US DOE Clean Cities Coalition Update





Clean Cities Program Overview

Fall 2010

Contact Information:

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The Department of Energy's mission is to advance the national, economic, and *energy security* of the U.S; to promote *scientific and technological innovation* in support of that mission; and to ensure the environmental cleanup of the national nuclear weapons complex.

The Clean Cities' mission is to advance the energy, economic, and environmental security of the U.S. by supporting local decisions to adopt practices that contribute to the reduction of petroleum consumption in the transportation sector.



Petroleum Displacement Methods



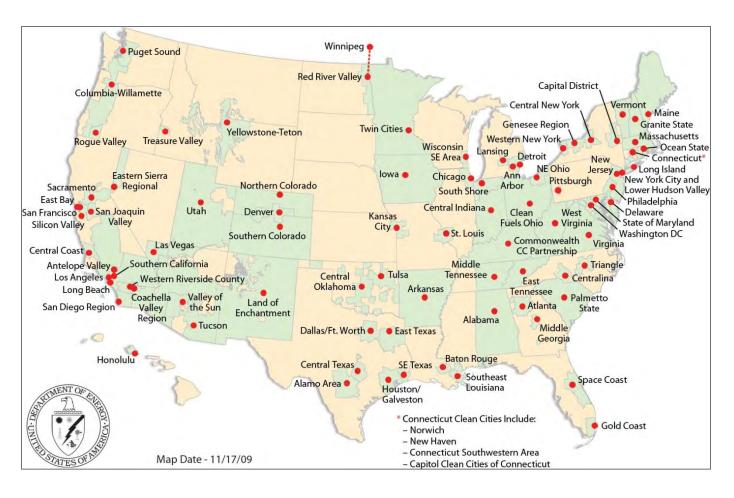
- Replace petroleum with alternative fuels and low-level blends.
- Reduce by promoting energy efficiency in vehicles through advanced technologies and more fuel efficient vehicles.
- Eliminate by promoting idle reduction, greater use of mass transit, trip elimination, and other congestion mitigation approaches.



Clean Cities Today



- 87 active coalitions in 45 states
- 632,000 AFVs using alternative fuels
- 5,600 AFV stations
- 6,500+ stakeholders



Clean Cities Stakeholders



Coalitions are made up of local and national stakeholders.

- Over 4,000 local stakeholders
- 49% private stakeholders





















Clean Cities Strengthens Markets



- The Clean Cities program, and local coalitions in particular, provides information and resources to stakeholders and the general public enabling them to make informed decisions.
- Education and outreach are important activities for coalitions as well as the ability to leverage funding from public and private resources.
- Clean cities:
- ✓ Creates jobs and commercial opportunities
- ✓ Educates fleets, elected officials, and the general public
- Encourages the use of alternative technologies
- ✓ Expands infrastructure
- Increases demand and help develop market-driven products
- ✓ Increases public awareness
- ✓ Supports regulated fleets



Five technology areas supported by the Clean Cities program

1. Alternative Fuels & Vehicles

- Biodiesel (B100)
- Electricity
- Ethanol (E85)
- Hydrogen
- Natural gas
- Propane

2. Fuel Blends

- Biodiesel/diesel blends (B2, B5, B20)
- Ethanol/gasoline blends (E10)
- Hydrogen/natural gas blends (HCNG)

3. Fuel Economy

Fuel efficiency Behavioral changes Vehicle maintenance initiatives Vehicle miles traveled (VMT)

4. Hybrids

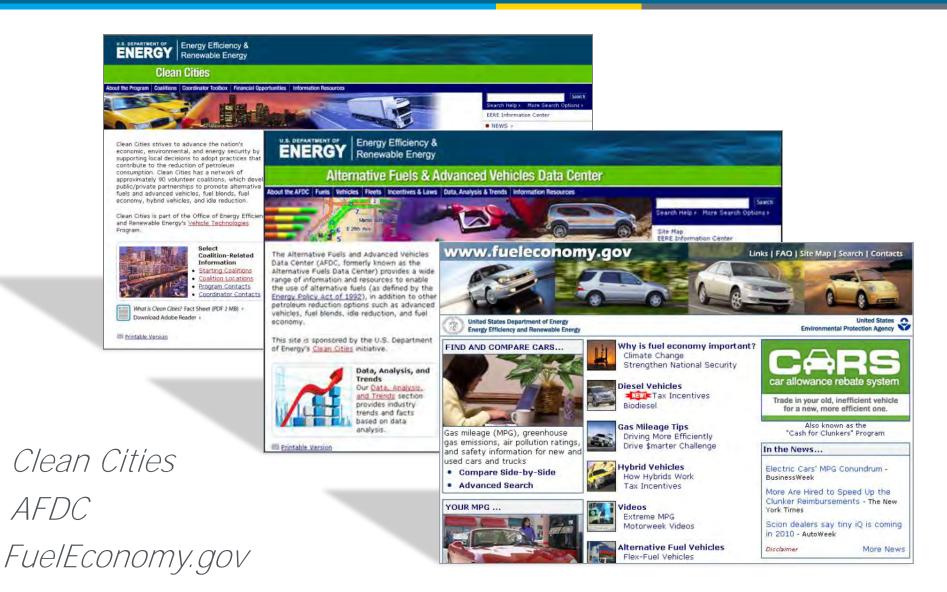
Light- and Heavy-duty HEVs PHEVs

5. Idle Reduction

Heavy-duty trucks School buses Truck stop electrification

Clean Cities Web Resources







Recent Funding Opportunities

Clean Cities FY09 Petroleum Reduction Technologies DE-PS26-09NT01236-00



Clean Cities Projects for the Transportation Sector Area of Interest 1-3:

\$13.6 million of Federal funds covered projects for:

Infrastructure

Vehicles





West Coast Infrastructure Projects

The National Biodiesel Foundation (NBB) will install seven biodiesel blending terminals and provide biodiesel to distributors in **California**, New Jersey, Pennsylvania, Illinois, Texas, and Virginia.

Temecula Valley Unified School District will install CNG dispenser to support the district's fleet conversion from diesel to CNG buses.

SCAQMD will install new liquefied natural gas storage tank and dispenser at the Los Angeles / Ontario International Airport.



West Coast Vehicle Projects

Clean Energy will purchase 71 CNG vehicles for airports in **Los Angeles**, Atlanta, Austin, Dallas, Houston, San Antonio, and Santa Ana.

SCAQMD will manage an incentive buy-down program for CNG taxicabs and shuttle vans serving the California South Coast Basin.

The Regents of the University of California and University of California-San Diego will purchase five electric hybrid CNG microturbine buses to support campus commuters.



West Coast Education Projects

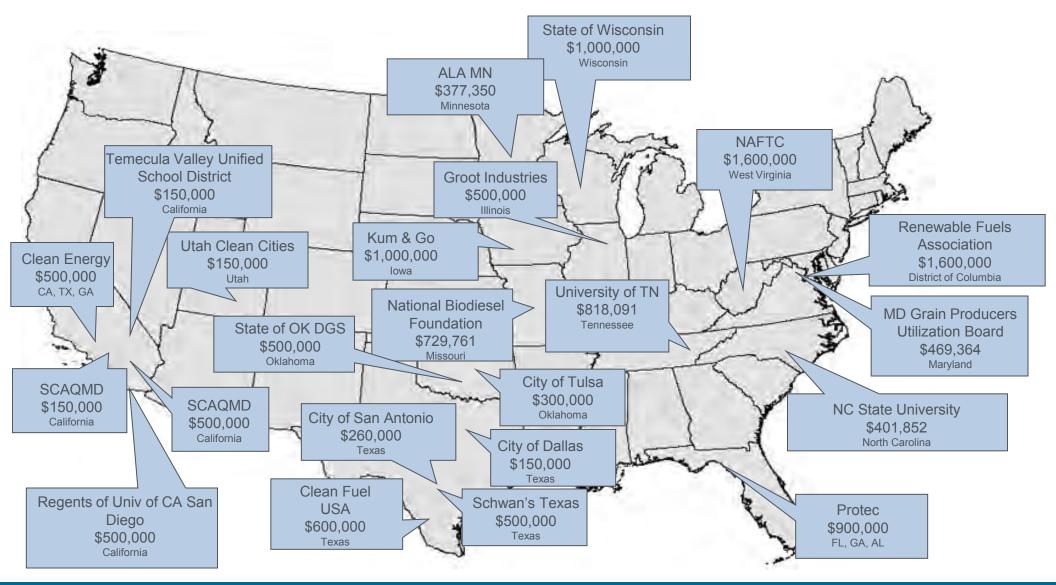
North Carolina State will hold 48 workshops across the country to raise awareness about alternative fuels and advanced transportation technologies.

West Virginia University Research Corp. (NAFTC) will support Odyssey Day events and develop classroom materials.

The Alternative Fuel Trade Alliance (RFA, NBB, the Clean Vehicle Education Foundation, and the Propane Education and Research Council) will host 45 Alt Fuel training workshops. Locations include: •Antelope Valley, San Diego, and others TBD

Clean Cities FY 09 Awards Geographical Distribution (AOI #1-3)







Clean Cities Projects for the Transportation Sector Area of Interest 4:

\$300 million of Federal funds covered projects for:

Infrastructure

Vehicles





West Coast Projects

SCAQMD will build LNG station in Las Vegas and deploy 48 HD LNG Trucks for UPS.

SCAQMD will manage an incentive buy-down program for over 200 HD LNG Drayage trucks serving the ports of LA & Long Beach.

SANBAG will deploy over 200 natural gas trucks for Ryder Truck in Southern CA. They'll will make public two LNG/CNG fueling stations in Orange and Rancho Cucamonga.



West Coast Projects

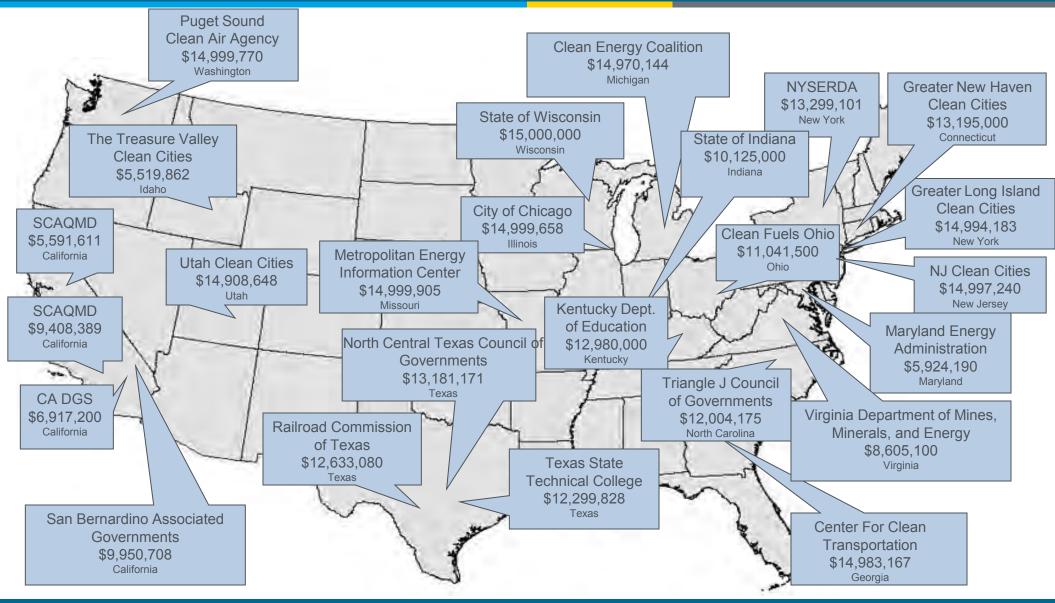
California Department of General Services will use Propel Fuels to provide E85 and Biodiesel at 75 public locations in CA.

Puget Sound Clean Air Agency will harness biogas made from waste products and solar energy to power electric vehicles.

Treasure Valley Clean Cities Coalition will deploy 28 HD CNG trucks and make available to the public CNG at two fueling stations.

Clean Cities Recovery Act Awards 25 Projects ~\$300M DOE ~\$500M Cost Share





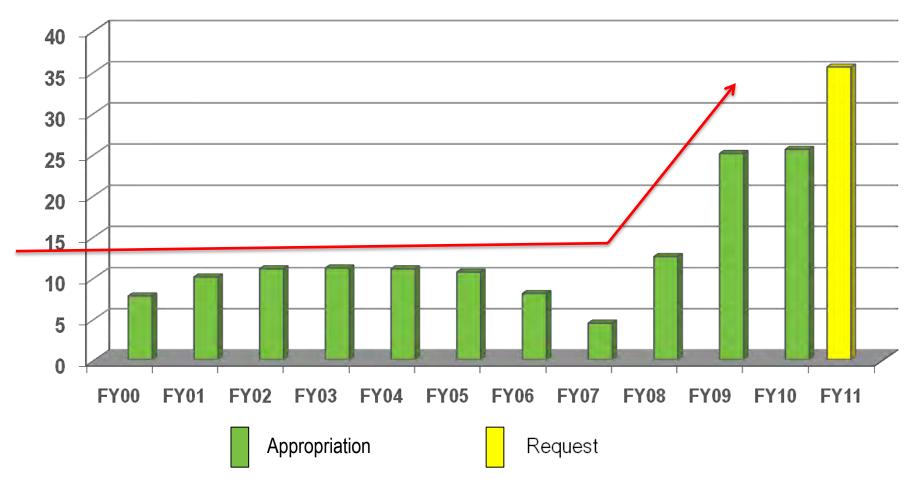


Clean Cities: Next Funding Opportunity FY11 & FY12

Budget History (not including \$300M funding from ARRA)



* ARRA \$300M is > **200%** of the Clean Cities budget spent in the **last 10 years**



Clean Cities Budget

\$ Millions



FY 11 Proposed Clean Cities Budget language and the next Solicitation

- Proposed FY 2011 funding of \$35.5 million includes \$20 million for support of transportation electrification-related infrastructure activities.
- These efforts include market analysis that will identify communities and Regions where aggressive infrastructure deployment efforts will have the greatest chances for success and determine which technologies and vehicle charging systems are market ready, practical, and safe for widespread introduction.



FY 11 Proposed Clean Cities Budget language and the next Solicitation

 Technical and financial assistance programs will be developed to accelerate the introduction of these technologies, and targeted consumer education and outreach efforts will focus on helping drivers and fleet operators choose electric-drive vehicles and charging systems that best suit their needs while also training the support-service providers that will be needed to install, maintain, and repair these systems.

• Activities supporting codes and standards that facilitate the introduction of electric drive vehicles and infrastructure will also be conducted.



Potential Funding Categories for FY 11 Solicitation

1. Infrastructure for Alternative Fuels:

- fund a percentage of the infrastructure cost associated with developing alternative fuel fueling capability.

2. Incremental Cost of Alternative Fuel Vehicles

- fund a percentage of the incremental cost associated with purchase of dedicated alternative fuel vehicles and/or advance technology vehicles.

3. Category du jour

- Electrification activities (which may be included in the above or separately)



Potential Schedule for FY 11 Clean Cities Program Solicitation

- 1. NETL will have Project Management and Administrative oversight
- 2. Estimated Date to Issue Solicitation: Dec 2010- Jan 2011
- 3. Estimated Due Date For Proposals: Feb 2011- Mar 2011
- 4. Estimated Award Date: Summer 2011
- Estimated Funding Available: \$24-30 million in DOE funds over 2 year funding period (i.e. \$12-15 million in FY 11 funds & \$12-15 million in FY 12 funds).

Note: All funding estimates are contingent upon final Federal budget appropriations for FY11 and future fiscal years.

Project Management Centers



Staff at the National Energy Technology Laboratory (NETL) Project Management Centers offer guidance to coordinators in their regions, monitor regional coalition activities, and foster relationships between coordinators in neighboring states.

Mike Bednarz

Mike is the Clean Cities Project Manager for the Western Region and point of contact for Clean Cities' coalitions in *California and Hawaii*. His responsibilities include facilitating the efforts of the Clean Cities coalitions to increase the use of alternative fuels and vehicles through the development of public-private partnerships. Along with traditional project management duties, Mike facilitates technology deployment strategies, evaluates proper alternative fuel technologies, determines resource availability, provides technical assistance, contributes areas of expertise, and supports transportation market transformation activities.

Mike presented at national conferences such as the Alternative Fuel Vehicle Institute (AFVI) and National Biodiesel Board (NBB), as well as regional meetings such as the United States Environmental Protection's West Coast Diesel Collaborative in 2007 and 2008. At the National Energy Technology Laboratory, Mike also serves as the lead for the project management center's communication support services team.

Michael Bednarz

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West Virginia

Pennsylvania

Southern California Region **Clean Cities Coordinators**





Coachella Valley Clean Cities Coalition Co-Coordinators Suzanne Seivright & Richard Cromwell III Website: http://www.c3vr.org/

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Long Beach **Clean Cities Coalition** Coordinator Website: http://www.longbeach.gov/pw/longbeachcleancities/default.asp

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Southern California Association of Governments Clean Cities Coalition **Co-Coordinators** Matt Horton & Rosanna Bayon Moore Website: http://www.scag.ca.gov/

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Southern California Region Clean Cities Coordinators





Western Riverside County Clean Cities Coalition Co-Coordinators Website: <u>http://www.wrcog.cog.ca.us/</u>



Los Angeles Clean Cities Coalition Coordinator Website: http://www.environmentla.org/Clean%20 Cities/cleancitieshome.htm

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Clean Cities Web site <u>www.eere.energy.gov/ccities</u>

Alternative Fuels & Advanced Vehicles Data Center Web site <u>www.eere.energy.gov/afdc</u>

Clean Cities Coordinator Contact Information and Coalition Web sites <u>http://www.afdc.energy.gov/cleancities/progs/coordinators.php</u>

DOEEERE Information Center and Technical Response ServiceWeb Site:http://www.eere.energy.gov/afdc/informationcenter.htmlPhone:1-800-EERE-INF (1-877-337-3463)Email:technicalresponse@icfi.comHours:9:00 a.m. – 6:00 p.m. EST

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Thank you for the opportunity to share our success stories...



Do you have any questions ???



Looking forward in Seeing you @

EPA Clean Diesel 10 October 19-20, 2010 in Washington, DC