## **FUELS**

# FLEETS &

## January 14, 2008

#### Volume XV, Number 2

#### **Dutch Do LNG**

Rolande LNG Plan Calls for 200 Trucks Plying a 'Blue Corridor' Fueling Network

An international team is beginning to field vehicles as it works to bring the range advantages of liquefied natural gas to European trucking. The team is pursuing the necessary licenses and permits for LNG trucks to initially be supported by fueling facilities in Oss and then Dordrecht, in the south central part of The Netherlands.

Eventually as many as 200 LNG trucks will ply European roads along "blue corridors," according to Henk Verbeek, a consultant with **Rolande LNG** (Dutch language website), an LNG importer.

The team initially converted a Scania 142 truck with a 420-horsepower engine to LNG operation using a carbureted system by Sandfirden, a specialist in marine conversions, Verbeek says. A second has now been converted using a direct injection system, resulting in a lean burn, spark-ignition engine.

LNG tanks are supplied by Chart Ferox of Germany and the Czech Republic. Potential operators reportedly include Vos Logistics, Vos Born and Den Hartogh Tankers. Smaller vehicles are on order as well, Verbeek notes, from OEMs including Mercedes and Iveco. Rolande has LCNG fueling capability too. Rolande LNG, Mr. Henk Verbeek, +31-61-045-9229; hverbeek@rolandelng.nl Rolande LNG, Alexandra van Seumeren, +31-416-282444; Alexandra@rolande.eu Chart Ferox, Hans Lonsain,

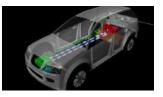
+49-212-7005-70; hans.lonsain@chart-ferox.com; www.chart-ferox.com Chart-NexGen (U.S.), Claus Emmer,

952-447-0905; claus.emmer@chart-ind.com; www.nexgenfueling.com

## **AFS Trinity Unveils Its Hybrid**

'Extreme Hybrid' drive developed with Ricardo includes lithium batteries and ultracaps, as well as high-performance, 'through-the-road' parallel architecture. Partners wanted.

Page 4



## **Prometheus Pumping in Earnest**

"We're shipping routine liquid," says exec — LNG to fuel county buses, made from waste methane at the Bowerman landfill in Southern California. Page 6

## **World Leader in Alt Fuels**

Las Vegas boasts an alternative fuels program that has garnered a World Leadership Award in London, beating out runners-up in Germany and India.



**Health Study Slams Diesel...** 

Page 2

E85 Network for California...

Page 2

San Francisco Fleet's All-B20...

Page 3

**ASTM Biodiesel Spec Vote...** 

Page 3

ADM-Daimler-Bayer Jatropha...

Page 3

Ford's 40% EcoBoost Gain...

Page 4

**BAF Expects Certifications...** 

Page 5

Lincoln Moves to New Factory...

Page 5

Cummins Cal Pacific Expands...

Page 5

i age 3

GAO Sounds LNG Warning...

Page 6

AF&V 2008 Is Looking Strong...

Page 7

#### California's AB 118

California Energy Commission and Air Resources Board are gearing up an ambitious alternative fuels implementation effort, amounting by law to \$1 billion over seven+ years.

The state seeks a commonsense balance of electricity, gaseous fuels and biomass sources to reduce oil imports and with them greenhouse gas emissions.

'All of the alternative fuels will be represented,' says one official.



Page 8

- COPYRIGHT © 2008 AUGUST PACIFIC PRESS

## **Health & the Environment**

#### **MATES III**

South Coast Draft Study Finds Continuing Risk, Could Lead to Even Tighter Fuel Fuel Fleet Rules The South Coast Air Quality Management District, the agency with responsibility for air quality in the Los Angeles area, is seeking comment on a draft study

finding that while air pollution measures have demonstrably reduced health risks, they nevertheless remain too high.

AQMD wants input on the draft version of MATES III (Multiple Air Toxics Exposure Study). MATES II, the agency notes, led to the area's current alt fuel fleet requirements.



"While there has been improvement in air quality regarding air toxics, the risks are still unacceptable and are higher near sources of emissions such as ports and transportation corridors," says a summary, which states that 84% of the toxics threat is from diesel exhaust. "Diesel particulate continues to dominate the risk from air toxics, and the portion of air toxic risk attributable to diesel exhaust is increased compared to the MATES II Study."

Public comments are being accepted until **April 4**. *SCAQMD*, *Dr. Jean Ospital*, 909-396-2582;

jospital@aqmd.gov; www.aqmd.gov



Rich Piellisch, Editor & Publisher August Pacific Press 357 Haight Street San Francisco. CA 94102 USA

+1.415.896.5988; piellisch@fleetsandfuels.com

Kathy Thorne for *Fleets & Fuels* Subscription Inquiries PNMSI, PO Box 335 / Boyds, MD 20841 USA +1.301.540.3971 telephone / +1.301.528.2497 fax

support@pnmsi.com

Fleets & Fuels is published electronically 24 times per year by August Pacific Press. \$397.00 per year world rate.

Quantity discounts available.

Publisher and Editor-in-Chief Richard Piellisch.

COPYRIGHT © 2008 August Pacific Press. All Rights Reserved.

Fleets & Fuels subscribers are asked to respect Fleets & Fuels' copyright, and share with colleagues only on-site. All are urged to get in touch with the publisher regarding discounts for additional, off-site subscriptions.

ISSN 1075-0134

#### **Ethanol**

## E85 for California, Finally

Conserv Fuel Station in Los Angeles Area
To Be First of Many with Calstart Backing
California has the first of a network of E85/ethanol
fueling stations, established by Conserv Fuel in
Brentwood (Los Angeles). It's the first of a series to be
opened in the state as part of a federal-state program
administered by Calstart.

A formal opening is being planned.

Pearson Fuels in Carlsbad/San Diego, until now a "lone wolf" supplier of ethanol in California, may open as many as half a dozen more stations.

Tulare, in the Central Valley, is coming on soon, likewise Concord, east of San Francisco. Other targets include El Centro, El Segundo (LAX/the Los Angeles Airport), San Luis Obispo, and Santa Barbara.

#### A 15-Facility Program

Calstart has \$27,500 in U.S. Department of Energy money for each station. There's money from the California Air Resources Board as well, all in all enough to back about 15 ethanol facilities, says Steve Sokolsky of Calstart's Northern California office.

Other partners include the Santa Barbara-based Community Environmental Council and GM.

Conserv Fuel says it "stands apart in promoting efficiency and sustainability as core values."

Calstart, Steve Sokolsky, 510-307-8772; fax 510-307-8706; ssokolsky@calstart.org; www.calstart.org

Conserv Fuel, Kris Moller, 310-571-0039; kris@conservfuels.com; www.conservfuel.com

Pearson Fuels, Mike Lewis, 619-243-0456; mlewis@pearsonfuels.com; www.pearsonfuels.com

Community Environmental Council, Michael Chiacos, 805-963-0583, ext 110; mchiacos@cecmail.org; www.communityenvironmentalcouncil.org

General Motors, Clay Okabayashi, 951-600-5962; clay.1.okabayashi@gm.com; www.gm.com



Conserv Fuel station in Brentwood, Calif.

## **Biodiesel**

## B20, All B20 - and Beyond

San Francisco Claims Biodiesel Lead Nationally With B20 Across Fleet, Big Waste Oil Ambitions San Francisco has completed the transition of virtually all of its 1,500-strong diesel fleet (with the exception of some emergency vehicles) to B20

biodiesel, and hopes to satisfy 100% of its B20 needs with reclaimed waste oils by the end of next year.

The key to success has been a strict procurement specification, says Marty Mellera of the San Francisco Municipal Railway, known as Muni. He runs a fleet of buses that accounts for about 6 million of the City's 7.5 million gallons of diesel, now B20 biodiesel, consumption per year.

Muni's supplier is San Francisco Petroleum, which currently uses 100% soy oil.

San Francisco's Public Utilities Commission late last year kicked off SF Greasecycle, aimed primarily at preventing sewer clogging by waste oil. Greasecycle provides restaurants with a free pickup service (using a pair of B100-powered trucks). It is now producing



about 5,000 gallons per month from some 200

By tapping more of San Francisco's 2,600 restaurants, SF Greasecycle aims to boost output to 50,000 gallons of City specification-compliant B100 per month by the end of the year, and 100,000 gallons by the end of 2009. That would be 1.2 million gallons of B100 a year, enough for all of the city's B20 needs. San Francisco is hoping to boost its biodiesel fuel content all the way up to B99, says Greasecycle's Karry Ving. *SF Environment, Ms. Vandana Bali, 415-355-3728*;

vandana.bali@sfgov.org; www.sfenvironment.com

SF Greasecycle, Karri Ving, 415-695-7366; karri@sfgreasecycle.org; www.sfgreasecycle.org

SF Muni, Marty Mellera, 415-701-4460; marty.mellera@sfmta.com; www.sfmuni.com

SF Petroleum, Doug Seames or Barry Viles, 415-621-5226

#### Biodiesel in Orlando in Just Three Weeks...

THE RESERVE TO SERVE THE PARTY OF THE PARTY

**February 3-6,** 2008 National Biodiesel Conference at the Gaylord Palms Resort and Convention Center in Orlando, Fla.

Organized by the National Biodiesel Board.

NBB, Jenna Higgins, 573-635-3893 or toll-free 800-841-5849, ext 15; fax 573-635-7913; jhiggins@biodiesel.org; www.biodieselconference.org

More Meetings News on Page 7

#### **ASTM Progress**

Panel Approves D 6751 Specification for B20, Vote Seen as 'Huge Step Forward' for the Fuel ASTM International's D02 Subcommittee E has approved changes to the D 6751 biodiesel standard allowing for popular 6% to 20% biodiesel blends.

"Major engine companies and petroleum refiners joined the biodiesel industry," said Steve Howell, chairman of the ASTM Biodiesel Task Force. "B20 made with in-spec biodiesel is a good quality, reliable fuel," he said. "OEMs, regulators and customers have demanded formal ASTM passage of a B20 blend spec... The biodiesel industry is delivering that."

ASTM's D02 panel is expected to approve the spec, addressing a key issue of filter clogging above the cloud point, when it meets **June 15-19** in Vancouver. *ASTM, David Bradley*,

610-832-9681; dbradley@astm.org; www.astm.org

## Jatropha Alliance

ADM of the U.S. Teams with Daimler and Bayer To Explore an 'Industry' Based on Tropical Plant American agricultural giant Archer Daniels Midland is teaming with Germany's Bayer CropScience and Daimler "to jointly explore the potential for a biodiesel industry based on jatropha."

"Jatropha biodiesel can be produced with quality similar to biodiesel from oil seeds," Daimler advanced engineering VP and environmental chief Herbert Kohler says in a release. "It is time to evaluate the commercial potential of jatropha biodiesel."

Daimler is to explore interactions between fuel and engine while Bayer CropScience develops and register herbicides, soil insecticides and fungicides applicable to jatropha plantings.



Jatopha oil on Wikipedia

ADM already runs several biodiesel refineries worldwide.

The firms describe jatropha – *Jatropha curcas L.* — as a hardy, drought tolerant plant and can be cultivated in tropical and sub-tropical regions, and even on degraded land.

Daimler info, Verena Müller, +49-711-17-95158; verena.mueller@daimler.com; www.daimler.com ADM, Scott Fenwick, 217-451-3608; scott\_fenwick@admworld.com; www.admworld.com

#### ...and Biofuels in Brussels in March



March 12-14, World Biofuels Markets '08 at the Brussels Expo Centre in Belgium.
UK's Green Power Conferences.

GPC (London), Matthew Probyn, +44-20-7801-6333; matthew.probyn@greenpowerconferences.com; www.worldbiofuelsmarkets.com

## **Technology**

#### Ford's 'EcoBoost'

Direct Injection Allows Up to 20% Fuel Savings, Meaning Far Faster Payback than Diesel, Hybrid Ford has unveiled a line of 4- and 6-cylinder engines with fuel savings of up to 20%, and carbon dioxide emission reductions of 15%.

Ford pledges to employ EcoBoost engines "in half a million Ford, Lincoln and Mercury vehicles annually in North America during the next five years beginning with the new Lincoln MKS sedan in 2009."

"EcoBoost builds upon today's affordable gasoline engine and improves it, providing more customers with a way to improve fuel economy... across a wide variety of engine types in a range of vehicles, from small cars to large trucks — and it's affordable," global product development VP Derrick Kuzak says in a release.



'EcoBoost' direct injection will debut on Ford's 2009 Lincoln MKS, its 3.7-liter engine combining V-6 economy with V-8 power

"Customers in North America can expect to recoup their initial

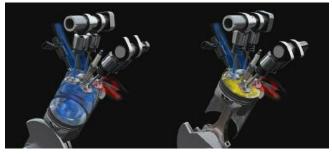
investment in a 4-cylinder EcoBoost engine through fuel savings in approximately 30 months," Kuzak said, compared with an average of 7.5 years to get back the money for a diesel, "while the cost of a hybrid will take nearly 12 years to recoup."

The direct inject-turbocharge combination allows downsizing. "A small 4-cylinder EcoBoost engine has the capability of producing more torque than a larger 4-cylinder engine – nearly an entire liter larger in displacement – with better fuel efficiency," Ford says.

Ford is also promoting fuel-saving electric power assisted steering, and says that as many as 90% of its vehicles will have EPAS by 2012.

Ford info, Said Deep,

313-594-0942; sdeep@ford.com; www.ford.com



Compressed intake air (blue) comes from a turbocharger, and enters the cylinder chamber prior to being mixed with gasoline from the direct injector.

Compared to conventional port fuel injection, Ford says, 'EcoBoost's direct injection system delivers fuel directly into the combustion chamber in small, precise amounts yielding a cooler, denser in-cylinder charge, allowing for more efficient combustion (shown in yellow) and higher compression.'

#### **Events**

#### **AFS Shows Its PHEV**

AFS Trinity and Ricardo Seize on Detroit Show To Unveil 'Extreme Hybrid' with Ultracapacitors Ending a long period of silence, Seattle-based AFS Trinity Power Systems and development partner Ricardo have unveiled a battery-and-ultracapacitor, XH-150 "Extreme Hybrid" drivetrain at the North

American International Auto Show in Detroit.

The vehicle, based on a GM Saturn Vue, uses a combination of lithium ion batteries and ultracapacitors to attain full



AFS Trinity-Ricardo 'Extreme Hybrid' badge

freeway capability and an all-electric range of 40 miles (F&F, August 28, 2006).

Put another way, AFS claims 150 miles per gallon, assuming six days per week of 40 miles per day in allelectric mode and one day at 100 miles using the gasoline engine. GM's Green Line Vue hybrid gets 26 mpg, AFS says.

"Addressing the central limitations of chemical batteries was critical to creating the Extreme Hybrid," said AFS chief Ed Furia.

The vehicle's has conventional, engine-driven front-wheel drive and a fully-electric rear-wheel drive, combining to form a "through-the-road parallel," in the words of AFS Trinity engineer Don Bender.

With both engaged, performance is comparable to a Porsche Cayenne SUV, he *told*  $F \not\sim F \longrightarrow 0$  to 60 mph in 6.9 seconds.

AFS Trinity, Don Bender, 925-455-7990; dbender@afstrinity.com; www.afstrinity.com Ricardo, Rod Beazley, 734-397-6666; rod.beazley@ricardo.com; www.ricardo.com

#### No Noodles at NAIAS – Detroit Auto Show

"We want people in America to know BYD is not a noodle company," says Paul Lin, identified as auto export manager of China's BYD Auto in *The Wall Street Journal* 

on Friday, as BYD launches itself into the U.S. market, offering not only conventional cars but a plug-in hybrid.

"It took Toyota 60 years to get where they are today," Lin told the *Journal*.

Like AFS Trinity (above) BYD is making its move at the 2008 North American International Auto Show.

NAIAS is formally open **January 19-27**, although media access and industry previews are already underway, and numerous announcements in connection with the event have already been made.

NAIAS is being held at Detroit's Cobo Center.

More Meetings News on Page 7

## **Natural Gas Vehicles**

#### **BAF Nears New Certifications**

Operators hard-pressed to find natural gas-fueled vehicles should know that Ford F-150, F-250 and F-350 trucks are to be available soon from Ford dealers with dedicated-CNG conversions by BAF Technologies. BAF has completed testing for both U.S. and California certifications of the vehicles with 5.4-liter engines, says VP Bill Calvert.

"It's the cleanest we've ever done," Calvert told F&F.

BAF last year secured California Air Resources Board super ultra low emission vehicle/SULEV certification of Ford E-350 vans with the 5.4-liter engine to converted to CNG operation (F&F, May 21).



2008 Ford F-350 Super Duty

E-450 buses are offered with 6.8-liter engines.

The vehicles are upfitted at BAF centers in Dallas and Fresno. They have BAF warrantees with warranty work processed by Ford dealers.

BAF, VP Bill Calvert, 214-231-1450; fax 214-231-1466; bcalvert@baftechnologies.com; www.baftechnologies.com BAF (Los Angeles), John Sledge, 714-376-8143; jsledge@baftechnologies.com; www.baftechnologies.com

#### Iran Presses Forward with CNG

Iran is expected to have 1,800 compressed natural fueling stations by March 2009, says a report in NGV Global, supporting significant numbers of vehicles built by domestic automakers.

Iran had about 300 CNG stations as of mid-November with upwards of 850 more either opening or under construction during the first months of 2008.

Iran is forcing domestic use of methane both to reduce urban air pollution and to free more liquid fuels for export.

The Iranian alternative fuels vehicles association has a Farsi language website.

#### XinAo Industry Expands in China

China's XinAo Industry Company is stepping up its presence in natural gas vehicles and in other alternative fuels in China.



Zhanjiang XinAo Gas has completed the first LCNG station in Guangdong, the company says, and is building a gas refueling mother

station (shown) to support taxi and bus fueling centers in the area of Fushan.

XinAo Energy Trading has welcomed the first ship with LPG/propane from Total, carrying 10,800 tons to the port of Huizhou, and the XinAo Group and Shanxi Coking Coal are collaborating on methanol and dimethyl ether/DME production. XinAo may also become an exclusive distributor of the entire FuelMaker line meetings are planned for late this month.

XinAo Gas, Rosita Liang, +86-316-607-9782; fax -607-9772; lianghonghui@xinaogroup.com; www.xinaogroup.com

#### **Lincoln Tranfers to Its New Facility**

"We see 2008 and 2009 as busy years for the CNG bus business," says Jack Schimenti, business development chief at Lincoln Composites, now a unit of Norway's Raufoss-Hexagon Composites.

Lincoln is relocating its compressed natural gas cylinder manufacturing to the new Lincoln, Neb. location it opened last year for large all-composite cylinders for CNG bulkhauling (F&F, September 3). "Titan" brand tanks for development and certification are being fabricated now. They measure up to 1.08 meters in diameter by up to 11.5 meters length, or more than 42.5 inches by nearly 38 feet, with internal volumes as high as 8,400 liters.

"Essentially, we will have two manufacturing facilities," Schimenti says, with shared offices. The current is expansion/modernization is associated with CNG and hydrogen tanks for vehicles, he told F&F, "a result of our confidence in CNG opportunities."

Lincoln Composites, Jack Schimenti, 402-464-6611, ext 3315; jschimenti@lincolncomposites.com; lincolncomposites.com

#### Mexico to See Rapid NGVs Growth

The use of natural gas in transportation will grow by better than 24% a year through 2016 in Mexico, according to a forecast from SENER, the Mexican Department of Energy, as reported by NGV Global.

A SENER report anticipates the addition of 50 CNG retail outlets resulting in a total of 57 by the end of the period. The number of natural gas vehicles in Mexico is expected to increase by 25,600 during the period.

#### Thailand Draws Big, Rio this Coming June

Last month's ANGVA 2007 exhibition in Bangkok attracted a total attendance of 9,369 trade professionals from 59 countries, NGV Global reports. Asia NGV meetings are planned for Korea and Delhi in 2009.

NGV2008, the world natural gas vehicles meeting, is slated for this coming June 3-5 in Rio de Janeiro, Brazil.

**More Meetings News on Page 7** 

#### **New Cummins Service Center in Downey**

Cummins Cal Pacific is establishing a 33,000-square-foot alternative fuel service center in Downey (Los Angeles), supporting natural gas vehicles operated by LA Metro, the Orange Country Transportation Authority, and other heavy duty natural gas engine operators. "In Southern California the alternative fuel engines are going through a population explosion right now, and we're gearing up to take care of it," says customer service VP Phil Stutzel.

The company has signed a ten-year, \$3.8 million lease on the property, which will take the place of a facility at Montebello for alt fuels work. Cummins Cal Pacific has, for example, shifted re-power work for OCTA (Detroit Diesel engines being replaced with Cummins ISL G engines in some 230 buses) to the Downey facility.

A formal opening is planned for early summer. Cummins Cal Pacific, VP Phul Stutzel,

phil.s.stutzel@cummins.com; cumminscalpacific.com

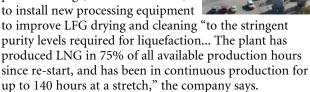
## **Methane and LNG**

#### Landfill-Based LNG Said 'Routine'

"We're shipping routine liquid," says Matt Barclay, project manager for the Prometheus Energy installation that's making liquefied natural gas from methane extracted from the Bowerman Landfill in Southern California.

The landfill gas/LFG-fed plant is currently running at more than 70% of the design capacity of 5,000 gallons per day, "and has exceeded design capacity for a number of periods," the company says.

The Bowerman facility was restarted on December 8 following a planned outage, Prometheus adds, to install new processing equipmen



"We are encouraged by the implications this has for the plant's ability to deliver increased commercial volumes of LNG over 2008," said Prometheus CEO Kirt Montague.

Fuel is being delivered under contract with Earth Biofuels/Applied LNG Technologies for Orange County Transportation Authority buses.

Prometheus, Matt Barclay, 425-289-3776;

mbarclay@prometheus-energy.com; prometheus-energy.com ALT, VP Kevin Markey, 214-634-6246;

kmarkey@apolloresources.com; www.altlngusa.com

#### Coast Guard's 'Insufficient Resources'

The federal government needs to step up protection of ships importing oil and natural gas to the U.S., especially as imports of liquefied natural gas increase, says a new report from the U.S. Government Accountability Office.

The "supply chain is potentially vulnerable in many places here and abroad, as borne out by several successful overseas attacks on ships and facilities," says a summary of report GAO-08-141. "Domestically, units of the Coast Guard, the lead federal agency for maritime security, report insufficient resources to meet its own self imposed security standards, such as escorting ships carrying liquefied natural gas... some ports report difficulty in securing response resources to carry out planned actions."

The report cites an Energy Information Administration forecast that while U.S. imports of crude oil will grow by about 4% by 2015, the amount of imported LNG will grow more than 400%. GAO also noted that LNG imports are projected to increase to account for some 17% of U.S. natural gas supplies by 2030, up from about 3% today.

GAO last year issued several reports calling for a better assessment of the consequences of an LNG tanker mishap or attack, noting that more than 30 applications for new import terminals are pending.

GAO, Stephen Caldwell, 202-512-9610; caldwells@gao.gov or Mark Gaffigan, 202-512-3841; gaffiganm@gao.gov; www.gao.gov

## **Cities**

#### City of the Year

Las Vegas Wins World Leadership Award, Gets the 1,000th GM-Allison Hybrid Bus Las Vegas was recognized as a world leader and the American City of the Year at the World Leadership Awards in London late last year, with much of the credit due to the city's fleet of alternative vehicles.

And, this month General Motors said that it would deliver its 1,000th GM-Allison parallel hybrid bus at the huge Consumer Electronics Show. GM says that the 1,000 buses, operating in more than 70 cities in the U.S., Canada and Europe, "will save an estimated 1.4 million gallons of fuel annually, enough to fill 175 tanker trucks."

Las Vegas has also ordered hybrid buses with ISE series drives from Northern Ireland's Wrightbus.

#### Hosting AF&V 2008 in May

"The city of Las Vegas incorporates sustainability into everything it does and the Alternative Fuel Program is the perfect example of this," City Manager Doug Selby said in a release. "More than 90% of the city's fleet of nearly 1,200 vehicles operates on cleaner alternative fuels, resulting in a better environment."

Las Vegas has had a hydrogen energy station, said the world's first, since 2002. It has been an early tester of Honda FCX hydrogen fuel cell cars, operates a pair of Ford hydrogen ICE buses, and has a worldrenowned fleet of propane-fueled taxis.

The World Leadership Award announcement notes that in 1993 the city of Las Vegas became just the fifth city to join the young Clean Cities program. It's fitting that Las Vegas is hosting the AF&V 2008 meeting this year (next page) — which many still refer to by its old Clean Cities name.

Las Vegas, Dan Hyde, 702-229-6971; fax 702-464-5735; dhyde@lasvegasnevada.gov; www.lasvegascleancities.org

## **Government Opportunities**

#### Watch for \$25 Million from CARB

The California Air Resources Board is to vote **January 24** on a staff proposal to spend \$25 million in Proposition 1B Bond money on diesel emission reduction projects in San Diego, San Francisco, the South Coast (Los Angeles and Central Valley. The South Coast area would get the most, \$13.8 million to replace some 260 trucks.

Projects involving natural gas fuel are to be eligible, CARB confirms, as will diesel emission control retrofits. *CARB, Doug Ito, 916-324-0356; dito@arb.ca.gov; arb.ca.gov* 

More California Opportunity News on Page 8

#### **Events**

## **Looking Good**

Just Glance at the Sponsors of AF&V 2008 To See Who's Serious About Clean Vehicles Fleets & Fuels is delighted that things are shaping up so well for the AF&V 2008 meeting May 11-14 in Las Vegas, with the Alternative Fuel Vehicle Institute now devising new sponsorship opportunities.

Committed already are \$100,000 platinum-level sponsors Clean Energy, Honda, and General Motors - representing natural gas vehicles, clean gasoline cars



AF&V 2008 will be held May 11-14 at the Rio All-Suite in Las Vegas, a venue allowing all events, even the

progressing to hydrogen via gaseous fuels and electric drive technology, and a two-prong strategy of E85/ethanol and mild hybrid electrics leading to plug-in hybrids.

Weighing in as ride-and-drive, to be held on-site diamond sponsors with

\$50,000 each are the American Clean Skies Foundation and Foton America as AFVi first-timers (natural gas as energy solution, Foton America and hybrid and natural gas vehicles imported from China), and Toyota Fleet, which made its return to AF&V last year. Gold sponsors at \$25,000 are Bosch, Alloy Custom Products, Chrysler and EPIC, the Ethanol Promotion and Information Council.

AFVi also counts more than half a dozen silver and bronze sponsors for AF&V 2008.



AF&V 2008 is aimed at fleet managers faced with the decision

of which clean vehicle type will most effectively allow them to reduce their carbon footprints — and quite possibly save money too. All the technologies are rep-

#### Gallop on Over This Weekend

DoE's National Renewable Energy Laboratory will be conducting free workshops on solar, wind and biomass energy for farms and ranches during the 101st National Western Stock Show, already underway in Denver.

The workshops, to be held this Saturday, January 19 and on Sunday, January 27, are to feature hands-on displays of clean, renewable energy systems, which can provide power for irrigation, stock watering, electric fences and other practical uses."

NREL info, George Douglas, 303-275-4069; george\_douglas@nrel.gov; www.nrel.gov



resented. Fleets & Fuels is delighted too to confirm that its Convention & Tradeshow News affiliate CTN ShowTimes will for the seventh year running be the official magazine of the meeting (which some of us still call Clean Cities).



One of those new sponsorship opportunities, by the way, is sponsorship of ShowTimes itself. AFVI, Kimberly Taylor, 702-254-4180; fax 702-254-4630; nationalconference2008@afvi.org; www.afvi.org Fleets & Fuels, editor Rich Piellisch, 415-896-5988; piellisch@fleetsandfuels.com; www.fleetsandfuels.com CTN, publisher Kirk Fetzer, 415-897-1414; kirk@ctnpublishing.com; www.ctnpublishing.com/afv08

#### **Gaseous Fuel Tanks**



March 11-12, CNG & H2 Cylinders; Clean Fuels Challenges, Opportunities & Strategies. Le Châtelain Hotel,

Brussels. Critical issues workshop organized by Brusselsbased Clean Fuels Consulting and the international Gas *Vehicles Report.* Limited table-top exhibit space available. CFC, Jeff Seisler, +32-2-647-3218;

iseisler@cleanfuelsconsulting.org; cngandh2workshop.com

#### **Next Month in Texas**

February 17-19, 2008 SWTA Annual Conference at the Doral Tesoro Hotel in Fort Worth, Texas. Organized by the South West Transit Association.

SWTA, executive director Kristen Joyner, 210-366-1436; kjoyner@swta.org; www.swta.org

#### 'Short Drive to Tomorrow' in San Jose

July 22-24, PHEV2008 Plug-In 2008 Conference & Exposition in San José, Calif. A new event hosted by EPRI, PG&E, Sempra, the Silicon Valley Leadership Group, SoCal Edison, the Sacramento Municipal Utility District/SMUD, and the Plug-in Hybrid Electric Vehicle Research Center at the University of California, Davis.



"Attendees will learn about the most current technical research, the business case for

PHEVs, the impact of current regulations, and clean-tech entrepreneurs' ideas to enhance and expand the PHEV market," organizers say. "In addition, the exposition floor will feature the latest innovations associated with PHEVs and supporting electricity infrastructure."

Additional sponsors include the State of California and the City of San Jose.

A Short Drive to Tomorrow is the meeting theme. PHEV2008, Pam Turner (First Option Events), 408-395-0059; pturner@firstoptionevents.com; plugin2008.com



#### Meetings!!

Click here for instant access to a complete listing of upcoming meetings and conferences courtesv Fleets & Fuels

## **Strategies**

#### **California Energy Commission**

Agency Is in the Forefront as California Moves To Slash Imported Oil Use, Cut GHG Emissions Economical plug-in hybrids, the double-bang of hybrids running on natural gas, and the establishment of biomethane as a market-viable renewable fuel are all in the cards as California refines an aggressive scheme to boost the use of domestic fuels — which will serve to reduce emissions too.

The U.S. EPA's denial of a Clean Air Act waiver doesn't affect a state law, enacted this past fall (F&F, October 22), setting up an Alternative and Renewable Fuel and Vehicle Technology Fund to help make alternative fuel and advanced technology vehicles more economical and hence more attractive to fleet operators.

#### 'We Want to Be In Step'

The law is AB 118, which provides money to implement California's 2005 greenhouse gas reduction statute AB 1007, and AB 1007's State Alternative Fuels Plan drafted by the California Energy Commission.

"It's going to provide a lot of critical research and development for vehicles," says one fuel provider.

"We're taking about commercialization," insists Peter Ward, a California Energy Commission veteran now serving as a policy advisor to CEC chief Jim Boyd. Ward notes that CEC has for years been out of advanced technology vehicles funding, and is now jumping back in.

The agency is spearheading a drive to be ready with rules in place and solicitations launched when AB 118 money becomes available. Fees to back AB 118 initiatives (including vehicle registration, license plate and smog abatement fees) will begin to be collected in July. It will

#### Law Implements CalSTEP

AB 118 may also be viewed as the legislative enabler of CalSTEP, the California Secure Transportation Energy Partnership, launched by WestStart-Calstart in late 2005.

CalSTEP, with partners from government agencies (like the California Energy Commission) alternative fuel providers, OEMs, venture capitalists, think tanks and academics, targets a *sustainable* reduction in on-road, oil-based fuel consumption in California to at least 15% below 2003 levels by 2020, while increasing the proportion of alternative transportation fuels in the state to at least 20% of total on-road demand.



Fuel diversification and improved vehicle efficiency are key tenets of the CalSTEP strategy.

WestStart-Calstart has posted an excellent **explication of AB 118** on the policy section of its website.

WestStart-Calstart, president John Boesel, 510-307-8700; jboesel@calstart.org; calstep.weststart.net

take some time to collect, but it will be a lot of money — CEC is expected to handle about \$125 million per year for seven and a half years, with the Air Resources Board, which is a unit of the California state EPA, dispersing another \$80 million or so.

CEC projects will emphasize fuel savings and renewable domestic supply, while CARB's will be tilted more toward emissions reductions.

Part of the process is establishing an advisory board of some three dozen people to help set priorities. A series of workshops is also planned.

The California Natural

Gas Vehicle Coalition has already noted that the process may grow contentious. If emission reductions are already mandated, by the South Coast Air Quality Management District for the Los Angeles area, for example, should CEC and CARB help pay for compliance?

#### Alt Fuels & Vehicle Technologies Specifically Mentioned

"We want to be in step with the affected industries every step of the way," says Ward.

AB 118, authored by California Assembly Speaker Fabian Núñez, mentions electricity, ethanol, dimethyl ether, renewable diesel, natural gas, hydrogen, and biomethane, "among others, and their feedstocks that have high potential for long-term or short-term commercialization, including projects that lead to sustainable feedstocks."

The law covers light-, medium-, and heavy-duty vehicles (including off-road vehicles) and such technologies as alternative fuel storage, advanced internal combustion engines with a 40% or better efficiency level over the current market standard, lightweight materials, energy storage, controls and system integration, measurement and metering systems and software, design standards and testing and certification protocols, battery recycling and reuse, engine and fuel optimization, hybrids, plug-in hybrids, fuel cells, and "conversions of hybrid technology to plug-in technology through the installation of safety-certified supplemental battery modules."

## Changes to the Current Law Are Expected to be Minimal

Watch for the legislature to make clarifications to AB 118, covering issues like environmental justice and possibly clearing some of the questions of how to support already-mandated cleanup efforts. There may also be some juggling of AB 118 money, some fear — Gov. Arnold Schwarzenegger last week declared a fiscal state of emergency in California.

"We are facing a very tough situation," the governor said. "But with tough times come historic opportunities."

Under AB 118, "All of the alternative fuels will be represented," CEC's Ward told F&F.

CEC, Peter Ward, 916-654-4639;

pward@energy.state.ca.us; www.energy.ca.gov

CARB, Jack Kitowski,

916-323-6169; jkitowsk@arb.ca.gov; www.arb.ca.gov