

## Clean Cities Around the World

Clean Cities International (CCI), modeled after the U.S. Department of Energy's (DOE) Clean Cities initiative, facilitates the exchange of information on alternative fuels for the transportation sector to interested countries around the globe. The benefits of using alternative fuels are clear—all can profit from cleaning the air, producing and using fuels domestically, and enhancing local economic activity. CCI seeks to use the successful experience in North America to help international communities realize these benefits.

CCI works with foreign governments, industry, and nongovernmental organizations to help establish foundations for viable alternative fuel markets and ensure safe and quality performance. CCI has already partnered with several countries and more partnerships are on the horizon.

### Background

Clean Cities takes a unique, voluntary approach to alternative fuel vehicle (AFV) deployment. It works with coalitions of local stakeholders to help develop local strategies and initiatives to integrate AFVs into the local transportation sector. Clean Cities coalitions work with the public and private sectors and individuals to help them establish foundations for alternative fuel markets and encourage others to see AFVs as viable options to integrate with the mainstream transportation sector. By encouraging AFV use, Clean Cities helps to achieve energy security and environmental quality goals on local, national, and international levels.

### Successful Activities

To date, CCI has worked with officials from Bangladesh, Brazil, Chile, China, Costa Rica, Egypt, the European Union, Guatemala, India, Mexico, Nepal, Peru, the Philippines, and Trinidad and Tobago on alternative fuel transportation issues. Working with CCI engages countries at various levels of involvement, from official designation of a city, such as in Santiago, Chile; to AFV



Current Clean Cities International Activities

training programs in Delhi, India; assessments of emerging markets in Manila, Philippines; program plan development in Mexico City, Mexico; review of codes and standards in Dhaka, Bangladesh; and peer exchange with the European Commission CIVITAS (The Institute for the Study of Civil Society) program. CCI aims to help each country assess its specific situation to see how the program can best offer its strengths and services to aid that country. Although membership does not guarantee funding, CCI members are eligible for assistance to find resources in the multidonor sector for AFV program development and CCI expert technical assistance.

### Importance of Partnerships

With nearly a decade in the domestic and international arenas, CCI recognizes the crucial roles many of its partners have played in successful projects. CCI has cultivated strong, long-term relationships with U.S. equipment and engine manufacturers that lend expertise in determining market opportunities in the international marketplace and supply several cost-share initiatives. Successful foreign partnerships through the CCI program have developed key international contacts and additional local cost share in the transportation sector. In cases where CCI has lacked funds to meet the needs of an international partner, the program's compelling capacity to leverage funding



with U.S. and multilateral financing organizations has helped CCI use its available funds to the maximum. CCI has successfully leveraged funds from \$500 to millions of dollars from organizations such as the U.S. Agency for International Development (including missions in Dhaka, Delhi, and Manila), the U.S.-Asia Environmental Partnership, the National Energy Technology Laboratory, the U.S. Department of Commerce, the U.S. Trade and Development Agency, and many private companies.

### Accomplishments

- The first international “Clean City” was established in Santiago, Chile, in 1999.
- CCI is fostering stakeholders and coalition development in Delhi, Dhaka, Manila, Mexico City, and Lima-Pucallpa.
- CCI educated nearly 450 technicians, drivers, policy-makers, and educators on AFVs, stations, emissions, and policies to ensure effective and safe programs.
- CCI educated more than 100 people from 12 countries on U.S. trade and technology tours to increase partnership opportunities for business and industry and promote global adoption of AFVs.
- CCI has sent technical experts all over the world. For example, some were sent to review Bangladesh codes and standards to encourage safer use of natural gas in transportation; others conducted an alternative fuel station assessment and gauged potential use in Manila.
- CCI cosponsored a mini-trade show on U.S. AFV technologies in Dhaka.
- CCI has hosted workshops on “How to Join Clean Cities” at National Clean Cities conferences and in Bangladesh.

### Plans for Clean Cities International

CCI receives many requests for assistance each year and has devised criteria to focus activities in emerging

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#### A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

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### Santiago: The First International Clean City

In 1999, DOE offered to share the Clean Cities model with Santiago, Chile. Santiago was poised to benefit from the model because of its strong economy and because the first natural gas pipeline from Argentina to Chile was completed in late 1995. In the ensuing years, CCI cooperated with U.S. industry to send personnel to Santiago to help the Chilean government establish a Clean Cities coordinator and coalition. Officials from Santiago and its sister city, Chicago, Illinois, signed a Memorandum of Understanding in which they agreed to proactively share information about each city's progress. In 1999 and 2001, Chilean delegations participated on trade missions to the United States that showcased natural gas transit bus and airport technologies. As a result, the Chilean National Environmental Commission and the Office of the Governor of Santiago implemented a \$1.2 million subsidy in 2000 to purchase natural gas buses. There are now more than 4,900 natural gas vehicles and 12 stations in Chile, and the coalition is self-sustaining.

markets to help ensure high levels of success and allocate limited program resources.

CCI provides a framework for coalitions to develop a strategic program plan and partnerships to guide coalitions on how to become members. It works to expand local AFV markets by encouraging each stakeholder to commit to activities that strengthen the markets. This framework, called the “Clean Cities International Roadmap,” includes six steps a coalition can take to become a member of the network of CCI coalitions:

- Step 1. Form a coalition and hold stakeholder meetings
- Step 2. Appoint a coordinator
- Step 3. Establish stakeholder commitments
- Step 4. Develop a program plan
- Step 5. Celebrate membership
- Step 6. Implement the program plan.

Developments and activities in the international arena can be tracked on the CCI Web site:

[www.eere.energy.gov/cleancities/international](http://www.eere.energy.gov/cleancities/international)

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