

Clean Cities Now

Official Publication of Clean Cities and the Alternative Fuels Data Center

Vol. 9, No. 2 - May 2005

Clean Cities Now (www.eere.energy.gov/cleancities/ccn) is the official publication of [Clean Cities](#), an initiative of the U.S. Department of Energy designed to reduce petroleum consumption in the transportation sector by advancing the use of alternative fuel vehicles, idle reduction technologies, hybrid electric vehicles, fuel blends, and fuel economy.

National Partner Award Winners

Clean Cities is built on public-private partnerships. And every year at this time we recognize the most outstanding of these partners. The 2005 National Partner Award winners were recognized May 3, 2005, at the Clean Cities Conference. They are...

National Partner of the Year

Cummins Westport Inc.

Cummins Westport is the industry leader in the production and marketing of medium- and heavy-duty alternative fuel engines. It manufactures three lines of natural gas vehicle engines and a propane engine that are used in fleet applications around the world. From transit fleets in Boston to airport vehicles in Los Angeles to buses in Beijing, Cummins Westport is advancing the use of alternative fuel vehicles (AFVs).

An international business that makes its impact felt at the local level, Cummins Westport is also being recognized by Clean Cities for its support of Clean Cities coalitions, its participation in Advancing the AFV Choice events and regional meetings, and playing a crucial role in planning the Clean Cities Conference.

"Clean Cities and our industry partners chose Cummins Westport for this award because of its national leadership in alternative fuel engine development and deployment both here and throughout the world," says Clean Cities Deputy Director Marcy Rood. "It has made a sizeable investment, both in funding and human capital, to bring quality alternative fuel engine products and service to the marketplace. It is a steadfast partner."

Cummins Westport, a joint venture formed in March 2001 between Cummins and Westport Innovations, is based in Vancouver, British Columbia, Canada. It manufactures its engines in Rocky Mount, North Carolina. Its engines with catalysts meet Environmental Protection Agency 2004 standards, California Air Resources Board regulations, and EURO II emissions standards. The company is currently working on technology to meet new 2007 and 2010 U.S. and European emissions regulations.

Alternative Fuel Provider of the Year

Wyoming Ethanol, LCC

Wyoming Ethanol sold almost 5.5 million gallons of ethanol in six intermountain states during 2004 and is working with Davinci Carburetor of Conroe, Texas, to develop

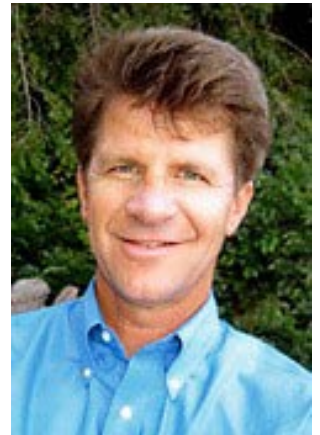
ethanol-specific carburetors. It is directly responsible for installing two E85 (85% ethanol, 15% gasoline) fueling stations: one in Torrington, Wyoming, and the other in Boise, Idaho. A third station in Scottsbluff, Nebraska, will be online this summer. Most significantly, Wyoming Ethanol has done much to raise awareness of ethanol as a fuel with its most visible project, an E85-fueled racecar. The racecar is displayed at numerous events across the United States, exposing ethanol to a wide and diverse audience. In addition, the company has conducted seminars for the American Coalition for Ethanol, Ethanol Producers, and Consumers, and BBI's Fuel Ethanol Workshop. Wyoming Ethanol has been featured in magazines such as National Dragster, Popular Hot Rodding, and Ethanol Today and recognized with the American Coalition for Ethanol Award and the Bill Bater Award for promoting drag racing and new fuels.

Clean Cities Hero

Jim Harger

Jim Harger, Senior Vice President at Clean Energy, has been involved in the natural gas business for more than 20 years. Prior to working for Clean Energy, he spent five years at the Southern California Gas (SoCalGas) Company developing the market for natural gas vehicles. At that time, he developed economic models for classes of natural gas vehicles and fueling stations still used today.

Jim is an avid supporter of Clean Cities. For example, Clean Cities Director Shelley Launey credits him with being an invaluable member of the 2005 conference planning committee and for bringing in a number of conference sponsors. "Jim's contributions helped to make the transition from a government-sponsored conference to an industry conference a successful venture," says Launey.



Clean Cities Hero,
Jim Harger
Clean Energy

While at SoCalGas, Harger was the company's policy and administration manager and was an expert witness during the 1994 commission hearings for the company's six-year low emission vehicle program. At the conclusion of the hearings in 1995, he began to pursue grant funds for customer vehicles and develop public/private partnerships. In 1997, he left SoCalGas and joined Pickens Fuel Corp. (predecessor of Clean Energy). The knowledge gained and successes realized by Harger and passed along to Clean Energy have helped the company to grow from \$2 million in sales in 1997 to more than \$50 million in 2004.

City Fleet of the Year

City of Fresno, California

The City of Fresno, California, has set a high standard for reducing emissions from its fleet. It operates 69 refuse trucks on liquefied natural gas (LNG); 27 compressed natural gas (CNG) transit buses, with 10 more on order; five CNG-powered trolley buses; two diesel-electric hybrid transit buses; and numerous other alternative fuel vehicles. It also installed a 12,000-gallon capacity public-access LNG station and has a high-capacity public-access CNG station under construction. These efforts helped the city displace more than 838,000 gallons of diesel fuel in 2004. It also has a program that allows zero-emission vehicles, super-ultra-low emission vehicles, and low-emission vehicles to park free in City of Fresno garages and at parking meters.

Exporter of the Year

Clean Fuel USA

Clean Fuel USA has long been recognized as a leader in establishing liquefied petroleum gas (LPG) as a viable vehicle fuel in the United States. It has established LPG fueling stations, rail terminals, and storage facilities in several states. Now its recognition extends beyond U.S. borders with LPG exports of \$1.1 million and a number of joint ventures. It has a fueling station in India (Clean Fuel India LPG AutoGas Ltd.); two in Mexico (Clean Fuel Mexico and a joint venture with Impco BRC de Mexico); and two in Argentina (Clean Fuel Argentina and a joint venture with Transpatora de Gas del Sur).

International Partner of the Year

China

The recent economic growth in China has been explosive. It has translated into mass migrations of rural inhabitants into urban centers, which puts heavy pressure on city transit operators. The new bus market in China doubled from 2000 to 2004 to accommodate this growth and is forecasted to grow another 33% over the next four years. China also has vast reserves of natural gas and pipeline infrastructure under development. The government is committed to improving environmental standards and rapidly increasing its use of natural gas as an energy alternative.

China's demand for alternative fuels is driven by the government's desire to reduce air pollution (it has six of the world's 10 most polluted cities) and reduce the country's dependence on imported oil. Preparing to host the 2008 Olympics also puts pressure on the government to make necessary investments in transportation infrastructure. The annual alternative fuels market in China is projected to grow to \$1.8 billion by 2008.

China is ranked seventh in the world in the number of vehicles that use CNG and LPG. Beijing has 2,500 CNG transit buses that use Cummins Westport engine technology, and it plans to have the entire 118,000-bus fleet on clean energy by the time the Olympics are held. It also has 20,000 LPG taxis, 36 CNG fueling stations, and 75 LPG fueling stations. In addition, the Central Government of China has implemented Clean Vehicle Action in 16 cities.

Private Fleet of the Year

McShan Florist

McShan Florist in Dallas, Texas, is one of the oldest florists in the Dallas Metroplex and has the area's largest privately owned CNG fleet. In 1991 it voluntarily replaced its delivery vans with dedicated CNG vehicles, and today has 30 vehicles, which use 80,000 gallons of CNG per year. McShan made the decision because of environmental concerns and has discovered that the economics are also very favorable--the engines last up to 200,000 miles. The company also operates a CNG fueling station in Dallas with Clean Energy.

State Partner of the Year

Texas State Energy Conservation Office

The Texas State Energy Conservation Office (SECO) has provided essential support to Clean Cities coalitions across Texas. The South East Texas, Central Texas, East Texas, and Alamo Area Clean Cities coalitions cited the financial, creative, and administrative assistance of Texas SECO as keys to their successes as coalitions. It has helped the coalitions start up operations and attain official designation, acquire funding through the State Energy

Program Special Projects grants, and has provided grant writing and other workshops. In addition, the Texas SECO has organized meetings of all the coalitions in Texas.

Transit Fleet of the Year

Sun Metro

Sun Metro in El Paso, Texas, uses approximately 3 million gallons of natural gas each year in its transit fleet. LNG or CNG powers 60% of its buses. Sun Metro recently purchased 25 new CNG-powered buses to replace older diesel vehicles, and plans to convert 25 more diesel buses to CNG, which will make the fleet almost 100% natural gas.

Clean Cities Coordinator Award Winners

Managing 88 coalitions across the country, our coordinators are the heart of Clean Cities. The 2005 Clean Cities Coordinator Award winners were recognized May 2, 2005, at the Clean Cities Conference. They are...

Coordinator of the Year

Colleen Crowninshield, Tucson Clean Cities Coalition
(Tucson, Arizona)

Colleen Crowninshield, coordinator of the Tucson Clean Cities Coalition, is a persistent advocate of alternative fuels and alternative fuel vehicles (AFVs). She worked to open a biodiesel and ethanol fueling station in Tucson, which began operations last year. During the same period, her coalition added nine new stakeholders and 517 new AFVs.

Crowninshield has held a number of media and Advancing the Choice events to tout the benefits of alternative fuels to legislators and the public. In addition, she helped organize a local monthly radio program called "Green Tuesday" with a theme of clean fuels. It focused on compressed natural gas (CNG), biodiesel, and ethanol.

She completes projects with or without federal funding. She helped write an application for the Clean School Bus Solicitation, but did not receive the grant. However, the application generated so much interest that the Arizona Department of Environmental Quality followed through with a school bus idling and health program. She also applied for (but did not receive) State Energy Program Special Project funding to start a CNG driver education program in the Amphitheater School District. This included the purchase of a CNG vehicle and a FuelMaker pump. The school district liked the idea so much that it implemented the project. Tucson thus became only the second city to host a clean fuel driver training program.



Colleen
Crowninshield
Pima County Assoc. of
Governments
Clean Energy

Midwest Region

Kellie Walsh, Central Indiana Clean Cities Alliance
(Indianapolis, Indiana)

Kellie Walsh has been instrumental in establishing the five-year-old Central Indiana Clean Cities Alliance coalition as a force to be reckoned with. The coalition leads the

nation in biodiesel blending facilities and use and increased the number of AFVs in central Indiana by 23%. As a result, more than 2 million gallons of petroleum were displaced in 2004. Also in 2004, Walsh wrote 12 stakeholder grants to implement alternative fuel projects; \$90,000 were awarded. The coalition gained 16 new members and more than doubled the amount of dues collected in 2003. It also hosted the 2004 Joint Regional Clean Cities Conference, where 25 coalitions were represented.

Central Region

Stacy Neef, Central Texas Clean Cities Coalition
(Austin, Texas)

Stacy Neef, coordinator of the Central Texas Clean Cities Coalition, has worked in all aspects of the Clean Cities portfolio and has developed a series of very effective alternative fuel workshops. Her events attract all types of public and private fleets in the Austin area. She plans her events and attends to her daily duties with a zest that impresses all who work with her. Neef supports the goals of the national program, and under her leadership her coalition has grown throughout the year.

Northeast Region

Becky Ohler, Granite State Clean Cities Coalition
(Concord, New Hampshire)

Becky Ohler has been the coordinator of the Granite State Clean Cities Coalition since its inception in 2000. Although she splits her time with other duties at the New Hampshire Department of Environmental Services (DES), she facilitates many accomplishments of the coalition. Ohler actively promotes biodiesel projects across the state. As testament to her success, the biodiesel programs at the City of Keene, Keene State College, and Cranmore Mountain ski area have received national recognition. She helped Rymes Propane and Oil open five retail biodiesel pumps and helped the University of New Hampshire deploy CNG shuttle vans and fueling infrastructure. Her position at DES has enabled her to be active in many expanded portfolio technologies such as fuel efficiency and idle reduction.

Southeast Region

Melissa Howell, Kentucky Clean Fuels Coalition
(Louisville, Kentucky)

Melissa Howell, coordinator of the Kentucky Clean Fuels Coalition (KCFC), is an enthusiastic and knowledgeable coordinator and a strong proponent of alternative fuels. Under her leadership, in 2004, Commonwealth Agri-Energy, a 24 million gallon/year ethanol production plant, opened in Hopkinsville, Kentucky, and Mid West Terminal in Paducah installed a 20,000 gallon storage tank for biodiesel. As a result, the state began to fuel its diesel fleet with biodiesel. The U.S. Department of Energy awarded the National Energy Leadership Award to Mammoth Cave National Park for being the only national park in the Department of the Interior whose entire vehicle and equipment fleet operates on 100% alternative fuels. Throughout 2004, KCFC members educated policy makers in state government about alternative fuels. Several KCFC members spent time with senators, representatives, and cabinet secretaries as they wrote Kentucky's first formal energy plan, which was unveiled in February 2005.

Mid-Atlantic Region

Nathalie Shapiro, Greater Philadelphia Clean Cities Coalition
(Philadelphia, Pennsylvania)

Nathalie Shapiro became the coordinator of the Greater Philadelphia Clean Cities Coalition in July 2004 and has enthusiastically taken on all the responsibilities. She worked with regional hybrid electric vehicle (HEV) dealerships to promote Clean Cities and the environmental and energy security benefits of HEVs. She also worked with the state to successfully pass Act 178, which will streamline the rebate process for HEV purchases, provide reimbursement to the Commonwealth for biofuels producers, and buy down the incremental cost of biodiesel purchases for federally tax exempt agencies. She promoted idle reduction technologies and strategies in school buses and initiated the Clean Yellow Bus Association to promote a unified message for outreach and education about school buses to the school districts. Nathalie also initiated a response to the IRS Invitation to Comment on the Biodiesel Tax Incentives.

Success Story

Coachella Valley Coalition Forms Model Partnership with Area Tribe

Clean Cities and the Agua Caliente Band of Cahuilla Indians are joining forces to bring sustainable transportation to California's Coachella Valley. The first-of-its-kind partnership was announced during a May 2 press conference at the [11th Annual Clean Cities Conference](#).



The Agua Caliente Tribe has called Coachella Valley home for centuries and is recognized by the United States as a sovereign entity. The Tribe's business interests include the Spa Resort Casino in Palm Springs and the Agua Caliente Casino in Rancho Mirage.

Sustainable Agua Caliente is a partnership between the tribe and the Clean Cities Coachella Valley Region (C³VR) coalition designed to improve public health and the environment in the Coachella Valley. At the same time, a fundraising component will help the C³VR coalition become independent and self-sustaining. The partnership could become a model for Native American tribes and Clean Cities coalitions nationwide.

As a first step, the Agua Caliente Tribe is a gold-level sponsor of the 11th National Clean Cities Conference. Along with Ford Motor Company, the Tribe is sponsoring the alternative fuel Truck & CARnival on May 3 and a reception at the Spa Resort Casino.

A successful experience at the conference may lead to Agua Caliente sponsorship of a yearly Palm Springs conference geared toward the public. The purpose of this conference would be to build support for sustainable transportation in the region while raising funds for continued operation of the independent C³VR coalition.

The C³VR coalition will provide technical and communication services to the tribe. It will help the tribe obtain funding to create a 100% alternative fuel fleet. It will also promote the tribe's environmental leadership through activities such as fostering transportation R&D

opportunities with industry and drafting contract language requiring casino vendors to use sustainable transportation practices.

The partnership is already bearing fruit. Agua Caliente is working with C³VR, Ford, and other partners to incorporate into their fleet two Ford V-10, E-450 shuttles powered by hydrogen internal combustion engines. Using the area's existing hydrogen fueling infrastructure, the shuttles will provide service between the tribe's casinos and the Palm Springs airport and from the airport to downtown Palm Springs. The project will provide opportunities for studying the performance and maintenance of hydrogen vehicles while building public awareness of the new technology. Discussions are underway with other project participants, including Clean Energy and the State of California.

Drive Clean and Green

The St. Louis and Kansas City coalitions teamed up with the Missouri Department of Natural Resources to sponsor, "Drive Clean and Green Across Missouri," a three-day event designed to introduce Missourians to advanced technology and alternative fuel vehicles (AFVs). The event, which featured a caravan of hybrid electric and gaseous bi-fuel vehicles, as well as those that run on E85 and biodiesel, began in St. Louis April 5 and ended in Kansas City April 8--a 664-mile trip.

The caravan made several stops in cities along the way, allowing citizens to see, touch, and learn about the vehicles. Promotion for the event included giving students from 313 schools green rubber wristbands with the words "Drive Green" engraved in them.



Vehicles involved in Drive Clean and Green Across Missouri on display at the St. Louis Arch.

NREL/PIX #13960

First Renewable Biodiesel Plant

The City of Denton, Texas, on March 29 announced the opening of a new biodiesel production plant. The facility, which is powered by renewable biogas extracted from an adjacent landfill, is the first renewable-energy plant to produce biodiesel. The 3-million-gallon-capacity facility is a cooperative effort between California-based Biodiesel Industries, Inc., and the City of Denton. It was built with the support of the Dallas-Fort Worth Clean Cities Coalition. Local entrepreneurs are also contributing to the cause. The plant will collect used cooking oils from area restaurants and feedstock from Texas farmers and use these materials in the production of biodiesel.

Coalition Targets the Public at Auto Show

The Central Oklahoma Clean Cities Coalition spread its message to the general public March 10-13 at the Oklahoma City International Auto Show. The coalition hosted a booth that promoted fuel economy and informed consumer choice in transportation options. The booth also offered visitors an opportunity to learn about the Clean Cities mission and activities. "While Clean Cities most frequently targets niche markets and fleet buyers, the Oklahoma City International Auto Show provided a venue to talk to the public--specifically those who might be contemplating a new car purchase," says Yvonne Anderson, Coordinator of the Central Oklahoma Coalition.

Tucson Hosts Driver Training Program

The Pima Association of Governments and the Tucson Clean Cities Coalition in Tucson, Arizona, worked with Southwest Gas, American Honda, and Whitton Plumbing/FuelMaker to develop a clean fuels driver-training program for the city's Amphitheater School District. The group organized the program and assisted the district in obtaining several dedicated Honda Civic GXs and a compressed natural gas FuelMaker personal fueling device. It also developed a curriculum that will be used to educate new drivers about alternative fuel vehicles. According to Colleen Crowninshield, coordinator of the coalition, Tucson is the second city to host a training program like this. (Salt Lake City, Utah, was the first.) For more information, e-mail ccrowninshield@pagnet.org.



Tucson-area students learn to drive in CNG Honda Civics.
NREL/PIX #13958

Also in Tucson...

The University of Arizona (UA) Society of Engineers on April 2 held an event to unveil its ethanol-fueled formula racecar, which was built by students from scratch in one year. UA is an active member of the Tucson Coalition. The coalition has sponsored the program for two years.

Tennessee Co-op Offers Only B5

The Sevier Farmers Co-op in Sevierville, Tennessee, sold its last gallon of traditional diesel on January 3, 2005. Since then it has offered exclusively B5. The station is in the jurisdiction of the East Tennessee Clean Fuels Coalition. Individual users and area fleets, such as the City of Sevierville, local school bus fleets, and the Sevier County Utility District, are using the blend. So far, the response has been positive. The co-op is considering moving to B20 in the future.

Program News

Clean Cities Debuts Webcasts

Over the past few months, coordinators attended a series of information-packed conferences without leaving the comfort of their offices. From October through March, Clean Cities Director Shelley Launey and Deputy Director Marcy Rood hosted seven webcasts, which featured experts on topics key to coordinators and stakeholders. Each interactive webcast attracted more than 60 participants who watched the presentations on their monitors, listened over the phone, and participated in question and answer sessions.

The webcasts were initiated to fill the need for information sharing between the coalitions, industry, the program, and other stakeholders at minimal cost. "It's hard to get 88 coalitions together on a regular basis," explains Launey. "Clearly we needed a regular and consistent way to exchange information."

Grant Opportunities

The first webcast, held October 28, focused on new grant opportunities for users of airport fleet vehicles and biodiesel. Jake Plante of the Federal Aviation Administration explained the new Voluntary Airport Low Emissions Program, which allows airports to use Airport

Improvement Program and passenger facility charges to finance low-emission vehicles, refueling and recharging stations, and other airport air quality improvements. Greg Zilberfarb, formerly of National Clean Cities, Inc., provided information on the biodiesel grants offered to Qualified Soybean Boards that have partnered with coalitions.

Tax Incentives for Ethanol and Biodiesel

On November 10, Phil Lampert of the National Ethanol Vehicle Coalition and Jenna Higgins from the National Biodiesel Board explained the new tax incentives available for ethanol and biodiesel blenders. The volumetric ethanol excise tax credit, which took effect January 2005, provides E85 blenders a payment of \$.52 per gallon based on actual gallons of ethanol blended. Higgins described the new biodiesel tax credit--\$.50 for each gallon of biodiesel blended into diesel fuel. She pointed out that the U.S. Department of Agriculture estimates that the tax incentive may increase the demand for biodiesel to at least 124 million gallons per year in the future.

Idle Reduction

A second November webcast featured idle reduction technology. Ken Proc of the National Renewable Energy Laboratory (NREL) updated participants on several U.S. Department of Energy (DOE) idle reduction research and demonstration projects. Diane Turchetta and Jennifer Mayer, both from the Federal Highway Administration, presented on funding opportunities and financing tools for idle reduction projects. Coordinator Sue Leitner, formerly of the Tri-State Clean Fuels Network (based in Cincinnati, Ohio), gave first-hand advice on how to hold an idle reduction workshop.

Natural Gas

The new year kicked off with a natural gas webcast on January 19. Dennis Smith of DOE gave an update of the market for natural gas vehicles. Clean Energy's Jim Harger talked about the fuel, infrastructure, and business case for natural gas. Gordon Exel of Cummins Westport offered an overview of engine technology and a vision of how natural gas may serve as a pathway toward hydrogen.

Hybrid Electric Vehicles

A week later, coordinators tuned in for a session on hybrid electric vehicles (HEV). Clean Cities Deputy Director Marcy Rood gave an overview of the technology, and Debbie Brodt-Giles of NREL provided a tour of the new [HEV Clean Cities](#) website. Walter McManus of McManus Analytics offered his thoughts on prospects for hybrids in the U.S. market, and Bill Van Amburg of WestStart/CALSTART talked about the Hybrid Truck Users Forum. Of note was his sharing of the U.S. Army's vision of reducing its fuel requirements for a deployed force by 75% after 2010. Naomi Friedman of the Center for the New American Dream closed the webcast by highlighting the environmental and quality of life benefits offered by hybrids.

Fuel Economy

On February 16, Dave Scrivener from MotorWeek and David Greene and Bo Saulsbury, both of Oak Ridge National Laboratory, spoke on delivering the fuel economy message to drivers. Scrivener talked about using broadcast and video to spread the Clean Cities vision. Greene and Saulsbury presented on the importance of fuel economy and spotlighted the [fueleconomy.gov](#) website and its newest features, a side-by-side comparison of vehicles and "Your MPG," which allows users to calculate and track their own fuel economy.

Fuel Blends

The final webcast, a discussion of alternative fuel blends, was held March 16. Ralph Groschen of the State of Minnesota and Tim Gerlach of the Twin Cities coalition spoke about Minnesota's success in advancing ethanol blends. Leland Tong of Mark IV discussed BQ9000 standards for biodiesel. Bob McCormick of NREL provided a look at biodiesel's effect on emissions and pointed out that the real advantages to using biodiesel blends are reducing petroleum consumption and greenhouse gas emissions.

According to Launey, there will be more webcasts in Clean Cities' future. "While it's not as good as getting together face-to-face, it was certainly a successful experiment."

The webcast presentations are available for download in the Clean Cities [Coordinator Toolbox](#) and from the Alternative Fuels Data Center document database at www.eere.energy.gov/afdc/resources/doc_database.html.

NCC, Inc., Announces Biodiesel Grant Awardees

National Clean Cities (NCC), Inc., and Clean Cities are partnering with industry organizations to develop grant programs for alternative fueling projects. In January, NCC, Inc., announced the recipients of the National Clean Cities Biodiesel Grants--a funding program co-sponsored by Clean Cities and the United Soybean Board. The grants, which totaled almost \$200,000, were awarded to 10 coalitions for various biodiesel projects. The grants leveraged over \$2 million in additional funding.

In addition, NCC, Inc., is currently finalizing details of a grant program co-sponsored by Clean Cities and the Propane Education and Research Council. The goal of the program is to fund projects that will help stimulate market growth in propane fuel use in vehicles. Keep an eye out for application details on the [NCC, Inc.](#), website.

We Need Your Help

It's a big job to maintain the database that serves the [Alternative Fuel Station Locator](#). Data is verified annually, but many stations open--and some close--every day. Information about new sites comes from a variety of sources including fuel trade associations, station owners and operators, press releases, and media coverage. Our best allies, however, are private individuals who use alternative fuels. Contact Stacy Putnam at sputnam@icfconsulting.com if you know of station openings, closings, or if you spot inaccuracies in our data. For new stations, you can also fill out and submit a [Fueling Station Submission Form](#) on the Station Locator site.

Transit Users Group to Hold Meeting in October

The next Natural Gas Transit Users Group (TUG) meeting is scheduled for October 26-28 in Lawrenceville, Georgia. The meeting will be hosted by the Gwinnett County Department of Transportation.

The agenda for the fall meeting includes information on training fire and police departments in responding to calls involving compressed natural gas (CNG) bus systems, a tour of Gwinnett's CNG bus fueling and maintenance facilities, and presentations by compressor manufacturers.

The goal of TUG is to assist transit agencies that have or are considering natural gas buses

and other vehicles for their fleets. It is open to representatives from transit agencies, industry associations, and government entities. TUG is sponsored by the U.S. Department of Energy and is organized by the National Renewable Energy Laboratory in conjunction with the Clean Vehicle Education Foundation.

There is no charge to join TUG or to attend meetings. To join, contact Hank Seiff at hseiff@cleanvehicle.org.

DOE Holds Annual Hydrogen Review

DOE is hosting its annual [Hydrogen Program Review](#) May 23-26 at the Crystal City Gateway Marriott in Arlington, Virginia. [Topics](#) covered at the four-day event will include hydrogen production and delivery; fuel cells; hydrogen storage; safety, codes, and standards; and education. Experts throughout the hydrogen industry--including government laboratories, universities, and original equipment manufacturers--will present research and findings. For more information, contact DOE Coordinator Carole Read at carole.read@hq.doe.gov. You can register [online](#).

Industry News

U.S. Fleets Demonstrate First Fuel Cell Vehicles

Fleet managers throughout the United States are leading the way to a hydrogen future by adding the Honda FCX second-generation fuel cell vehicle to their fleets. To date, 14 FCX sedans were leased to six fleets--including Las Vegas, Nevada; the State of New York; San Francisco, California; Los Angeles, California; Chula Vista, California; and the South Coast Air Quality Management District in Diamond Bar, California.

The fleets sign two-year leases for the vehicles at a monthly cost of \$500 per car. The first of the 14 FCXs in the United States was leased to the city of Los Angeles in December 2002. In the intervening years, Los Angeles operated five hydrogen-powered fuel cell vehicles on a regular basis, accumulating more than 25,000 miles as part of its alternative fuel fleet.

Customers for the upgraded 2005 FCX include the State of New York and, most recently, the City of Las Vegas. The State of New York is leasing two of the vehicles. The first was delivered in December 2004; the second vehicle will arrive in mid 2005. The two FCXs leased by Las Vegas will operate on a daily basis as part of the city's normal fleet operations. The vehicles will be fueled at a city-owned and operated hydrogen station.

The Honda FCX is the only fuel cell vehicle to be certified by the U.S. Environmental Protection Agency and the California Air Resources Board (CARB). The FCX operates by converting compressed gaseous hydrogen into electricity. It was certified by CARB as a zero-emission vehicle--its only emission is water.

The 2005 FCX has a range of up to 190 miles and seating for four people, making it practical for a wide range of real-world applications. To learn more about the vehicle, visit the [Honda](#) website.

USPS Delivers Alternative Fuel Success

The Northland District of the U.S. Postal Service (USPS) believes in using E85. Considering its home base of Minnesota, this attitude is not surprising. The state has more than 125 ethanol fueling sites--the highest concentration in the country.

The Northland District provides mail service for most of Minnesota and part of Wisconsin and is a valuable partner of the Twin Cities Clean Cities Coalition (TC4). Its alternative fuel vehicles (AFVs) of choice are flexible fuel vehicles (FFVs), which are capable of using gasoline or gasoline-ethanol mixtures up to E85. "We have the opportunity to use E85 because so many stations offer E85 in Minnesota," says Robert Kunowski, the Northland District's Manager of Vehicle Maintenance. "We should be leaders because we have the opportunity."

The USPS Northland District is covered under Executive Order 13149, which requires federal fleets to reduce petroleum consumption by 20% by the end of fiscal year (FY) 2005, compared to their FY 1999 consumption levels. The district is also covered under the Energy Policy Act of 1992, which requires federal fleets to acquire AFVs as 75% of their light-duty vehicle acquisitions each year.

Of the district's 3,594 light-duty vehicles, 525 are FFVs. These include 324 light delivery trucks, 167 minivans, and 34 administrative vehicles. The district tracks fuel use for the light delivery trucks, which mainly fuel at commercial stations. In 2004, the trucks used 214,000 gallons of E85, up 29% from the year before. Kunowski estimates that the FFV delivery trucks use E85 85% to 90% of the time.

How has the Northland District achieved such high E85 use? "We position our FFVs so they are near stations that offer E85," says Kunowski. "And if FFV drivers don't use E85, we take the vehicles away from them and assign them to drivers who will use E85." This is a big incentive to use E85 because the district's non-FFV delivery trucks are 10 to 20 years old, and drivers much prefer the model year 2000-2001 FFVs. The district's 2005 goal is 95% E85 use among its FFV delivery trucks.

Asked to give advice on establishing a successful alternative fuel program, Kunowski emphasizes the importance of an accurate fuel use tracking system. "You have to have good facts and data to make good decisions," he says. He also stresses educating managers and staff on E85 goals and procedures and designing the program to be cost effective. "You need to balance the cost with the environmental benefits of alternative fuels," says Kunowski. "And remember, we only get one environment."



A Northland District letter carrier fills up his FFV with E85 at a nearby fueling station.
NREL/PIX #13812

EPAct Unveils Interactive E85 Fleet Toolkit

In early March, the EPAct and Clean Cities initiatives unveiled the [E85 Fleet Toolkit](#), an online tool designed to help fleet managers increase the use of ethanol in their fleets.

This comprehensive toolkit was constructed to encourage regulated and voluntary fleets to build E85 infrastructure to support flexible fuel vehicles, which can run on gasoline or ethanol/gasoline blends. The project was inspired by feedback from regulated fleet managers that revealed a need for a “one-stop shop” for E85 infrastructure information.

“From regulatory considerations to determining equipment needs, it’s a daunting task to work your way through the details of building new infrastructure or converting equipment to dispense alternative fuels,” says Linda Bluestein, DOE Regulatory Manager of the EPAct State and Alternative Fuel Provider Rule. “We built the E85 Toolkit to help ease the burden on fleets.”



The E85 Fleet Toolkit helps fleets install ethanol pumps like this. NREL/PIX #07133

The result is a robust, easy-to-use website that walks fleets through the ins and outs of E85 and the infrastructure planning process. This timesaving toolkit will help fleets:

- Evaluate the best E85 options for their organizations.
- Learn about the equipment and technologies required to install a fueling site.
- Find out about infrastructure codes, standards, and the permit processes.
- Look up fleet success stories and lessons learned from implementing E85 infrastructure.
- Obtain contact information for leading industry associations, equipment manufacturers, fuel suppliers, state offices, and contractors.

It even has an interactive bulletin board fleet managers can use to discuss questions and concerns with peers and experts.

The E85 Fleet Toolkit is available to the public on the [Alternative Fuels Data Center](#) website, as well as being accessible through the [EPAct](#) website.

Clean Cities and Coconuts Beget Alternative Fuels in the Philippines

Few countries have more reason than the Philippines to embrace alternative fuels. This Southeast Asian nation imports more than 98% of its oil, leaving it vulnerable to supply disruptions and price spikes. Eighty-six million Filipinos share a land area slightly larger than Arizona; air pollution in the cities is stifling. For solutions, the Philippines is turning to natural gas, coconuts, and Clean Cities.



Map of the Philippines.
Digital Wisdom, Inc.

The international component of Clean Cities is assisting the Philippines as part of the Sustainable Energy Development Program (SEDP), a partnership that also includes the U.S. Agency for International Development and the Philippine Department of Energy. In 2004, Spencer Abraham became the first U.S. Energy Secretary to visit the Philippines. He and the Philippine Energy Secretary Vincente Perez signed a memorandum of understanding to promote alternative fuel vehicles and strengthen the SEDP, which also addresses reform of the Philippine electric power industry.

“Use of alternative fuels will improve energy security, air quality, and the local economy in the Philippines while opening new markets to North American alternative fuel equipment suppliers,” says Clean Cities Deputy Director Marcy Rood.

Divina Chingcuanco, country director of the SEDP, notes the importance of Clean Cities to expanding alternative fuel use in the Philippines. “Clean Cities is an effective vehicle for bringing together diverse groups of stakeholders within our community, all bound by a single objective: cleaning up the air we breathe,” she says. “The program is anchored on a strong public and private partnership, which makes it viable and resilient. This is something we Filipinos need.”

The first Clean Cities mission to the Philippines, in 2002, focused on assessing the country’s resources and developing alternative fuel strategies (see [Development of the Clean Cities Model in Manila, the Philippines \(PDF 2.9 MB\)](#) [Download Acrobat Reader](#)). In February 2005, Clean Cities returned to the Philippines to provide training and support thanks to funding from the U.S. Agency for International Development.

“One of the main purposes of our training was to prepare Manila for the arrival of 200 compressed natural gas (CNG) buses this year,” says Greg Zilberfarb, Vice President of ASG Renaissance, a technical and communication services company leading the Philippines training for Clean Cities. The training in Manila, the country’s capital, included a natural gas vehicle overview designed for bus mechanics and preliminary training on CNG stations. “It was like CNG 101,” says Zilberfarb. “We plan to continue training, with the ultimate goal of creating a pool of Filipino technicians, fleet operators, and fuel providers that can train and certify others.” Seventy-five people attended the February training.

The Clean Cities team also facilitated a small trade show in Manila, showcasing natural gas related products from companies such as Shell and Cummins Westport, Inc. (CWI). Shell operates CNG infrastructure in the Philippines, and CWI manufactures the natural gas engines that will be used in the transit buses ordered by Manila transit fleets.

Manila chose natural gas because of its clean-burning characteristics and because it is relatively abundant in the Philippines. A Philippine executive order provides incentives for natural gas vehicle use, and natural gas costs less than diesel. One CNG station is operable near Manila, and another is scheduled to open this year.

North of Manila, the Clean Cities team helped Baguio City kick off its unofficial Clean Cities coalition, the first in the Philippines. The coalition elected coordinators, formed committees, and established short- and long-term goals.

Baguio City is taking advantage of another local resource to supply alternative fuel. The Philippines is one of the world's largest producers of coconuts, which can be made into coco-methyl ester (CME), a form of biodiesel. The goal of the Baguio City coalition is to provide B1 (a blend of 1% CME and 99% conventional diesel) at all local fueling stations.

In addition to help from Clean Cities, the SEDP is providing technical support to advance the use of CME in the Philippines. The U.S. Department of Energy's National Renewable Energy Laboratory is studying the fuel properties of CME and the effects of CME on engine performance. Initial study results are anticipated this year.

Approximately 30% of vehicles in the Philippines run on diesel, providing a large potential market for CME and the locally grown coconuts from which it is made. Exportation may increase the economic benefits. Manila-based Chemrez, Inc., the world's largest producer of CME, plans to export CME to Japan.

Plans for additional Clean Cities missions to the Philippines include continued natural gas vehicle and infrastructure training and establishment of coalitions in Manila, Cavite, and Cebu. A Filipino delegation is attending the 11th Annual Clean Cities Conference and Exposition, May 1-4, in Palm Springs, California.

New Resources

Advanced Vehicle Testing Activity

The Advanced Vehicle Testing Activity (AVTA), part of U.S. Department of Energy's (DOE) FreedomCAR and Vehicle Technologies (FCVT) Program, recently produced two new publications. Advanced Technology Vehicles in Service: Knoxville Area Transit Propane Hybrid Electric Trolleys ([PDF 414 KB](#)) ([Download Acrobat Reader](#)) and Advanced Technology Vehicles in Service: New York City Transit Drives Hybrid Electric Buses into the Future ([PDF 492 KB](#)). Both fact sheets describe recent evaluations completed by AVTA and can also be found on the Alternative Fuels Data Center document database at www.eere.energy.gov/afdc/resources/doc_database.html.

FCVT Program's Natural Gas Vehicle Technology Forum

The FCVT Program's Natural Gas Vehicle Technology Forum also has two new publications. Assisting Transit Agencies with Natural Gas Bus Technologies ([PDF 180 KB](#)) describes the Natural Gas Transit Users Group, which helps transit agencies incorporate natural gas buses into their fleets. Evaluating the Safety of a Natural Gas Home Refueling Appliance ([PDF 175 KB](#)) summarizes a DOE evaluation of FuelMaker Corporation's new home refueling appliance, Phill. Phill went on sale this year in select markets. Both publications can also be found on the Alternative Fuels Data Center document database at www.eere.energy.gov/afdc/resources/doc_database.html.

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DOE/GO-102005-2128
May 2005



U.S. Department of Energy

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