2012 DOE Vehicle Technologies Program Review Presentation





Southeast Propane Autogas Development Program
VA Department of Mines, Minerals and Energy
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Virginia Clean Cities at James Madison University

Project ID #ARRAVT065

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

Overview

Timeline

- December 7, 2009
- December 6, 2013
- Less than 50% Complete

Partners

- Project Lead: DMME, Division of Energy
- Project Manager: Virginia Clean Cities at James Madison University
- Strategic Partners:
 - Alliance AutoGas
 - Municipalities & private transportation companies
 - Clean Cities Coalitions
 - Formation (formerly MSM Communications)

Barriers and Risks

Barriers

- Lack of familiarity with propane autogas as an alternative fuel
- Limited EPA certifications

Top Risks

- Quality Control
- Reporting compliance
- Improper training and education
- Conversion pace

Budget

 Total project funding \$8,605,100 grant monies \$21,346,311 cost-share About \$30,000,000 total project value

Relevance

Project Objectives

- Convert over 1,200 vehicles from gasoline to propane autogas in order to reduce U.S. dependence on imported petroleum, increase fuel economy and improve emissions.
- Install propane fueling infrastructure that supports project vehicle refueling, and ultimately, general public refueling.
- Ensure that propane autogas vehicles run on propane autogas to the greatest extent possible and collect quantitative and qualitative data to document the success of the program
- Create and retain jobs in the areas of:
 - Conversion center and fleet technician personnel
 - The procurement and distribution of propane autogas
 - The administration of the integrated program of Alliance AutoGas
 - Marketing and communications specialization for alternative fuels and propane autogas fuel

Relevance

Project Objectives (continued)

- Provide appropriate education and training for partners associated with this
 project to ensure the vehicle conversions and maintenance are performed
 safely, beyond the scope of the project
- Promote individuals associated with this project and provide education in the larger community about propane autogas viability and available technology
 - Create immediate and sustainable interest in propane autogas for fleet applications from Maryland to Florida to Mississippi
 - Change the way fleet operations as well as the public view propane autogas vehicles and alternative fuels in general, from a difficult logistical challenge to a logical business decision with direct, positive economic impacts
 - Address ability to utilize existing fleet vehicles, and educate about fuel cost savings

Approach

Month/Year	Project Milestone		
May-12	100% conversion equipment ordered		
	90% vehicle deployment		
	100% infrastructure installment complete		
	100% infrastructure NEPA EQs submitted and approved		
	Continued periodic audits of conversion system installation		
	Continued development of fleet written case studies		
	First video case study complete		
	Continue regional Roadshow Series		
	Continued online marketing campaign		
	Continued regional public relations campaign		
Jun-12	100% vehicle deployment		
Juli 12	100% Fleet maintenance training complete		
Sep-12	ep-12 Second video case study complete		
Feb-13	Begin Phase 2 of Roadshow Series		
	Begin Phase 2 of fleet written case studies		
Aug-13	100% Roadshow Series complete		
Sep-13	Sep-13 100% outreach/education activities complete		

Technical Accomplishments and Progress

Technical Accomplishments and Progress - Previous Year Activities Summary

Month/Year	Project Milestone	Progres To-Date as of May 15, 2012
May-11	Vehicle conversions begin 2nd phase, with initial beta test	Beta test completed and quality control measures
	at start	documented and comprehensive Conversion Center
		training completed
	Vehicle and fueling station decals sent to all fleet partners	Decals placed on all converted vehicles and installed
		fueling stations
	Public and private websites launched for Program	Public website (public education) and private website
		(track program success) launched
	Completion of equipment order	All equipment for original fleets ordered
Jun-11	Begin full-scale PR campaign with press releases, media	From June 2011 to current, efforts include weekly
Juli-11	pitching and events	media pitching, securing VCCmedia interviews,
		distributed 8 press releases
Sep-11	Final equipment order and audit	VCC audit of remaining equipment completed
	100% infrastructure installment for original fleets	All anticipated onsite fueling stations for original fleets
Nov-11	completed	installed
	Develop plan for written and video case studies	Identified fleets and arranged for first written and
NOV 11		video case studies development
	Schedule Roadshow Serieswith Clean Cities in 9 states	3 dates set and the others being finalized in
		conjunction with Clean Cities coordinators
	RFP 2 fleets onboarded and subagreements signed	All RFP 2 fleets completed subagreements and
		conversion schedule developed
Dec-11	Production of Roadshow Series materials	All Roadshow Materials completed and distributed
	30% vehicle deployment	30% vehicle deployment with aggressive conversion
		schedule outlined
Jan-12	Virginia fleet performance audit and maintenance	Audit was successful; converted vehicles operating
	assessment	according to expectations and fleets pleased with
		vehicles
Feb-12	38% vehicle deployment	38% vehicle deployment with aggressive conversion
		schedule outlined
Apr-12	First two events of Roadshow Series executed	Events in Atlanta, GA and Columbia, SC were
		successful and attracted fleets and media

Technical Accomplishments and Progress

Technical Accomplishments and Progress – Current Year

Month/Year	Project Milestone	Progres To-Date as of May 15, 2012	
May-12	100% conversion equipment ordered	Aggressive conversion schedule outlined	
	90% vehicle deployment	Working with new fleet locations on infrastructure	
	100% infrastructure installment complete	Outlined plan for roadshows to be held in new states	
	100% infrastructure NEPA EQs submitted and approved	Maintenance trainings executed and training video to be	
	Continued periodic audits of conversion system installation	•	
	Continued development of fleet written case studies	Extensive PR national and regional PR efforts outlined	
	First video case study complete	Plan developed for online marketing campaign	
	Continue regional Roadshow Series		
	Continued online marketing campaign		
	Continued regional public relations campaign		
Jun-12	100% vehicle deployment		
	100% Fleet maintenance training complete		
Sep-12	Second video case study complete		
Feb-13	Begin Phase 2 of Roadshow Series		
	Begin Phase 2 of fleet written case studies		
Aug-13	100% Roadshow Series complete		
Sep-13	100% outreach/education activities complete		

SPONSOR/FUNDING AGENCY Department of Energy (DOE)

Primary Role: Oversee project activities and ensure they are in accordance with negotiated terms and conditions, and meet DOE goals and objectives.

PRIME AWARD RECIPIENT

Virginia Department of Mines, Minerals, and Energy (DMME)

Primary Role: Award administrator and pass-through entity. Ensure compliance with ARRA, DOE and state terms & conditions.

PROJECT MANAGER

Virginia Clean Cities (VCC) at James Madison University (JMU)

Primary Role: Overall award and project manager. Ensures project is completed on-time, within budget, and exceeds expectations, Daily project monitor and liaison between sponsor agency (DOE) and project partners. Responsible for ensuring information and data is collected to comply with reporting duties. Identifies and mitigates risks.

SUB-RECIPIENTS

PUBLIC & PRIVATE FLEET PARTNERS

- ABS Vans
- Airport Shuttle
- Augusta County
- Blossman Gas Buncombe County
- · Carroll County Sheriff's Office
- Carrollton (City of)
- Cobb County
- Community Counseling · Culpeper County Sheriff's Office
- Frederick County Sheriff's Office
- Greenville County
- Groome Transportation
- Jackson County
 James Madison University
- Kingsport (City of) Lee County
- . Lowis Post Control

- - Muscogee County Sheriff's Office
 - Newport News (City of)
- Pearl River County Peninsula Propane Clearwater
- Peninsula Propane Jacksonville
- Peninsula Propane West Palm Beach
- Pickens County
- Sandy Springs (City of)
- Spotsylvania Sheriff
- Spotsylvania Schools
- Veolia Transportation Baltimore
- · Veolia Transportation Jacksonville
- Veolia Transportation Pittsburgh
- Veolia Transportation Kansas City
- Veolia Transportation Deriver Vestavia Hills
- Virginia Premier Health Plan

CLEAN CITIES COALITION PARTNERS

- Support education & outreach.
- - · Alahama Clean Cities
 - Atlanta Clean Cities
- · Mississippi Economic Development Partnership Palmetto State Clean Cities Coalition

 - Tennessee Clean Fuels Coalition

FORMATION

Supports marketing, education and outreach efforts.

BLOSSMAN GAS / ALLIANCE AUTOGAS

Supports refueling infrastructure installation

and maintenance.

AMERICAN ALTERNATIVE FUEL

Provides conversion equipment for

vehicles (Prins), supports vehicle

conversions, trains technicians, and

provides support to conversion centers.

PROPANE EDUCATION AND RESEARCH COUNCIL (PERC)

Supports education and training efforts.

VEHICLE CONVERSION CENTERS

- American Alternative Fuel - Baker Equipment
- Brooks Chevrolet
- Bus Group
- Cobb County • Force 911
- German Motor Werks
- Greenville County Light-N-Up
- Peninsula Propane
- Veolia Transportation

Top-level Partners





















Conversion Center Partners















Peninsula Propane

Fleet Partners













Peninsula Propane















Fleet Partners





























Clean Cities Coalitions participating in regional Roadshow Series























Media Coverage

























See the entire SPADP media archive at: http://www.usepropaneautogas.com/media-archives/

Muscogee County Video Case Study

Newport News Case Study

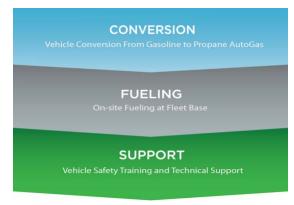
Future Work for 2012

- Install remaining infrastructure for new fleets
- Complete vehicle conversions by target completion date (June 2012)
- Work with fleets to review options for transition private fueling stations to publicly accessible fueling stations
- Promote Program and partner successes to generate wide-scale interest in alternative fuels
 - Continue aggressive marketing and PR efforts, including press releases and media events
 - Execute Phase 1 of Roadshow Series in 10 Southeast states
 - Collect detailed information regarding ROI and impact of project
 - o Develop and distribute numerous case studies about fleet successes with autogas



Summary

- This is the largest Department of Energy-funded propane autogas conversion deployment Program in U.S. history
- 1,201 vehicles from public and private fleets are being converted using the same equipment provided by one technology supplier organization
- Detailed, comprehensive data on all 1,201 propane autogas vehicles is being collected and widely distributed to highlight the impact of the funds
- Project teams brings unique ability to leverage program far beyond proposed objectives by marketing the program throughout the Southeast U.S. using a number of mediums – media, Internet, video, and roadshow events
- An estimated 4 million gallons of gasoline and 4,000 tons of air pollutants will be displaced each year of the program that all of the propane autogas vehicles are on the roads
- To date, this program has funded more than
 32,000 hours of work, creating and retaining jobs



The Alliance AutoGas Chain



Program Statistics - March 2012

