

U.S. DEPARTMENT of ENERGY

# ALTERNATIVE FUEL NEWS

The Official Publication of the Clean Cities Network and the Alternative Fuels Data Center



# Clean Cities 5<sup>th</sup> Anniversary



*Atlanta - September 8, 1993*



*Providence - September 14, 1998*



*Omaha - September 18, 1998*



Dear Clean Cities Stakeholders and Supporters:

Happy Anniversary to you and your coalition!

Yes, it has been 5 years since the first Clean Cities coalition—Atlanta, Georgia—was designated by the U.S. Department of Energy (DOE). Who would have guessed that 5 years later the Clean Cities Program would be the largest network of alternative transportation fuel advocates in the nation?

Well, thanks to you—the Clean Cities coalitions—the program has become a tremendous voluntary public/private partnership—a partnership that is often the envy of other government programs. Sure, we hear public/private partnerships all the time in “government speak,” but you know that this time the concept is working, with more than 65 cities and 3,000 stakeholders now a part of the program, striving to make local markets for alternative fuel vehicles sustainable. When this program was first launched, public relations was a large focus, but now Clean Cities advocates in city after city across the United States are building stations and driving alternative fuel vehicles, in addition to enhancing public awareness. This issue will feature our newest coalitions—Red River Valley, Puget Sound, Providence, and Omaha. See the enthusiasm they are bringing to the network in this issue.

I also want to thank our national partners, the automakers and fuel associations, who have stood by us through good times and bad. We know there is still a lot of work ahead, and this is why we have developed the Clean Cities Game Plan 1998/99 in partnership with industry. All of the hard work ahead seems surmountable when we know we have partners who are so committed to the cause.

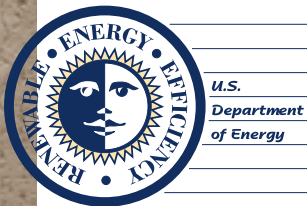
Many thanks to my colleagues who have helped to cultivate Clean Cities and made Clean Cities a fun and interesting place to work, from the Regional Support Office staff—Mike, Steve, Yolanda, Dan, Ernie Oakes and Ernie Rios, Mindy, Roxanne, James, and Trish; to my colleagues at headquarters—Christy, TG, Dorothy, and Rhonda—to the staff at our national laboratories. Of course, I would be remiss if I did not mention Shelley Launey, the first program manager for Clean Cities; Tommy Foltz, former Clean Cities co-director and alternative fuel Razorback; and Jeff Hardy, the one who left me with his monstrosity. We are also very appreciative of David Rodgers and the DOE leadership for their support of this program. Without their guidance and support, we certainly would not be here today.

Again, congratulations for making it to 1998 and fighting a good fight for cleaner air and a nation less dependent on imported petroleum.

Sincerely,

Marcy A. Rood  
Deputy Director  
National Clean Cities Program

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# Clean Cities 5th Anniversary

Albuquerque, NM - 12/7/94 Boston, MA - 3/18/94 Central Oklahoma - 5/29/96  
 Chicago, IL - 5/13/94 Colorado Springs, CO - 12/18/96 Delaware - 10/12/93  
 7/13/94 Corpus Christi, TX - 5/28/98 Evansville, IN - 12/18/96 Hampton Roads, VA - 3/30/95 Lancaster, CA - 10/18/96 Los Angeles, CA - 10/3/97  
 CA - 03/22/96 Little Rock, AR - 11/21/94 Norfolk, VA - 11/17/95 Peoria, IL - 11/22/94  
 Philadelphia, PA - 9/22/93 Portland, OR - 8/10/98  
 Rogue Valley, OR - 10/21/94 Sacramento, CA - 10/21/94 St. Louis, MO - 11/18/94  
 Salt Lake City, UT - 10/21/94 San Francisco, CA - 10/21/94 Southern California - 9/22/97  
 Washington, DC - 10/21/94 White Plains, NY - 11/4/94 Wisconsin - 11/4/94

T.G. Powell - DOE/PIX 06550



Philadelphia, PA - 9/22/93

Bill Clinton was sworn in as the 42nd President of the United States. John Grisham's "The Firm" was a box office hit. Michael Jordan announced his retirement from basketball (for the first time). And the city of Atlanta was officially designated the very first Clean Cities coalition. What year was it?

## Where We've Been

On September 8, 1993, in front of a small crowd outside of Atlanta's brand new Georgia Dome, Bill White, [former] Deputy Secretary of Energy, presented [former] Atlanta Mayor Maynard Jackson with a plaque officially designating America's first Clean City. At the time, the city of Atlanta had 48 alternative fuel vehicles (AFVs) in operation, eight refueling stations, and the Clean Cities-Atlanta partnership consisted of just seven stakeholders. It was an exciting day for everyone involved, and the coalition created as much fanfare as possible to draw attention to the ceremony and to get the word out about AFVs. "Back then, nobody really knew about the Clean Cities Program," said Kent Igleheart, Clean Cities-Atlanta Coordinator. "I don't think people then envisioned the program would grow as much as it has."

DOE/PIX 06534



Washington, DC - 10/21/93

But the program did grow. In fact, the Clean Cities concept caught on like wildfire, and in just 3 months—by December 1993—the Clean Cities network was already six cities strong. The next year an additional 28 cities joined the program. Over 300 people attended the first national conference in St. Louis in 1995, and double that number attended the second Clean Cities Conference in Atlanta in 1996. By that time there were nearly 50 cities across the country—the Clean Cities Program had made its mark.

## Where We Are

Just 5 years after its official designation, Clean Cities-Atlanta has already met its year 2000 goal of operating over 2,600 AFVs on Atlanta city streets. Eighty-six refueling sites have been established, and over 30 Clean Cities-Atlanta partners, who are renowned for innovative projects that help spur AFV market development, have been organized. They've paved the way with their fleet identification system and "one stop for fleets" interactive computer program, the premise of which serves as the basis for the national Clean Cities Preferred Fleets Database and Fleet Buyer's Guide. The coalition has also incorporated as a 501(c)(3) nonprofit organization and has received several grants enabling them to pursue multiple projects with different alternative fuels.

T.G. Powell - DOE/PIX 06559



Austin, TX - 4/18/94

Over the past 5 years, Clean Cities-Atlanta has garnered a lot of support, which, according to Igleheart, is the key to their great success. At this year's national conference, Clean Cities-Atlanta also received the Movers and Shakers Award for being the coalition to add the most AFVs and stations in its area. "With every project we do, we're able to bring together a large partnership, which makes for a great deal of success. We [the coalition leaders] have been the central coordinating point, but everybody's doing their part," Igleheart said.

T.G. Powell - DOE/PIX 06557



Long Beach, CA - 8/31/94

Atlanta isn't the only city. All across the country, the response has been overwhelming. New cities are bringing the key market players together, developing program plans, and petitioning for Clean Cities status. Designated coalitions are continually bringing in new stakeholders and developing new projects. It seems like just about everyone wants in on the



T.G. Powell - DOE/PIX 06558

Baltimore, MD - 10/7/94

action—and a more active and extensive Clean Cities network means more AFVs on the road and more refueling stations in the ground.

A lot has happened in the last 5 years. The Clean Cities Program was originally described as the U.S. Department of Energy's (DOE's) new "nationwide program to put 250,000 alternative fueled vehicles on the road and 500-1,000 refueling stations in 50 cities across the United States." Who would have guessed that in just 5 years the Clean Cities Program would have already met those goals—66 cities, over 3,000 stakeholders, and 4,000

refueling stations? And we're well on our way to surpassing the 250,000 vehicle mark. Who would have thought that in just 5 years you'd be able to drive your personal AFV over 3,500 miles, from one coast to the other, stopping to fill up at only publicly accessible refueling stations? Bill Fairbairn, from the California Natural Gas Vehicle Coalition, did just that, traveling from Sacramento, California, to the

Fourth National Clean Cities Conference in Washington, D.C., in June.

### Where We're Going

While we've come a long way, there is much more to do. Clean Cities Deputy Director Marcy Rood detailed the Game Plan 1998/99 strategy at the

Fourth National Clean Cities Conference in June, emphasizing the importance of private fleet participation. Since then, the white pages database has been compiled, complete with the names of businesses in each and every Clean Cities community that potentially have an interest in alternative fuels and acquiring AFVs for their fleets. The "Clean Cities callers" have been burning up the phone lines, making thousands of calls, interviewing representatives of these potential stakeholder businesses to determine if there's an interest in alternative fuel use. This list is then pared down to the "yes" responses and put back into a database on CD-ROM—and the "yes" list is longer than you may think. An overwhelming 70% of the businesses surveyed have expressed an interest in

AFVs. The Preferred Fleets Database provides coordinators with a comprehensive list of local private fleets that have a definite interest in using alternative fuels—in other words, ideal recruits for a Clean Cities coalition. If you don't already have it, your coalition's database is coming soon. Check with your DOE Regional Support Office Clean Cities representative for more information.

The next step involves actually putting the Preferred Fleets Database to use. The plan is for coali-

tions to host "Advancing the AFV Choice Events" in each of their communities. Individuals identified in the Preferred Fleets Database will be invited to meet with members of the coalition, local auto dealerships, and fuel providers to learn more about how AFVs can benefit their businesses. The "Advancing the AFV Choice Events" will also provide an ideal opportunity to showcase the AFV Fleet Buyer's Guide. This computer-based product walks fleet managers through the process of buying an AFV, and it contains specific information, including which vehicles and models best serve their fleets' needs to the dealerships and refueling stations located in their area. The Dallas/Ft. Worth Clean Cities Coalition recently held its first event featuring the AFV Fleet Buyer's Guide which, according to Nan Miller, Dallas/Ft. Worth Clean Cities Coordinator, was very well received. "It went very well," said Miller. "Dallas/Ft. Worth Clean Cities is housed in the Council of Governments, so most of the people we work with are from the public sector. We were glad that with this event we were able to reach the private fleets in the area." You can check out the AFV Fleet Buyer's Guide on-line at [www.fleets.doe.gov](http://www.fleets.doe.gov).

Increasing private fleet participation in Clean Cities will remain one of the program's primary goals over the next few years, until the market is truly sustainable. To see more AFVs ordered, DOE intends to offer rebates to fleet managers in selected cities. Meeting the 100% niche market challenge is another priority, as outlined by DOE's Assistant Secretary Dan Reicher at this year's Clean Cities Conference. Niche applications for alternative fuels provide an important foundation for a sustainable AFV market. Therefore, an important objective of the national program plan is to target niche markets in Clean Cities communities for 100% AFV use in 5 years. (See the first in a series of articles on niche markets, p. 8.) Other major projects in the works at the national level include a nationwide Clean Cities media campaign and developing a Clean Cities national nonprofit organization. If Clean Cities keeps growing at the rate it has over the next 5 years, who knows ... there may be one million AFVs on the road by the program's 10th Anniversary!



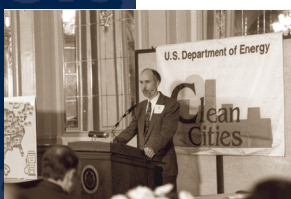
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Sacramento, CA - 10/21/94



P.D. N.C.C./PIX 06151

Paso Del Norte, TX - 11/17/95



T.G. Powell - DOE/PIX 06556

Pittsburgh, PA - 12/5/95

T.G. Powell - DOE/PIX 06551



Los Angeles, CA - 3/22/96

T.G. Powell - DOE/PIX 06554



Weld/Larimer/RMNP, CO - 5/21/96

T.G. Powell/PIX 06552



Hampton Roads, VA - 10/4/96

T.G. Powell - DOE/PIX 06553



Long Island, NY - 10/18/96





# Federal News

## Comply with EPOA and the Clean Fuel Fleet Program at the Same Time

In today's world of increasing regulations and decreasing time to understand them, it is critical to maximize efficiency. "Killing two birds with one stone" definitely applies to clean vehicle purchase requirements. The Energy Policy Act of 1992 (EPOA) and the 1990 Clean Air Act

Amendments (CAAA) both require certain fleets to acquire alternative fuel vehicles (AFVs) and certified clean vehicles, respectively. If you must comply with both requirements, then you may want to consider the difference between EPOA and the Clean Fuel Fleet Program (see chart) before making your purchasing decisions. As recommended by Tommy Foltz of Clean Fuels Strategies, "The best option for fleet operators to meet both requirements with one vehicle is to purchase a certifiably clean, alternatively fueled vehicle."

Currently, both the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) have proposed rulemakings for additional AFV/clean fuel vehicle (CFV) acquisition requirements that are under consideration. As covered in "The Great Debate," Vol. 2, No. 2 of *Alternative Fuel News*, DOE is in the process of reviewing and analyzing public comments from the Advance Notice of Proposed Rulemaking (ANOPR) to create incentives or mandate local government and private fleets to purchase alternative fuel vehicles. Ken Katz, DOE's manager for the Alternative Fuels Regulatory Program, said, "the Department will be weighing its options and developing different scenarios, and we may initiate meetings this fall to discuss the different scenarios before we make a decision on what the Department will pursue." DOE has received more than 80 written comments, as well as remarks from the 41 individuals who spoke at the public hearings.

There are many resources for you to review if you are interested in this issue. For a copy of DOE's ANOPR, visit the Alternative Fuels Data Center Web site at [www.afdc.doe.gov/whatsnew.html](http://www.afdc.doe.gov/whatsnew.html). EPA has proposed Optional Certification Streamlining Procedures to ease the burden of certification for manufacturers of CFVs and to revise the definition for dedicated fuel systems to include CFVs with limited ability to operate on a conventional fuel. For a copy of the EPA's Notice of Proposed Rulemaking

### What's the difference between EPOA and the Clean Fuel Fleet Program?

#### EPOA

**Goal:**  
Reduce dependence on foreign oil by developing alternative fuels

**Alternative Fuel:**  
Substantially nonpetroleum (Alternative fuel only)

Fleets of 20 or more vehicles

Covers vehicles up to 8,500 lbs

Population of 250,000 or more

Earn and bank credits

Trade credits nationwide

Vehicle must be able to run on alternative fuel

**Compliance Dates:**  
Federal fleets (75%) by 1999  
State fleets (75%) by 2001  
Fuel provider fleets (90%) by 2001

**Penalties:**  
Violation - \$5,000  
Willful violation - \$10,000  
Repeated violation - \$50,000

#### CAA Clean Fuel Fleet Program

**Goal:**  
Reduce vehicle emissions and improve air quality by promoting clean vehicles and further infrastructure development for clean fuels

**Clean Fuel:**  
Any power source on which a clean vehicle can operate (Alternative and conventional fuels)

Fleets of 10 or more vehicles (centrally fueled)

Covers vehicles up to 26,000 lbs

6 ozone or CO nonattainment areas\*

Earn and bank credits

Trade credits within nonattainment area

Vehicle must be federally certified to LEV, ILEV, ULEV, or ZEV standards, regardless of fuel type, and operate on that fuel

**Model year phase-in:**  
Light-duty (30%) heavy-duty (50%) by 1999  
Light-duty (50%) heavy-duty (50%) by 2000  
Light-duty (70%) heavy-duty (50%) by 2001

**Penalties:** Vary from state to state  
**Violation:** Not meeting 30% and 50% targets for light- and heavy-duty, respectively, by MY 99

\*Atlanta, GA; Metropolitan Washington, D.C.; Chicago-Gary Lake County, IL-IN; Milwaukee-Racine, WI; Baton Rouge, LA; Denver-Boulder, CO

visit [www.epa.gov/oms/regs/fuels/cff/cfvnpr-s.txt](http://www.epa.gov/oms/regs/fuels/cff/cfvnpr-s.txt) or EPA's Clean Fuel Fleet Program and vehicle acquisitions Web site at [www.epa.gov/oms/cff.htm](http://www.epa.gov/oms/cff.htm).

For more information, or a copy of the Comparative Alternative/Clean Fuel Provisions of the Clean Air Act and the Energy Policy Act, call the National Alternative Fuels Hotline at 800-423-1DOE.

For more information and assistance on DOE's EPA Act AFV acquisition regulations and incentives, visit the AFV Fleet Buyer's Guide Web site located at [www.fleets.doe.gov](http://www.fleets.doe.gov).

## NLEV Pushes Auto Manufacturers to Produce Cleaner Cars

Through a cooperative effort focused on public participation and joint problem solving, the Ozone Transport Commission (OTC) states, auto manufac-

turers, environmentalists, fuel providers, the U.S. Environmental Protection Agency (EPA), and other interested parties formed the voluntary National Low Emission Vehicle (NLEV) program. Originally, the program was created as a way to help the northeastern states address their smog problems. However, this program has resulted in much more than that. It is now a program that will substantially reduce air pollution nationwide, while providing the automotive industry flexibility to meet the new requirements in the most efficient manner. This means cleaner light-duty vehicles and trucks will be produced and sold starting this year! Because NLEV was intended to be a voluntary program, it could only become enforceable

with the lawful agreement of the northeastern states and 23 auto manufacturers. All auto manufacturers and relevant states have notified EPA that they have lawfully "opted-in" (see states and auto manufacturers above). Now that NLEV has been agreed upon by the states and auto manufacturers, the standards are federally enforceable—just like any

other federal motor vehicle program. The program is in effect and enforceable by EPA beginning in the northeast state model year (MY) 1999 and nationwide MY 2001.

EPA will issue three new types of NLEV compliance certificates to the auto manufacturers: unrestricted, restricted, and NLEV/Clean Fuel Fleet. The unrestricted certificate will be issued for vehicles meeting applicable NLEV emission standards introduced into commerce in the All States Trading Region (45 states, plus U.S. territories). The NLEV restricted certificate will be issued for vehicles meeting applicable NLEV emission standards introduced into commerce in the Northeast Trading Region (nine northeast states plus the District of Columbia). The NLEV/Clean Fuel Fleet certificate is similar to the unrestricted certificate, except the vehicles will also comply with the applicable Clean Fuel Fleet emission standards.

Environmental effects of the NLEV program will include significant reductions in ground-level ozone and emissions, such as particulate matter, benzene and formaldehyde, acetaldehyde, and 1,3-butadiene. According to EPA, NOx will be reduced by 496 tons per day in 2007, and nonmethane organic gases will be reduced by 311 tons per day in 2001. The program will help the states to achieve their clean air goals and give automakers more flexibility to meet requirements, while concurrently maintaining economic growth.

Some important things to keep in mind regarding the continuing importance of AFVs for air quality improvement:

1. NLEV does not apply to some of the most popular light-duty vehicles in the market today—standard-size pickup trucks, vans, and large sport utility vehicles (SUVs).
2. Emissions of medium- and heavy-duty trucks and buses are also not affected.
3. Gaseous and electric alternative fuel vehicles reduce nonmethane organic gas (NMOG) emissions by significantly greater amounts than required by the NLEV program.
4. Automakers can average fleet NMOG reductions across all NLEVs sold, so their interest in working to introduce low NMOG-emitting AFVs may actually increase. (They may be able to include many of them in NLEV.)
5. NMOG emissions reductions per vehicle for presently available original equipment manufacturers' gaseous fuel standard pickups and vans, and perhaps future model year SUVs, are larger than for vehicles affected by NLEV. (Ford Motor Company is experimenting with a natural gas-fueled large SUV.)
6. NMOG reductions are of greatest value within metropolitan areas with existing ozone air quality problems.

### Twenty-three auto manufacturers have lawfully opted in to the NLEV program:

American Honda Motor Company, Inc.  
American Suzuki Motor Corporation  
BMW of North America, Inc.  
Chrysler Corporation  
Fiat Auto U.S.A., Inc.  
Ford Motor Company  
General Motors Corporation  
Hyundai Motor America  
Isuzu Motors America, Inc.  
Jaguar Motors Ltd.  
Kia Motors America, Inc.  
Land Rover North America, Inc.  
Mazda (North America), Inc.  
Mercedes-Benz of North America  
Mitsubishi Motor Sales of America, Inc.  
Nissan North America, Inc.  
Porsche Cars of North America, Inc.  
Rolls-Royce Motor Cars, Inc.  
Saab Cars USA, Inc.  
Subaru of America, Inc.  
Toyota Motor Sales, U.S.A., Inc.  
Volkswagen of America, Inc.  
Volvo North America Corporation

### These eastern states have lawfully opted in to the NLEV program:

Connecticut	New Jersey
Delaware	Pennsylvania
District of Columbia	Rhode Island
Maryland	Virginia
New Hampshire	



7. Electric and gaseous-fueled AFVs reduce NMOG emissions not only at the vehicle tailpipe, but also at refineries, gasoline storage tanks, gasoline stations, and evaporation and leakage from the vehicle fuel system.

While the NLEV program is an important policy to improve air quality, widespread use of alternative fuel vehicles will achieve greater reductions because of the elimination of nonmethane hydrocarbons, and AFVs will aid in fighting our dependence on foreign oil. Also, the NLEV program does not cover the larger vehicles (pickup trucks, heavy-duty trucks, vans, etc.) and only sets standards for cars and smaller trucks. For more information on the NLEV program, visit the Web site at [www.epa.gov/OMSWWW/lev-nlev.htm](http://www.epa.gov/OMSWWW/lev-nlev.htm).

## DOE Proposes New Alternative Fuel

In response to a petition from Pure Energy Corporation to add their proprietary "P-Series" fuel to the regulatory definition of "Alternative Fuel," the U.S. Department of Energy's (DOE's) Alternative Fuel Transportation Program proposed a Notice of Proposed Rulemaking (NOPR) to classify the proprietary "P-Series" fuel as an alternative fuel.

What are P-Series fuels? The P-Series fuels are produced from approximately 70% renewable biomass (i.e., wastepaper, wood waste, and agricultural waste). Renewable biomass-based fuels reduce greenhouse gas emissions, tailpipe emissions, and dependence on foreign oil. The fuels are blends of ethanol, methyltetrahydrofuran (MTHF), natural gas liquids, and butane. It is expected that the ethanol and MTHF will be derived from renewable domestic feedstocks. The P-Series emissions are generally below those of reformulated gasoline and are well below federal emissions standards. The fuels are expected to be produced domestically and use existing distribution infrastructure. Pure Energy plans on pricing the fuels to be competitive with gasoline.

Beginning in 1992, the Energy Policy Act of 1992 (EPAct) created a shift in U.S. policy to domestically produce nonpetroleum cleaner burning fuels to support the requirements for federal, state, and fuel provider vehicle fleets to purchase an increasing percentage of alternative fuel vehicles (AFVs). P-Series was developed with the U.S. fleet market in mind, which is estimated at 10 billion gallons per year.

Another added benefit is P-Series works with the hundreds of thousands of flexible fuel (flexfuel) vehicles on the road today. In fact, Chrysler Corporation's most popular minivan is flexfuel, and the Ford Ranger pickup is expected to have the flexfuel engine in the 1999 model year. According to

Pure Energy, "P-Series is designed to service the estimated 10 billion gallon per year U.S. fleet market, that by federal mandate is required to use an increasing proportion of AFVs, and the nascent consumer AFV market."

"With our nation's increasing reliance on imported oil, it is important that we develop and use clean, domestic, renewable alternative fuels such as the P-Series fuels," said Dan Reicher, Assistant Secretary for Energy Efficiency and Renewable Energy. "P-Series fuels have the potential to displace approximately one billion gallons of gasoline by 2005. This will help the United States cut pollution from automobiles and reduce carbon equivalent greenhouse gas emissions."

The P-Series fuel received U.S. Patent No. 5,697,987 on December 16, 1997; these fuels were originally developed at Princeton University. Pure Energy then petitioned DOE for a rulemaking to classify the fuels by definition "Alternative Fuel," as defined in EPAct. The Notice of Proposed Rulemaking was published in the Federal Register on July 28, 1998, to designate the new P-Series fuel as an "Alternative Fuel." DOE accepted public comments until September 28, 1998. For a copy of the Notice of Proposed Rulemaking, visit the Web site at [www.access.gpo.gov/su\\_docs/fedreg/a980728c.html](http://www.access.gpo.gov/su_docs/fedreg/a980728c.html). To contact Pure Energy directly, visit [www.pure-energy.com](http://www.pure-energy.com).

## DOE Takes Big Step in Enforcing EPAct Compliance

The U.S. Department of Energy (DOE), as part of the Energy Policy Act of 1992 (EPAct) implementation, is sending notices to potentially covered parties who have not yet submitted a compliance report for the state fleet and fuel provider rule. This is the first visible step in a plan to ensure compliance with the AFV acquisition rule for state and fuel provider fleets. The compliance strategy includes a series of letters notifying parties of possible EPAct requirements, as well as possible fines for EPAct violations. For more information and to view a copy of the letter, go to the DOE Office of Transportation Technologies Web site at [www.ott.doe.gov/legislation.html](http://www.ott.doe.gov/legislation.html).

# Spotlight on Niche Markets

## SCHOOL BUSES

It's an age-old tradition. Just about every morning, from September 1 to June 15, thousands of children grab their lunches, wave good-bye to their parents, and walk to the bus stop. They all climb aboard the big yellow bus that takes them to school, and when the bell rings at 3 p.m., that same big yellow bus takes them all home.

When you think about niche markets, or "ideal" applications for alternative fuels, school buses ring a bell of their own. Predictable routes, centralized refueling, and wide product availability—it's all there. And who wants their children breathing those harmful fumes? So school buses and alternative fuels are a perfect match.

Just ask Mike Andre, supervisor of Pupil Transportation in the Lower Merion School District just outside Philadelphia. The Lower Merion School District purchased its first compressed natural gas (CNG) bus in 1995 in an effort to alleviate the community's concerns over pollution and noise in their neighborhoods. "We met the neighbors halfway and decided to clean up our act," said Andre. "We had to replace our buses anyway, so we figured why not replace them with cleaner burning fuel? And it's worked pretty well." In just 3 years, the Lower Merion School District fleet has grown to include 51 CNG buses.

Alternative fuel school buses are driving kids to school all across the country. The Shenendehowa Central School District in Albany, New York, operates 27 CNG buses. Nearby Scotia-Glenville schools operate propane buses, and further to the south, students in Montgomery County, Maryland, can ride one of nine CNG buses to school. The Evansville-Vanderburgh School Corporation in Indiana operates a fleet of 150 CNG school buses, making it one of the larger CNG school bus fleets in the nation.

On the West Coast, the California Energy Commission's (CEC's) Safe School Bus Demonstration Program is paving the way for the continuing acquisition of alternative fuel vehicles (AFVs) for the state's school bus fleet. According to Al Deterville, from the CEC's Transportation Technologies and Fuels Office, over 860 pre-1977 school buses have been replaced with 826 buses that burn cleaner fuel. Two partnerships, John Deere and Blue Bird



Body Company, and Detroit Diesel Corporation and Crown Coach, are working to develop alternative fuel school buses specifically to meet the needs of the School Bus Demonstration Program. Over half of these buses are alternatively fueled—nearly 270 powered by natural gas and 150 by methanol—and all are equipped with advanced safety features. For more information about the CEC's School Bus Demonstration Program, check out: [www.energy.ca.gov/afvs/schoolbus](http://www.energy.ca.gov/afvs/schoolbus).

Another great success story comes from the Tulsa Public School (TPS) District. If you attended the table talk sessions at the Clean Cities Conference in June, perhaps you met Larry Rodriguez. His inspiring story detailed how TPS has succeeded in converting much of their school bus fleet to run on CNG and propane.

In 1988, the Oklahoma Department of Commerce requested that TPS participate in a 2-year pilot program to test the viability of alternative fuels. TPS agreed and subsequently converted 24 buses to CNG. Bolstered by several successful bond issues and zero-interest loans from the state, the conversions continued after the pilot ended. Oklahoma Natural Gas (ONG) stepped in when conversion costs grew beyond the limit of the state loan program. By partnering with ONG, TPS also added 40 more buses and 30 trucks, which they will own after a 60-month lease period. They are also leasing an additional 13 cars, which are used for driver's education.

Perhaps the most amazing part of this story is that loans and equipment costs will be covered by the savings in fuel costs from using CNG instead of gasoline and diesel. TPS typically uses 26,000 gallons of gasoline and 29,000 gallons of diesel per month; at \$0.32 per gallon for CNG versus \$0.61 per gallon for conventional fuels, it makes good sense to choose alternative fuels. The school district has now made it a policy to consider AFVs first when new vehicles are purchased. Not



only is it cost effective, but the technology for these buses has also improved. "The new generation of spark-ignited engines, the John Deere 8.1-liter engine, is showing increasing efficiency," said Paul Norton, senior engineer at the National Renewable Energy Laboratory. "Reports from the field are very positive on performance and reliability; it's a major step forward," he added.

Larry Rodriguez's story demonstrates how strong advocacy for alternative fuels and perseverance can influence the choice of viable, money-saving options in running a bus fleet. Garnering support from

Oklahoma businesses and state agencies has helped TPS succeed, as did the \$50,000 U.S. Department of Energy State Energy Program Special Projects grant bestowed in 1997. Despite a few bumps in the road, TPS now boasts 190 vehicles converted to dedicated CNG.

Rodriguez plans to continue using alternative fuels in the TPS fleet. He believes "for continued fuel cost savings, extended vehicle maintenance intervals and fewer oil changes, and positive effects on reducing air pollution," alternative fuels are the best choice for the future.

## Clean Cities Market Development

By Steve Howards, President,  
Environmental Strategies: Consultants in Pollution Prevention, Inc.

Market development for alternative fuel vehicles (AFVs)—that sounds important. But what does it really mean? Market development is all about identifying specifically what your coalition can do to stimulate fleets to purchase more AFVs. Many Clean Cities assumed the important roles of educating and disseminating information when they first got started. But time has revealed that, in most cases, coalitions and AFV advocates must do much more if they really want to get more AFVs on the road.

Market development is all about using limited resources wisely. It means understanding what your coalitions and stakeholders need to be doing and in what order those things should be done to make AFV purchase decisions for their fleets easier. Market development is really a systematic process for identifying the dominant obstacles to expanded AFV use, customizing programs to address these obstacles in a manner sensitive to the political realities of the region, and then mobilizing (and, in some cases, streamlining) the coalition so it is equipped to get the job done. Marketing and information dissemination are also key, but using resources wisely means first being clear about those fleets that are the best candidates for AFVs and then targeting information and sales at the most promising fleets.

So what's the "key" to fleet purchase decisions? In real estate, for instance, it's said there are three things: location, location, location. With AFVs, it's cost, cost, cost. The bottom line for purchase decisions with (nonmandated) fleets is whether the vehicles are worth the price and the perceived risks, which include fuel availability, vehicle servicing, and concerns about safety and resale value. So the onus is really on coalitions and AFV advocates to work with their state and local governments, along with the private sector (e.g., the alternative fuel suppliers), to design and target innovative programs to make AFVs even more enticing to fleets. (See Clean Cities Fifth Anniversary "Where We're Going" article for information on DOE Clean Cities Program plans to attract fleets, p. 3.)

The DOE *Guide to Alternative Fuel Vehicle Incentives and Laws* is filled with the types of innovative inducements enacted coast-to-coast to make the future brighter for AFVs. These include rebates and grants for vehicles and infrastructure; state tax deductions and fee waivers; reduced fuel taxes; low-interest and revolving loan programs; state and local AFV purchase mandates; and local parking and transportation inducements. The third edition of the *Guide* is expected to be available in November 1998. Meanwhile, to review current information for your state, visit the AFV Fleet Buyer's Guide Web site at [www.fleets.doe.gov](http://www.fleets.doe.gov) or call the Clean Cities Hotline at 800-CCITIES.

AFV cheerleading isn't enough. The success of the AFV movement and coalitions hinges on the ability to move up to the next level; that is, to design and help implement the types of programs that will shift the financial scales in favor of AFV fleet purchase decisions. If you are interested in creating a market development plan, or if you feel like your coalition is stuck in low gear and you want to take it to the next level, give the Clean Cities office a call. They have sponsored market development workshops over the last 4 years for new and existing coalitions coast-to-coast. If you would like to take part in this program, please call your DOE Regional Support Office Clean Cities representative.





## Focus On

### Red River Valley is Now a Clean Cities Coalition

After the many natural disasters (snowstorms, floods, fires, etc.) that postponed 1996 and 1997 designation ceremonies in North Dakota, the Red River Valley has finally received its designation as a Clean City Coalition. On August 10, 1998, the Red River Valley, which covers 250 miles of the northern Midcontinent Trade Corridor and has a population of over 1.6 million people, was designated as the 63rd Clean Cities Coalition. (See "Roundup") The U.S. Department of Energy has approved the region's 5- and 10-year implementation plan, which includes the goal of increasing the use of alternative fuels along this clean corridor. (See map below.) The corridor stretches from Winnipeg, southward through Grand Forks-East Grand Forks and Fargo-Moorhead, in North Dakota. The Red River Valley Clean Cities (RRVCC) Coalition is also recognized as an "international" Clean Cities coalition because it brings Canadian expertise and stakeholders into the Clean Cities network. Winnipeg Councillor Glenn Murray addressed the gathering and, on behalf of the city and Mayor Susan Thompson, announced Winnipeg's membership as the RRVCC's most recent stakeholder, and delivered a check for \$10,000 to support the coalition. Winnipeg, a vibrant, culturally rich city of over 700,000, is the center of a growing alternative fuels industry. Winnipeg is home to such industry leaders as Kraus Industries (compressed natural

gas [CNG] compressor stations/dispensers); Centra Energy Services (fuel-site construction); New Flyer Industries (transit buses); and Motorcoach Industries (highway buses). Propane fuels nearly 100% of Winnipeg's taxi fleets and another RRVCC stakeholder, the Canadian Forces Base Winnipeg, has begun

converting vehicles to CNG and propane. Winnipeg will host the July 1999 Pan-American Games, and the RRVCC hopes to showcase alternative fuels to the anticipated 100,000 athletes and visitors.

Another new RRVCC stakeholder, Global Electric MotorCars (GEM), is the only U.S. manufacturer of the new vehicles that qualifies for the new class of low-speed vehicle, which has recently been established by the National



Highway Transportation Safety Administration. The GEM electric-powered, two-seat "Neighborhood Electric Vehicle" responds to the demands for inexpensive, fuel-efficient transportation to be used for shorter intra-city trips. RRVCC Coordinator, Tim Gerlach, stated, "GEM has really taken off since their spring start-up. The Clean Cities network is helping them get the word out on their vehicles and in contacting prospective customers in southern U.S. niche markets. GEM vehicles are a perfect fit for retirement and planned communities, parks, medical facilities, airports, utilities, and even commuter applications."

Among the many unique programs that have been implemented throughout the Clean Cities regions, the Red River Valley has created a feel all its own. The RRVCC conducted a trial marketing campaign to educate the public and gain the attention of fleet operators. Their efforts included transit buses carrying the slogans: "Still Using Gasoline or Diesel?" and "Keep Using E85-We'll Grow More!" (These slogans are also displayed on a 15' x 50' sign at the Grand Forks airport—what a way to greet all incoming visitors!) The RRVCC also uses the *Luncheon News* (5,000 copies daily at 85 restaurants) to display alternative fuel ads and trivia, as well as movie previews at local theaters. RRVCC has also displayed alternative fuels educational and promotional items in cooperating restaurants—Players Sports Grill has inexpensive table tent cards informing folks about Clean Cities and asking trivia questions for fun. These are just a few clever ways to catch the attention of your town, city, or region.

T.G. Powell - DOE/PIX 06553



Dr. Gerald H. Groenewold, Director, Energy and Environmental Research Center, addresses stakeholders and attendees.





## From the Hill

### Voluntary Mobile Source Emission Reduction Programs—Leveling the Playing Field for Clean Cities?

The U.S. Environmental Protection Agency (EPA) is recognizing the value of nonregulatory programs at the local level in meeting air quality standards. Thanks to EPA's Voluntary Mobile Source Emission Reduction Programs (VMEPs), Clean Cities projects and other voluntary mobile source reduction programs will have an easier time obtaining credits in State Implementation Plans (SIPs). EPA defines voluntary emission measures as programs that rely on the actions of individuals or other parties for achieving emission reductions. Finally, we have a winning solution for some of the Clean Cities that have struggled for years to get alternative fuel vehicle (AFV) projects in SIPs. We hope EPA may become more comfortable with giving credit for air quality benefits of AFVs because of Argonne National Laboratory's work with the Clean Cities Program to develop appropriate emission reduction models.

To kick off the VMEP, EPA and the U.S. Department of Transportation (DOT) are sponsoring regional workshops on developing and implementing effective voluntary emission reduction programs for metropolitan planning organizations, state departments of transportation and air quality agencies, and anyone in the community who has an interest in VMEP. (So that means you, too, Clean Cities stakeholders!) The U.S. Department of Energy is working to ensure that Clean Cities projects will indeed be covered at these training sessions. The next workshop is December 3-4 in New York City. Space is limited. For more information, and a schedule of other workshops, call the National Association of Regional Councils' Janet Oakley at 202-457-0710, ext. 19.

### TEA-21 Signed into Law, What Now?

Well, the landmark transportation legislation—the Transportation Equity Act for the 21st Century (TEA-21)—reauthorized the Congestion Mitigation and Air Quality (CMAQ) Improvement Program over the next 6 years (1998-2003) with at least \$2 billion increase in funds totaling \$8.1 billion. In the last 6 years of CMAQ, approximately \$270 million went toward AFVs. The importance of CMAQ funding was also mentioned by Rodney Slater, Secretary of the U.S. Department of Transportation (DOT). "This legislation strengthens proven strategies to safeguard public health and the environment, such as the CMAQ Improvement Program, to help communities clean their air, transportation enhancements to help them improve their quality of life, and new technologies, such as less polluting vehicles and intelligent transportation systems."

DOT's Federal Highway Administration (FHWA) has released the interim CMAQ guidance, which includes informational items on issues related to the reauthorized CMAQ program and new guidance regarding projects now eligible for CMAQ funding. DOT, in conjunction with U.S. Environmental Protection Agency (EPA), plans to hold a series of focus group sessions to develop the final CMAQ guidance, which is expected to be released in December 1998. Four outreach meetings were held to receive feedback on the provisions in the guidance. Clean Cities representatives attended the meetings.

#### TEA-21's CMAQ for Alternative Fuels and Vehicles:

Refueling infrastructure and capital costs

New public-private partnerships

Private ownership of facilities and equipment

Incremental cost of AFVs (over cost of equivalent conventional-fueled vehicles)

Increment must include all federal funds, not just CMAQ

Cannot use CMAQ for projects required under the CAA or other federal Laws

Projects that are included in the State Implementation Plan (SIP) are the highest funding priority under the CMAQ program. Further, the new interim guidance has lifted the requirement that alternative fuel projects be included in the SIP to be eligible for CMAQ funding. "The requirement no longer made sense once we had a clear indication that Congress supported these projects," according to Mike Savonis, FHWA's CMAQ Improvement Program Manager. In addition to the extension of the ethanol tax incentive until 2007 with slight modifications, TEA-21 also entails new authorized efforts under research and technology (Highways Surface Transportation Research). Those programs include an advanced research program, which will address a variety of transportation-related environmental issues, and the Advanced Vehicle Technologies Program, jointly administered by the U.S. Department of Energy and DOT, which will develop advanced vehicles, components, and infrastructure, and bring them to the commercial market. For more information on TEA-21, as well as the dates and locations of scheduled focus groups, visit the Web site at [www.fhwa.dot.gov/tea21/outreach.htm](http://www.fhwa.dot.gov/tea21/outreach.htm) or visit [www.istea.org](http://www.istea.org).

#### Interim Guidance (CMAQ)

Please submit comments by November 30, 1998, to:

James Shrouds

Chief Environmental Analysis Division

FHWA, Department of Transportation

400 7th Street, SW

Washington, DC 20590



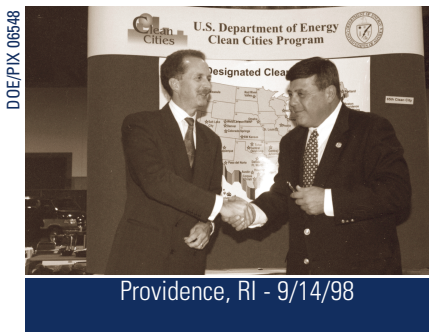
# Clean Cities Roundup

While many people were vacationing this August and September, coordinators and stakeholders in four Clean Cities coalitions were busy preparing for their big event—designation day. In just 2 months, the Clean Cities Program jumped from 62 cities (Genesee Region Clean Communities became #62 on May 28) to 66, with each of the new designees being the first Clean Cities coalition in its respective state, including one that crosses international borders. For a current list of Clean Cities, check out our Web site at [www.cities.doe.gov](http://www.cities.doe.gov).

- **Red River Valley—it's official.** The long wait for Red River Valley Clean Cities stakeholders is finally over. The coalition was originally scheduled to be designated in December 1996, but due to an unfortunate series of natural disasters that plagued the region over the past 2 years, the ceremony was postponed and rescheduled several times. But on August 10, at long last, Red River Valley was officially designated the 63rd member of the Clean Cities Program.

They did it with style, in an event that featured a brass band and included the presentation of a ZAP electric bicycle donated by Northern States Power and a mountain bike from the Borrowed Bucks Roadhouse (a local nightclub) to the Grand Forks Police Department.

Support for Red River Valley Clean Cities came from all levels. Tom Gross, Deputy Assistant Secretary for Transportation Technologies, served as the presiding U.S. Department of Energy (DOE) official; he joined Red River



Valley stakeholders in signing their Clean Cities Memorandum of Understanding. Senator Kent Conrad (D-ND); Senator Byron Dorgan (D-ND); Congressman Earl Pomeroy (D-ND); Congressman Collin Peterson (D-MN); Colonel George F. Oliver, III, U.S. Army; and Deputy Chief of Staff, U.S. Mission to the United Nations; and Dr. Joseph Westphal, Assistant Secretary, U.S. Army and Director, Corps of Engineers, attended. Grand Forks Mayor Patricia Owens, East Grand Forks Mayor Lynn Stauss, and Winnipeg Councillor Glenn Murray were also on hand to celebrate the designation.

- **Puget Sound.** The Puget Sound coalition was designated the 64th member of the Clean Cities Program on August 13, 1998, in Seattle, Washington. The Charles Street Station, one of the city's compressed natural gas (CNG) refueling sites, provided a perfect backdrop for the ceremony recognizing the coalition's efforts to develop the alternative fuel vehicle (AFV) market. Brian Castelli, DOE's Chief of Staff for Energy Efficiency and Renewable Energy, presented the official Clean Cities plaque to Seattle Mayor Paul Schell and congratulated Puget Sound stakeholders.

Puget Sound Clean Cities, the first designated coalition in Washington State, already has over 1,500 AFVs on the road, and plans to have double that number by the year 2002. The coalition recently received a DOE State Energy Program Special Projects grant to support a coordinator and to pay for the incremental cost of two original equipment manufacturer dedicated CNG vans for metro van pools; electric vehicles for Seattle City Light for



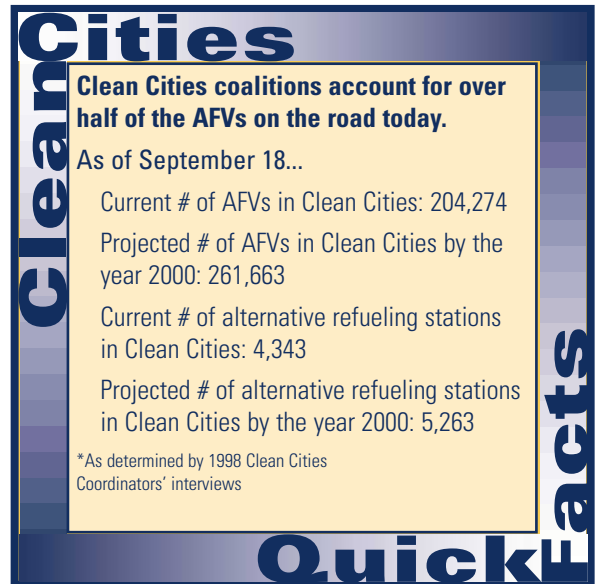
demonstration, education, and research; and dedicated CNG vehicles for the city of Seattle fleet.

- **Providence.** Providence, Rhode Island, was designated the 65th Clean Cities coalition on September 14, 1998, at a luncheon ceremony held during the 16th National Natural Gas Vehicle Conference. Rhode Island Governor Lincoln C. Almond joined DOE's Brian Castelli, DOE's Chief of Staff for Energy Efficiency and Renewable Energy, in officially welcoming the coalition to the nationwide network of Clean Cities. Other special guests included Providence Mayor Vincent A. Cianci, Jr.; State Representative Peter Kilmartin; James Hagan, President, Greater Providence Chamber of Commerce; and James Dodge, Chairman, President, and Chief Executive Officer, Providence Energy Corporation.

Providence currently has approximately 150 AFVs operating on its roadways and projects adding another 570 by the year 2002. The coalition is also working to expand publicly accessible refueling infrastructures through a universal card system.

- **Omaha.** The Greater Omaha Regional Clean Cities coalition became the 66th member of the program on September 18, 1998. Nebraska Governor E. Benjamin Nelson, a long-time supporter of Omaha Clean Cities and one of the founding fathers of the Governor's Ethanol Coalition, was on hand to take part in the festivities. In a ceremony outside the Omaha City and

County Building, DOE's Brian Castelli, Chief of Staff for Energy Efficiency and Renewable Energy, joined Governor Nelson, Omaha Mayor Hal Daub, and Omaha Clean Cities stakeholders in the official signing of their Memorandum of Understanding. The Greater Omaha Regional Clean Cities Program already has almost 420 AFVs on the road, 341 of which run on E85. Stakeholders plan to more than double that number by the year 2002.



**Clean Cities**

**Clean Cities coalitions account for over half of the AFVs on the road today.**

As of September 18...

- Current # of AFVs in Clean Cities: 204,274
- Projected # of AFVs in Clean Cities by the year 2000: 261,663
- Current # of alternative refueling stations in Clean Cities: 4,343
- Projected # of alternative refueling stations in Clean Cities by the year 2000: 5,263

\*As determined by 1998 Clean Cities Coordinators' interviews

**Quick Facts**



## On the Web

### [www.evworld.com](http://www.evworld.com)

EV World's Guide to Original Equipment Manufacturers (OEM) Electric Vehicles (EVs) in the United States. While every major car manufacturer is presently working on advanced technology vehicles, only three manufacturers currently have electric vehicles (EVs) available to consumers in the United States: Ford, Honda, and General Motors. Those vehicles are depicted along with Bombardier's neighborhood vehicle, a short-range, low-speed vehicle (25 mph), which is beginning to find a role in running errands in and around gated and planned communities in place of the family car. There are several other EV options available outside original equipment manufacturers lines, including vehicles from Global Electric MotorCars (GEM), Solectria, and small-scale conversion houses and entrepreneurial start-ups that may be of interest. Prospective EV owners should note your state may offer tax and other incentives on the purchase or conversion of an alternative fuel (including electricity) vehicle and that many power companies offer special off-peak, time-of-use electricity rates for recharging EVs at night.

### [www.navc.org](http://www.navc.org)

The Northeast Alternative Vehicle Consortium (NAVC) is a nonprofit association of private- and public-sector firms and agencies, working toward promoting advanced vehicle technologies in the northeastern United States. NAVC, established in 1993, is a principal multistate, nonprofit funding mechanism for advanced transportation research, technology development, and demonstration in the Northeast region.



## From the States

### Another California LEV?

The low-emission vehicle (LEV) requirements in California have greatly reduced air pollution in the state. However, the trend to use light-duty vehicles (pickup trucks, sport utility vehicles (SUVs), and mini-vans) as passenger vehicles has increased dramatically, significantly impacting California's air quality. In fact, almost half of all automobile sales in California last year were SUVs and trucks. These light-duty vehicles are certified to the more lenient emission standards (and Corporate Average Fuel Economy standards) because they were originally used for work trucks, not passenger vehicles. The proposed changes to California's LEV regulations, currently being considered "LEV II," will further reduce automotive emissions and specifically bring all vehicles under 8,500 gross vehicle weight (GVW) into conformance with new emission standards. Also proposed are changes to reclassify the light-duty truck and medium-duty vehicle categories.

Other proposed modifications will expand the scope of vehicles that could qualify to partially meet the 10% zero-emission vehicle (ZEV) requirement. Options would include new propulsion systems with very-low-emission characteristics, such as hybrid electric vehicles, methanol reformer fuel cell vehicles, and other clean and durable combustion engine vehicles that meet certain emission standards. A new category—super ultra-low-emission vehicle (SULEV)—would be added to the vehicle emission category. A system of ZEV credits and multipliers would be implemented for additional vehicles to count toward the ZEV requirement. The proposal recommends increasing the stringency for evaporative emissions and setting a particulate matter (PM) standard of 0.010 gm/mile for light-duty vehicles and trucks less than 8,500 GVW certified to LEV, ULEV, and SULEV standards beginning in 2004, to provide an upper limit on PM emissions from vehicles used for personal transportation.

For detailed information about the LEV II proposal, visit the Web site at [www.arb.ca.gov/msprog/levprog/levii/levii.htm](http://www.arb.ca.gov/msprog/levprog/levii/levii.htm). The Web site will house the staff report, once released, and will include information on the November 5, 1998, hearing to consider the LEV II proposal. For more information, call Paul Hughes, California Air Resources Board's Manager of LEV Implementation, Mobile Sources Control Division, at 626-575-6977.

### Boost in Arizona AFV Incentives

In early June, Arizona Governor Jane Dee Hull signed a comprehensive alternative fuels bill into law that will increase existing incentives and create new tax incentives. Arizona Senate bill (SB) 1269, sponsored by Senator Scott Bundgaard (R-AZ), will provide the state with a combination of increased tax incentives and financial assistance to encourage the use of alternative fuel vehicles (AFVs) and AFV fueling infrastructure.

The law increases from \$1,000- to \$2,000-individual and corporate income tax credits for purchase, lease, or conversion of a dedicated AFV, or alternative fuel delivery system. Original equipment manufacturer (OEM) AFV credit is only given if the vehicle is certified as a low-emission vehicle by the U. S. Environmental Protection Agency. Also, AFVs can receive from 50% to 90% of the incremental cost equivalent above conventionally fueled vehicles. Income tax credits will be given to individuals and corporations for the expenses associated with construction and operation of an alternative fueling station (50% of costs incurred up to \$400,000 for publicly accessible or renewable fuel; 25% or up to \$200,000 for other stations).

The Arizona Clean Air Fund Program (ACAFF), which was implemented separately in 1996 and is run by the Department of Commerce Energy Office, is also broadened by SB 1269. ACAFF can provide grants up to \$100,000 for publicly accessible alternative fueling sites and grants up to \$1,000 for individuals and small businesses to buy and install alternative refueling infrastructure. ACAFF can issue grants to aid municipalities and school districts with AFV conversions. This newly enacted law extends the ACAFF's use to include reducing the costs of converting or acquiring AFVs and AFV equipment, public awareness programs, and training of AFV service technicians. A copy of the law can be found on Arizona's state Web site: [www.azleg.state.az.us/legtext/43leg/2r/laws/0221.htm](http://www.azleg.state.az.us/legtext/43leg/2r/laws/0221.htm).



## Colorado AFV Rebates Make Good Business Decisions Even Better

The Colorado Governor's Office of Energy Conservation (OEC), the Colorado alternative fuel industry, and the U.S. Department of Energy have teamed up to help Colorado meet its environmental and energy goals by offering an alternative fuels rebate program to qualified fleets and individuals. The rebates range from 50% to 80% of the alternative fuel vehicle incremental price on a new vehicle or on the cost of converting a vehicle.

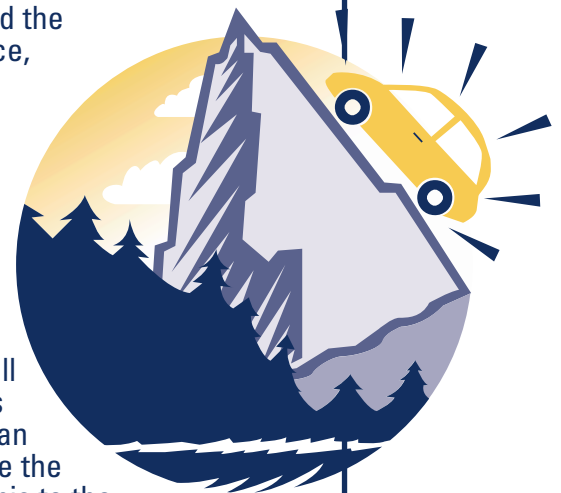
The rebate is available for vehicles certified by the U.S. Environmental Protection Agency or the California Air Resources Board to low-emission vehicle standards. To

obtain a rebate through this partnership program, you need to select a local participating fuel supplier in the program. The Web site [www.state.co.us/gov\\_dir/oec/programs/trans/altfuel.htm](http://www.state.co.us/gov_dir/oec/programs/trans/altfuel.htm) has program information, application instructions, and matching parties.

According to Tom Brotherton of the OEC, rebates are still available and will be allocated until the program ends December 31, 1998, or until funding has been exhausted. To contact him, phone 303-620-4292 or 800-OEC-6662, fax 303-620-4288, or visit the OEC Web site listed above.

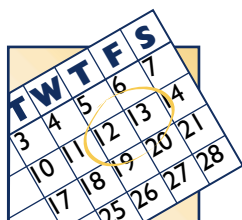
## Propane-Fueled Rabbit Conquers Mt. Washington

America's oldest motorsports competition, beginning in 1904, hosted the world's first alternative fuel stock race car fueled by propane. The race, "Audi Climb to the Clouds," climbs Mt. Washington in Gorham, New Hampshire, and covers over 4,500 vertical feet in 7.4 miles winding through 70 turns to the top of the mountain at 6,120 feet. Gilbert Cox, driver of the car and president of the Safe Alternative Fuel Association (SAFA), stated, "This performance demonstrates the power and viability of propane as an alternative fuel, even in the demanding environment of stock car racing." The SAFA press release explained that the world's first propane and natural gas stock race cars give a broader exposure to alternative fuels and dramatically demonstrate their potential through events like the Mt. Washington hill climb. As emphasized by the owner of Eastern Truck & Auto, the car's principal sponsor, "We wanted to increase awareness of propane as an increasingly accessible alternative fuel. We feel it makes sense to use the rising popularity of stock car racing as a vehicle for communicating this to the public." For more information on SAFA, contact Gilbert Cox at 603-529-2876.



**National Alternative Fuels and  
Clean Cities Hotline**

NREL  
1617 Cole Blvd., MS/1633  
Golden, CO 80401-3393



**Upcoming  
Conferences  
and Events**

**1998 North American EV & Infrastructure  
Conference and Expo (NAEVI 98)**

December 3-4, 1998  
Phoenix, Arizona  
Contact: Kim Pauley 703-318-0300, ext. 551

**Congress of Cities Expo**

December 3-6, 1998  
Kansas City, Kansas  
Contact: David Lee 703-318-0300, ext. 567

**Interstate Oil and Gas Compact Commission  
1998 Annual Meeting**

December 6-8, 1998  
Salt Lake City, Utah  
Contact: Jason Gildeg 405-525-3556

**Propane Vehicle Conference**

January 25-27, 1999  
Las Vegas, Nevada  
Contact: Frank Rowe 303-863-0521

**Questions? Comments? Suggestions?**

Call the National Alternative Fuels Hotline at 800-423-1DOE or  
the Clean Cities Hotline at 800-CCITIES  
Check out the Alternative Fuels Data Center Web site at  
[www.afdc.doe.gov](http://www.afdc.doe.gov) or the Clean Cities Web site at  
[www.ccities.doe.gov](http://www.ccities.doe.gov).



***And ... They're Off!***



**Get ready for the Fifth National  
Clean Cities  
Conference and Expo!**

**Where:** Louisville, Kentucky  
**When:** May 23-26, 1999

Your postcard with conference  
details is on the way!



Special thanks  
to the 1998 Conference host—  
the Washington, D.C. Energy Office  
and the Metropolitan Washington  
Alternative Fuels Partnership!

Last year's conference in the nation's  
capital will be hard to beat!

*For more information on these events, visit the Alternative Fuels Data Center Web site at [www.afdc.doe.gov](http://www.afdc.doe.gov).*