

Clean Cities Now

Official Publication of Clean Cities and the Alternative Fuels Data Center

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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.

Coordinators Awarded at Clean Cities Congress

On May 8, 2006, three coordinators were presented with awards at the Clean Cities Congress in Phoenix, Arizona. This year's honors include accolades for Coordinator of the Year, as well as two new categories, Coordinator Choice and Coordinator Innovation.

The Coordinator of the Year award recognizes all-around excellence. The Choice award is based on a coordinator's contributions to other coalitions, ability to overcome diversity, and commitment to education and outreach. The Innovation award recognizes a coordinator who thinks outside the box, inspires others in times of adversity, and develops alliances with other regions to further Clean Cities' goals.

Winners were nominated by fellow coordinators, and awards were sponsored by industry.

Coordinator of the Year

Jonathan Overly, East Tennessee Clean Fuels Coalition
(Knoxville, Tennessee)

Jonathan Overly has led the East Tennessee Clean Fuel Coalition (ETCFC) since 2002. He is described as a tireless and enthusiastic advocate for alternative fuels and clean air.

Overly supports the use of all alternative fuels, but biodiesel is clearly his passion. In 2004, he formed the [Biodiesel Brigade](#), which welcomes local citizens and organizations that use a biodiesel blend. The club's 30 members display a ETCFC-sponsored 11- by 30-inch magnet on their vehicles that reads "I'm runnin' on the clean burn of biodiesel." Overly's own truck, a biodiesel-fueled Dodge Ram 2500, leads the Brigade. Well-known around Knoxville as "the General," the truck is a distinctive moving billboard for biodiesel.



Jonathan Overly ETCFC

Overly's dedication to educating the public on the benefits of alternative fuels has not gone unnoticed. His peers say he is "exceptional at getting the word out." He produces his own newsletter, writes regular news releases, appears on radio programs, organizes workshops, and regularly presents at public events. He even co-organized and hosted a National Biodiesel Board [benefit](#) with musician Bonnie Raitt to raise money for biodiesel awareness in East Tennessee.

Overly's latest accomplishment is meeting a [milestone](#) of 50 Knoxville-area fleets using biodiesel in just two years.

"Jonathan is like a race horse," noted one of his peers. "He is a thoroughbred that you don't hold back. You just let him run the race at full speed."

Coordinator Choice Award

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

Kellie Walsh has been coordinator of the Central Indiana Clean Cities Alliance (CICCA) since mid 2001. According to her peers, Walsh is known for her leadership abilities. Whether she's mentoring a fellow coordinator or hosting an event for Indiana's legislators, Walsh is a born leader who takes an energetic and direct approach to promoting alternative fuels.



Kellie Walsh

Her work has paid off. Under her charge, CICCA has displaced more than 1 million gasoline gallon equivalents of petroleum through the use of alternative fuels, hybrid vehicles, and fuel blends. Her success is credited to her dedication to educating the public and potential stakeholders about the benefits of alternative fuels—especially biofuels.

This spring, Walsh organized four one-day E85 Workshops throughout Indiana. These events followed the four Biodiesel Education Workshops she conducted in 2005. She also promotes alternative fuels through her involvement with the State of Indiana's [BioTown USA](#) initiative, an effort to meet all of a city's needs through the use of biorenewable resources.

In addition, Walsh has organized a number of breakfasts with Indiana state senators and representatives to promote awareness of alternative fuels. She is well acquainted with Indiana's Lieutenant Governor Becky Skillman and Senator Richard Lugar and speaks with them regularly about potential projects.

Coordinator Innovation Award

Linda Urata, San Joaquin Valley Clean Cities Coalition
(Bakersfield, California)

Linda Urata has been coordinator of the San Joaquin Valley Clean Cities Coalition (SJVCC) since 2000. According to her peers, Urata is highly effective at matching projects with the right players. She is an expert networker who knows who to talk to, what to say, and how to say it. She is also known for seeing every project through to fruition—efficiently working around any obstacle she may encounter.



Linda Urata

"Linda always has a new idea to share," noted one of her colleagues. "Her ever-ready attitude is infectious." If it's a viable project idea, she is ready to tackle it. For example, she fought hard to make sure two high-profile alternative fuel events—actor Dennis Weaver's "Drive to Survive" and the California Fuel Cell Partnership's "Rally Through the Valley"—came through the San Joaquin Valley. The events were scheduled during the same month, and Urata worked overtime to make sure they were well attended.

Highlights from Urata's tenure include successfully administering a Clean Cities vehicle rebate program, increasing grant opportunities and support for SJVCC stakeholders, and managing a publicly funded vehicle-scraping program.

TERP Grants Promote Air Quality in Texas

Shurepower and IdleAire received more than \$5 million in grants to install idle reduction equipment in North Texas. Administered by the North Central Texas Council of Governments (NCTCOG), the grants are part of the Texas Emissions Reduction Plan (TERP), a comprehensive set of incentive programs aimed at improving air quality.

According to Mindy Mize, Dallas-Fort Worth Clean Cities coordinator, Shurepower received almost \$155,000 to install and operate at least 25 idle-reduction pedestals, while IdleAire received more than \$5.4 million to install and operate up to 600 advanced electrification units. The companies are required to match the funding by 50% and place their units at truck stops within the Dallas-Fort Worth nonattainment counties of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant.

Shurepower will set up electric plug-in units that provide power for on-board amenities such as heating, cooling, and entertainment. IdleAire will install window units that provide heating and cooling, electrical outlets, and communication and entertainment options. All together, the units are expected to displace more than 231 tons of emissions per year.

East Tennessee Passes Milestone

The East Tennessee Clean Fuels Coalition (ETCFC) recently announced it surpassed its milestone of having 50 fleets using biodiesel in its area. In early March 2004, there was no biodiesel use in the region. In 2005, East Tennessee fleets displaced approximately 750,000 gallons of petroleum by using biodiesel.

The following fleets helped ETCFC hit and pass this important milestone.

- Tennessee Valley Marble: The fleet recently began using B5 in its seven heavy-duty, off-road vehicles and plans to expand to B20 in the next few months.
- The Tennessee Department of Transportation: The fleet is using B20 in 133 on-road vehicles in its Region 1 area, which covers Knoxville and Johnson City. It plans to use B20 in its Region 1 off-road vehicles and expand use in adjoining regions soon.
- Bristol Virginia Utilities: The fleet is using B5 in its 30 on- and off-road vehicles and is dispensing the blend onsite from a 10,000-gallon underground storage tank.

For a full list of East Tennessee fleets that have switched to biodiesel, visit the [ETCFC Web site](#).

Utah Uses 2 Million GGE of CNG in FY 2005

Utah Clean Cities is seeing growth in the use of compressed natural gas (CNG). According to coordinator Beverly Miller, 2 million gasoline gallon equivalents (GGE) of CNG were dispensed in fiscal year (FY) 2005, compared to 1.5 million GGE in FY 2004. The numbers were collected by Questar, Utah's natural gas provider.

Since the price of conventional fuel has gone up, so has the use of CNG, says Miller. Interestingly, use by the area's most consistent CNG supporters—Jordan School District, Salt Lake City International Airport, and Questar—has remained the same.

"All I can think is that it's local consumers," says Miller. "Citizens are going to great lengths to get their hands on CNG vehicles. And why not, when CNG costs \$1.29 per gallon? They are buying them at government auctions, private auctions, even bidding for them on eBay."

After California, Utah has the most CNG stations in the country. In Salt Lake City alone, 21 public stations located along major highways offer CNG. Consumers that frequent or pass these stations can see from the fuel signs that CNG costs half as much as gasoline. "It's a matter of economics," Miller says. "Citizens are seeing how much CNG can save them and how readily available it is to them. It makes sense that they are trading in their cars for used CNG vehicles."

Although the amount of CNG local consumers are using is currently speculative, Miller looks forward to next year when Questar institutes more thorough tracking mechanisms in area pumps.



A Salt Lake City fuel sign shows drivers how much money they can save if they drive a CNG vehicle (taken in February 2006).

Utah Clean Cities

Program News

Clean Cities Welcomes New Leader

In March, Clean Cities introduced Dennis Smith as its new Acting Technology Development Manager under the U.S. Department of Energy's (DOE) FreedomCAR and Vehicle Technologies Program.

Smith has a long history with Clean Cities that started in 1992 while he was working for Atlanta Gas Light Company in Georgia. An engineer and energy management expert, Smith was asked to serve on DOE's industry advisory panel that conceptualized and formed the Clean Cities Program. Back in Georgia, Smith was a charter board member of Atlanta Clean Cities and provided aggressive support as a regional industry stakeholder. With his help, Atlanta was designated the first Clean Cities coalition in 1993.



Dennis Smith

In 1996, Smith served as president of the natural gas industry's "Clean Air Team" in conjunction with the Summer Olympic Games in Atlanta. He managed a fleet of approximately 600 alternative fuel vehicles and oversaw the infrastructure operations that became part of the official Olympic transportation system.

Since joining DOE in 1999, Smith helped steer the Clean Cities course. As the initiative's technology advisor and Technical Assistance Project leader, he provided engineering and problem solving help to fleets and early adopters of alternative fuel technologies.

Most recently, he managed DOE's research and development efforts for nonpetroleum-based vehicle fuels. Many of the alternative fuel trucks and buses that are commercially available today utilize engines that were developed under this program.

Over the years, Smith has built relationships with fuel providers, vehicle and engine manufacturers, and other related industry members, which will be of great value to Clean Cities. He is a registered professional engineer and certified energy manager.

Clean Cities' former director, Shelley Launey has taken on new challenges in DOE's Federal Energy Management Program.

Clean Cities Grant Solicitation Now Open

Funding announcements for three categories of Clean Cities grants were issued in mid April. Information on these opportunities is listed under [Clean Cities Transportation Sector Petroleum Reduction Technologies Commercial Deployment, DE-PS26-06NT42770](#), on the U.S. Department of Energy's (DOE) E-Center Web site. The categories are described as follows.

- Area of Interest 1: Refueling Infrastructure for E85 and Other Alternative Fuels ([DE-PS26-06NT42770-01](#)). This funding opportunity applies to infrastructure projects that include new dispensing facilities, additional equipment, or upgrades and improvements to existing sites for alternative fuel vehicles (AFVs). Proposals to purchase equipment or pay for specific turn-key fueling services by alternative fuel providers are sought. Teaming arrangements are strongly encouraged. Blending facilities that provide biodiesel and E85 exclusively to the transportation sector will be considered. Bulk fuel production facilities are not eligible.

There is \$3.1 million available in this category. One to five awards are expected to be made, and there is a 50% cost sharing requirement.

- Area of Interest 2: Incremental Cost of AFVs ([DE-PS26-06NT42770-02](#)). This area of interest offers funds for the incremental cost of new original equipment manufacturer AFVs or the retrofit/conversion of new or used vehicles to run on alternative fuels. (Conversion systems must be U.S. Environmental Protection Agency or California Air Resources Board compliant.) Only on-road vehicles will be considered for funding. DOE has particular interest in medium- and heavy-duty highway vehicles and school buses. Funds are not available for non-fuel system upgrades.

There is \$500,000 available in this category. One to five awards are expected to be made, and there is a 50% cost sharing requirement.

- Area of Interest 3: Idle Reduction Training and Awareness for School Districts ([DE-PS26-06NT42770-03](#)). This category includes projects that eliminate or reduce idling in school buses through the development and implementation of comprehensive driver education and awareness. DOE seeks proposals that train the greatest number of individuals and projects that are transferable or repeatable with other school districts. Data collection is a required component. The purchase and installation of equipment for data collection is an allowable expense.

There is \$100,000 available in this category. One to three awards are expected to be made, and there is no cost sharing requirement.

Applications for these three grants are due June 8, 2006, and must be submitted through www.grants.gov.

New Study Fuels Debate over Ethanol

True or false? Ethanol production uses more nonrenewable energy than the fuel actually provides, resulting in negative net energy. And ethanol fuel generates relatively high greenhouse gas emissions.

In the past two years, two studies* have claimed that both of these statements are true. But a new study by the University of California (UC) Berkeley finds these claims to be false, supporting prior studies by the U.S. Department of Energy, the U.S. Department of Agriculture, and the National Corn Growers Association.

“The Berkeley study independently reviews most of the published analyses of the ethanol life cycle efficiency and concludes that corn ethanol is good for energy security and greenhouse gas emissions,” says Robert McCormick, leader of the National Renewable Energy Laboratory’s Nonpetroleum Based Fuels Project. “The fact that it survived Science magazine’s rigorous peer review process means that we can be highly confident of the study’s conclusions.”

Unlike studies reporting negative net energy, the UC Berkeley study included in its net energy calculations the coproducts of ethanol—such as corn oil and animal feed—saying they displace competing products that require energy to produce. Therefore, the energy saved will partly offset the energy required for ethanol production. This yields a positive net energy of about 4.2 kilowatt hours (kWh)/gallon to 9.5 kWh/gallon. On an energy basis, the study estimates that the average performance of ethanol today reduces petroleum use by about 95%.

The UC Berkeley study also reports that on average the ethanol produced today reduces greenhouse gas emissions by about 13%. In the future, the study suggests that greater reductions in greenhouse gas emissions could be achieved through cellulosic ethanol production. Cellulosic ethanol is produced from the fibrous material that makes up the bulk of plant matter. This material includes cornstalks and corncobs, municipal wastes, and wood chips. The technology to cost effectively produce cellulosic ethanol from such materials is still under development.

For more information, see [UC Berkeley ERG Biofuel Analysis Meta-Model](#).

*Patzek, T. *Critical Reviews of Plant Sciences*, 23, 519 (2004). Pimental, D.; Patzek, T. *Natural Resources Review*, 14, 65 (2005).

Success Story

Biofuels Help Green the Department of Defense

The Fort Leonard Wood (FLW) U.S. Army base in Waynesville, Missouri, has used biofuels to displace more than 205,000 gallons of petroleum.

In March 2003, FLW’s Directorate of Logistics Transportation Division installed onsite E85 and B20 infrastructure in an effort to meet the petroleum reduction goal of Executive Order 13149, which challenges Federal agency fleets to reduce conventional fuel use by 20% compared to their 1999 level.

Today, FLW boasts one E85 station with a 10,000-gallon storage tank and four B20 pumps that run off two 12,000-gallon storage tanks. Annual reporting numbers show that FLW has used more than 154,000 gallons of E85 and 255,000 gallons of B20*.



A Fort Leonard Wood tactical army vehicle fills up with B20.

Fort Leonard Wood

Of the Fort's 1,113 vehicles, 734—or 66% of the fleet—run on alternative fuels. E85 powers the fleet's more than 300 light-duty flexible fuel vehicles (FFVs), while B20 is used in roughly 425 tactical vehicles, which include cargo trucks, wreckers, and armament carriers.

Fuel keys ensure the drivers use alternative fuel, says Keith Bax, FLW Motor Transport Officer. Each vehicle is assigned a fuel key that will work only at the E85 and B20 pumps. Bax monitors the Fort's alternative fuel use using a computerized tracking system in the pumps. According to Bax, FLW now averages about 6,000 gallons of E85 and 19,000 gallons of B20 a month.

For more information, contact [Keith Bax](#), FLW Motor Transport Officer.

*According to FLW fiscal year 2004 and 2005 reporting data.

EPAct Update

Federal Fleet Initiative Moves to FEMP

The Federal Fleet (FF) initiative is moving from the U.S. Department of Energy's [FreedomCAR and Vehicle Technologies Program](#) to the [Federal Energy Management Program](#) (FEMP).

The mission of FEMP is to help federal agencies find innovative solutions to their energy challenges. FF has a similar mission—helping covered federal fleets meet the requirements of the Energy Policy Acts (EPAct) of 1992 and 2005 and Executive Order (E.O.) 13149. Under EPAct, federal agencies must purchase a certain number of alternative fuel vehicles each year, while E.O. 13149 requires agencies to reduce their petroleum consumption by 20% compared to their 1999 level.

The move will be seamless for covered agencies and provide an opportunity for various federal energy savings programs to work more closely together.

International News

Clean FUEL USA Pumps Propane Overseas

Georgetown, Texas,-based Clean FUEL USA recently announced it is supplying propane station equipment to Panama. Twenty-one of the company's skid-mounted stations, which include a storage tank and dispenser, are now being installed at conventional gas stations in Panama City.

The new propane dispensers are part of Panamanian President Martin Torrijos' initiative calling for all government vehicles to run on liquid petroleum gas (LPG), a clean-burning alternative fuel that's readily available from neighboring Trinidad. An agreement between Panama's government and Delta, Panama's largest propane supplier, will ensure the success of the LPG initiative.

Their agreement calls for the government to convert up to 20,000 of its vehicles to operate on propane and Delta to supply the propane and install the infrastructure. Seven of the 21 LPG dispensers are already installed in Panama City, and the rest should be up and running by summer. Another 15 to 20 stations could be installed in the future, says Curtis Donaldson, Clean FUEL USA Founder and President.

Although Panama is pleased that LPG is environmentally friendly, economics drove the decision to convert the government vehicles. On average, LPG costs 30%-50%



One of Clean FUEL's 21 LPG pumps installed in Panama City, Panama.

Clean FUEL USA

less than gasoline in other countries.

Clean FUEL USA is also helping to establish propane infrastructure in Argentina and India. In fact, the company has subsidiaries in both countries. Clean FUEL Argentina will install LPG infrastructure and convert vehicles to run on propane in the northern region of Argentina, a remote area where other energy sources are not readily available. Meanwhile, Clean FUEL India is supplying station equipment to fuel public rickshaws and other vehicles that operate on LPG.

Donaldson credits Clean Cities International (CCI) for its association with India. Likewise, he tributes CCI for a budding relationship between Clean FUEL USA and the Philippines. "We are in talks to put in LPG stations outside of Manila," Donaldson says.

Clean FUEL USA developed its overseas market 10 years ago when Donaldson realized that propane may not necessarily become a sustainable market in the United States. He says LPG is popular overseas because the citizens and government are open to change.

"The populations in these countries generally don't have a mindset of convenience like we do in the United States," Donaldson says. "They are enthusiastic about using alternative fuels and aware of the long-term viability of using a cleaner, less expensive, domestically produced fuel."

New Resources

Recent Federal Actions

A section of Recent Federal Actions is now available on the Alternative Fuels Data Center's Laws and Incentives Web site. This new feature lists publicly available agency actions, such as Federal Register notices, rulemaking announcements, and agency directives, related to all five Clean Cities technology areas. Visit State and Federal Incentives and Laws (www.eere.energy.gov/afdc/progs/fed_action_sum.cgi?afdc/US/0) for the latest information.

Fuel Ethanol and Biodiesel Report

This weekly newsletter offers an in-depth look at the ethanol and biodiesel pricing markets. Published by the Oil Price Information Service (OPIS), this 16-page report tracks all levels of ethanol pricing, including spot barge, rail, bulk truck, term contract, and splash blend, as well as wholesale rack biodiesel pricing. Readers can use it to track indicators of where prices are heading by following major costs for ethanol production and to keep up on pricing data for forwards markets, such as the New York and Chicago trade boards. For subscription information or to read a sample issue, visit the OPIS Web site at www.opisnet.com/news/ethanol.asp.

Greening Garbage Trucks: Trends in Alternative Fuel Use, 2002-2005

This comprehensive study by INFORM evaluates our nation's estimated 179,000 garbage trucks and their impact on the environment. Among the findings: Garbage trucks are among the oldest, least fuel-efficient, and most polluting fleet vehicles in the United States. To read a synopsis of the report, visit http://informinc.org/ggt_project1.php. An electronic version of the full document can be purchased for \$15 on the INFORM site.

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

For more information contact: EERE Information Center 1-877-EERE-INF (1-877-337-3463)

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Energy Efficiency and Renewable Energy

Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable