

*Clean Cities Now* ([www.eere.energy.gov/cleancities/ccn](http://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.

## I-65 is Nation's First Biofuels Corridor

Interstate 65, extending 886 miles between Gary, Indiana, and Mobile, Alabama, is the nation's first "biofuels corridor." In 2005, there were no biofuel stations along I-65. Today the corridor designation means that a driver is no more than 100 miles from a participating E85 retailer. The \$1.3 million federal project funded 31 E85 and five B20 stations and one biodiesel blending facility located on the Indiana-Ohio border. Matching funds for construction and conversion were provided by individual infrastructure owners. E85, a blend of 85% ethanol and 15% gasoline for use in flexible fuel vehicles, and B20, a blend of 20% biodiesel and 80% petroleum-based diesel for use in diesel vehicles, are fuels made with renewable agricultural products.

The corridor, which spans four states, was completed thanks to the Indiana Office of Energy and Defense Development (IOEDD), which worked with Carl Lisek of Indiana's South Shore Clean Cities, Kellie Walsh of Central Indiana Clean Cities, Melissa Howell of the Commonwealth Clean Cities Partnership (CCCP) in Kentucky, and Mark Bentley of the Alabama Clean Fuels Coalition (ACFC).

The project began when Lisek and Walsh approached IOEDD about responding to the 2006 DOE Clean Cities solicitation which included infrastructure grants. Already in the process of ramping up biofuels expansion in the state, IOEDD welcomed the solicitation and encouraged Lisek and Walsh to identify partners from neighboring states.

Meetings with CCCP's Howell and ACFC's Bentley and the Tennessee State Energy Office soon expanded the plan across four states. IOEDD then developed the corridor proposal and was eventually awarded DOE funding to help build it.

According to Bentley, the I-65 corridor now has 15 biofuels fueling sites in Alabama, 19 in Indiana, and three each in Tennessee and Kentucky. But this couldn't have happened without the additional participation of the Indiana Soybean Alliance, Indiana Corn Growers Association, the Ethanol Promotion and Information Council, as well as the Indiana, Kentucky, Tennessee, and Alabama stakeholders who supported local infrastructure development.



The I-65 Biofuels Corridor extends from Gary, Indiana to Mobile, Alabama.  
*Indiana Office of Energy and Defense Development*

According to Julie Howe, IOEDD grants finance manager, the best advice for making this project and others like it work is to identify a strong entity to manage the process from grant writing to finance and subcontracting. "The state energy office in one state is equipped to handle a multistate project such as this," Howe says.

"This partnership is proof that you can join with other states to achieve a common goal," says Walsh, "This project has laid the foundation for other coalitions to partner across state lines for success."

## Coalition News

### Melissa Howell Named Clean Cities Coordinator of the Year

Melissa Howell was named Clean Cities Coordinator of the Year by the U.S. Department of Energy. Howell has been at the helm of the Louisville-based Kentucky Clean Fuels Coalition (KCFC) for 14 years. Under her leadership, the coalition reduced petroleum consumption in Kentucky by 11 million GGE in 2007. Of this, 7 million GGE was displaced through the use of biodiesel, mainly in school buses and heavy equipment.

KCFC, under Howell's coordination, was also a partner in the I-65 biofuels corridor project that sited E85 public refueling infrastructure from Gary, Indiana, to Mobile, Alabama. Howell also represents the coalition on the Transportation and Greening the Games committee for the 2010 Federation Equestre Internationale World Equestrian Games, which will be held in Lexington.

"In the last three years, Melissa has helped reduce U.S. petroleum consumption by almost 30 million GGE," says Dennis A. Smith, national Clean Cities director. "We attribute this outstanding track record to Melissa's tireless dedication to the Clean Cities mission and her infectious enthusiasm toward the benefits of alternative transportation fuels. She exhibits leadership in her coalition and is a role model for other coordinators."

### Odyssey Day Celebrated Across the Nation

Clean Cities coalitions across the country marked National Alternative Fuel Vehicle Day Odyssey, a biennial event dedicated to promoting cleaner choices in transportation. Most celebrations were held around Oct. 3 and were designed to bring national attention to AFVs and advanced technology vehicles. Events included outdoor car shows featuring several AFV technologies, indoor symposiums, and grand openings of alternative fuel stations to provide interactive and educational events that demonstrated AFVs as cleaner and more efficient choices for transportation.



The U.S. Department of Energy (DOE) launched the 2008 Odyssey Day with an event outside DOE headquarters in Washington, D.C. Speakers included Acting Assistant Secretary John Mizroch, Deputy Assistant Secretary David Rodgers, and National Alternative Fuels Training Consortium (NAFTC) Executive Director Al Ebron.

NAFTC hosted the first Odyssey day in 2002. Marking the 2008 event, Ebron said: "Transportation represents this country's largest energy user, and over half of that energy is imported. Alternative fuel and advanced technology vehicles make sense because they are cleaner, which is so important for improving air quality, especially in our major cities." Local Clean Cities coalitions hosted a variety of Odyssey Day events. They included:

#### Vehicle Exhibits

- **Houston-Galveston Clean Cities (HGCC)** — HGCC held its event in conjunction with Gulf Hydrocarbon, a Houston-based biodiesel distributor. A ZENN electric vehicle and more than 200 flex-fuel police vehicles from the Houston Police Department were on display. On a larger scale, Schmidt and Sons brought a 4,500-gallon tanker equipped with a hose mechanism that mixes biofuels with diesel during the fueling process.

- **Utah Clean Cities (UCC)** — UCC, together with Salt Lake Community College, hosted an AFV display and car show and scheduled speakers who discussed the effects of air pollution on children’s health and efforts to build greener fleets and sustainable communities. Two panel sessions followed the speakers.
  - **West Virginia Clean State Program** — This coalition offered a full slate of presentations on the state’s transportation programs, as well as disseminated information on compressed natural gas (CNG) vehicles, biodiesel for tractors, electric bicycles, and the West Virginia University Eco Car Challenge Team. Outside the meeting, held in Fairmont, West Virginia, were 10 AFVs.
  - **Central Coast Clean Cities Coalition (C5)** — C5 hosted more than 2,000 people at its AFV exhibit that included electric, propane, ethanol, CNG, and biodiesel vehicles. Alternative fuel experts were on hand to answer questions and provide test drives of some of the vehicles. C5 also hosted an Advancing the Choice workshop featuring prominent speakers on a variety of alternative fuels.
  - **East Tennessee Clean Fuels Coalition** — This coalition held an outdoor exhibit that featured 20 AFVs, including plug-in hybrids, pure electric tractors, and hydrogen conversions.
  - **Delaware Clean State Program (DCSP)** — DCSP held its event in conjunction with the University of Delaware Coast Day and exhibited a Miles electric truck and a vehicle-to-grid electric vehicle.
  - **Northern Colorado Clean Cities and Denver Metro Clean Cities** — These two coalitions invited the general public to wander through a maze of AFVs and exhibit booths in the parking lot of the Boulder City Library. Inside the building speakers presented information on biofuels and natural gas.
- Central New York Clean Cities (CNYCC)** — CNYCC offered a ride-and-drive that featured CNG, electric, and hybrid vehicles, as well as an electric ATV. A tour of Onondaga Community College’s Automotive Technology Laboratory was also part of this event.

## Seminars and Expos

- **Southern Colorado Clean Cities Coalition** — This coalition held an Alternative Energy Expo to educate the community, government officials, and fleet managers about alternative fuels, alternative fuel station locations, and alternative fuel choices. Exhibits included a solar-powered vehicle, a biodiesel school bus, and a flexible fuel Colorado State Patrol vehicle.
- **Genesee Region Clean Cities (GRCC)** — GRCC focused on hydrogen vehicles and included a hydrogen fueling demonstration. Hybrid and hydrogen cars were featured in a Green Vehicle Parade at the Rochester Institute of Technology.
- **Centralina Clean Fuels Coalition** — This coalition organized a hybrid electric vehicle first-responder training class for emergency response personnel who may be called on to confront automobile accidents involving hybrid electric vehicles.

## Festival Exhibits

- **St. Louis Clean Cities (SLCC)** — SLCC held its event during the Green Homes and Renewable Energy Festival for 4,000 visitors. AFVs and more than 100 booths were on display.
- **Triangle Clean Cities Coalition (TCCC)** — TCCC held its event at the North Carolina State Fair to bring attention to its Green North Carolina exhibit, which included 30 exhibitors featuring sustainable foods, eco-friendly living, water conservation, recycling, alternative fuels, and travel.
- **Dallas-Fort Worth Clean Cities** — At its exhibit at the Texas State Fair, this coalition displayed a hybrid Yellow Cab representing the North Texas Green and Go Clean Taxi Partnership and Energy Xtreme equipment.
- **Land of Enchantment Clean Cities (LECC)** — LECC hosted its event to the New Mexico state fair and displayed ten alternative fuel vehicles, including those that ran on CNG, electricity, biodiesel, and E85.

## Fuel Station Events

- **The Red River Valley Clean Cities** — This coalition celebrated the day with stakeholders Cenex and Blue Flint Ethanol, which both offered E85 at \$1.94 a gallon. Volunteers cleaned visitors' windshields.
- **Commonwealth Clean Cities (CCC)** — CCC promoted E85 sales at the Fern Valley Road Thornton's Quick Cafe and Market along a four-state length of I-65, the first biofuels corridor in the U.S. (see related story)
- **East Bay Clean Cities Fuel Coalition** — This coalition's event featured groundbreaking for new E85 stations throughout California including Concord, San Jose, Carmichael, Perris, Beaumont, and Sacramento and ribbon cuttings to mark the opening of E85 stations in Carlsbad and Hayward, California.

"Odyssey Day was a way to stimulate public awareness of our dependence on foreign oil and to support the alternative fuel vehicle industry. By working together, we will bring national attention to AFVs and advanced technology vehicles and promote them as a cleaner and more efficient choice for transportation," Ebron concluded.

## Central Texas CCC Offers Incentives for Electric Vehicles

Austin Energy and Central Texas Clean Cities (CTCC) stakeholders are partnering to provide incentives to Austin Energy customers for the purchase of selected electric bikes, scooters, motorcycles, and neighborhood electric vehicles as part of the "Plug in Your Wheels" electric vehicle incentive program. The goal is to increase the use of electricity as a transportation fuel and to focus attention on this segment of CTCC's electric vehicle stakeholders. Close to \$30,000 was awarded through the program in the past 18 months, and the Austin City Council plans to expand the program into 2009.

## Texas Coalitions Promote Rebates for Propane-Powered Mowers

Texas-based Clean Cities coalitions, including Alamo Area, Dallas/Ft. Worth, East Texas, Houston-Galveston, Central Texas, and South East Texas kicked off the propane mower program in conjunction with the Propane Education and Research Council on Oct. 16 at the Alternative Car Expo in Austin, Texas. The program is offering a total of \$100,000 in rebates for the purchase of original equipment manufacturer propane-powered mowers and the conversion of qualified mowers with less than 200 hours of use. The rebates are available only to Texas-based Clean Cities stakeholders, and the propane mowers must be purchased from retailers that belong to a Texas coalition. Through this program the coalitions aim to expand the use of propane in Texas while increasing the stakeholder base of all Texas coalitions.

## Fleet Experiences

### Meijer Delivers While Reducing Miles Driven and Fuel Used

Reducing vehicle miles traveled seems like an insurmountable challenge for a long-haul delivery service that supplies 185 retail super centers throughout the Midwest. Yet Meijer, Inc., based in Grand Rapids, Michigan, has increased profitability while reducing miles driven by 2.5 million miles in the past year, saving nearly 385,000 gallons of diesel fuel in the past year. Meijer is a stakeholder in Greater Lansing Area clean Cities.

The key to its success is a proprietary Web-based e-log systems that tracks route efficiency, driving speed, engine performance, fuel consumption, and idling time for each Meijer driver on the road. Idling time that goes over four minutes, for example, results in an exception report. Dave Hoover, Meijer director of logistics, says the e-log system gives management Web-based visibility of driver performance at all times, but he credits his drivers, who have an average of 20 years of seniority, with the success of the program. "We provide training from original equipment manufacturers about progressive shifting techniques and appropriate use of revolutions-per-minute bands. The success of these techniques is in driver performance."

Meijer prides itself on supplying its stores with fresh produce seven days a week. As diesel prices rose over the past year, the company used established systematical criteria to model pickup and delivery scenarios.



"We use our own fleet for about 40% of our deliveries and rely on third-party fleets for the remaining 60%," says Hoover. "We use load modeling and frequency to determine whether we should pick up with our own truck or use a third party." The Web-based systems the company uses maximize outbound trailer loads and vendor backhauls to reduce deadhead return trips. Meijer transports goods for other companies on routes that would otherwise mean empty return trips. The Web system also tracks idling time, and the company has been able to reduce its average idling time to under four minutes.

The current Meijer-owned fleet includes Volvo tractors with Cummins ISX engines. In the next year, the company expects to replace its older vehicles with automatic transmission vehicles. "Automatic transmissions will give us more control over speed, rpm bands and idling," Hoover says. In addition, Meijer wants to purchase engines with selective catalytic reduction units designed to meet 2010 U.S. Environmental Protection Agency (EPA) requirements.

Meijer, Inc., was recently awarded the EPA SmartWay Environmental Excellence Award for its leadership in conserving energy and lowering greenhouse gas emissions from its transportation and freight activities. The company also received the Michigan Energy Independence Award presented by Greater Lansing Area Clean Cities, Detroit-Area Clean Cities Coalition, and the Clean Energy Coalition of Ann Arbor. Meijer was also recognized by the U.S. Secretary of Transportation for its efforts in reducing onroad truck traffic.

Hoover credits the maintenance and operations employees for the success of the program. "They work hard each day to conserve fuel," Hoover says. "Our employees and customers can take pride in knowing our company has taken an aggressive, proactive approach in doing its part to support a cleaner environment."

## Program Resources

### **Petroleum Reduction Planning Tool**

The Petroleum Reduction Planning Tool is an interactive application that allows fleets, consumers, and business owners to develop petroleum reduction strategies by selectively choosing from eight different methods to accomplish their goals. The tool automatically calculates petroleum use reductions generated from the deployment of hybrids, alternative fuels, biodiesel blends, improved fuel economy, idling reduction, and vehicle miles traveled reductions. The Petroleum Reduction Planning Tool is available in the Alternative Fuels and Advanced Vehicles Data Center (AFDC) [Fleet section](#).

### **2009 Vehicle Buyer's Guide**

The 2009 Vehicle Buyer's Guide, published by Clean Cities, is a 32-page booklet featuring alternative vehicles that run on E85, natural gas, biodiesel, propane, and hybrid technology. Copies are available from Clean Cities coalitions for distribution, and a PDF is available at the Alternative Fuels and Advanced Vehicles Data Center's (AFDC) [Vehicle Make/Model Search](#).

### **Fuel Economy Guide**

The 2009 Fuel Economy Guide, published jointly by the U.S. Department of Energy and the U.S. Environmental Protection Agency, is available for download from [www.fueleconomy.gov](http://www.fueleconomy.gov). You can also request single printed copies or bundles of 25 copies by using the [Fuel Economy Order Form](#) on AFDC.

### **Natural Gas**

This two-page Clean Cities fact sheet is a primer on natural gas transportation applications. The fact sheet describes the performance and availability of natural gas as a vehicle fuel, as well as the performance and cost of natural gas vehicles. ([PDF 269 KB](#)) [Download Adobe Reader](#).

## Ethanol Basics

This six-page Clean Cities fact sheet contains information on the production of ethanol, vehicle applications, energy balance, and greenhouse emissions. It also discusses the impact of ethanol on food production.

[\(PDF 488 KB\) Download Adobe Reader.](#)

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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.

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