energy Conference](#)
23. [2008 Blue Sky Awards Nominations Accepted Through March 31](#)
24. [Send Us Your News!](#)
25. [Board of Directors](#)

### 1. Join Us Feb 1 at Honda in Torrance

Friday, February 1, 2008, CHBC will hold its first General Meeting of the new year, hosted and sponsored by American Honda Motor Corp. To be held at the automaker's Torrance, CA headquarters, the meeting will be highlighted by a presentation on Honda's very exciting recent hydrogen activities. In addition, we'll have updates on an MSRC RFP for hydrogen infrastructure, an update on AB 118 and AB 1007, and two very important presentations from the California Air Resources Board on AB 32, California's Climate Change Initiative, and the status and future of hydrogen vehicles in California -- plus much more! Registration is still open. Please also calendar these additional dates for CHBC General Meetings in 2008: May 16, September 12 (Northern CA), and December 5, locations to be announced.

[Feb 1](http://www.californiahydrogen.org/page.cfm?content=45&event_ID=74): [http://www.californiahydrogen.org/page.cfm?content=45&event\\_ID=74](http://www.californiahydrogen.org/page.cfm?content=45&event_ID=74)

### 2. Welcome New Members

CHBC extends a warm welcome to our newest Individual Members Ellen Batzel and Mike Gruszczynski. We appreciate your support!

### 3. Hydrogen Benefits as Fuel Becoming Obvious

(Editor's Note: Mary D. Nichols, chair of the California Air Resources Board, submitted an article to the San Jose Mercury News clarifying the benefits of hydrogen vehicles in the state.) The next several years will usher in an exciting new area in the use of hydrogen as a

fuel source: GM will introduce over 100 vehicles nationwide, 60 of which will be placed in Southern California. Within weeks the Sacramento Municipal Utilities District and BP will dedicate their 100% renewable photovoltaic hydrogen station in Sacramento. Honda will later this year begin leasing its new Clarity to private citizens in Southern California. Several hydrogen fuel cell-powered transit buses are already operating as pilot projects in the Bay Area. For our part, the Air Resources Board will release a request for proposals for \$7.7 million for three new hydrogen stations and upgrades that will increase the capacity of two existing stations. We will soon unveil a rebate program for Californians buying certain models of alternative fuel vehicles.

[Mary Nichols](http://www.mercurynews.com/ci_8032177?IADID=Search-www.mercurynews.com-www.mercurynews.com&nlick_check=1): [http://www.mercurynews.com/ci\\_8032177?IADID=Search-www.mercurynews.com-www.mercurynews.com&nlick\\_check=1](http://www.mercurynews.com/ci_8032177?IADID=Search-www.mercurynews.com-www.mercurynews.com&nlick_check=1)

#### **4. MSRC Issues RFP for Hydrogen Infrastructure**

The Mobile Source Review Commission has issued a request for proposals (P2008-12) for alternative fuel infrastructure projects, including hydrogen and hydrogen/natural gas blends. The targeted funding level for 2007-08 is \$2.5 million. Eligible applicants include infrastructure developers and alternative fuel providers, fleet operators including fleets participating in the AQMD Carl Moyer Program, owners of existing stations seeking to upgrade or expand. Projects are site specific and will be evaluated with respect to their unique sites. Eligible projects may include new construction using new infrastructure components, upgrade and expansion of existing stations and modifications to existing facilities to accommodate alternative fuels. Proposals are due by March 28, 2008.

[MSRC RFP](http://www.cleantransportationfunding.org/document/rfp/word/FY_2007-08_Alt-Fuel_Infrastructure_fnl.doc): [http://www.cleantransportationfunding.org/document/rfp/word/FY\\_2007-08\\_Alt-Fuel\\_Infrastructure\\_fnl.doc](http://www.cleantransportationfunding.org/document/rfp/word/FY_2007-08_Alt-Fuel_Infrastructure_fnl.doc)

#### **5. Honda FCX Clarity Featured on Jay Leno's Garage**

Jay Leno recently interviewed Honda's PR Manager Sage Marie at "Jay Leno's Garage." Jay also drove the FCX Clarity in Burbank and made his first stop on the California Hydrogen Highway when he refueled at the City of Burbank's hydrogen station. Honda's "zero-emission sedan of the future" will be on display at CHBC's General Meeting at American Honda Motor Co. on February 1. (See story 1 above.)

[Jay Leno](http://www.jaylenosgarage.com/video/video_player.shtml?vid=205255): [http://www.jaylenosgarage.com/video/video\\_player.shtml?vid=205255](http://www.jaylenosgarage.com/video/video_player.shtml?vid=205255)

[Honda](http://fcx.honda.com): <http://fcx.honda.com>

#### **6. GM Unveils Eco-Friendly Concept Cadillac**

General Motors' latest concept car is a Cadillac that could get 300 miles on a single tank and has nearly all the eco-friendly features you can think of. The Provoq -- the first concept car to get its premiere at the Consumer Electronics Show in Las Vegas -- runs on a hydrogen fuel cell and a lithium ion battery, according to GM CEO Rick Wagoner, who unveiled the car during his keynote speech. The car primarily runs on hydrogen, but uses the battery for peak power and storing electricity to extend the range. (The battery gets recharged from a wall socket.) The fuel cell -- GM's fifth generation of fuel cells -- is half the size of the last one, which increases internal room and storage. On the roof sits a solar panel for running the car's electronics. To increase aerodynamics, shutters automatically cover up the air vents on the grill at high speeds. "It will go up to 100 miles an hour and from zero to 60 in 8.5 seconds," Wagoner said.

[Provog](http://www.news.com/GM-unveils-eco-friendly-concept-Cadillac/2100-11389_3-6225257.html?tag=nefd.top): [http://www.news.com/GM-unveils-eco-friendly-concept-Cadillac/2100-11389\\_3-6225257.html?tag=nefd.top](http://www.news.com/GM-unveils-eco-friendly-concept-Cadillac/2100-11389_3-6225257.html?tag=nefd.top)

#### **7. Hydrogenics Assists in Development of Tribrid Emission-Free Bus**

The UK's first affordable emission-free minibus, known as the Hydrogen Bus, produces zero carbon dioxide emissions, and is a "tribrid" vehicle powered by hydrogen fuel cells, electrical

batteries and ultra-capacitors. The 16-passenger bus has a maximum speed of 55 miles per hour and a range of 150 miles. In March 2008, the bus will go into service as an inter-campus shuttle at the University of Glamorgan in Wales. The vehicle is the result of collaboration among several Welsh and international enterprises. Dragon Coachworks, a joint venture of two Welsh automotive companies, supplied the body of the vehicle. Hydrogenics of Mississauga, Canada, provided the fuel cell technology and assistance in developing the system. The Maxwell High Voltage Capacitors were developed by General Atomics Energy Products of San Diego, Calif. for the vehicle.

[Tribrid](http://biz.yahoo.com/bw/071205/20071205005694.html?.v=1): <http://biz.yahoo.com/bw/071205/20071205005694.html?.v=1>

### **8. Hydrogen Bus Alliance Calls for Industry Support**

The Hydrogen Bus Alliance, currently chaired by Transport for London, is calling upon suppliers in the hydrogen and bus manufacturing industries to join forces with it. Working in partnership with the industry, it aims to support the continued and rapid development and commercialization of hydrogen technology in the public sector. The Alliance aims to ensure that hydrogen buses can compete with their diesel counterparts in terms of cost and performance by 2015. To advance that goal, the Alliance recently launched an "Industry Dialogue" at the Canadian High Commission. Click the link below to participate in the Dialogue.

[Alliance](http://www.hydrogenbusalliance.org/AllianceLaunchPress250907.pdf): <http://www.hydrogenbusalliance.org/AllianceLaunchPress250907.pdf>

### **9. Eden Energy to Install India's First Hydrogen Dispenser**

Eden Energy's subsidiary Hythane Co. will supply and install India's first public hydrogen dispensing station in India to supply fuel to motor vehicles running on either hydrogen or Hythane - a mixture of hydrogen and natural gas. Indian Oil has awarded Hythane the tender to build the \$1 million fuel outlet in the heart of Delhi. The station will be used to refuel a number of trial vehicles including buses, cars, trucks and auto-rickshaws. Approximately 2,500 vehicles refuel at the existing site per day with petrol diesel and natural gas. The station is scheduled for completion in the third quarter of 2008. It will coincide with the Hythane bus demonstration projects that Eden plans for Gujarat and Mumbai this year. The Delhi fuel station will be the springboard for progressive commercial roll out across India commencing in 2009.

[India](http://www.tradingmarkets.com/.site/news/Stock%20News/996820/): <http://www.tradingmarkets.com/.site/news/Stock%20News/996820/>

### **10. Could River Power Lake Placid Cars?**

The village of Lake Placid, NY hopes to save tens of thousands of dollars by tapping into the Chubb River to create hydrogen fuel for their vehicles. Recent snows have turned the Olympic Village white, but officials at the village offices want to see more green taking place by increasing their environmental efforts. They want to start at this dam by putting in a hydro project that will generate electricity, then to electrolyze it to generate hydrogen. Hydrogen would become the fuel to power specially fitted police cars and replace costly gasoline. Rogers figures they can save about \$40,000 a year by doing that. So far, the New York Power Authority has shown strong interest in funding part of the million dollar project. Their local congresswoman is also seeking funds.

[Lake Placid](http://www.wcax.com/Global/story.asp?S=7568572&nav=menu183_2): [http://www.wcax.com/Global/story.asp?S=7568572&nav=menu183\\_2](http://www.wcax.com/Global/story.asp?S=7568572&nav=menu183_2)

### **11. UC-Berkeley Releases Report on Ammonia as Storage for H2 Fuel Cells**

The Transportation Sustainability Research Center at UC-Berkeley has issued its final report on "Ammonia as an Alternative Energy Storage Medium for Hydrogen Fuel Cells." The research was carried out under a technical agreement with the California Department of Transportation (Caltrans). Among the key findings: "Ammonia cracking systems can have attractive economics compared with other hydrogen supply options, particularly at small to

medium scales," and "At least two companies, Apollo Energy Systems and Intelligent Energy, are in a position (or soon will be) to supply small-scale ammonia cracking units for near-term FOT/demonstration projects."

[Report](http://www.californiahydrogen.org/UCB.pdf): <http://www.californiahydrogen.org/UCB.pdf>

[Intelligent Energy](http://www.intelligent-energy.com/): <http://www.intelligent-energy.com/>

### **12. Zero Emissions Ship to Commence Operation in Germany**

Proton Motor, Germany, is supplying the innovative hybrid drive for the world's first fuel cell-powered passenger vessel, Zemships (Zero Emission Ships). In summer 2008 the vessel will start operating in Hamburg, on the Alster and in the harbour area, carrying up to 100 passengers per trip -- completely emission-free. In January, the keel was laid, signaling the start of the next phase of the project funded by the European Union. Proton Motor is entering new territory in fuel cell ship's engines and underlining its trailblazing role in cleantech and zero-emission solutions. The heart of the new Alster steamer is an innovative fuel cell hybrid drive from Proton Motor. The individually developed complete system PM Turnkey is powered by two PM Basic A 50 50kW fuel cell systems. Linde AG is constructing a hydrogen refuelling station on a side canal of the river Alster to supply the necessary fuel.

[Zemships](http://www.bymnews.com/news/newsDetails.php?id=20652): <http://www.bymnews.com/news/newsDetails.php?id=20652>

[Linde](http://www.linde.com/hydrogen_flashsite_final/index.htm): [http://www.linde.com/hydrogen\\_flashsite\\_final/index.htm](http://www.linde.com/hydrogen_flashsite_final/index.htm)

### **13. Icelandic Hydrogen Ship Heralds Fossil-free Future**

In a few weeks, the Elding - Icelandic for "Lightning" - will be transformed into the world's first hydrogen-equipped commercial vessel, the latest sign that Iceland is pushing hard to become the first nation to break free from the constraints of fossil fuel. Come April, visitors to Europe's northernmost capital will get a taste of that future by taking whale-watching tours aboard the ship, or renting one of the world's first hydrogen-powered hire cars. The conversion of the Elding to hydrogen power will initially be confined to the use of a fuel cell to power the engine that runs its lighting, but for 43 euros (\$A72) a trip, the ship will offer whale-watchers unprecedented peace. When the crew spot whales at sea, they shut down the main engines to let people hear the mammals swim and blow water - an experience owner Vignir Sigursveinsson said had been marred in the past by the rumble of a diesel auxiliary engine below.

[Ship](http://www.theage.com.au/news/environment/benvironmentb-iceland-aims-to-be-free-of-fossil-fuels/2008/01/25/1201157669193.html): <http://www.theage.com.au/news/environment/benvironmentb-iceland-aims-to-be-free-of-fossil-fuels/2008/01/25/1201157669193.html>

### **14. NHA 2008 Held in Sacramento March 30-April 4**

The NHA Annual Hydrogen Conference is the largest hydrogen conference in the U.S. and the longest running annual hydrogen conference in the world. More than 1,500 business professionals and expo visitors are expected to attend the 19th Annual Conference in Sacramento, CA, March 30 - April 4, 2008. This year's theme is "Ramping Up Commercialization." As a result, a major focus of the Conference and Expo will be the challenges and opportunities in early markets, as well as ways to advance the commercial use of hydrogen products currently available in the marketplace. CHBC is supporting this important event.

[NHA 2008](http://www.hydrogenconference.org/content.asp?registration): <http://www.hydrogenconference.org/content.asp?registration>

### **15. BNSF Railway and Vehicle Projects Develop Experimental Hydrogen Fuel Cell Switch Locomotive**

BNSF Railway Company and Vehicle Projects LLC recently announced they are developing an experimental hydrogen fuel cell switch locomotive. The experimental switch locomotive has the potential to reduce air pollution, is not dependent on oil for fuel, and could serve as a mobile backup power source for military and civilian disaster relief efforts. The switch

locomotive is currently under development and field testing is scheduled to begin later this year. Senator Sam Brownback (R-Kansas) stated, "I'm pleased to have been working for the past two years to procure funding for the fuel cell locomotive. The progress that BNSF and Vehicle Projects are making in its development is remarkable, and their work is helping to wean America off foreign oil."

[Locomotive](http://www.foxbusiness.com/markets/industries/transportation/article/bnsf-railway-vehicle-projects-develop-experimental-hydrogen-fuel-cell-switch_430705_8.html): [http://www.foxbusiness.com/markets/industries/transportation/article/bnsf-railway-vehicle-projects-develop-experimental-hydrogen-fuel-cell-switch\\_430705\\_8.html](http://www.foxbusiness.com/markets/industries/transportation/article/bnsf-railway-vehicle-projects-develop-experimental-hydrogen-fuel-cell-switch_430705_8.html)

### **16. Renewable Hydrogen Energy**

Construction work has started on Wales' first Renewable Hydrogen Research and Demonstration Centre based on Baglan Energy Park. The 1.7 million pound centre is being developed by The University of Glamorgan in partnership with Neath Port Talbot Council. The first of its kind in Wales, the Centre will explore the potential use of hydrogen as one of the key fuels of the future and will show how hydrogen can be produced from local renewable sources. Located next to the Solar Centre and close to the Technium Sustainable Technologies centre, the building will provide facilities for hydrogen production, conferencing, research, demonstrations and education and will run itself from renewable energy sources. (See story 7, above.)

[Wales](http://www.newswales.co.uk/?section=Education&F=1&id=12965): <http://www.newswales.co.uk/?section=Education&F=1&id=12965>

### **17. Masdar and Hydrogen Energy Plan Clean Energy Plant in Abu Dhabi**

Masdar, Abu Dhabi's initiative for renewable and alternative energy and clean technology, and Hydrogen Energy, the joint venture between BP Alternative Energy and Rio Tinto, recently announced the signing of an agreement to work together on the front-end engineering design of an industrial-scale hydrogen-fired power generation project with capture of the carbon dioxide (CO<sub>2</sub>), which would then be available for transportation and storage. The plant would be located in Abu Dhabi. Natural gas would be processed to create hydrogen and CO<sub>2</sub>. The hydrogen fuel would generate low-carbon electricity. Rather than being emitted to the atmosphere, the CO<sub>2</sub> would be captured, ready for transportation and injection into a producing oil field where it could replace natural gas currently being injected into the field to maintain pressure. The injected CO<sub>2</sub> has also the potential to increase the proportion of Abu Dhabi's oil that can be recovered.

[Abu Dhabi](http://business.maktoob.com/News-20070423137914-Masdar_and_Hydrogen_Energy_Plan_Clean_Energy_Plant_in_Abu_Dhabi.aspx): [http://business.maktoob.com/News-20070423137914-](http://business.maktoob.com/News-20070423137914-Masdar_and_Hydrogen_Energy_Plan_Clean_Energy_Plant_in_Abu_Dhabi.aspx)

[Masdar\\_and\\_Hydrogen\\_Energy\\_Plan\\_Clean\\_Energy\\_Plant\\_in\\_Abu\\_Dhabi.aspx](http://business.maktoob.com/News-20070423137914-Masdar_and_Hydrogen_Energy_Plan_Clean_Energy_Plant_in_Abu_Dhabi.aspx)

### **18. Hydrogen-Powered Cell Phone Doubles Battery Lifetime**

Angstrom Power's hydrogen-powered Motoslvr cell phones were on display at the Consumer Electronics Show in Las Vegas in January. The fuel cell version looks identical to the battery version, but another advantage of the new technology is that it can refuel in as little as 10 minutes. As Paul Zimmerman of Angstrom Power explains, the key advantage of the technology is the ability to fit the fuel cell into the phone itself, rather than being hooked up to an exterior device for power. With the design of "Micro Hydrogen" technology, Zimmerman hopes that the company will launch its first commercial fuel cell phones in 2010, and grow from there. If fuel cell phones live up to their promise of better power, the market could be in the hundreds of millions of devices.

[Angstrom](http://www.physorg.com/news119544735.html): <http://www.physorg.com/news119544735.html>

### **19. Millennium Cell and Horizon Fuel Cell Debut HydroPak(TM) Portable Power Product**

Millennium Cell Inc. and Horizon Fuel Cell Technologies announced the completion of a pre-production version of the HydroPak(TM) portable power generator that incorporates a unique water-activated cartridge system. The HydroPak product combines Horizon's fuel

cells with Millennium Cell's Hydrogen on Demand(R) storage technology to offer a clean and quiet power generator for emergency and recreational purposes. This power source is a high energy alternative to lead acid battery packs and portable generators. The HydroPak system, together with each cartridge, provides infinite shelf life and enough energy to recharge an average notebook computer 8 to 10 times. The HydroPak made its public debut at the Consumer Electronics Show in Las Vegas and was shown to the U.S. military at the Tactical Power Sources Summit 2008 at the Georgetown University Conference Center in Washington, D.C. on Jan. 29-30.

[HydroPak](http://www.millenniumcell.com/fw/main/default.asp?DocID=92&reqid=1091045): <http://www.millenniumcell.com/fw/main/default.asp?DocID=92&reqid=1091045>

## **20. New Facility For Hydrogen Pipeline Testing Made To Prompt Hydrogen Economy**

Efforts to create a "hydrogen economy" to reduce U.S. oil imports will get a boost from a new laboratory at the National Institute of Standards and Technology (NIST) that will evaluate tests, materials, mechanical properties and standards for hydrogen pipelines. Construction is just beginning on the 750 square foot laboratory on the site of a former hydrogen test facility at the NIST campus in Boulder, Colo. The laboratory--including a control room in a separate, existing building--is expected to be operational by mid-2008. Widely used in industrial processing, hydrogen is attractive as a fuel because it burns cleanly without carbon emissions and can be derived from domestic sources. But long-term exposure to hydrogen can embrittle existing pipelines, increasing the potential for dangerous failures.

[NIST](http://www.sciencedaily.com/releases/2008/01/080124094006.htm): <http://www.sciencedaily.com/releases/2008/01/080124094006.htm>

## **21. HPI Announces Development of Advanced Fuel Technology**

Hydrogen Power, Inc. recently announced it has developed a new technology for mixing its proprietary AlumiFuel(TM) fuel which significantly improves performance and cost effectiveness in its target energy applications. HPI's new technology covers the production of hydrogen from aluminum, water and a proprietary reactant additive using an advanced processing technique and formula. Cartridges filled with AlumiFuel powder are dropped into a reactor and when water is added, high purity hydrogen and steam are generated as a result of the chemical reaction. The hydrogen and/or steam can be fed into fuel cells, turbine-based power conversion modules, or directly into inflatable devices, such as weather balloons. HPI has filed a provisional patent application for the new technology, which is considered a separate invention and is the property of HPI. This is the technology the company is now using in all applications being pursued with partners and customers

[HPI](http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/01-07-2008/0004731837&EDATE=): <http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/01-07-2008/0004731837&EDATE=>

## **22. Abstracts Due Feb 4 for World H2 Energy Conference**

Contributions for papers and posters are now invited for presentation at the 17th World Hydrogen Energy Conference (WHEC) to be held in Brisbane, Australia in June 2008. This major event has the theme "Supplying Energy To A Changing World," in recognition that hydrogen is an energy carrier, and that the global energy business is changing. The conference will cover a wide range of technical issues from how hydrogen is safely produced, stored, transported and utilized to broader topics such as environment, education and regulatory developments. Lessons learned from the CUTE hydrogen fuel cell bus field trial based in Perth, Western Australia, will give attendees at this meeting a unique perspective. The WHEC will be held June 15-19 at the Brisbane Convention and Exhibition Centre, Queensland, Australia.

[WHEC](http://www.whec2008.com/): <http://www.whec2008.com/>

### **23. 2008 Blue Sky Awards Nominations Accepted Through March 31**

Nominations are now being accepted for WestStart-CALSTART's 2008 Blue Sky Award. The internationally recognized award is presented to companies, organizations or individuals selected for making outstanding contributions to clean air, energy efficiency and the advanced transportation industry. The Blue Sky Award's criteria focus on marketplace actions. However, those activities may take many forms. Prospective award recipients can be manufacturers, developers or users of advanced transportation technologies or services. They can be selected for bringing new vehicles or vehicle technologies to market; for significant implementation of clean, sustainable transportation options; and for significant technology breakthroughs that affect the marketplace.

[Blue Sky](http://www.calstart.org/info/bluesky/BSA_2008.php): [http://www.calstart.org/info/bluesky/BSA\\_2008.php](http://www.calstart.org/info/bluesky/BSA_2008.php)

### **24. Send Us Your News!**

We welcome important news from our members for inclusion on our website and in next month's report. In addition to being distributed to CHBC's list of over 2200 industry members, our newsletters are forwarded to thousands more through the Canadian Hydrogen Association and FuelCellMarkets.com. Please send to:

[info@californiahydrogen.org](mailto:info@californiahydrogen.org). Thank you for helping build a great organization.

[CHA](http://www.h2.ca/): <http://www.h2.ca/>

[Fuel Cell Markets](http://www.fuelcellmarkets.com): <http://www.fuelcellmarkets.com>

### **25. Board of Directors**

President - Henry Wedaa; Vice President - Paul Scott, ScD; Secretary - Josh Mauzey; Treasurer - Larry Watkins; Managing Director - Catherine Rips; Membership Chairman - Mark Abramowitz; Program Chairman - Henry Wedaa; Director at Large - John Williams, PE; Director at Large - Allan Bedwell; Director at Large - Fred Silver; Ex-officio Government Liaison - Analisa Bevan. To contact the board, please email: [info@californiahydrogen.org](mailto:info@californiahydrogen.org).

---

[Click Here](#) to unsubscribe.

Catherine Rips, Editor/Publisher

**California Hydrogen Business Council**

760-341-2924

[www.CaliforniaHydrogen.org](http://www.CaliforniaHydrogen.org)