

U. S. DEPARTMENT of ENERGY

ALTERNATIVE FUEL NEWS

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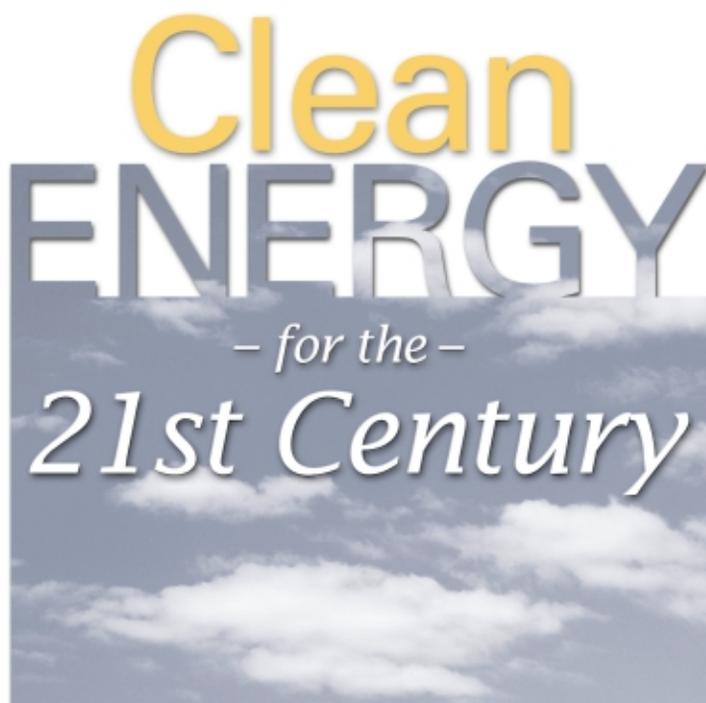
New Directions for Alternative Fuels

A new direction for alternative fuels is emerging within the U.S. Department of Energy (DOE). As a result of public input and new requirements, consideration of a proposed rule for local government and private fleet alternative fuel vehicle (AFV) acquisition requirements has been delayed. In this special issue of *Alternative Fuel News*, we summarize DOE's current position on the local government and private fleet rulemaking that has been under consideration. We'll also take a look at the new area of focus—niche markets—an area that is promising to be another effective way to help meet national targets for displacing petroleum-based fuels.

The Local Government and Private Fleet Rule

The Energy Policy Act of 1992 (EPAAct) requires that replacement fuels comprise 10% of total U.S. motor fuel consumption by 2000 and 30% by 2010. As a means of reaching these targets, the act requires federal and state government and alternative fuel provider fleets to acquire AFVs for their light-duty fleets. It also gives DOE the authority to extend AFV acquisition requirements to certain local government and private fleets, if such extensions seem necessary to meet the replacement fuel targets.

As a part of the rulemaking process, DOE published an Advance Notice of Proposed Rulemaking (ANOPR) about the possible requirements in the *Federal Register* on April 17, 1998 (63 FR 19372). During the ANOPR's 90-day comment period, DOE held public hearings in Los Angeles, Minneapolis, and Washington, D.C. The resulting input has been mixed. Support for increased alternative fuel use remains strong, yet many have questioned whether mandated purchase of AFVs by local government and private fleets is the best way to increase alternative fuel use. Executive Order 13132, "Federalism," (64 FR 43255) requires DOE to consult with state and local governments before issuing a proposed rule that may have substantial effects on the states, the relationship between the federal government and the states, or the distribution of power and responsibilities among various levels of government.



Consequently, in March 2000, DOE announced its plans to delay a rulemaking to allow more time to receive additional public comment, input, and analysis and to carefully evaluate alternative approaches, including those that emphasize voluntary collaboration and incentives rather than mandatory regulation.

The Impact of EPAAct

Existing regulations that govern federal, state, and alternative fuel provider fleets have helped to build an alternative fuel industry. According to DOE's Energy Information Administration, the current inventory of dedicated AFVs stands at nearly 450,000. The number continues to climb, rising at a rate of about 7% per year.

Alternative fuel use has also grown. In 1999, U.S. annual consumption was estimated at approximately 350 million gasoline gallon equivalents (not including the alternative fuel used in blends and oxygenates).

Despite this progress, we're still far short of the targets that EPAAct established. It's now evident that the markets

The Need for Public Input

Executive Order 13132, "Federalism," (64 FR 43255) requires DOE to consult with state and local governments before issuing a proposed rule that may have substantial effects on the states, the relationship between the federal government and the states, or the distribution of power and responsibilities among various levels of government. Over the next several months, DOE will host three public workshops to discuss regulatory options, issues, and possible incentives for alternative fuel use, as well as to gather information from local government and private fleets about their operations and how they would be affected by regulations.

Specific details about the time, date, and location of these workshops, along with additional details, will be found in the *Federal Register* notice that should be printed in May. The details will also be posted on DOE's Alternative Fuels Data Center Web site at <http://www.ott.doe.gov/legislation.shtml>.

In addition to discussing foregoing the local government and private fleet mandate, DOE will seek input on several possible regulatory approaches:

Local Government and Private Fleet AFV Acquisition Program—As described in EPACK, local government and private fleets would be required to obtain AFVs as a percentage of their light-duty vehicle acquisitions beginning as early as 2002.

mandated by EPACK to purchase AFVs are simply too small to meet the 10% and 30% goals. And EPACK's focus on light-duty vehicles limits its applicability. Even if the local government and private fleet rule were implemented, alternative fuel use would increase by about 100 million gallons per year. Although this is a significant number, it is less than 0.1% of the nation's total fuel use projected for 2010. In part, this is because EPACK addresses only vehicle acquisition and not alternative fuel use, which allows many covered fleets to purchase bi-fuel or flexible-fuel vehicles (FFVs) and then operate them on gasoline.

Other issues that reduce the potential impact of the EPACK regulations have surfaced. For example, many fleets are not as "centralized" as previously thought, making it difficult to justify developing the fueling infrastructure to service the fleets. In addition, deregulation in the natural gas and electric utility industry has led to reduced investments in refueling infrastructure.

Fleet Rewards Program—Regulated private and local fleets could opt-in to this program, which would provide "credit" for obtaining AFVs of any size, class, or type, as well as for alternative fuel use.

Replacement Fuel Program—Local government and private fleets could opt-in to this program, which would require a fleet to reduce its petroleum usage in light-duty vehicles by increasing its use of alternative fuels.

Extending Flexible Options to Other Fleets—Under this option, DOE would extend these flexible approaches to state government and fuel provider fleets to encourage alternative fuel use (in addition to AFV acquisition). DOE would try to recognize and reward programs that resulted in the development of fueling infrastructure and the increased use of AFVs in local communities. DOE would also consider inviting noncovered fleets and private citizens to participate in these innovative programs.

Alternative Fuel Urban Transit Bus Acquisition Program—Urban area transit bus operators would be required to obtain alternative fuel transit buses for their fleets.

Through this public process, DOE intends to seek comment on the need for federal regulation, on projected compliance costs of the regulatory options described above, on legally available policy alternatives, and on ways to avoid or minimize conflict between state and federal laws.

If Not Regulations, What?

While the consideration of the local and private rule-making continues, other efforts to promote the use of alternative fuels are intensifying. The analysis of the potential impacts of the local government and private fleet rule, combined with other recent studies, has illuminated other pathways not built on regulations for increasing alternative fuel use.

Niche Markets

Many Clean Cities Coalitions already have successful track records for encouraging the use of AFVs and alternative fuels for special applications—such as taxicab fleets, forklifts, and transit and shuttle buses—that have potential impacts as great or greater than the estimated 100-million-gallon potential of the local government and private fleet rule. The table on page 3 summarizes several options for making a significant impact on fuel use by expanding AFV applications in niche markets.

Potential Impact of Niche Market Applications

Vehicle	Number of Vehicles Needed	% of Total Vehicles on the Road	Alternative Fuel Use/Year (gal)
Transit buses	10,000	20%	100,000,000
School buses	60,000	12%	98,900,000
Average heavy vehicles	39,300	1%	172,600,000
Private fleet light trucks	46,600	2%	46,600,000
FFVs using E85	75,000	10%	40,400,000
Total	230,900		458,500,000

Many of these applications lend themselves well to using alternative fuels because technology is available, fueling stations are centralized, and routes are predictable. And this list is but a small sampling of the types of vehicles that can successfully deploy alternative fuels and the associated technologies.

A New Approach—Activity Centers

The wide range of possible applications, although encouraging, could result in Clean Cities' efforts and other DOE activities becoming quickly scattered and thus ineffective. To avoid spreading too few resources across too many types of projects, DOE is promoting a new way of approaching niche market applications— "activity centers."

Take airports, for example. The various vehicles that service a major airport—parking and hotel shuttles, security vehicles, taxis, baggage tugs, medium- and heavy-duty service vehicles, and staging vehicles—open up many interesting possible applications for alternative fuels. Yet at a given airport, these fleets may be owned and operated by a variety of different entities, complicating the recruitment process for AFV proponents. Instead of approaching these entities one-by-one, a more effective approach would be to meet with decision makers and present the applications as an airport-wide opportunity. If hotel, parking, taxi, and airport operators commit to implementing alternative fuels together, a much stronger case can be made for investing in a fueling infrastructure.

Public transit authorities are another appealing activity center. Along with full-size transit buses, most transit authorities operate a wide range of other vehicles that might be run on alternative fuels—paratransit (disabled access) vans, security vehicles, support and maintenance vehicles, and station cars.

Examples of other potential activity centers might include local governments, corporate/academic campuses, national parks and major theme parks, freight depots and delivery services, and port authorities. Think about your area: can you identify any special niche markets for alternative fuels?

In effect, the niche market activity center approach is a strategy based on developing a sound and sustainable infrastructure plan rather than one based primarily on acquiring a certain number of vehicles in a region. Although both are important, for many this represents a critical shift in the strategic mind-set of alternative fuel marketing, one that could be essential to long-term success.

In the absence of alternative fuel regulations, what might motivate these local government and private fleets to use alternative fuels? Air quality is a big reason. Particularly in many of the medium- and heavy-duty applications, alternative fuels can significantly improve air quality. Also, in the aftermath of the recent gasoline and diesel price increases, fleet managers may take a new interest in diversifying their vehicle types as insurance against future price shocks. Good public image is also very important to many fleets. If communicated effectively, the societal benefits of alternative fuels can translate to good press.

Next Steps

Anticipating the potential impacts and benefits of alternative fuels in many of these specialized applications, DOE plans to provide focused support to help Clean Cities coordinators and stakeholders approach these types of activity centers.

Infrastructure Development

Several projects aimed at developing an alternative fueling infrastructure are moving forward. For example, one approach that has proven successful involves working with independent gasoline distributors to evaluate ethanol fueling equipment as a good economic investment. Particularly in cities with large federal fleets, a strong economic case can be made for building an ethanol infrastructure.

Local publicity campaigns informing private FFV owners about the usability of alternative fuels in their vehicles and the location of nearby stations may also bolster the economic justification for infrastructure investment.

Projects aimed at developing infrastructure for all alternative fuels are making progress. Building natural gas infrastructure along key interstate corridors is one notable example.

Financial Support and Incentives

In an effort to lay the groundwork for more effective AFV market penetration, DOE is also reviewing ways to free up more financial resources and focus its State Energy Program, Broad-Area Announcement, and Clean Cities rebate investments on alternative fuel niche markets and infrastructure development.

The Congestion Mitigation and Air Quality Improvement Program grants awarded to cities in nonattainment areas are another potential resource. DOE is committed to working with the U.S. Department of Transportation to make more of this resource available to AFV projects, along with helping to train Clean Cities stakeholders on how to develop the best possible grant proposals.

In addition, DOE will work with Congress to consider any appropriate modifications to EPCa and to help formulate and support financial incentives to encourage alternative fuel use. Suggestions have been made about ways to shift EPCa's focus away from vehicle acquisition and toward fuel use in order to meet the goals set in the original legislation. Congress is currently considering other financial and tax incentives.

Other Tools

The heightened focus on niche market activity centers will take a front seat in several of DOE's outreach and information dissemination vehicles. A new, interactive success stories section on the Clean Cities Web site allows stakeholders to add information about successful projects in their areas. New publications highlighting niche market activity centers and providing examples of projects in high-potential areas are also under development. Through the Alternative Fuels Data Center, DOE will also support

targeted "Advancing the Choice" events that will bring together stakeholders and fleet peer groups interested in particular segments of the AFV market.

DOE is also investigating ways to provide technical assistance to several of the most promising activity centers through teams of specialists that could help coalitions evaluate opportunities and carry out successful projects.

Meeting the Promise

The promise of alternative fuels for meeting the nation's needs for energy security, environmental quality, and personal mobility is as exciting as ever. The accomplishments made by public and private stakeholders since EPCa was enacted in 1992 have laid the groundwork for a strong alternative fuels marketplace. They have also provided new insights about the most effective approaches and roles for governments to play in supporting the shift from near total dependence on imported petroleum. Focusing public and private resources on voluntary mechanisms that have the greatest potential impact, while keeping an open mind about appropriate regulations, should allow for significant progress toward an independent and efficient national energy economy. At DOE, we invite your participation and input as we craft new directions for the nation's transportation future.

Additional Information Sources

The National Alternative Fuels Hotline:
1-800-423-1363

The Alternative Fuels Data Center:
<http://www.afdc.doe.gov>

The Clean Cities Web site:
<http://www.cities.doe.gov/>

