



Southeast Propane Autogas Development Program

VA Department of Mines, Minerals and Energy

Peter Denbigh

Virginia Clean Cities at James Madison University

Project ID #ARRAVT065

Prepared March 2012

Presented May 16, 2012

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

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

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
	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

Technical Accomplishments and Progress

Technical Accomplishments and Progress - Previous Year Activities Summary

Month/Year	Project Milestone	Progress To-Date as of May 15, 2012
May-11	Vehicle conversions begin 2nd phase, with initial beta test at start	Beta test completed and quality control measures 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
Jun-11	Completion of equipment order	All equipment for original fleets ordered
	Begin full-scale PR campaign with press releases, media pitching and events	From June 2011 to current, efforts include weekly media pitching, securing VCCmedia interviews, distributed 8 press releases
Sep-11	Final equipment order and audit	VCC audit of remaining equipment completed
Nov-11	100% infrastructure installment for original fleets completed	All anticipated onsite fueling stations for original fleets installed
	Develop plan for written and video case studies	Identified fleets and arranged for first written and video case studies development
	Schedule Roadshow Series with Clean Cities in 9 states	3 dates set and the others being finalized in conjunction with Clean Cities coordinators
Dec-11	RFP 2 fleets onboarded and subagreements signed	All RFP 2 fleets completed subagreements and conversion schedule developed
	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 assessment	Audit was successful; converted vehicles operating 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

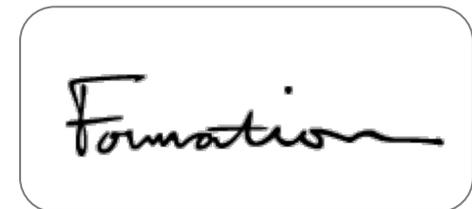
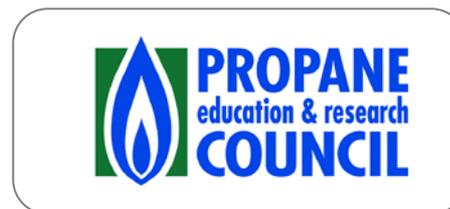
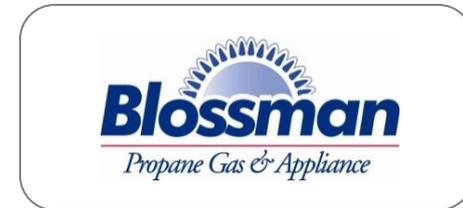
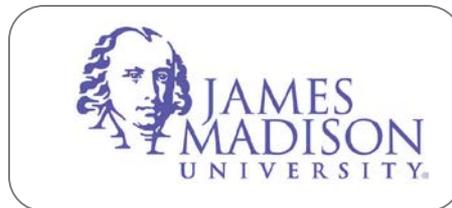
Month/Year	Project Milestone	Progres To-Date as of May 15, 2012
May-12	100% conversion equipment ordered	Aggressive conversion schedule outlined
	90% vehicle deployment	Working with new fleet locations on infrastructure
	100% infrastructure installment complete	Outlined plan for roadshows to be held in new states
	100% infrastructure NEPA EQs submitted and approved	Maintenance trainings executed and training video to be developed
	Continued periodic audits of conversion system installation	Extensive PR national and regional PR efforts outlined
	Continued development of fleet written case studies	Plan developed for online marketing campaign
	First video case study complete	
	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	

Partners and Collaborators



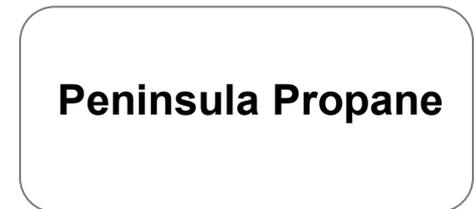
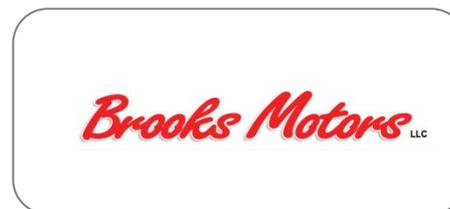
Partners and Collaborators

Top-level Partners



Partners and Collaborators

Conversion Center Partners



Partners and Collaborators

Fleet Partners



Peninsula Propane



Greenville County



Newport News
Where Great Things Are Happening

Partners and Collaborators

Fleet Partners



Augusta County, VA



JACKSON COUNTY
Georgia



Partners and Collaborators

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

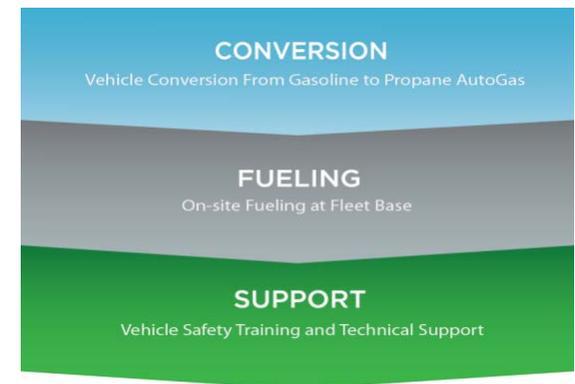
Future Work for 2012

- 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
 - Develop and distribute numerous case studies about fleet successes with autogas

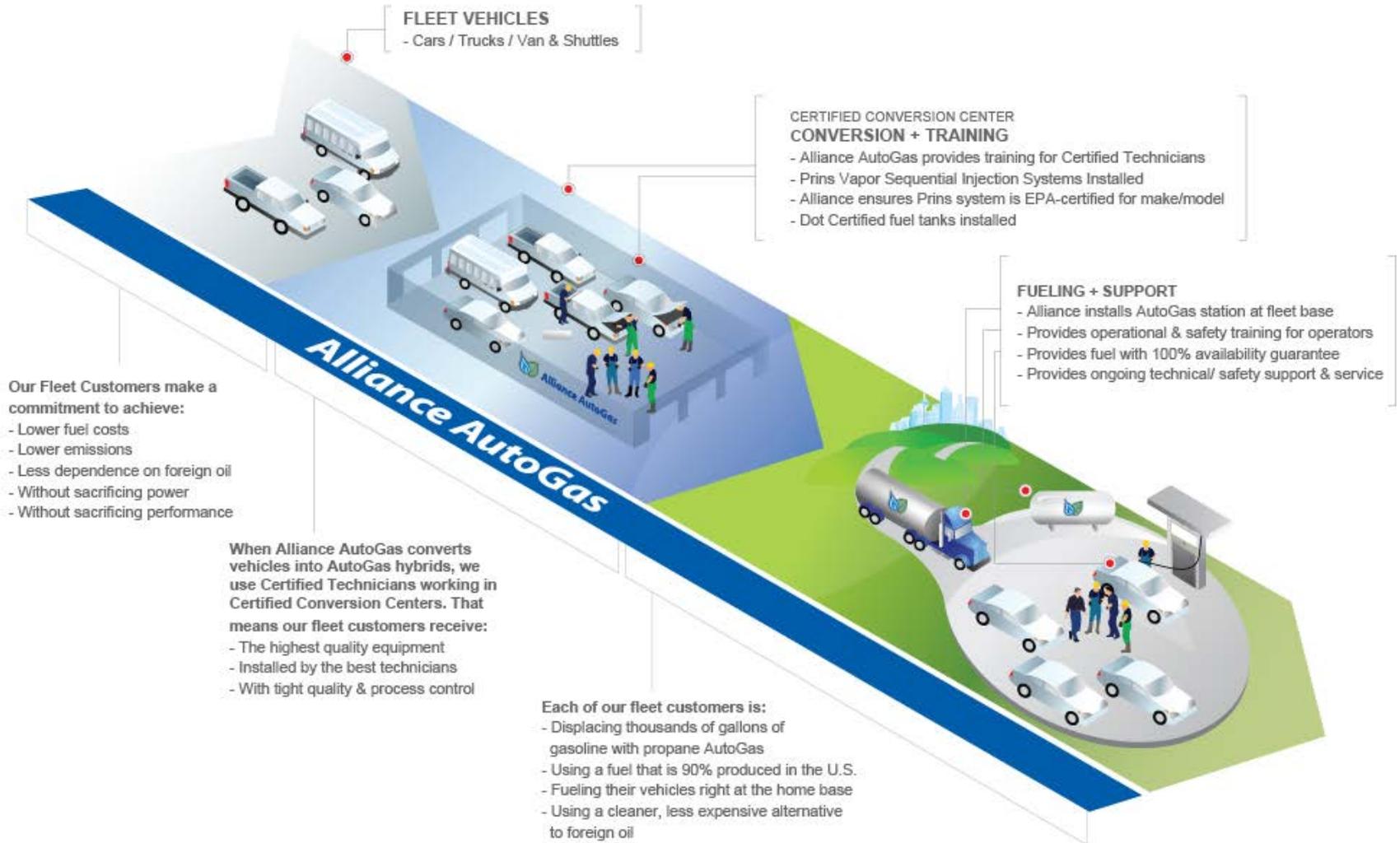


Summary

- 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

