Odyssey AFV Event at Yuba College Highlights National Alternative Fuel Vehicle Day

On Thursday, October 14th, Yuba College staged their National AFV Day Odyssey event at the Yuba City campus. Focusing on providing information on alternative-fuel vehicles (AFV) for drivers and students concerned about energy security and air quality, the half-day Odyssey event involved plenty of alternative fuel-related information and demonstrations of a handful of new and emerging AFVs.

Presented by the College, the National AFV Day received planning help from the Greater Sacramento Regional Clean Air Coalition—the Sacramento regional Clean Cities chapter—with securing AFVs for display, including the CARB-certified Ford Roush Propane F-250 truck and an experimental electric vehicle from BMW.

GSRAC Board Member Greg Gilbert provides AFV information

GSRCAC was represented at the event by board member Greg Gilbert, who handed out information on available alternative fuels and AFVs, along with the benefits provided by the Clean Cities program, to the roughly 250 event attendees and participants. Co-located with the Ford Roush F-250 pickup truck, the GSRCAC AFV information table included brochures and handouts on EPA or CARB-certified propane vehicles, availability of refueling infrastructure in California, and CO2 and tailpipe emission benefits achieved by modern CARB-certified propane-fueled vehicles such as the Ford Roush Propane F-250 truck. Questions including truck price and availability, upgrade options, warranty, etc., were handled by Marty Ferdani, Ford Roush Propane Truck Sales Manager (Big Valley Ford, Stockton, CA).

According to Mike Morse, Yuba College's Automotive Technology professor involved with planning of the Odyssey event and the upcoming DOE-funded AFV First Responder's Training class set for November 19 – 20 in Sacramento with the cooperation of GSRCAC, the Odyssey event makes perfect sense to the College's mission of aggressively implementing alternative fuel courses in its automotive

technology program while providing community members the latest information on the clean-air and energy-security benefits that only AFVs can provide.

Auto Tech Students Inspecting Ford Roush LPG Truck

When asked about the propane-fueled Ford Roush F-250 displayed at the event, secured with the help of GSRCAC, Morris replied “It’s extremely unique for this area---many here have not had a chance to see it, and we consider in a centerpiece for our event today. We’re definitely looking forward to teaching our automotive technology students about the new generation of propane vehicles and how, particularly with their low emissions, they are just so far advanced from their predecessors. And we greatly appreciate the assistance and participation of the Sacramento Clean Cities chapter with our event, since the DOE’s Clean Cities program brings an important global perspective to our students and our school.”

Propane Ford Roush F-250 Appeals to Agricultural Studies Students

Sacramento Clean Cities Sponsors Workshop Highlighting Propane and Other AFVs

With over 200 people attending, the 4th Annual Sustainable Business of the Year Awards Ceremony and Pollution Prevention Expo was held at the Sacramento Municipal Utility District (SMUD) headquarters in Sacramento on October 8. Environmental awards to regional and local businesses and government agencies weren't the only draw however, since displays of alternative fuel vehicles (AFV) and an AFV workshop were also made available to Expo attendees and the public.

Sacramento Regional Clean Cities Members Talk With Event Attendees

Working with the Business Environmental Resource Center (BERC) for several weeks in advance of the event, the Sacramento Clean Cities chapter (Greater Sacramento Regional Clean Air Coalition, or GSRCAC) took on a number of important planning tasks for the AFV displays and workshop, setting up commitments for workshop displays and presentations on propane infrastructure and propane vehicles including the Ford Roush Propane F-250 truck. Other AFVs on display included the 12,000 lb. GVWR eStar battery electric utility vehicle made by Navistar, and electric light-duty vehicles. GSRCAC's assistance also included connecting the Western Propane Gas Association to BERC, resulting in a membership donation by WPGA to help offset BERC's event costs.

Attendees were able to view several AFVs that were staged immediately outside the Expo event, including a Ford Roush Propane pickup truck, a commercial-industrial eStar electric truck, a plug-in electric hybrid, and two EVs.

Marty Ferdani, Presenter on the Ford Roush Propane F-250, Answers Workshop Attendee's Questions

Indoors and adjacent to the main awards room, approximately thirty-five energy and environmentally-oriented vendors and organizations provided product and service information to Expo and AFV workshop attendees. GSRCAC's booth was staffed by Greg Gilbert of Autumn Wind Associates, and Freya Arick of the Sacramento Metropolitan Air Quality Management District, both board members of the GSRCAC. Greg Gilbert facilitated the AFV workshop following the Expo awards ceremony. Information on propane infrastructure and propane vehicles as well as information on other AFVs available now to California drivers was provided to Expo and workshop attendees who stopped by the Clean Cities booth or visited the vehicles on display.

Bill Boyce of SMUD Presented Information on EVs and SMUD's Expanding Efforts to Facilitate EV Use in the Sacramento Region.

The one-hour AFV workshop, facilitated by Greg Gilbert and sponsored by BERC with support from GSRCAC, included a variety of remarks and presentations, including those from Marty Ferdani, Propane Vehicle Sales Manager for Big Valley Ford, a California select dealer for sales and service of Ford Roush propane-fueled vehicles, Eric Bassett, manager of Sacramento's Riverview Trucks and representing Navistar's battery electric

eStar truck line; Bill Boyce, manager of the Sacramento Municipal Utility District's (SMUD) Electric Transportation Program which is involved with a wide range of electric drive technologies and support of policy development for electricity as a transportation fuel;, and Tim Taylor, GSRCAC board member and Division Manager in charge of land use planning and mobile sources at Sacramento Metropolitan Air Quality Management District.

According to the Department of Energy's Alternative Fuels and Advanced Vehicles Data Center (AFDC), propane (also known as liquefied petroleum gas or LPG) is an alternative transportation fuel recognized for its domestic availability, high energy density, and clean-burning qualities. With over 2500 refueling stations countrywide, it is the most commonly used alternative transportation fuel and the third most used vehicle fuel, behind gasoline and diesel. For more information on Propane vehicles and refueling infrastructure, see http://www.autogasusa.org/propane-vehicles-and-equipment/ or http://www.afdc.energy.gov/afdc/fuels/propane_locations.html.

Sacramento Clean Cities Fills the Auditorium on September 14, 2010

The Greater Sacramento Regional Clean Air Coalition (Sacramento Clean Cities) co-hosted a highly successful technology forum on September 14, 2010. Held at the City of Sacramento's Meadowview Corporation Yard, an overflow crowd was treated to vendor displays, equipment and technology displays as well as informative presentations. Sacramento Clean Cities, in cooperation with the Public Equipment Manager's Association (PEMA), the Sacramento Metropolitan Air Quality Management District, the East Bay Clean Cities Coalition and the City of Sacramento General Services Department, Fleet Management Division, hosted over 90 fleet managers and fleet technicians in the event where they were able to hear about the 2011 on-road engines and exhaust after-treatment technologies. Prior to the presentations, attendees were able to check out displays by:

- Zonar, Electronic Fleet Management using GPS type devices
- Creative Creations Embroidery, Logos for fleets
- Municipal Maintenance Equipment (MME), Specialized equipment for public works organizations
- Transfer Flow, Particulate Filters, custom tool boxes, fuel tanks and van customizing equipment
- Cummins West, Cummins Engines

Vehicles on display included:

- City of Sacramento 2010 Autocar Expeditor refuse truck with a Wayne Sideloader body and a 2010 Cummins ISC 320HP engine with SCR
- Freightliner M2 Two Axle Truck Chassis with 2010 Cummins ISC 260 HP Engine with SCR and Allison Automatic Transmission
- Ford F250 with Rausch propane technology
- 2010 PACCAR MX with DD13 Engine using SCR technology
- 2011 International 4400 with an Intaernational MAXXFORCE DT-Engine with cooled EGR and an Allison 3000 HS Automatic Transmission
- International eStar 10,000# GVWR CARB-certified Battery Electric Vehicle with zero tailpipe emissions and a 100 mile range.

Dan McCann, PEMA Past President, introduces the Forum program

International eStar 10,000# All-Electric Delivery Truck

Ford F250 with Rausch Propane Upfit

Following a fantastic Mexican lunch, the attendees were treated to technology presentations by: Cummins, PACCAR, International/Navistar, Ford/Rausch propane, and Transfer Flow, Inc. Ed Johnson with Cummins led off with a complete overview of 2011 Cummins engine lineup including their strategy for using Diesel Emission Fluid (DEF) and a special catalyst, in combination with their existing Diesel Particulate Filter (DPF) to control emissions and improve fuel economy. Marti Ferdani from Big Valley Ford presented an overview of the emission benefits and overall performance of the Ford F250 using the Rausch propane technology. Rigo Picazo with International described the International approach to the new emission standards using increased EGR rather than DEF. Suzanne Seivright and XXX with Valley Power presented the PACCAR engine lineup for 2011. PACCAR will be using the DEF technology and also expects significant fuel economy improvements. Finishing out the presentations was Chris Bovia with Transfer Flow. Chris presented an active DPF that has recently been permitted in Butte County for stationary engines.At the conclusion of the meeting, Sacramento Clean Cities President, PEMA member and City of Sacramento Fleet Manager Keith Leech assisted event MC and San Joaquin County Fleet Manager Dan McCann in the traditional prize drawing. A Garmin GPS, a $20 prize and a $10 prize were given away along with several hats provided by Navistar. For a complete review of the presentations that were made, go to: www.airquality.org/mobile/ctf/pastevents.shtml.

May 6, 2010 - Sacramento Clean Cities Co-sponsors Fleet Workshop

The Greater Sacramento Regional Clean Air Coalition (Sacramento Clean Cities) and the City of Sacramento Department of General Services, Fleet Management Division, co-sponsored a workshop on “Implementing Best Business Practices – What Smart Leaders do in Challenging Times.” Keith Leech, Fleet Manager for the City of Sacramento and newly elected President of Sacramento Clean Cities Coalition, welcomed 51 attendees from 30 different public agencies to his Meadowview Corporation Yard facilities for the 9:00am to 3:30pm event on May 6, 2010.

The primary focus of the conference was on greening fleets and greening maintenance facilities. Paul Condran, Culver City Fleet Manager named the #1 Best Green Fleet in North America for 2009 by Government Fleet Magazine led off followed by Rick Longobart, Santa Ana Fleet Manager named the NAFA Green Fleet Award Recipient for the best environmentally based ideas in 2009.

Chris Merrill from Trimble Mobile Resources spoke on how the #1 fleet in the country saved over $700,000 in fuel in one year. Keith Leech, Fleet Manager of Sacramento, one of the 100 Best Fleets in North America followed speaking on grants for alternative fuels and fleet efficiencies.

Greg Haglin with National Joint Powers Alliance presented strategies for eliminating the RFP process for obtaining green fleet equipment and Jon Tegmeier with the Avion Company talked about return on investments for green technology. Bill Howard with FuelMaster showed how to measure and monitor the use of fuel while Bob Sparks with AssetWorks spoke on fleet efficiencies through 'dashboarding."

Other speakers included Rudy Six with INVERS Mobility Solutions speaking on motor pooling of municipal fleets and Tom Johnson with 100 Best Fleets who pulled it all together as he spoke about the 5 best practices of the 100 Best Fleets.

The workshop hosts included 100 Best Fleets, AssetWorks, FuelMaster and Trimble Mobile Resource magazine with FuelMaster hosting lunch. The workshop also featured displays by Pure Power Oil Filters and Zonar GPS devices.

Tom Johnson with 100 Best Fleets talks about the 5 best practices of the 100 Best Fleets.

51 Fleet Managers participated in the 100 Best Fleets workshop with displays by Pure Power Oil Filters and Zonar GPS devices.

June 2009 LNG Technician Training in Sacramento

The City and County of Sacramento conducted a Liquified Natural Gas (LNG) training program for heavy-duty technicians in June 2009. Due to diminshing municipal budgets, the City of Sacramento and the County of Sacramento sought funding from the Sacrametno Clean Cities Coalition to provide technician traning. The Coalition board of directors approved funding and a one day technician training program was conducted at the City of Sacramento's Meadow View Corporation Yard training facility on Wednesday, June 25, 2009.

Bruce Keneagy from Chart Inc. (407 7th Street NW. New Prague, MN) conducted the training. Training topics included:

- LNG Fueling Stations
- Safety Theory
- Basic Operation
- LNG Vehicle Fuel System Basics; and
- LNG Fueling Station Operation.

Twenty technicians from the City of Sacramento's and the County of Sacramento's heavy-duty fleet maintenance crews received passed the course and were awarded certificates of completion. Both the City of Sacramento and the County of Sacramento fleet operations personnel were very appreciative of the Clean Cities Board for covering training costs.

The County of Sacramento has over 100 LNG trucks that will benefit from the technician training program.

July, 2009 - E85 Program

The Sacramento Air District and the Sacramento Clean Cities Coalition worked with 7 different fuel providers to implement E85 ethanol fuel at 23 retail sites, 4 card lock sites and two fleet sites (SMUD and City of Sacramento). The 7 providers who installed systems in 27 retail and limited access card lock sites formed a “consortium” with the Air District and the Sacramento Clean Cities Coalition to jointly develop a mailout to notify the public about the availability of E85 in our region. With the completion of this infrastructure, the Sacramento region now has the highest concentration of alternative fuel ethanol sites in California. The seven ethanol providers, who would normally be considered business competitors worked with the Air District and the Sacramento Clean Cities Coalition to make this notification and mailout possible.

August 5, 2009 - Sacramento Region Celebrates the First EV Recharging Station at a Public Gas Station

DMC Green, a Stockton based alternative fuel company, celebrated the grand opening of the first electric vehicle recharging station to be installed at a retail gasoline station on Wednesday, August 5, 2009. This first system is now operating at a Phillips 76 station on Harbor Point Place in West Sacramento. Speakers at the event included Diana Morgan, CEO of DMC Green, Mariko Yamada, California State Assembly Member, Jim Provenza, Yolo County Supervisor and Member of the Board of the Yolo Solano Air Quality Management District, Matt Erhardt, Air Pollution Control Officer, Yolo Solano Air Quality Management District, Richard Loenthal, CEO of Coulomb Technologies and Matthew Ivler, Field Representative for State Senator Lois Wolk,. Also participating in the event were Sacramento Clean Cities President Jill Egbert and Vice President Tim Taylor,

DMC Green has recently installed E85 and biodiesel systems in 7 retail service stations in the Sacramento region. They also plan to install over 40 electric vehicle recharging stations in the next six months.

The electric recharging system being used by DMC Greene is designed and manufactured by Coulomb Technologies and has a number of innovative features. Clients are issued a unique Radio Frequency (RF) key fob that unlocks and activates the recharging system. The system automatically sends a text message to their cell phone when the car is fully charged or if anyone attempts to disconnect the electrical connection. Clients also have access to 24/7 customer support. If a client has lost a key fob or has any other issues they can call and receive assistance. Customer service specialists can also unlock and activate the recharging systems remotely.

Funding for the E85 infrastructure was provided by a grant from the California Air Resources Board and administered by the Sacramento Air District, both members of the Sacramento Clean Cities Coalition. The Coalition actively promoted the E85 infrastructure in cooperation with a consortium that included the Sacramento Air District

and several E85 providers. Private funds were used for the electric vehicle recharging system.

September 15, 2009 - 2010 Technology Workshop

On September 15, 2009 the Public Equipment Managers Association (PEMA) and Sacramento Clean Cities Coalition held a workshop to introduce 2010 compliant heavy-duty vehicle technology to Sacramento Fleets. Representatives from over 110 public and private fleets attended. The workshop was very successful. Special thanks to the City of Sacramento, PEMA, Clean Cities and all of the technology presenters - Cummins, Kenworth, International Trucks, Cummins Westport and Freightliner

Vendor Displays at the Clean Technology Forum

Trucks on Display at the Clean Technology Forum

Dwight Hanson presents information on Heavy-duty Natural Gas engines at the Clean Technology Forum


Over 110 Attendees view presentations at the Clean Technology Forum

CleanFUEL USA Awarded DOE AOI4 Grant

Sacramento Clean Cities Coalition member CleanFUEL USA was awarded $12.3 million by the US Department of Energy (DOE) for the installation of 184 propane refueling stations in over 12 major metropolitan areas. The grant also includes funds for assisting in the purchase of propane school buses and training technicians in service and repair of propane engines. The technician training and education program has been specifically designed to include training for unemployed technicians and military veterans.

The Sacramento region is one of the areas where the propane refueling infrastructure will be expanded. CleanFUEL USA Western Regional Manager and Sacramento Clean Cities Board Member, Jon Van Bogart, was instrumental in securing the DOE grant and bringing several of the propane stations to Sacramento.

Another major partner in the CleanFUEL USA program is one of the world's largest oil companies, Conoco-Philips who will work to assist in refueling site selection so that each station has easy access, is capable of accelerated deployment and will provide maximum program exposure.

Approximately 90% of the United States' propane supply is produced domestically, while the remaining 7% - 10% is imported from Canada making propane a readily available, secure alternative fuel source.

These photos represent a sample of what a CleanFuelUSA installation would look like.