

2014 Advancing Alternative Fuel >>> Markets Adoption and Growth

**Greater Washington Region Clean Cities
Coalition**

Project ID # TI037

Ronald S. Flowers

6/19/2014



“This presentation does not contain any proprietary, confidential, or otherwise restricted information”

Clean Domestic Fuel Council



Primary Leadership Team

Ron Flowers, Greater
Washington Region Clean
Cities Coordinator

--

Chris Rice, Maryland Clean
Cities Coordinator

--

Alleyn Harned, Virginia
Clean Cities Coordinator



Project Overview

➤ Timeline

- Start: February 1, 2013
- Finish: January 31, 2015
- 31% complete, based on budget spent

➤ Budget

- Total project funding
- DOE Share: \$500,000
- Local Share: \$156,152
- Funding in FY 13: \$152,671
- Funding for FY 14: \$347,329

➤ Partners

- State, County & City Governments
- Local & Regional Businesses
- Non-profits



Project Overview - Major Barriers

CNG

- Lack of Infrastructure & available land in region
- Lack of available high pressure pipelines in region
- Limited CNG OEM options
- Re-education needed to address past negative fleet experiences in region
- Cost of shop upgrades

Biodiesel

- Biodiesel price fluctuations
- Cost of biodiesel can be higher than conventional diesel

Ethanol

- Ethanol price fluctuations
- *Insufficient E85 available*
- *Consumer awareness and dealer acceptance*



Project Overview - Additional Barriers

Propane

- Lack of Infrastructure
- Lack of permit regulations in DC
- Limited OEM options

Electric & Hydrogen

- Higher upfront costs of EVs and infrastructure and failure to fully utilize life cycle cost analysis
- Lack of effective use of cooperative and volume purchasing
- Lack of tax and non-tax incentives compounded by expiring federal tax credits
- Range anxiety and limitations
- Uneven regulatory practices such as reselling authorization

Targets

Our targets are: Reducing the region's greenhouse gases levels, a reduction in oil use per day, and greater access to fueling infrastructure.



Objectives/Relevance



Establish focus groups of local, state, and regional partners to address and develop policies and initiatives to positively impact viable growth of alternative fuels usage within the project region.

Develop, and where appropriate, disseminate barrier reduction initiatives that will identify, examine and, in many cases, mitigate or eradicate current impediments to widespread adoption of alternative fuels.

Identify and document areas of needed training, and deliver appropriate training for in-service personnel and first responders.

Objectives/Relevance



Develop opportunities for the necessary on-going training of these audiences within the region through partnerships developed with industry and community colleges.

Develop and implement programs to further develop the market and attract consumers, fleets and other key target audiences which, in turn, impact expansion of alternative fuels usage and availability in the region.

Approach

Establish Work Group Teams for each alternative fuel type to address issues that impede the increased use of alternative fuels and vehicles:
Policies, Barriers, Safety & Training and Marketing

Work Groups include:

- Propane
- Compressed Natural Gas
- Bio-Fuels (Ethanol & Biodiesel)
- Electric & Hydrogen



Propane and CNG are our primary focus, and Electric Vehicle/Hydrogen and Bio-diesel are secondary



Collaboration/Partnerships

- Virginia Clean Cities
- Sustainable Energy Strategies, Inc.
- Greater Washington Region Clean Cities
- Innovation Drive
- Roush CleanTech
- Green Parking Council
- Maryland GPUB
- TFC Recycling
- Virginia Natural Gas
- PAPCO
- Propane Education & Research Council
- Maryland Clean Cities
- Alliance AutoGas
- DC Water
- Eaton Corporation
- Trillium
- Washington Gas
- Crystal Gateway Marriott
- Metro Washington COG
- NGVAmerica
- Clean Energy
- DC Government



Accomplishments & Progress



The four (4) Workgroup meetings brought together more than 125 professionals from the alternative fuels industry as well as fleet and government entities.

Maryland has proposed a regulatory change to allow splash blending E50-E85.

DC Government provides access to one (1) E85 Station and two (2) Biodiesel Station for federal fleet

New Propane Station opens for Prince George County, MD Fleet.

E85 Station opens in Cabin John, MD

CNG Stations opens at Dulles and BWI Marshall Airports

Under DC Mayor's "Sustainable DC Omnibus Act of 2013" a 50% Tax Credit on equipment and labor cost is proposed for vehicle conversions and a 50% Tax Credit for infrastructure equipment and labor cost.

GWRCRC hosted 7 of 8 planned events.

EV initiative to expand 8-State MOU to include DC and VA in regional effort to increase ZEVs by 2025

Accomplishments

CNG & Propane Technical Training



Accomplishments

Virginia Clean Cities hosted a “School Bus Case Study” webinar to highlight the Mesa, AZ Public School fleet of 89 propane buses. This served as a way to provide concrete data and information to fleets in the project region interested in utilizing propane as an alternative fuel.

Virginia Clean Cities presented at Richmond High School and gave a presentation to students on EVs, providing insights on barriers to deployment and development.

Several hundred fleet professionals took part in 3 days of educational workshops during the January 27-29, 2014 Washington DC Auto Show.

Virginia - Administration has determined that the hybrid tax on vehicles shall be repealed.



Accomplishments

E85 Station Cabin John, MD. & CNG Station
Chantilly, VA.



Accomplishments

Educational Workshops at Washington, DC Auto Show



Alternative Fuel Market Expansion Potential

During the months ahead we will be:


Working on a path for uniform fire and building codes for alternative fuel infrastructure template based on current consensus

Complete 3 more regional alternative fuels technician training program for technicians and first responders

Develop regional alternative fuels outreach template for consistency of message across region

Complete regional access/model for cooperative purchases related to alternative fuel vehicles and equipment

Review, develop, and encourage the appropriate best practice models for conversion of diesel and gasoline engines to alternative fuels for our regional stakeholders

Complete a regional strategic plan covering the short and long term deployment of AFVs, infrastructure, and reduction of petroleum use 

Alternative Fuel Market Expansion Potential

In the coming year:

- As the project grows, ongoing successes will be drawn from the work of the project partners and prior achievements. For example, the success of CNG Tariff initiated by Washington Gas will guide discussions and guidance on policy and infrastructure implementation barriers that may be faced by other area utilities on tariff matters.
- Primary safety and training measures developed through this grant may serve as the examples to development of further measures not only within the project region, but also across the nation.
- The project partners are pleased with the progress made under the current efforts, as momentum continues building across all regions of the project area and within the working groups addressing the stated scope of work.



Alternative Fuel Market Expansion Potential

- Continued work on the entire project has allowed all participants to build off collaboration within each working group, and has created a more holistic approach to the overall goals.
- Through Working Group participation, a higher level of synergy has contributed to an enhanced level of project outcomes.
- We continue to see increased interest and participation in all working groups and amongst project participants.
- We have sustained our goal of advancing the project's reach through all targeted audiences, and forecast that this reach will continue throughout the duration of the project, and after its conclusion.



Project Summary

- GWRCCC/MCC/VCC established 4 regional working groups to address barriers to expanded use of AFVs and advance technologies.
- Working groups outcomes should result in a regional strategy that will significantly increase alternative fuel use and greater emissions reduction.
- Working groups are already seeing results from their collaborative efforts – proposed rules and legislation in MD, VA and DC.
- More than 6 events of technical trainings have educated over 225 regional technicians and fleet managers.
- Project demonstrates the need to continue the Work Group Teams and the Clean Domestic Fuel Council long after the project concludes.





Contact Information

Ronald S. Flowers, Executive Director

Greater Washington Region Clean Cities Coalition

Mailing Address: P.O. Box 73402

Washington, DC 20056-3402

2000 14th St., NW | Suite330 | Washington, DC 20009

(202) 671-1580 - Office ronflowers@gwrccc.org