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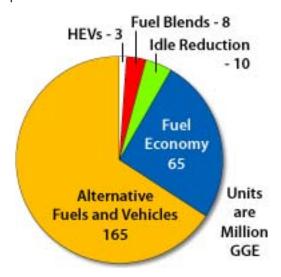
Clean Cities Now (www.eere.energy.gov/cleancities/ccn) is the official publication of Clean Cities, an initiative of the U.S. Department of Energy designed to reduce petroleum consumption in the transportation sector by advancing the use of alternative fuel vehicles, idle reduction technologies, hybrid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

# **Clean Cities Displaces 251 Million GGE in 2005**

The 2005 Annual Coalition Questionnaire results show that Clean Cities coalitions displaced more than 251 million gasoline gallon equivalents (GGE) in 2005—enough fuel to power 500,000 vehicles for a year. This accomplishment represents a 6% increase over the 237 million GGE displaced in 2004.

Of Clean Cities' five technology areas alternative fuels and vehicles led the pack by displacing 165 million GGE (or 66%) of the petroleum displaced in 2005. Although impressive, this figure is roughly 5% lower than the 173 million GGE of petroleum displaced in this category in 2004.

The reduction isn't surprising, says Clean Cities Analyst Vicky Putsche at the National Renewable Energy Laboratory, because fewer coordinators submitted questionnaires. In 2005, 64 coordinators (or 70%) took the survey, compared to 73 (or 88%) in 2004. Why the decline in participation? "We're still investigating but believe that coalitions are growing so fast that it's become more difficult to gather data," Putsche says. "We're looking for ways to streamline the process." Nonetheless, a 70% response rate is still very promising, she adds.



Results show that compressed natural gas (CNG) was in high demand in 2005, accounting for 35% of the alternative fuel used last year. B20 and propane followed at 21% and 20% respectively. Although availability of light-duty CNG vehicles has diminished, the heavy-duty CNG vehicle market is holding steady. The majority of the CNG used in 2005 resulted from heavy-duty vehicles.

Fuel economy measures contributed to 65 million GGE (or 26%) of the total fuel displaced by Clean Cities in 2005—a 16% increase over 41 million GGE in 2004. Of that, approximately 2 million GGE resulted from reduced vehicle miles traveled by stakeholders. The remaining 63 million GGE were estimated by Oak Ridge National Laboratory to have come from fuel economy efforts influenced by the <u>Fuel Economy Guide</u>. These measures include purchasing more fuel-efficient vehicles, keeping tires inflated at the proper pressure, and driving less aggressively.

Idle reduction efforts displaced roughly 10 million GGE (or 4%) of petroleum in 2005, a slight decrease from 12 million GGE in 2004. Putsche says the decrease is likely due to better data and more refined estimating techniques. Interestingly, the majority of the fuel savings from idle reduction resulted from voluntary and mandatory truck idling rules at ports, such as in Los Angeles/Long Beach, California.

Use of low-level fuel blends, such as E10, B2, and B5, displaced 3 million GGE of petroleum in 2005. E10, which is required in fuel pumps in many cities, accounted for 96% of this figure. B2 and B5 displaced 1 million GGE.

The acquisition of hybrid electric vehicles (HEVs) also increased in 2005, accounting for 17,100 (or 8%) of the total vehicles reported in 2005. This is a 137% increase in HEVs purchased in 2004. HEV use resulted in the displacement of approximately 3 million GGE of petroleum, up from 2 million GGE in 2004.

"I'm pleased with the coalitions' efforts in 2005," says Clean Cities Director Dennis Smith. "Increases in almost every technology area bodes well for meeting our goal of displacing 2 billion GGE by the end of 2008."

#### **Coalition News**

#### Walsh Receives Paul Dana Leadership in Biofuels Award

Kellie Walsh, Central Indiana Clean Cities Alliance Executive Director, is one of three recipients of the new Paul Dana Leadership in Biofuels Award. Walsh received the honor for her efforts to install E85 public pumps across Indiana. In January 2005, Indiana had no public E85 pumps. Today the state has 30 public E85 sites and commitments for 19 more.

The biofuels award was created in memory of Paul Dana, an Indy Racing League (IRL) driver killed in a racing accident in March 2006. A biofuels advocate, Dana was working with the Indiana State Department of Agriculture on several biofuels initiatives at the time of his death. Through Dana's efforts, the IRL has committed to use E10 in its cars in 2006 and E100 in 2007.

"Having gotten to know Paul in the months before his death and gotten to see firsthand his devotion, belief, and true passion for ethanol and alternative fuels, I am deeply honored to be one of the first recipients of an award in his name," Walsh says.



Secretary of Energy Samuel Bodman (center) and Assistant Energy Secretary Andy Karsner (right) inspect an ethanol-fueled racecar with driver Jeff Simmons at the Indianapolis Motor Speedway.

Photo contributed by DOE

#### In Other Indiana News-

U.S. Department of Energy (DOE) Secretary Samuel Bodman and Assistant Secretary for Energy Efficiency and Renewable Energy Andy Karsner attended events at the Indianapolis Motor Speedway on May 11, 2006, to commemorate Ethanol Day. Walsh met with Karsner and had the opportunity to discuss the origins and background of Clean Cities, the Beyond a Billion milestone and celebrations, and the goal of displacing 2 billion gasoline gallon equivalents of petroleum by 2008. They also discussed recent budget challenges faced by Clean Cities. Karsner and Bodman asked Walsh to keep them posted on Clean Cities activities.

# Treasure Valley, Central Coast Sign on with Clean Cities

Idaho's Treasure Valley and California's Central Coast are Clean Cities' newest members. DOE approved their coalition plans in June.

The Treasure Valley Clean Cities Coalition (TVCCC) encompasses a portion of southwest Idaho—with 438,016 residents, it is the state's most highly populated area and includes Idaho's two largest cities, Boise and Nampa.

Beth Baird, environmental program coordinator for the City of Boise, is acting TVCCC co-coordinator with Leonard Herr, air-shed coordinator with the Idaho Department of Environmental Quality. Twenty-one companies, government agencies, and other organizations have signed a memoranda of understanding with TVCCC. Among that group are fuel suppliers, stakeholders that maintain fleets, organizations that deal with transportation issues, and agricultural interests.

The Central Coast Clean Cities Coalition (C5) comprises all of San Luis Obispo County, which is located between San Francisco and Los Angeles along U.S. Highway 101. The long-term geographic goal of the coalition is to establish a clean fuels corridor that connects the Bay Area and Southern California.

Aeron Arlin Genet and Melissa Guise are ad-hoc coordinators for the coalition, which had been a chapter of Project Clean Air. C5 has been meeting since 2002. It has more than 40 members and hosts numerous outreach events including a California Clean Cities Airport Workshop and alternative fuel vehicle (AFV) displays at Earth Day events and National AFV Odyssey Day.

The C5 Clean Cities designation ceremony is scheduled for August 25, 2006, at the Hearst Castle in San Simeon, California. Clean Cities Director Dennis Smith plans to attend. For more information, visit the C5 Web site.

#### **Central Texas Pushes Plug-Ins**

The Central Texas Clean Cities Coalition in Austin has been instrumental in the national Plug-In Partners campaign. Coordinated by local and state governments, utilities, as well as environmental, consumer, and business organizations, the campaign aims to create a market for plug-in hybrid electric vehicles (PHEVs) to catch the attention of vehicle manufacturers. It encourages rebates and incentives, soft fleet orders, petition drives, and endorsements.

The national campaign was launched at Austin Energy in 2005 and quickly moved across the country. The Central Texas coalition, housed at Austin Energy, was involved early on. "At the planning meetings, we made sure everyone knew Clean Cities has the best networking connections for this type of project," says Central Texas Coordinator Stacy Neef. "We provided all the names and addresses for each coalition and recommended that whoever had meetings in each region, contact the Clean Cities coordinator first." Neef also introduced the campaign to other coordinators and encouraged their involvement.



National Campaign

The plug-in campaign is a natural fit for Clean Cities. National Renewable Energy Laboratory analysts estimate that PHEVs will demonstrate a 50% reduction in fuel use over conventional vehicles when they are ready for market—possibly as early as 2010. One and a half million PHEVs on the road could save approximately 20 million barrels of oil annually.

Currently more than 200 utilities; non-profits; city, county, and local governments; national security organizations; alternative fuel associations; and environmental groups have joined the Plug-In Partners Campaign.

# **Program News**

# **Grant Opportunities Prove Popular**

More than 100 applications were received in response the \$3.7 million available in Clean Cities grants. The application period closed on June 8.

"We had a particularly enthusiastic response," said Clean Cities Director Dennis Smith. "The numbers show that there is a lot of interest in Clean Cities activities."

Of the responses, approximately 50 applications were received for Area of Interest 1: Refueling Infrastructure for E85 and Other Alternative Fuels; approximately 25 were received in Area of Interest 2: Incremental Costs of Alternative Fuel Vehicles; and approximately 25 in Area of Interest 3: Idle Reduction Training and Awareness for School Districts.

Grant awardees will be announced in September.

## **Industry News**

### **Iowa Offers Tax Credits, Unique Incentive for E85 Retailers**

On May 30, 2006, the State of Iowa established the toughest renewable fuels standard in the nation. It plans to displace 25% of the state's petroleum use with biofuels by 2020.

Starting in 2009, retailers will receive tax incentives based on the schedule for achieving this standard. The tax credit will increase from \$0.025 a gallon for retailers within 4% of the schedule to \$0.065 a gallon for retailers meeting or exceeding the schedule. The legislation also creates a tax credit that starts at \$0.25 a gallon for retailers selling E85 and another for \$0.03 a gallon for retailers selling biodiesel. This credit will phase out in 2021. For more information, read Iowa General Assembly House File 2754.

To help offset the cost of delivering biofuels to consumers, \$13 million has been allocated under the legislation to help expand Iowa's fueling infrastructure. To learn more, see Iowa General Assembly House File 2759.

Iowa's new renewable fuels legislation also allows gas station franchisees that sell E85 to purchase it from sources other than their parent companies. This is the first time a state has passed legislation that can help retailers meet a renewable fuels standard, as well as increase consumer demand.

Other states encouraging the use of biofuels include Louisiana and New York. On June 12, 2006, Louisiana Governor Kathleen Babineaux Blanco signed <u>House Bill 685</u>, which <u>mandates the sale of ethanol and biodiesel</u> in the state. In addition, Governor George Pataki has directed the New York State Thruway to install or <u>convert fuel pumps at travel plazas</u> to provide E85, B20, and compressed natural gas.

## **Success Story**

# **Portland Transit District Adds CNG Buses, Infrastructure**

Nearly one-half of Portland, Maine's fleet of transit buses now runs on compressed natural gas (CNG). These buses fuel at Maine's first CNG fueling station.

On May 1, 2006, the Greater Portland Transit District (METRO) and Maine Clean Communities formally unveiled 13 new Orion buses with John Deere CNG engines and their new fueling station. METRO estimates that the buses could displace nearly 120,000 gallons of diesel a year. The fueling station is also being used by Portland School District buses and will be available to other fleets and individuals.



Both transit and school buses fuel at Maine's first CNG station operated by the Greater Portland Transit District in Portland.

Photo contributed by Steve Linnell

Maine Clean Communities, its coordinator Steve Linnell, and Clean Cities were pivotal in procuring the buses and developing the station. In fact, the first seeds for the project were planted in the 1997 Maine Clean Communities Coalition Work Plan. At that time, however, there was not a CNG champion at METRO. A new general manager and Linnell's perseverance reinvigorated the project in 2001.

"The new general manager had previous experience with natural gas and was comfortable with the project," explains Linnell. "Individual METRO board members may have supported the project because they were influenced by emissions, energy independence, and the promise of cheaper fuel and lower operating expenses."

Linnell submitted a proposal and received a Clean Cities State Energy Program (SEP) grant for \$150,000 in infrastructure funding in 2001. The Maine Department of Transportation matched the funding with \$150,000

in Congestion Mitigation and Air Quality Improvement (CMAQ) funds. Northern Utilities contributed \$25,000 and free hookup to the gas main. Additionally, Linnell received commitments from several fleets to use CNG once the station was built.

Since the project's inception, Maine Clean Communities received additional SEP funds for the incremental costs of five CNG transit buses, and Linnell assisted the Maine Department of Environmental Protection in applying for and securing Clean Cities SEP funds for incremental costs of three CNG school buses.

From the initial concept in 1997 to the unveiling of the buses in 2006, Linnell acknowledges that bringing CNG to Portland and METRO was a long, sometimes arduous, process, but the several committed partners made it work.

"The METRO general manager was key to keeping things on track," says Linnell. "Putting together the funding was the biggest challenge. Keeping it, due to how long it took to spend, was the second."

Next, METRO will be working with the Maine Department of Transportation and the Maine congressional delegation to secure funding to replace eight more diesel buses with CNG buses. Meanwhile, Maine Clean Communities is working with fleets in proximity of the new CNG station to encourage them to add CNG vehicles.

### **EPAct Update**

## **DOE Announces Proposed Rulemaking on New Compliance Option**

Fleets covered by the <u>State and Alternative Fuel Provider Rule</u> may have a new compliance option on the horizon.

If passed, the proposed Alternative Compliance program will allow fleets to choose a petroleum reduction path in lieu of acquiring alternative fuel vehicles, as mandated by the Energy Policy Act (EPAct) of 1992. The option was initiated by EPAct 2005, which was signed by President Bush last August.

The rulemaking process is already underway. A <u>Notice of Proposed Rulemaking</u> was published in the *Federal Register* on June 23, 2006. Subsequently, on July 12, 2006, the U.S. Department of Energy (DOE) held a public hearing at headquarters to discuss the rulemaking. Approximately 30 people attended the workshop. Participants included covered fleets, national alternative fuel associations, and fuel providers.

DOE is accepting public comments on the proposed rulemaking until August 7, 2006. Received comments and other related documents are posted in DOE's <u>electronic docket</u> on the EPAct Web site.

For more information, read the <u>Federal Register</u> notice or contact the <u>Regulatory Information Line</u> at (202) 586-9171.

#### **International News**

## **Tulsa Gas Technologies Contributes to the Global Economy**

No one has to convince Tom Sewell that the world is flat. He has been contributing to and thriving in the global economy featured in Thomas Friedman's book, *The World is Flat*, since 1998.

Sewell is the president of Tulsa Gas Technologies, Inc., (TGT) a compressed natural gas (CNG) dispenser manufacturer and distributor headquartered in Tulsa, Oklahoma. TGT is currently installing 55 CNG dispensers in Ahmadabad, Gujarat, India. The company is halfway through the project, which it plans to complete by August. The dispensers will be fueling transit buses and taxis.

This is not Sewell's first foray into India. TGT built 40 CNG dispensers in New Delhi between 1999 and 2002, and it has so much service work that it opened a factory there in 2005. In New Delhi each dispenser is fueling about 400 vehicles a day. While Sewell is not certain how much diesel the CNG has actually displaced, he is certain that it has had a large environmental impact. "The air was so bad before we started this project that we used to wear air masks because of the diesel fumes. Now we can actually see and feel the difference," Sewell says.

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TGT is installing 55
CNG dispensers in
Ahmadabad. TGT is
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Mountain High Maps

In fact, due to the poor air quality in New Delhi, the Supreme Court of India in 1998 issued a mandate to replace all diesel buses in the city with those that run on CNG. The U.S. Agency for International Development and Clean Cities International have worked with the city to place more than 80,000 natural gas vehicles into service within the city, and New Delhi is considered one of the most successful in the world at converting to alternative fuel vehicles on a massive scale.

International work is not always easy, however. "In India, the bureaucracy often leads to no one person having the authority to make a decision," says Sewell. "This causes delays. Additionally, supplies that are manufactured outside of India are often held up at customs or freight facilities. The Indian people are hard working and frustrated by the system; they've found workarounds." He credits his partner, Ashok Anand, at TGT India, with much of the company's success in that country.

The increased sales in India have helped TGT's local suppliers. "We use 100% U.S.-made components and raw materials. Actually, 50% of those raw materials come from Oklahoma," explains Sewell.

Sewell predicts that TGT's international work is going to grow. "The dispenser is just one component of a complete natural gas station, but it is the one people see everyday. It has to hold up to the climate—we make our dispensers so we can change the hardware or software as needed."

Closer to home, Sewell doesn't see the same demand for CNG, and he sees similar hold-ups by bureaucracies. He says Clean Cities has helped break down those barriers by helping build infrastructure through the grant process and helping to educate consumers about natural gas.

#### **New Resources**

#### **Clean Fleet Guide**

The U.S. Department of Energy's Clean Fleet Guide is a collection of tools designed to help fleets make "green" vehicle and fuel decisions. The site offers specs on available alternative fuel and advanced technology vehicles, tools to perform cost analyses based on specific fuel type and location, and information on technologies that can improve fuel economy. Visit the site at <a href="https://www.eere.energy.gov/fleetguide">www.eere.energy.gov/fleetguide</a>.

#### **Clean Alternatives Report**

The National Alternative Fuels Training Consortium (NAFTC) redesigned its newsletter, the *Clean Alternatives Report*. The quarterly newsletter, available in hard copy or electronically, provides general news on the alternative fuels industry and advanced technology vehicles and specific news about NAFTC courses, workshops, and events. To subscribe, go to <a href="https://www.naftc.wvu.edu">www.naftc.wvu.edu</a>.

#### **Alternative Fuels Index**

The *Alternative Fuels Index* provides weekly wholesale pricing for and industry news about alternative fuels, including biodiesel, ethanol, propane, methanol, electricity, hydrogen, and natural gas. The newsletter is produced by the Energy Management Institute and requires a subscription (a two-week free trial period is offered). For more information, visit www.energyinstitution.org.

#### **Energy Savers Driving and Car Maintenance**

The U.S. Department of Energy provides energy saving transportation tips to consumers on its Energy Savers Driving and Car Maintenance Web site. Among the tips are suggestions to avoid aggressive driving, keep tires properly inflated and aligned, and use air conditioning only when necessary. Additional pointers are provided. Check it out at <a href="https://www.eere.energy.gov/consumer/tips/driving.html">www.eere.energy.gov/consumer/tips/driving.html</a>.

# 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) <a href="https://www.eere.energy.gov">www.eere.energy.gov</a>

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