TRANSPORTATION APPLICATIONS

Fuel Cell Bus to Operate in Belgium.
A 43-foot hybrid electric Van Hool transit bus equipped with a UTC Power fuel cell system will be delivered to De Lijn, the largest bus fleet operator in Belgium, and will begin service in early June. It will operate in Belgium for six months before being leased to other transit agencies in Europe.
http://www.utcpower.com/fs/com/bin/fs_com_Page/0,11491,0215,00.html

H2 Logic Delivers Hydrogen-Powered Truck and Refueler to Samsø Energy Academy.
H2 Logic delivered a hydrogen-powered truck, H2 Truck v2, and refueling unit to Samsø Energy Academy in Denmark. This adds to the six other H2 Trucks and three refueling units in operation around Denmark already.

Hydrogenics Receives APU Order from MAN.
Hydrogenics Corporation has received an order for a fuel cell auxiliary power unit (APU) from MAN Nutzfahrzeuge AG. The unit will be integrated into a hydrogen internal combustion engine (H2ICE) bus that is being deployed in Berlin for the European Community’s HyFLEET:CUTE project. The APU will be delivered and bench tested in the early fall of 2007 and fully installed by the end of the year.
http://www.hydrogenics.com/ir_newsdetail.asp?RELEASEID=244066

DOE Invests $19 Million in Advanced Vehicle Technologies Research.
Five next-generation vehicle research projects will receive up to $19 million from the U.S. Department of Energy (DOE) to further the development of plug-in hybrid electric vehicles, hybrid electric vehicles, and fuel cell vehicles. Projects will focus on reducing the cost, weight, and size of electric drive and power conversion devices while increasing vehicle efficiency. Industry teams based in California, Michigan, New York, and Virginia will share the cost of the projects, bringing the total investment to $33.8 million from the current fiscal year through fiscal year 2010.
http://www.energy.gov/news/5078.htm

Sandia and Boeing Team Up on Aircraft APU.
Sandia National Laboratories and Boeing are collaborating on a project looking at the feasibility of using a hydrogen-powered fuel cell for providing backup power in aircraft. The project focuses on the use of a polymer electrolyte membrane (PEM) fuel cell for backup electrical power to critical subsystems during emergency scenarios.

STATIONARY APPLICATIONS

Foster’s - Australian for Fuel Cell.
Foster’s Yatala Brewery in South East Queensland has installed a microbial fuel cell that creates energy from brewery waste water. The experimental fuel cell, developed by scientists at the University of Queensland, uses bacteria to consume water-soluble brewing waste such as sugar, starch and alcohol,
while producing electricity. If successful, Foster's will look at ways to apply the technology to other breweries and wineries.  

Acumnetrics Ships Unit to Sweden.  
Acumnetrics Corporation has shipped a 5 kW solid oxide fuel cell generator to the GlashusEtt environmental information center in Stockholm, Sweden. The generator was purchased by ABB Corporate Research in Västerås, Sweden, together with 8 other Swedish companies and organizations.  

CCEF Helps Fund High School Fuel Cell.  
The Connecticut Clean Energy Fund (CCEF) has approved a grant of $940,000 through its On-site Renewable Distributed Generation (DG) Program to help defray more than half of the total project cost of installing a 200-kilowatt fuel cell at the new Middletown High School, currently under construction in Middletown, Connecticut. The fuel cell will be a phosphoric acid fuel cell supplied by UTC Power and will provide approximately 48% of the estimated baseload electricity requirements for the school and will supply heat to the swimming pool and the school’s space heating system. Additionally, the fuel cell will provide grid-independent power to support the school’s function as an emergency shelter at times when the electric grid is unavailable.  

SECA Phase I Complete.  
The six industry teams participating in DOE’s Solid State Energy Conversion Alliance (SECA) program have successfully completed tests of the first solid oxide fuel cell prototypes that can be manufactured at costs approaching those of conventional stationary power-generation technology. The teams designed and manufactured SOFC electrical power generators in the 3-10 kilowatt range that were then subjected to a series of rigorous tests to evaluate system performance with respect to efficiency, endurance, availability, and production cost.  

PORTABLE/BACKUP POWER

HELION Installs System at French Agency.  
HELION has installed a 30-kW industrial fuel cell backup power system at the new CEA (French Commission for Atomic Energy) headquarters in Saclay, France.  
http://www.helion-fuelcells.com

Tropical Showcases Fuel Cell at Hannover.  
Tropical S.A. presented the HT-1000, a 1kW fuel cell system operating with LPG or Natural Gas reformer at the 2007 Hannover Fair. Tropical S.A. teamed-up with HELBIO S.A. Hydrogen & Energy Production Systems to develop a portable fuel cell for off-grid recreational applications such as campers / caravans / RVs, boats, remote cabins, special vehicles etc. It uses the widely available liquid fuels (propane, LPG) typically employed in such activities. Hydrogen is extracted from the fuel in the fuel processor and feeds a PEM fuel cell that can produce 0.5 - 1.5 kW electricity.  

Protonex Awarded Contract from NCMS.  
Protonex Technology Corporation has been awarded a second contract with the Michigan-based National Center for Manufacturing Sciences (NCMS). The contract, with a total program value of $400,000, will help Protonex continue to increase the manufacturability of its fuel cell products.  
http://www.protonex.com/

FUELS/REFORMERS/STORAGE

Hydrogen Station Opens in Hamburg.
The Hamburg Airport recently opened its hydrogen filling station that was developed and built by Linde. The mobile fueling unit is used to fill two fuel cell STILL tractors and a people-carrier which will eventually be in daily use at the airport. The project, planned to last two years, is a collaboration between the Hamburg Regional Initiative for Hydrogen and Fuel Cell Technology, Hamburg Airport, Wasserstoffgesellschaft Hamburg and The Linde Group.


Florida Hydrogen Station Fueling Shuttle Buses.
Florida’s first hydrogen energy demonstration station, located in the metro-Orlando area, is now open and will fuel hydrogen-powered Ford E-450 shuttle buses. The Boggy Creek Hydrogen Fueling Station will provide the foundation for a “hydrogen hub” in Central Florida. The station was formed through a collaboration between the State of Florida, Ford Motor Company, Chevron Technology Ventures (a subsidiary of Chevron Corporation) and Progress Energy.


DOE Office of Science Awards $11.2 Million for Hydrogen Research.
DOE awarded $11.2 million for 13 research projects aimed at overcoming the scientific challenges associated with the production, storage and use of hydrogen. Universities and national laboratories in 10 states and Washington, DC will conduct research in two technical areas – novel materials for hydrogen storage and nanoscale catalysts.


Shell Hydrogen LLC and Virent Energy Systems, Inc. have entered into a five-year joint development agreement to develop further and commercialize Virent’s BioForming™ technology platform for hydrogen production. This technology enables the production of hydrogen from renewable glycerol and sugar-based feedstocks.


A Purdue University engineer has developed a method that uses an aluminum alloy to extract hydrogen from water on demand. Hydrogen is generated spontaneously when water is added to pellets of the alloy, which is made of aluminum and a metal called gallium. The method makes it unnecessary to store or transport hydrogen - two major challenges in creating a hydrogen economy.


Millennium Cell Awarded Air Force Contract.
Millennium Cell Inc. has been awarded a contract with the U.S. Air Force Research Laboratory to extend the capabilities and performance of its Hydrogen on Demand® based fuel cartridges for current and future soldier power systems. The primary focus of this effort is to enable the flexibility for field-hydration of cartridges so that the soldier can activate the fuel by adding field-quality water at the point-of-use on missions.


H2Gen Wins DOE Award.
H2Gen Innovations received the “DOE Hydrogen Program R&D Award” at DOE’s annual Hydrogen Peer Review Meeting. The award, “In recognition of Outstanding Achievement in Technology Innovation,” stems from H2Gen’s development of hydrogen generation technology that is expected to meet the DOE hydrogen cost target of $2.50/gallon of gasoline on an energy equivalent basis by 2010.


MATERIALS/COMPONENTS

GEFC Offers Numerous Products.
Golden Energy Fuel Cell Co., Ltd. (GEFC) offers several products for sale for fuel cell manufacturers. Their product line includes membranes, gas diffusion layers and other components such as GEFC-10N, GEFC-C10, GEFC-MEA, and GEFC-GDL.

http://www.gefc.com

REQUESTS FOR PROPOSALS

IFC Fuel Cells Initiative.
The International Finance Corporation (IFC) will consider proposals from fuel cell vendors and project developers for turnkey stationary fuel cell installations. IFC’s Fuel Cell Financing Initiative for Distributed Generation Applications, funded by the Global Environmental Facility (GEF), is a two stage program - the first stage provides for three grants of up to $3 million each, while the second stage has an allocation of up to $45 million in additional funding. In stage one of the initiative, up to three commercial demonstration projects using fuel cells for distributed power generation will be promoted in at least two GEF-eligible countries. These projects may involve various stakeholders and are expected to result in a total installation of 4-7 MW of fuel cells by 2010. IFC will accept proposals on a rolling basis for a period of 18 months.


DOE Seeks Information for New Hydrogen Storage Center of Excellence.
DOE issued a Request for Information regarding a new Hydrogen Storage Center of Excellence to complement and coordinate with the three already existing materials-based Centers of Excellence. The focus of the new center will be system and component development for on-board hydrogen storage systems. Information gathered through the RFI may be used to develop a future Funding Opportunity Announcement. Responses to the RFI are due June 15, 2007.

http://e-center.doe.gov/iips/faopor.nsf/8373d2fc6d83b66685256452007963f5/d7fb0a999eaccdf2852572c900739db3?OpenDocument

DOE has issued a Request for Information (RFI) seeking information regarding early market activities that will facilitate the commercialization of hydrogen and fuel cell technologies for purposes of possibly developing a funding opportunity announcement to address this topic. Information is also sought on fuel cell performance testing and community partnerships. Deadline for responses is June 30, 2007.

https://e-center.doe.gov/iips/faopor.nsf/8373d2fc6d83b66685256452007963f5/60bee4baca2e83a852572c9005653f0?OpenDocument

REPORTS/MARKET STUDIES

Clean Energy Investing.
Research and Markets has released the 1st Edition of Clean Energy Investing, a study of the growing level of investment in clean energy technologies.
http://www.researchandmarkets.com/product/4111bd/clean_energy_investing

MISCELLANEOUS

Fuel Cell Manufacturing Facility for Lease.
W. F. Harris Development LLC is leasing a state-of-the-art 93,000SF facility, which includes 25,000SF office space that was engineered and designed by eminently respected Lockwood Greene for H Power as their corporate headquarters and for the development and manufacture of fuel cells. Also, there is area to add on an additional 120,000 square feet contiguous to the building. “The facility is remarkable for its all-inclusive work environment,” comments Bill Harris, Managing Member of W. F. Harris Development LLC. “Everything from its two-story media room, food preparation area with large capacity lunchroom, and 14 bay loading dock through its office space, production area, clean room, and explosion-proof test facility is state-of-the-art, including in-place and approved hydrogen systems. Plus, it's next to the Monroe Airport.
with its 5500 foot runway, and is less than 20 minutes from uptown Charlotte, the largest banking center in the nation second only to NYC.” For a complete pictorial tour and specifications, visit www.wfharrisdev.com. Contact Michael A. Catanese, Jr. at NAI Southern Real Estate, 704-375-1000 for more information.

**Acumentrics Wins Innovation Award, Opens Canadian Office.**
Acumentrics Corporation has won a 2007 New England Innovation Award from SBANE, the Smaller Business Alliance of New England. The company was one of 7 winners chosen from a pool of 171 applicants and the only alternative energy company to win this year. Acumentrics has also formed Acumentrics Canada Ltd. To create the new entity, Acumentrics acquired assets and hired employees of Fuel Cell Technologies Ltd. of Kingston, Ontario.
http://www.acumentrics.com/0d83b2b4-a6e1-452b-8dec-3b5c4b241c46/press-releases-release-details.htm

**UNH Wins Intel Innovation Award Again.**
The University of New Hampshire team won the prestigious overall Intel Innovation Award at the 17th Annual International Environmental Design Contest (EDC). This is the third time UNH has brought home the Intel award, which is more than any other school. The team designed a single-chamber, open-air microbial fuel cell that successfully converts cow manure directly into electricity.

**Proton Energy Systems Now Distributed Energy Systems.**
Northern Power Systems and Proton Energy Systems were combined and will now be known by the parent company name, Distributed Energy Systems.

**Fuel Cell Pioneer Fondly Remembered**
Dr. Patrick G. Grimes, a pioneer in fuel cells and advanced energy systems, died on May 27 at Overlook Hospital in Summit, New Jersey. He was 77. His long career as a researcher and innovator began with the Atomic Energy Commission Laboratory in Ames, Iowa. In 1972, Pat joined Exxon Research and Engineering Co., and later transferred to Exxon Corporate Research lab in New Jersey. He retired in 1994, formed a consulting company, and joined Gibbs Energy as chief scientist, staying active until his death. Pat helped design the first fuel cell-powered tractor, using an alkaline fuel cell. He held more than 25 patents in electrochemistry, energy storage and energy conversion. Contributions may be made in his name to Loras College -- Development Office (Dept. Chemistry), http://alumni.loras.edu, or the American Chemical Society, www.chemistry.org/portal/a/c/s/1/acsdisplay.html?DOC=gifts%5cmatchingfund%5cindex.html. (Submitted by Bob Rose)

**CONFERENCES**
For a complete list of conferences, please go to http://www.fuelcells.org/news/conf.html

**Fuel Cell Early Markets 2007.**
Fuel Cell Early Markets 2007: Policy, Finance, & Applications will be held June 11-12, 2007, at the Brussels Marriott Hotel in Brussels, Belgium. For more information, please contact Magda Dziembowski at mdziembowski@intertechusa.com or visit http://www.intertechusa.com/fuelcells.html.

**Fuel Cell 2007.**
Don't miss the chance to learn the latest in fuel cell technology at the Fuel Cell 2007 conference held June 14-15, 2007, at the Hyatt Regency Rochester in Rochester, N.Y. Going on its fourth year, featuring speakers from Delphi, Eldre, Idatech, Maxwell, Vairex and Voller Energy, with keynote speaker Mr.

**Investment in Taiwan.**
A seminar, Investment Opportunities in Taiwan’s Fuel Cell Industry, will be held Monday, June 18, 2007, at the Holiday Inn Dayton/Fairborn Hotel in Fairborn, Ohio. For more information, email chicago@taitra.org.tw.

**HFCE2007.**

**Grove Fuel Cell Symposium.**

**FC Expo 2008.**
The 4th International Hydrogen & Fuel Cell Expo (FC Expo 2008) will be held February 27-29, 2008, at Tokyo Big Sight in Tokyo, Japan. For conference information, please visit http://www.fcexpo.jp/english/.

**WIREC 2008.**

*Fuel cells generate electricity without combustion by harnessing the energy created when hydrogen and oxygen are chemically combined. Fuel Cells 2000 is an independent, nonprofit activity dedicated to the commercialization of fuel cell technologies.*