

U.S. DEPARTMENT of ENERGY

# ALTERNATIVE FUEL NEWS

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

From the Office of Energy Efficiency and Renewable Energy

## Clean Cities: Past, Present, Future

stronger  
coalitions 37,000  
Gameplan  
2000  
Stakeholders  
CO<sub>2</sub>  
down  
653,000  
TONS  
Advancing the  
AFV Choice  
self-sustaining  
coalitions  
greater public awareness  
160,000  
AFVs  
Oil Barrels  
down 8 million





Dear Clean Cities Stakeholders:

This final issue of the *Alternative Fuel News (AFN)* for the 20th century will update you on specific Clean Cities Program progress and provide a glimpse of what's in store for the future. As many of you know, a national nonprofit organization has been part of the Clean Cities vision for some time, and now it's a reality as National Clean Cities, Inc. (NCC). Although NCC is an entity separate from the U.S. Department of Energy (DOE) and not affiliated with the federal government, it will mirror the goals of the Clean Cities Program. NCC's purpose is to supplement the effectiveness of individual coalitions by raising funds from large, private-sector, national foundations interested in energy, environmental, educational, and health-related causes. While Clean Cities coalitions have had some success in securing local private foundation funds for alternative fuel vehicle (AFV) projects in their regions, now with the help of NCC, they can tap into the millions of dollars available from large, national foundations. Training and outreach support are also part of NCC's efforts; be sure and read more about the organization in our cover story.

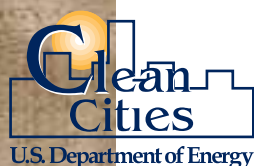
This national nonprofit organization is just one piece of the overall strategy for Clean Cities in the year 2000. The Clean Cities Game Plan 2000, which is the highlight of the cover story, outlines our strategy for the next year. It continues some of our successful efforts in 1999, such as the Advancing the AFV Choice events, and incorporates new efforts, such as public service announcements and the development of universal card access for refueling. Strategic planning has always been an important part of the Clean Cities Program, and as we look ahead to the future, we'll be trying a different approach to the planning process. Since our coalitions and coordinators are an integral part of the Clean Cities planning process, we'll be seeking input for the Clean Cities Game Plan 2001 by inviting coalition coordinators to join Clean Cities staff and selected stakeholders at DOE in strategy sessions in early March. Together we'll develop specific plans and pathways for meeting our goals. Stay tuned for more information about this important effort.

Best wishes for a happy holiday season, and as usual, enjoy the issue.

**Shelley Launey, Director**

National Clean Cities Program  
Office of Transportation Technologies  
Energy Efficiency and Renewable Energy

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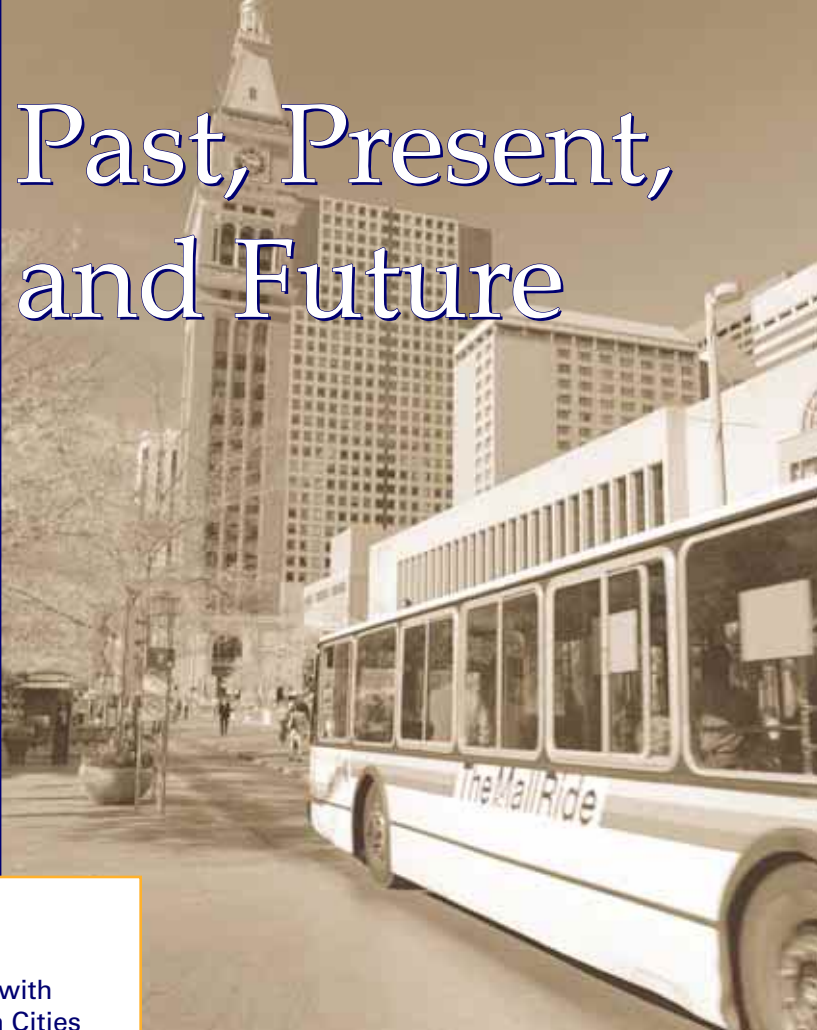
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# Clean Cities: Past, Present, and Future

The U. S. Department of Energy's (DOE's) Clean Cities Program is ready to meet the new millennium with a strong foundation, enthusiastic members, and exciting opportunities. Designated Clean Cities coalitions now number nearly 80, from Maine to Miami, Tucson to Tacoma, and beyond U.S. borders to Canada and Mexico. Some 3,700 stakeholders participate in the Clean Cities network, all advocates of energy efficiency who have helped deploy more than 160,000 alternative fuel vehicles (AFVs)—an impressive 40% of all AFVs in the nation. Coast-to-coast travel is now possible in an AFV, thanks to the efforts of Clean Cities stakeholders, who have been instrumental in building close to 5,000 alternative fuel stations across the country.



Warren Grez, NREL/PIX 06125

## Designated Clean Cities:

Your annual survey information provides DOE with valuable information that is used to track Clean Cities Program progress. This year, the information was also used in the *Clean Cities Report to Congress*, which provides federal legislators with an update on the status of the Clean Cities Program. In addition to the total AFV, station, and stakeholder numbers, here's what else we learned about what happened in 1998...

- Coalitions added nearly 10,000 light-duty AFVs and almost 750 heavy-duty AFVs—a 9% increase in the light-duty fleet and a 32% increase in the heavy-duty fleet.
- Niche markets (specifically transit bus, school bus, taxi, and police fleets) represented 0.5% of the light-duty AFV population and approximately 69% of the heavy-duty population.
- Coalitions added 500 new alternative fuel stations in 1998, an increase of 17% from 1997.
- About half of the coalitions published newsletters, which reached a collective audience of approximately 16,000 readers.
- 73% of the coalitions received some media exposure, reaching an estimated audience of 12 million people.
- Coalitions received more than \$8.5 million in grants.
- Only about 20% of coalition coordinators worked full-time on Clean Cities; of the part-time coordinators, only half were paid for their efforts; the other half volunteered their time.

Five years ago, a national conference for Clean Cities participants was only a concept; now it is the largest annual gathering of AFV advocates. Attendance has more than doubled—from 300 at the first event in St. Louis, to 700+ at the fifth national conference in 1999 in Louisville. Through the Clean Cities Program, DOE has awarded more than \$13 million for AFV projects in 38 states. This money has helped participants leverage more than \$79 million in matching funds for additional AFV purchases and refueling infrastructure development. However, quantities of vehicles, stations, and participants don't mean much unless you look at the bigger picture. Has Clean Cities reduced U.S. dependence on imported oil and made our air safer to breathe?

We're happy to report the answer is "yes." Although the United States remains dependent on imported petroleum for transportation, and air pollution from mobile sources is still an issue, the Clean Cities Program is making quantifiable progress. A few statistics, listed below, demonstrate the impact AFVs have already made within the Clean Cities network, and estimate the benefits they will achieve by the end of 2001.

- Clean Cities AFVs have displaced approximately 8 million barrels of petroleum and will displace an additional 10.2 million barrels by the end of 2001.



- They've reduced carbon dioxide (CO<sub>2</sub>) emissions in the atmosphere by 653,000 tons, and will lessen those emissions by an additional 873,000 tons in the next 2 years.
- About 79,000 tons of criteria emissions (hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter) have been reduced, and in the next 24 months, these levels are expected to drop by another 99,000 tons.

Despite impressive progress, much remains to be done. DOE has developed several new strategies for Clean Cities, which are designed to strengthen the designated coalitions and further encourage cities outside the network to make the commitments required for Clean Cities status. These strategies are outlined in the Clean Cities Game Plan 2000, which will be online on the Clean Cities Web site soon.

The Game Plan has three main pieces, outlined in the paragraphs below, each with a different goal.

- Advancing the AFV Choice
- Developing stronger, self-sustaining coalitions
- Creating greater public awareness and acceptance of AFVs and the Clean Cities Program.

## Advancing the AFV Choice

The "Advancing the AFV Choice" concept debuted in the Clean Cities Game Plan 1998/99; it was designed to increase the number of AFVs on the road—particularly in niche market applications—as well as the number of refueling and recharging stations. Under the Game Plan 2000, Clean Cities coalitions will continue to host "Advancing the AFV choice" events and inform local fleet owners and operators about their AFV options.

The Fleet Buyer's Guide, which was also introduced in the 1998/99 Game Plan, will continue to be featured at these events. The guide is a computer-based, interactive tool that walks users through the steps involved in deciding to purchase an AFV. Topics include vehicle models and options, local dealerships that offer specific AFV models, and local refueling station information. In response to feedback from Clean Cities stakeholders, the guide will

be updated to include medium- and heavy-duty vehicle information.

Financial assistance for alternative fuel and vehicle projects is also offered; \$2.7 million will be available for these endeavors in fiscal year 2000, through DOE's State Energy Program (SEP) Special Projects grants, and \$800,000 in Clean Cities rebates. For details on the SEP 2000 plan, see p. 10. For more information on Clean Cities rebates, call your DOE Regional Clean Cities contact, listed on the Clean Cities Web site <http://www.ccities.doe.gov/contacts/regional.shtml>.

DOE continues to work closely with federal agency partners to advance the AFV choice. The Federal AFV USER Program, a joint effort by DOE and the U.S. General Services Administration, will help boost the number of federal fleet AFVs in selected cities and increase throughput at local public refueling stations. Clean Cities and the U.S. Environmental Protection Agency (EPA) are partnering to develop a user-friendly, computer-based tool that will help coalitions estimate the ozone-precursor emission reduction credits earned by acquiring original equipment manufacturer AFVs. For more information on this tool and DOE's partnership with EPA, see p. 8.

DOE has also formalized an interagency agreement with the U.S. Department of the Interior to promote energy efficient and renewable energy technologies in national parks, and to educate the public about clean energy efforts.



Approximately \$250,000 will be available for AFV and refueling infrastructure projects in fiscal year 2000 in our national parks.

The final piece of the Advancing the AFV Choice section of the Clean Cities Game Plan 2000 is developing universal card access for refueling. In some regions of the country, a significant AFV infrastructure already exists. However, many stations may only be used by private fleets, or they require customers to use a specific card issued by the local gas provider. When each station requires a different card and has different billing, it becomes more difficult for AFV drivers to fill up, much less drive cross-country without advanced planning and a pocketful of cards. To alleviate this problem, DOE is working in conjunction with several Clean Cities coalitions to develop a universal card access system that will allow stations to share one card and provide common billing. Clean Cities partners who are interested in advancing this technology regionally, as well as linking multiple regions nationally, should call their regional DOE Clean Cities contact, or Dennis Smith, Special Assistant to the Clean Cities Program, at 202-586-1791, for more information.

## **Stronger, Self-Sustaining Coalitions**

The second strategy of the Game Plan 2000 calls for creating stronger, self-sustaining coalitions. As the number of designated cities grows, it becomes more important for DOE to apply resources that will help coalitions help themselves. To do this, the Clean Cities Program will be offering workshops for coordinators and stakeholders on topics such as grant writing and market development.

Perhaps the most exciting part of that strategy is the new nonprofit organization, National Clean Cities, Inc., which is ready to roll. National Clean Cities, Inc. (a separate and distinct organization from the U.S. Department of Energy) is based in Washington, D.C., and is now recognized by the Internal Revenue Service as a 501(c)(3) nonprofit organization. It is now accepting coalitions as chapter members. Becoming a member, although not automatic for designated Clean Cities, is easy. Coalitions must file official incorporation papers with their states to join, and submit a simple application form with a \$100 administrative fee to become a chapter of the organization.

And membership has its privileges. According to Peter Wolk, a member of the National Clean Cities, Inc. Board of Directors, affiliation with the organization guarantees nonprofit status, which will save coalitions time and money. Applying directly to the U.S. Internal Revenue Service for nonprofit status is fairly involved, and the application fee alone costs \$500, which doesn't include related legal fees. The nonprofit, tax-exempt status awarded to coalitions as chapters of National Clean Cities, Inc. opens the door to new funding sources for AFV projects. As chapters, coalitions are eligible for foundation grant funds normally unavailable for many local coalitions that are not 501(c)(3) nonprofits and not associated with a national organization—including, for example, funds to support a full-time coordinator.



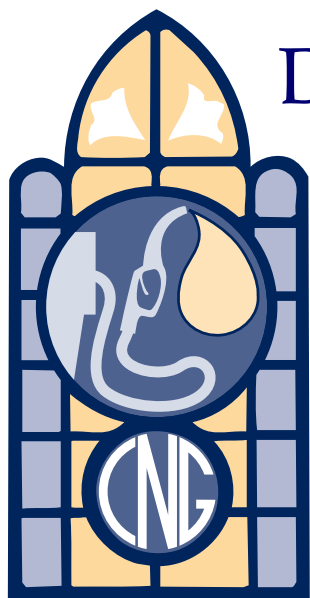
Carol Butler was recently named executive director for National Clean Cities, Inc. As the former Ocean State (Greater Providence, Rhode Island) Clean Cities coordinator and consultant to the Norwich, Connecticut, coalition, Butler brings firsthand experience in working with Clean Cities and in seeking funds to support AFV projects. Next a board of directors will be selected to provide direction and formulate policies for the new organization. Board members will represent various sectors of the Clean Cities community, including (but not limited to) fuel providers, automakers, academia, and fleet owners. For more information on becoming a chapter of National Clean Cities, Inc., contact Carol Butler at 703-644-9995 or [cbutler@psn.net](mailto:cbutler@psn.net).

## **Creating Greater Public Awareness**

Creating greater public awareness and acceptance of AFVs and the Clean Cities Program is the final piece of the Game Plan 2000. Clean Cities is developing video and print public service announcements that coalitions can use when working with local media. Training will be offered at the Sixth National Clean Cities Conference in May to support Clean Cities coalitions, covering topics such as improving communications skills and capturing the attention of the local media.

The momentum that propelled Clean Cities from a high-level concept almost 6 years ago into a nationwide network of nearly 80 coalitions now promises to drive the program to new heights in 2000. So much is in store for Clean Cities coalitions—from new training opportunities to new products—and the Game Plan 2000 is the comprehensive strategy that outlines development and implementation.





# Divine Intervention for AFVs

## Spotlight on Niche Markets

*In past issues, AFN has featured various niche market stories covering diverse areas of transportation needs being met with alternative fuel vehicles (AFVs), including transit buses, taxis, and airports. But this issue's highlighted niche market may surprise many readers.*

### Cleveland, Ohio

Erin Russell, coordinator for the Northeast Ohio Clean Fuels Coalition, was pleasantly surprised to receive her first response to the Fleet Managers' survey from an unlikely source—the Congregation of the Sisters of St. Joseph. Curiosity about the feasibility of adding AFVs to their fleet was the initial impetus for the Sisters' involvement. Once they attended the Clean Fuel Choice Fleet Managers' Event last July in Ohio, Sisters Loretta Schulte and Mary Schrader realized that many AFVs are market-ready. After research, study, and conversations with car dealers and utility representatives, the Sisters purchased their first AFV—a Honda compressed natural gas (CNG) Civic GX.

When asked how the congregation became interested in AFVs, Sister Loretta, St. Joseph's transportation director, responded, "During a recent congregational gathering, we affirmed the direction the community would like to pursue in our future. Two elements of our direction include seeking to ground actions in global reality, and recognizing our unity with the earth." Sister Mary, a member of the congregation's leadership team, added, "I was unaware of how advanced AFVs are, and the Clean Fuel Choice Event was a wonderful consciousness-raising experience. During a meeting in late October (1998), we explained to our whole congregation the details of this practical step

toward implementing unity with the earth. We plan to share our information and experience with the larger community by inviting Sisters from other congregations in the Cleveland area to an informational session on AFVs."

The Sisters purchased their vehicle from Motorcars Honda in Cleveland Heights, the only distributor for the CNG Civic in Northern Ohio. According to Andrew Charielle, the dealer's AFV sales and leasing manager, "I am working to get the Sisters a CNG refueling station at the convent to enable them to purchase more AFVs." He continued, "Their environmental concern for clean air and desire to set an example were the impetus for their AFV purchase. With a more convenient refueling site, they plan to increase the number of AFVs in their fleet."

Russell was excited about reaching non-mandated fleet managers through the coalition's activities, and said, "From my experience as a new Clean Cities coordinator, it was great to see our efforts on the Fleet Managers' Survey and the Clean Fuel Choice event

rewarded. This is testimony to our events; we couldn't have sold that vehicle to the Sisters of St. Joseph without reaching out to fleet managers."



Congregation of the Sisters of St. Joseph/PIX 08482

(Above) Sister Loretta Schulte of the Congregation of the Sisters of St. Joseph poses with their natural gas-powered Honda Civic, purchased from Honda Motorcars in Cleveland Heights, Ohio.

(Below) Sister Jean Keating of the Congregation of St. Joseph Provincial House in Latham, New York, tries out a CNG Chrysler minivan.



Stacey Hughes/PIX 08481

### Latham, New York

After seeing Sister Jean Keating at alternative fuel workshops and funding events, Stacey Hughes, Capital District Clean Communities Co-Coordinator, arranged a CNG minivan test drive for the Sisters of St. Joseph Provincial House in Latham, New York. Hughes has been working with Sister Jean to help coordinate her purchase of AFVs, as well as install a CNG refueling station. Sister Jean has managed a fleet of approximately 200 vehicles for more than 9 years, and for the past several years she has researched AFVs as an option to reduce air pollution and decrease the use of petroleum products.

More than 250 Sisters call the Provincial House their home. They recently conducted an energy audit to learn how best to conserve energy, and their

Homeland Committee focuses on ways to make their 6-acre home environmentally friendly. The Sisters now have a 10-year plan to make environmental improvements. However, because they provide transportation and assistance for the convent and community projects, vehicles are still a necessity in their lives.

According to Sister Jean, "The use of NGVs would allow the Sisters to continue to do their part for the environment." She continued, "Until we get fueling infrastructure for CNG

vehicles, we hope to purchase five Toyota Prius vehicles next year. Also, we want to convert a Dodge Caravan to be wheelchair-accessible and run on CNG."

For more information about activities in Latham, New York, please contact Stacey Hughes at 518-782-2023. For more information on purchasing or leasing a CNG Honda Civic GX in Northern Ohio, please contact Andrew Charielle, at 216-932-2400, ext. 224, or visit the Web site <http://www.motorcarshonda.com>.



## From The Automakers

### GSA Offerings

Plans are underway to finalize the U.S. General Services Administration (GSA) vehicle offerings for model year 2000 (MY00). Each year, GSA's Office of Vehicle Acquisition and Leasing Services provides federal agencies and other organizations with quality vehicles to meet their individual requirements. For MY00, GSA expects to take advantage of the wide range of alternative fuel vehicles (AFVs) now being offered by the manufacturers. Customers or agencies have access to this list of AFVs, federal vehicle standards, vehicle pricing, and incremental cost through the Office of Vehicle Acquisition and Leasing Services, Automotive Division's home page. Look for the updated information on <http://pub.fss.gsa.gov/motor>, or call Ira Herman at 703-308-4576.

### Future Truck 2000

How green is your sport utility vehicle (SUV)? This fall, 15 selected universities will compete in the FutureTruck 2000 event sponsored by General Motors Corporation and the U.S. Department of Energy. The goal of FutureTruck 2000 is to reengineer a Chevrolet Suburban SUV to increase the fuel economy and reduce greenhouse gas emissions, without sacrificing safety, convenience, or performance. Participating schools include Concordia University, Cornell University, George Washington University, Georgia Institute of Technology, Michigan Technological University, Pennsylvania State University, Ohio State University, Texas Tech University, University of California-Davis, University of Idaho, University of Maryland, University of Tennessee, University of Wisconsin, Virginia Polytechnic Institute, and West Virginia University.

To create this "greener" SUV, the universities have proposed a range of advanced automotive technologies for converting the vehicles from a gasoline engine to an alternative propulsion system. Hydrogen fuel cells, hybrid powertrains, and alternative fuels are all likely options. Advanced electronics, aerodynamic modifications, and lightweight materials that increase efficiency may also be incorporated to increase efficiency.

FutureTruck evolved from the FutureCar Challenge, which was developed to support the Partnership for a New Generation of Vehicles (PNGV), a DOE co-sponsored project with the goal of building an 80-mpg mid-size sedan without sacrificing performance, emissions, or utility. Both competitions are designed to foster

cooperation between industry, government, and academia, and to provide hands-on educational experience for all student participants. With the increasing popularity of SUVs, the FutureTruck competition is especially important to demonstrate how advanced automotive technologies can make large SUVs greener, cleaner, and more efficient.

The FutureTruck 2000 competition will be held for the next 4 years. FutureTruck 2000-2001 will be sponsored and hosted by General Motors (GM); in 2002-2003, the competition will be sponsored and hosted by Ford Motor Company. This year, GM has offered each university team \$10,000 in seed money to finance the initial work. GM also provided technical support for the teams during a technical workshop held September 20 and 21, in Pontiac, Michigan. In November, GM delivered the 15 MY00 Suburbans to the universities, who will then have 6 months to complete their modifications. The competition and judging will occur June 8-June 16, 2000, at General Motors' Desert Proving Ground in Mesa, Arizona. The vehicles will be judged in categories such as greenhouse gas impact, safety, emissions, braking, handling, vehicle design, and consumer acceptability.

Stay tuned to how the students plan to make their SUV "greener" by logging onto <http://www.futuretruck.org>.



The goal for FutureTruck 2000 is to reengineer a Chevrolet Suburban SUV (as shown here) to increase the fuel economy and reduce greenhouse gas emissions, without sacrificing safety, convenience, or performance.

DOE file photo/PIX 08485



# Federal News



## DOE and EPA Work toward Partnerships

One of DOE's top priorities continues to be improving coordination and increasing joint alternative fuel efforts with the Environmental Protection Agency (EPA). Several projects are in the works that relate to alternative fuels, refueling infrastructure, funding opportunities, state implementation plan (SIP) credits, and more. In addition, the two agencies have been holding bimonthly conference calls to strengthen relationships between DOE/EPA headquarters and DOE/EPA regional offices.

DOE plans to co-sponsor EPA's voluntary mobile source emission reduction program (VMEP) workshops; EPA will cost-share the development of the analytical worksheet being produced by Argonne National Laboratory for the National Clean Cities Program. According to Chris Saricks at Argonne, "The intention of the model is to have the Clean Cities coordinators quantify the emission reduction benefits for the AFVs they have already purchased and those they plan to acquire." This model can determine net reduction in ozone precursors, such as non-methane hydrocarbons, oxides of nitrogen, and summertime carbon monoxide. Users will be able to copy the specific vehicle data that is available on the Internet, then calculate the total number of SIP credits per AFV. The vehicle models include dedicated and dual fuel light-duty vehicles and trucks, transit buses, school buses, electric vehicles, and trucks.

Argonne has submitted the computer model and the draft user's guide to EPA's Office of Mobile Sources for review. According to Matt Payne, EPA's team leader for the voluntary measures program, "We are currently reviewing the model, and our target date is the first half of next year."

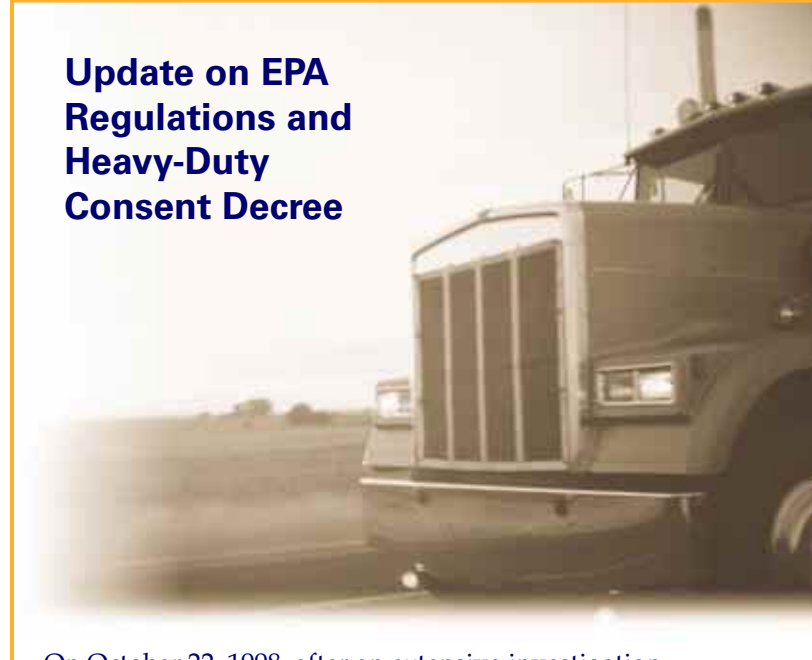
The planned VMEP workshops will provide information for state and local governments interested in receiving SIP credits for voluntary mobile source emission reduction programs. A training session will cover general SIP information, and sessions on alternative fuels will explain the

Argonne model and other EPA programs, such as heavy-duty retrofits and airport strategies. Finally, the workshop will cover voluntary EPA measures that provide emission credits from various sources and the different EPA tools available to calculate emissions.

Other joint projects include a "Plain English" handbook on various rules affecting the AFV industry, and a complete list of EPA grants and other funding opportunities. In addition, DOE's Marcy Rood, Deputy Director of the Clean Cities Program, participated on the Planning Committee for the National Ozone Action conference, sponsored by the Air and Waste Management Association, EPA, DOE, and others.

Photodisc

## Update on EPA Regulations and Heavy-Duty Consent Decree



On October 22, 1998, after an extensive investigation into the use of illegal "defeat devices," a federal case against the world's seven largest diesel engine manufacturers ended in a landmark settlement totaling more than \$1 billion dollars. The U.S. Environmental Protection Agency (EPA) and the U.S. Department of Justice (DOJ) found that Caterpillar Inc.; Cummins Engine Company; Detroit Diesel Corporation; Mack Trucks, Inc.; Navistar International Transportation Corporation; Renault Vehicules Industriels, s.a.; and Volvo Truck Corporation had used defeat devices in their engines that led to the release of 1.3 million tons of excess oxides of nitrogen (NO<sub>x</sub>) in 1998 alone. The manufacturers, who comprise 95% of the U.S. heavy-duty diesel engine market, settled with the EPA and the DOJ after more than 1.3 million engines were found to contain defeat devices. These devices allowed the engines to pass EPA emission standards during routine



examinations, but then switch to allow NO<sub>x</sub> emissions three times above the legal limit when running on highways.

The civil penalty of \$83.4 million, the largest ever resulting from an environmental violation, requires manufacturers to pay to build new engines and update older ones, and to fund a variety of environmental research projects, including studies of alternative fuels. Although approximately \$850 million of the billion-dollar settlement will be spent to produce cleaner engines and rebuild older ones, \$109 million will fund additional environmental projects. Of the \$109 million, approximately 55% has been earmarked for research projects.

The DOJ and EPA committed to meet with states, industry groups, environmental groups, and concerned citizens in a series of public meetings during the first year of the consent decree program, and then at least annually thereafter during implementation phases. The meetings will focus on how each of the seven engine manufacturers are taking steps to improve air quality through specific research and development projects and technology deployment activities.

The first public meeting was held on September 10, 1999, in Washington, D.C. Dennis Smith, DOE's Special Assistant to the Clean Cities Program, attended the hearing and was pleasantly surprised, stating, "nearly half of the proposals submitted deal with alternative fuels or alternative fuel technologies, and many of those were submitted or co-sponsored by local Clean Cities coalitions around the country." This first meeting focused on the federal government's review of the companies' proposed project plans, in-use testing plans, and implementation of the low NO<sub>x</sub> rebuild program. Specifically, presentations were given on consent decrees by DOJ's Karen Dworkin, the selection process for company-proposed projects by EPA's Bruce Buckheit, and compliance milestones by EPA's Anne Wick.

Under the protocol of the consent decree, manufacturers solicited proposals from industry for projects designed to offset alleged emissions violations of earlier engine control designs. Proposals were due by January 12, 1999, and the engine manufacturers were required to submit compliance plans to EPA and DOJ by October 28, 1999. EPA was then given 30 days to rule on the proposed plans. EPA/DOJ could choose to accept or reject projects as proposed, or could suggest modifications to ensure compliance. Of the proposals submitted by the industry, approximately half dealt specifically with alternative fuel technologies or had an AFV component.

This ruling points out that diesel-powered vehicles have been polluting at much greater levels than once thought, which creates an even stronger argument for clean alternative fuels. Increasing awareness of such environmental issues will undoubtedly promote alternative fuels as an option to diesel fuel.

For future hearing dates and additional information on the heavy-duty diesel engine settlement, please visit the Web site: <http://www.epa.gov/oeca/ore/aed/diesel>.



## EPA's Clean Air Excellence Awards Program

The Clean Air Act Advisory Committee (CAAAC)—an advisory committee to the U.S. Environmental Protection Agency (EPA)—recently launched the Clean Air Excellence Awards Program, which will honor outstanding, innovative efforts that support progress in achieving cleaner air each year. The program, open to both public and private entities in the U.S., offers awards in five categories: Clean Air Technology, Community Development/Redevelopment, Education/Outreach, Regulatory/Policy Innovations, and Transportation Efficiency Innovations. An award for outstanding individual achievement will also be given.

Clean Air Excellence Award entries are judged using both general criteria and criteria specific to each individual category. The four general entry criteria are: (1) directly or indirectly (i.e., by encouraging actions) reduces emissions of criteria pollutants, greenhouse gases, or hazardous/toxic air pollutants; (2) demonstrates innovation and uniqueness; (3) provides a model for others to follow (i.e., it is replicable); and (4) positive outcomes from the entry are continuing/sustainable. Judging for the Clean Air Excellence Awards is done through a screening process conducted by EPA staff, with input from outside experts. A workgroup of the CAAAC conducts an additional review. Final award determinations will be made by the CAAAC and the EPA Assistant Administrator for Air and Radiation.

If you have any questions concerning the Clean Air Excellence Awards Program or would like to receive an application, please contact Paul Rasmussen of EPA's Office of Air and Radiation at 202-564-1306. Alternatively, you may visit the Clean Air Act Advisory Committee Web site at <http://www.epa.gov/oar/caaac/>.



# Funding Opportunities

## DOE Offers Additional Funding Through Broad Area Announcement

Once again, DOE's Office of Transportation Technologies will offer additional funds for projects supporting Clean Cities Program activities through a Broad Area Announcement (BAA). The new project areas will help further the program's mission by increasing the dissemination of information to Clean Cities stakeholders, providing additional training for local coalitions, and promoting international partnerships intended to reduce pollution from trade transportation at our nation's borders.

One key to increasing alternative fuel use is to make sure vehicle owners and operators have the information they need to make the AFV choice. Conferences and events are perfect opportunities for that information to reach a large audience. As such, one project area in the BAA will co-sponsor industry conferences and training events. Training topics could include alternative fuels and vehicle basics; strategic infrastructure development; EPA's Clean Air Act, and Clean Fuel Fleet Program compliance; application for and receipt of Congestion Mitigation and Air Quality Improvement Program funds; and calculation of vehicle emission credits.

Market development training for Clean Cities coalitions is the second project category. An important goal of the Clean Cities Program is to increase the number of AFVs on the road and the amount of alternative fuel used. The

market development plan outlines how coalitions can reach that goal. As detailed in the BAA, the associated training will help stakeholders in 15 Clean Cities coalitions identify and prioritize program goals, establish a strong base of stakeholder support, develop organizational structures and processes, create strategies, and identify niche markets in their areas.

The third project category of the DOE's BAA focuses on promoting information exchange between the U.S. and its international partners. Most imported and exported goods transferred between the United States and its immediate neighbors, Canada and Mexico, are transported by heavy-duty diesel trucks. These trucks emit large amounts of pollution, which affect U.S. air quality at its borders. DOE wants to promote international partnerships and develop projects to increase the use of AFVs in border traffic and cross-border transportation. Projects funded in this BAA category include technology transfer, data collection, outreach, training, and technical assistance. For more information on the BAA, check out the Web site: <http://www.pr.doe.gov/solicit.html>.

## State Energy Program Announcements for 2000

To assist Clean Cities coalitions in building sustainable, local AFV markets, DOE will continue to provide funds to State Energy Offices for special alternative fuel projects.

The 2000 State Energy Program (SEP) will help to ensure that local Clean Cities coalitions are vibrant and active, enabling fleet customers to increase their use of AFVs. The program will also strengthen the relationship between the federal, state, and local government partners and private sector Clean Cities stakeholders.

### SEP Funding will be offered in five project areas:

- 1) Projects that promote the acquisition of AFVs in fleets
- 2) Projects that deploy alternative fuel school buses
- 3) Projects that promote the development of an AFV refueling infrastructure
- 4) Fuel cells and infrastructure
- 5) Full-time Clean Cities coordinator positions.





All projects are required to have a cost share from either federal or non-federal sources. Projects in categories one, two, and three require a 33 1/3% cost share, and projects in categories four and five require a 50% cost share. Evaluation criteria (such as the probability for a project's success; a project's future potential; energy-related benefits as indicated by the number of alternative refueling stations or vehicles; and the ability of a project to strengthen and stimulate a Clean Cities coalition) will be considered when choosing projects to fund. Procedural guidelines must be met to be eligible for Clean Cities funding. For details on the SEP solicitation, check out the SEP

"I would like to encourage the new coalitions to take advantage of this funding opportunity. SEP is a great way to assist in building a successful coalition."

*DOROTHY WORMLEY, DOE's Energy Technology Specialist for Clean Cities*

Web site [http://www.eren.doe.gov/buildings/state\\_energy/seps00-forum.html](http://www.eren.doe.gov/buildings/state_energy/seps00-forum.html), or contact Dorothy Wormley at 202-586-7028.



## From the States

### NCSL's Advisory Council on Energy: Identifying Trends in Energy for the Next Decade

With the constant influx of new state legislators and the many complex issues they face, how can we ensure that state legislators are knowledgeable about energy topics such as transportation and alternative fuels? The National Conference of State Legislatures' (NCSL) Advisory Council on Energy (ACE) was established in 1997 to anticipate new trends in energy and to develop ways for NCSL's Energy Project to assist state legislatures with these issues. The Energy Project's "Energy 101: A Workshop for New State Legislators," held in Tucson, Arizona, October 7-8, 1999, was designed to do just that.

Energy 101 provides a forum where newcomers can discuss energy and transportation-related issues with "seasoned" state legislators. According to Matthew Brown of NCSL, "One of the most important and challenging developments in state legislatures has been term limits, which are now in place in around 20 states. This means that there is significant turnover in some state legislatures." This turnover can have major implications for energy issues, because it takes experience to truly understand the issues and policies involved.

Energy 101 provided new legislators much-needed help with transportation and alternative fuels issues identified as crucial to the future of energy over the next decade. Legislators from more than 25 different states participated in the

workshop, as well as representatives from Ford Motor Company, the Natural Gas Vehicle Coalition, the American Methanol Institute, and NCSL. Presentations and panel discussions focused on alternative fuels, energy efficiency and renewable energy, and utility restructuring issues. Several natural gas vehicles were also available for participant demonstrations.

This workshop was sponsored in part by the U.S. Department of Energy and the U.S. Environmental Protection Agency. For more detailed information on the workshop, or for future NCSL events, please call NCSL at 303-830-2200, or visit the Web site at <http://www.ncsl.org>.







# City of Santa Monica



## Focus On

### Santa Monica Runs with the Tide

As part of Santa Monica's Sustainable City Program, the city's fleet department was asked to operate 75% of its vehicles on alternative fuels by the year 2000. Although the city had previously experimented with electric, compressed natural gas (CNG), methanol, and propane AFVs, major changes took place after the city council adopted its Sustainable City Program in 1994. (Santa Monica defines a "sustainable city" as one that can meet its current needs without compromising the ability of future generations to do the same.) Santa Monica has a strong tradition of commitment to safeguard and enhance natural and human resources. Now, more than ever, city representatives are resolved to ensure that their impact on the environment does not jeopardize the prospects of future generations.

The Environmental & Public Works Management Department is responsible for 642 of Santa Monica's fleet of 962 on- and off-road vehicles. These vehicles are used for park and street maintenance, refuse packing, parking enforcement, passenger transportation, light- and heavy-duty trucking, and specialty equipment needs. At first, converting to alternative fuels seemed daunting, but, according to Ralph Merced, Fleet Manager Superintendent, the city's

"The city of Santa Monica has shown that electricity and natural gas are viable alternatives to petroleum-based fuels. Moreover, when all of the pieces come together—infrastructure, adequate vehicles, and determination—the impossible can be achieved."

*JANIS CHRISTENSEN, President, Christensen & Day Group, consultant for the fleet management industry.*



Southern California Edison/PIX 08486

Santa Monica provides solar-powered recharging stations for electric vehicles in many different areas of the city. The two shown here are at Santa Monica Pier (above) and at City Hall (below).



Southern California Edison/PIX 08489

aggressive and innovative clean air goals presented the opportunity to grow, learn, and help other fleet managers who are experimenting with alternative fuels.

The city of Santa Monica is known for attractions such as the Santa Monica Pier; Santa Monica State Beach, where the television program "Baywatch" was filmed; the Third Street Promenade, an outdoor shopping area resembling European cities; and Santa Monica Place, a large shopping complex. Each location contains an electric vehicle (EV) charging station site and is serviced by four "Tide Shuttles," the city's 25-passenger electric buses.

Included in the city's fleet are 30 EVs, including General Motors S-10 pickups and EV1s, Ford Rangers, Honda EV-Plus, and Toyota RAV4s. According to Merced, "The mix of original equipment manufacturer EVs allows the city to transport one, two, or four passengers comfortably."

Although EVs are preferred by the city, CNG is frequently used for heavy-duty vehicles, such as trash haulers. The city is also in the process of installing a liquefied natural gas (LNG) fueling facility to accommodate its future transition from diesel to LNG buses. Merced stated, "We use electricity for low range with flat terrain, CNG for heavy-duty medium range, and intend to use LNG for longer range vehicles."

Santa Monica's alternative fuel infrastructure is already in place with eight EV charging stations, one large CNG facility, and plans for an LNG facility. Merced is currently developing a training manual for the city's EV operators, to further facilitate EV use.

Will Santa Monica meet its 75% AFV goal by 2000? AFVs comprise about half of the fleet, and 62% of the fuel consumed is alternative fuel. To answer that question, Merced said, "If we can get the vehicles from the manufacturers on schedule, we will meet our 75% goal by the beginning of next year. The infrastructure and everything else is in place; we just need the vehicles."

For more information about the city of Santa Monica, visit <http://pen.ci.santa-monica.ca.us/>.

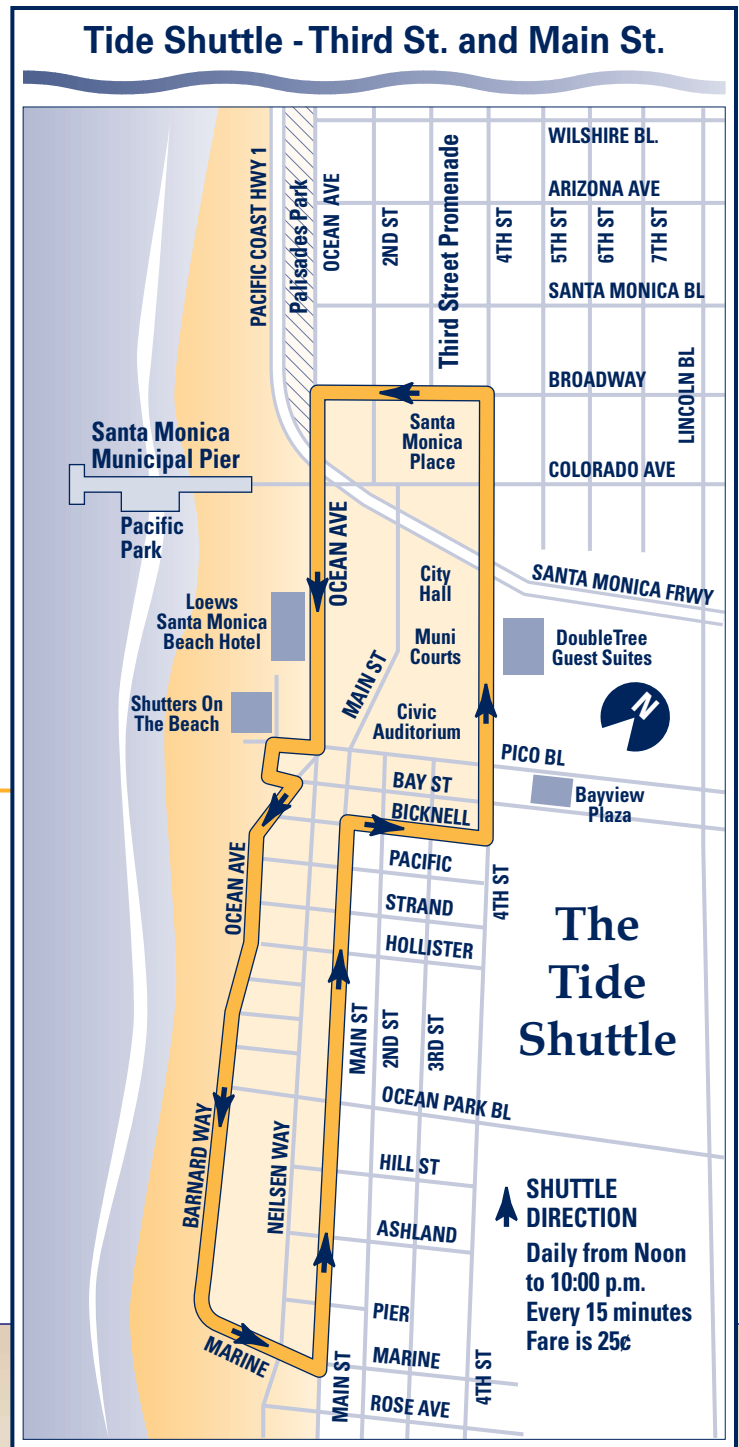


Southern California Edison/PIX 08488

These electric buses in Santa Monica transport passengers along the Santa Monica Pier and the Third Street Promenade, an outdoor shopping area resembling European cities.



Southern California Edison/PIX 08487





# At the Pump

## E85 Project Update

With such a strong collaborative effort between public and private sectors, it's no wonder that the Minnesota E85 Team has been so successful in the alternative fuels industry. Tim Gerlach, of the American Lung Association of Minnesota and E85 Team member, claims the success "wouldn't have happened without support from the U.S. Department of Energy, Ford Motor Company, and all of the local partners."

Since its inception about a year ago, the Minnesota E85 Team has worked to develop a strong E85 infrastructure for the Twin Cities region under what is known as the Minnesota E85 Project. The Twin Cities metro area was selected as a national test market for E85 (a blend of 85% ethanol and 15% petroleum) and flexible-fuel vehicles (FFVs). Over the next year, sales of E85 fuel are expected to increase as 30 more refueling stations open in the Twin Cities area. Ten more stations are expected to offer E85 in greater Minnesota by the end of 2000. The new stations will be fueling the growing number of FFVs in Minnesota, which now include eight different models. "The short-term goal is to get [E85 refueling] sites up and keep fuel flowing through them," said Gerlach.

The team estimates that more than 50,000 FFVs will be operating in Minnesota within the next year, in addition to the increasing number of FFVs in the U.S. Postal Service, U.S. General Services Administration, and Minnesota state fleets. Once the infrastructure is in place, the team will begin a full-scale outreach effort to educate the general public about E85 fuel and FFVs. According to Gerlach, "Changing the way people fuel is a major task...but that's why education and marketing [efforts] will be just as important as building the sites." In the Twin Cities, E85 is competitively priced with regular unleaded gasoline.

To follow the E85 Project or for a listing of E85 stations (present and planned) in Minnesota, visit <http://www.alamn.org>, or <http://www.fleets.doe.gov>

The Minnesota E85 team is a partnership among the Minnesota Corn Growers Association, National Ethanol Vehicle Coalition, Minnesota Coalition for Ethanol, Minnesota Department of Commerce, National Corn Growers Association, Minnesota Department of Agriculture, U.S. Department of Energy, Ford Motor Company, and the American Lung Association of Minnesota.



Tim Gerlach/Pix 08484

## Propane Vehicle Demonstration Grant Recipients

MUTUAL PROPANE, ONTARIO AIRPORT, ILLINOIS – to establish a card reader system for on- and off-road vehicles at the existing Ontario Airport station (\$26,000)

SALT LAKE CITY NEWSPAPER AGENCY CORPORATION, UTAH – to support the purchase of propane-powered delivery trucks (\$25,000)

SUBURBAN PROPANE, NORCROSS, GEORGIA – to support propane refueling infrastructure development (\$50,000)

NEW JERSEY STATE FLEET, TRENTON, NEW JERSEY – to support the development of new propane refueling stations (\$27,600)

CITY OF PORTLAND, OREGON – to establish a propane-powered shuttle bus system serving the ports of Portland (\$67,500)

THERMOGAS, DENVER, COLORADO – to assist in the development of new propane refueling sites in the Denver area (\$50,000)

MARICOPA COUNTY, ARIZONA – to support the purchase of propane trucks (\$45,900)

FERRELLGAS, KANSAS CITY, MISSOURI – to help establish public-access propane refueling facilities (\$50,000)

## Propane Grant Projects

DOE's Office of Transportation Technologies recently awarded a \$250,000 grant to the Propane Education & Research Council (PERC). This grant, matched by commitments from the Propane Vehicle Council (PVC), will support several propane vehicle demonstrations (see box above for list of winners).

The demonstration program will work to identify and publicize the air quality benefits of propane, reduce foreign oil imports, expand the awareness of propane as an alternative transportation fuel, and demonstrate the performance of original equipment manufactured propane vehicles. Targeted projects consist of infrastructure development, airport applications, school buses, and other highly visible endeavors that could be modeled nationally.

The propane industry's goal is to triple and possibly quadruple its initial investment of \$250,000 by seeking matching funds from potential partners in the project. According to Joe Colaneri, the Executive Director of PVC, "These matching funds are the first significant dollars the propane vehicle industry has ever received from a federal agency." Colaneri has also been charged with management of the Propane Vehicle Demonstration Grant Program.

For more information, contact the Propane Education Research Council at 202-261-2201, or visit the Web site at <http://www.propanecouncil.org>.





# Clean Cities Roundup

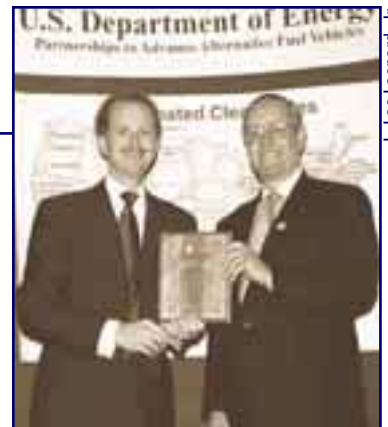
## Remember...the Alamo

Although the Alamo may evoke visions of Davey Crockett and Sam Houston fighting in their 13 days of glory, it also makes history as one of the best and brightest coalitions to join the Clean Cities Program in 1999. The Alamo Area was designated the 77th Clean Cities coalition on Wednesday, November 10. DOE's Brian Castelli, Chief of Staff for Energy Efficiency and Renewable Energy, traveled to San Antonio to preside over the ceremony, the climax of the United States-Mexico Border Energy Forum VI (see box).

With nearly 1,700 AFVs already in operation, the Alamo Area is well on its way to becoming a top-notch Clean City. San Antonio maintains a fleet of more than 330 propane vehicles. Among the more than 50 Alamo Area stakeholders are several key niche market fleets, including shuttles; school buses (the Northside Independent School District maintains 378 propane buses); transit buses (VIA Transit currently operates 168 propane transit buses); and heavy-duty delivery fleets, including a Clean Cities National Partner, H.E.B Grocery. The Alamo Area Clean Cities Coalition is also working with the five U.S. military installations in the area, including Lackland, Kelly, and Randolph Air Force bases, to further develop the regional compressed natural gas (CNG) refueling infrastructure.

Also unique to San Antonio is its riverwalk, which has allowed the Alamo Area Clean Cities Coalition to expand its membership to riverboat fleets—coalition partner Yanaguana Cruise maintains a fleet of 40 CNG riverboats. The Alamo Area Coalition (housed in the local council

of governments), as a key partner in the new International Clean Transportation Corridor 3 (ICTC-3) and North America's Superhighway Coalition, works closely with the five other designated Clean Cities in Texas on legislative activities and corridor development.



DOE's Brian Castelli presents the Clean Cities plaque to Alamo Area Council of Governments Executive Director, Al Notzon.

L. Lee Leopard, Jr.

## U.S.-Mexico Border Energy Forum VI

The Border Energy Forum, held this year on November 9 and 10 in San Antonio's Camberley Gunter Hotel, is an annual meeting of energy officials from the United States and Mexico. The forum's intent is to foster better cross-border communications and to promote new partnerships for energy and environmental projects. Topics at this year's forum were markets and trade for natural gas and electricity, the effects of deregulation, energy efficiency, and renewable energy technologies. Following the forum, attendees were transported via CNG riverboats (courtesy of Yanaguana Cruise) to the beautiful La Villita Assembly Hall to celebrate the Alamo Area coalition's designation.

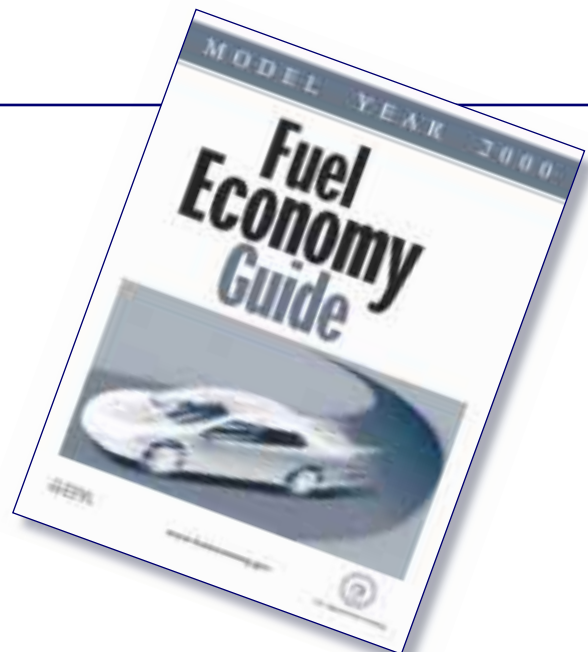


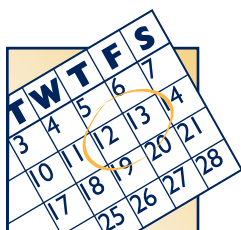
## Hot Off the Press

### MY2K Fuel Economy Guide Hits the World Wide Web

<http://www.fueleconomy.gov>

The Model Year 2000 Fuel Economy Guide is now accessible on the redesigned Web site. Published as a joint effort between DOE and EPA, the guide gives consumers tools to compare the fuel economy of cars, light-duty trucks, minivans, sport utility vehicles, and special purpose vehicles (AFVs and advanced technology vehicles are included). Helpful hints on how to save fuel are also offered, along with instructions on estimating annual fuel cost. Now you can shop online for your new vehicle and compare it to other vehicles at <http://www.fueleconomy.gov>.





## Upcoming Conferences and Events

### Propane Vehicle Conference

February 1–3, 2000  
Austin, Texas  
Contact: RP Publishing  
303-863-0521

### Future Car Congress

April 2–6, 2000  
Sponsored by DOE and administered by  
Society for Automotive Engineers (SAE)  
Crystal City/Arlington, Virginia  
Contact: SAE International  
724-772-7131

### 6th National Clean Cities Conference and Exposition

May 7–10, 2000  
San Diego, California  
Contact: Clean Cities Hotline  
800-224-8437

### The 6th National Clean Cities Conference and Expo

will be held May 7–10, 2000, in San Diego, California. Topics will include policy updates, technology trends, marketing tips, and—new this year—“Clean Cities University,” which will cover basic alternative fuel knowledge and Clean Cities tools. Those new to the industry or old pros looking for new resources will benefit—you won’t want to miss this conference! Check your mailbox for more detailed conference information and registration forms.



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