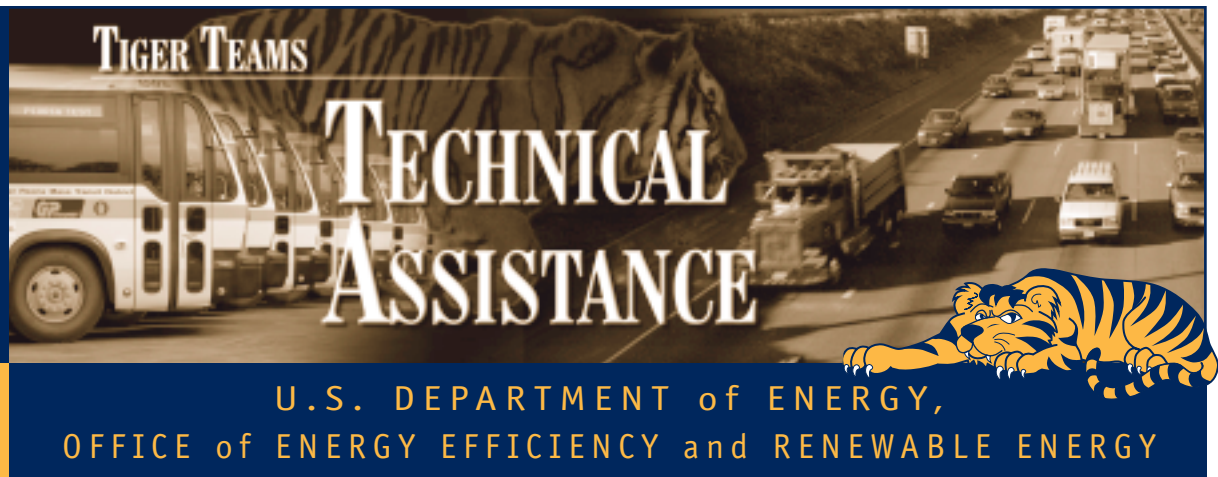




Alternative Fuel
Information Series

April 2002



Tiger Teams Help Coalitions Solve Technical Issues

U.S. Department of Energy (DOE) Clean Cities Program coalitions across the nation have successfully implemented alternative fuel vehicles (AFVs) into local fleets and helped their constituents become more aware of the benefits of alternative fuels and AFVs.

However, many coalitions have experienced problems that have slowed progress in incorporating AFVs into their regions. The Clean Cities Program has developed a project to help. Operated by the National Renewable Energy Laboratory (NREL), the Clean Cities Technical Assistance Project, better known as Tiger Teams, provides technical expertise in alternative fuel and AFV use to Clean Cities that are dealing with challenging problems.

DOE and NREL have selected groups of experts and firms based on their specialized hands-on experience with specific AFV niche market applications. Expertise in compressed natural gas (CNG), liquefied natural gas, liquefied petroleum gas, ethanol, as well as electric vehicles is represented, as is experience in light-, medium-, and heavy-duty vehicle applications (such as taxis, cargo delivery vehicles, and school buses).

What kind of help is available?

Tiger Team experts help Clean Cities organizations solve problems for which they have not been able to find solutions on their own—especially if the solutions apply to other Clean Cities. The following types of projects are considered for Tiger Team assistance:

- **Technical problem solving, vehicle operations:** These problems can be related to vehicle performance or drivability, safety issues, maintenance, driver acceptance, lack of training, and implementation of AFVs at specific sites.
- **Technical problem solving, infrastructure operations:** These problems can be related to fueling station design and site issues, interaction with alternative fuel providers and fire safety code officials, fueling station

performance and maintenance requirements, and user and operator training.

- **Evaluation of potential opportunities:** Clean Cities coalitions that are working to develop complex AFV projects (transit, airport, etc.) may request technical assistance from Tiger Teams if expertise is not available from local or regional resources or stakeholders. Tiger Team experts can help evaluate local market conditions pertinent to the project, conduct a technical assessment of infrastructure and stakeholder capabilities or needs, and determine project feasibility. For viable projects, Tiger Teams help coalitions develop an AFV action plan that identifies specific implementation steps and stakeholder responsibilities.

Tiger Teams will work directly with Clean Cities coordinators, stakeholders, and partners to “help them help themselves.” Teams will not be deployed to perform general maintenance or repair or to conduct sales calls. When asking for Tiger Team assistance, requestors must clearly demonstrate that all appropriate efforts were made at the local or regional level to help solve the problems.



School Bus Fleet Magazine/PIX 10923

From how to obtain school bus funding to AFV driver's training, Tiger Teams help coalitions solve problems.

What types of projects are eligible for assistance?

Since the program's inception in 2001, the Tiger Teams have participated in a wide range of projects. They include:

- Studying the feasibility of a national AFV procurement process for commercial airports to make buying AFVs easier for airport officials based on the U.S. General Services Administration's vehicle specification schedules.
- Designing an accessible card reader system to allow AFV operators the convenience of paying at the alternative fuel pump.
- Developing an "Alternative Fuel School Bus Proposal Tutorial" to help states and school districts prepare effective proposals that will increase their chances of securing funding.
- Designing the California AFV and Fueling Infrastructure Partnering Workshop to provide fleet managers and fuel providers with a forum for identifying their needs, facilitating the necessary fueling infrastructure, and discussing other pertinent issues.
- Producing a comprehensive resource guide that points AFV transit managers and maintenance personnel to sources of AFV-related education and training, including fuel theory, emergency response procedures, facility design criteria, fire safety and code issues, funding, and emission benefits.
- Developing facility specifications to modify the Washington, DC, Metropolitan Area Transit Authority's bus maintenance facilities to include a new CNG fueling facility.

How do we apply for assistance?

Clean Cities coalitions can request assistance from the Tiger Teams by filling out a form available from the Clean Cities Web site at www.cities.doe.gov/tiger.html and submitting it online. The Web site offers guidance on how to prepare your request.

How are requests evaluated?

Each request for technical assistance is evaluated according to the following criteria:

- Is the problem well described and defined?
- Are the stakeholders and contacts identified and involved with the attempted resolutions to date?
- Does this request fall within the scope of the Technical Assistance Project, and is it substantial enough to warrant team deployment at this time?
- Have local resources and solutions already been applied or exhausted? Does the Technical Assistance Review

Committee (TARC) have the expertise to assist with the problem?

- Is the estimated number of hours of technical assistance adequate to resolve the problem? If not, how much time will be required?
- How much will it cost to address and resolve the problem?
- Does the TARC have adequate funding to resolve this problem?
- Would the resolution of this problem be applicable to other sites?
- Would a partial resolution be adequate at this time?

How are selected projects structured?

Requests selected for assistance are defined through discussions with the requestor, the Tiger Team expert, and others who are knowledgeable about the problem and the solutions attempted so far. The work will proceed through teleconferencing and on-site meetings between the Tiger Team expert and local stakeholders.

The Tiger Team member will keep DOE and NREL informed about the progress of the project, and, if necessary, DOE and NREL representatives will visit the site to provide additional help. At the conclusion of the project, the Tiger Team expert will submit to NREL, DOE, and the appropriate DOE Regional Office a final report that summarizes the problem's resolution or recommended actions.

How can we start a project?

If your coalition has a stubborn operational problem or faces a critical AFV technical issue (especially one with national implications) that local or regional resources have been unable to resolve, we encourage you to work with your local Clean Cities coordinator to submit a request for assistance.

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