Texas Propane Vehicle Pilot Project

Project ID #ARRAVT058

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Railroad Commission of Texas
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Overview

The Railroad Commission is Texas’ chief energy agency

Timeline
• Start: February 1, 2010
• End: January 31, 2014
• Less than 50 percent complete

Barriers
• Technical
• Budgetary
• Administrative

Budget
• $45,159,853
  – DOE share: $12,633,080
  – Cost share: $32,526,773

Partners
• School districts
• Cities/counties
• Central Texas Clean Cities
Objectives

Texas Propane Vehicle Pilot Project

- Deploy ~800 propane vehicles
- Install/upgrade 35 propane fueling stations
- Operate concurrent public education and training programs

In order to:

- Reduce dependence on petroleum by ~12 million gallons
- Increase use of propane by ~15.9 million gallons
- Reduce GHG emissions by ~78,000 tons
- Educate the public about alternative fuels’ benefits
- Create/retain 141 jobs
Approach

Vehicle and Infrastructure Deployment

• Recruit public fleet managers to make transition to alternative fuels.
• Identify all eligible funding sources, including state and local funds and propane motor fuel tax credits, to maximize economic incentive for each entity.
• Partner with distributors of OEM and aftermarket fuel systems to create smooth ordering, installation and repair channels.
• Create detailed specifications on BuyBoard.com to comply with public agency competitive bid requirements.
Approach

• Work with OEMs to create fleet loaner program to allow fleets to try out propane vehicle for a week at a time.
• Recruit test fleets through each Clean Cities organization.
• Collect driver testimonials after test week; publish on blog.
• Create press events to recognize fleet partners’ accomplishments.
## Accomplishments

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 2010</td>
<td>Contract signed</td>
</tr>
<tr>
<td>March 2011</td>
<td>198 propane vehicles deployed</td>
</tr>
<tr>
<td>March 2011</td>
<td>30,000 gallons of petroleum displaced</td>
</tr>
<tr>
<td>March 2011</td>
<td>4 propane refueling stations deployed</td>
</tr>
<tr>
<td>Nov. 2009–March 2014</td>
<td>Clean Cities public education program up and running.</td>
</tr>
<tr>
<td>January 2010–January 2014</td>
<td>Training program for refuelers, technicians and emergency responders up and running</td>
</tr>
<tr>
<td>June 2011</td>
<td>Evaluate public education and training plans; modify as needed</td>
</tr>
<tr>
<td>January 2012</td>
<td>100% of fueling stations installed</td>
</tr>
<tr>
<td>January 2012</td>
<td>100% of vehicles deployed</td>
</tr>
</tbody>
</table>
Technical Accomplishments

Vehicles and infrastructure are being deployed

- Project is on schedule to deploy all the vehicles and infrastructure by January 2012.
- Partners who cannot meet this timeframe are deobligating their funds.
- Replacement fleets have been identified, and new contracts and/or amendments are issued as funds are deobligated.
Technical Accomplishments

Program has generated participation by new fleets

• Many of Texas’ largest school bus fleets, including Houston ISD, are now partners and are using alternative fuels for the first time.

• Strategy: Group new fleets near existing propane fleets to share expertise.

• Numerous fleets wait-listed. Administrative structure in place to deploy additional vehicles quickly, if funding made available.
Technical Accomplishments

The training program is up and running

- Conducted classes for 149 propane drivers and other staff on propane vehicle refueling.

- Trained 66 emergency responders from agencies that may be called to respond to incidents involving refueling stations and/or vehicles paid through this grant.

- Trained 153 mechanics to work on propane fuel systems.
Technical Accomplishments

The public education program is up and running

• Grant has funded a fleet loan program through Clean Cities that lets fleets try out a propane vehicle for a week.

• Texas Propane Fleets blog provides a forum for fleets to write about their experiences.
Technical Accomplishments

Expanded Outreach Through Social Media

Texas Propane Fleets is developing an online community where vehicle owners, propane autogas providers, and vehicle manufacturers

• Share their experiences about propane,
• Ask questions, and
• Learn about new vehicles that are being developed.
Partners

OEMs
Regular meetings to discuss supply pipeline and new product offerings.

Distributors and Installers
Share information on funding opportunities available for new fleets; co-host mechanics’ training classes on equipment and propane systems.

Fleet Managers
Feature in case studies; enlist for peer-to-peer education forums.

Community Leaders
Supply background information for decisions on alternative fuels; organize press events.
Future Work

By January 31, 2012 (end of Program Year 2)

Evaluate public education and training programs (6/1/11); modify as needed

- Complete vehicle and infrastructure reimbursement programs (1/31/12)
- Seek additional funding for partners on waiting list
- Continue Clean Cities seminars, special events, media outreach
- Continue driver, refueler, technician and emergency responder training
- Collect data; report on time
Summary

Many propane vehicles and fueling stations deployed
  • Deployed 190 school buses, pickups and other vehicles to date
  • Submitted three refueling sites for reimbursement

Program deployment will be complete by 1/31/12
  • Reporting and reimbursement processes developed and operational
  • Deobligation/reobligation process is working smoothly

Public education program exceeding targets
  • 31 seminars, 194 fleets, 939 fleet managers through 3/31/2011
  • Events covered by more than 118 Texas media outlets
  • Social Media outreach through Texas Propane Fleets blog

Training program off to a fast start
  • Trained 66 emergency responders; 149 drivers, and 153 mechanics through 3/31/2011