Texas Alternative Fuel Vehicle Pilot Project

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Project ID#
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Overview

The Railroad Commission is Texas’ chief energy agency

Timeline
• Start: February 1, 2010
• End: January 31, 2014
• More than 75 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 ~600 natural gas and propane vehicles
- Install/upgrade 30 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 and natural gas by ~15.9 million gallons
- Reduce GHG emissions by ~78,000 tons
- Educate the public about alternative fuels’ benefits
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 incentives, to maximize economic benefit 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

• Create press events to recognize fleet partners’ accomplishments.
• Host road shows for area fleet managers with “ride and drive,” testimonials from current alt fuel fleets and access to vendors.
## Accomplishments

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Milestone</th>
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<tbody>
<tr>
<td>February 2010</td>
<td>Contract signed</td>
</tr>
<tr>
<td>March 2012</td>
<td>481 (81%) of propane vehicles deployed</td>
</tr>
<tr>
<td>December 2011</td>
<td>546,815 gallons of petroleum displaced</td>
</tr>
<tr>
<td>March 2012</td>
<td>15 propane refueling stations deployed</td>
</tr>
<tr>
<td>Nov. 2009–March 2014</td>
<td>Clean Cities public education program up and running.</td>
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<tr>
<td>March 2012</td>
<td>Texas Propane Fleets social media site averages 20 posts per month</td>
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<tr>
<td>January 2010-January</td>
<td>Training program for refuelers, technicians and emergency responders up</td>
</tr>
<tr>
<td>January 2013</td>
<td>100% of fueling stations installed</td>
</tr>
<tr>
<td>January 2013</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 2013.

• 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 100 emergency responders that may respond to incidents involving grant-funded refueling stations and/or vehicles.

• Trained 201 mechanics to work on propane fuel systems.

• Hosted first training webinar; 262 registrants
Technical Accomplishments

The public education program is active

• Grant has funded a fleet loan program through Clean Cities that let 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 Training Through Books and Webinars

Railroad Commission, in partnership with DOE and the Propane Education and Research Council, is developing a series of 5 training modules on propane fuel systems.

- First webinar, for propane drivers and refuelers, drew 252 registrants
- Program includes DOE-sponsored troubleshooting course
- Books and webinars available online at propanecouncil.org
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, 2013 (end of Program Year 3)

Evaluate public education and training programs (6/1/12); modify as needed

- Complete vehicle and infrastructure reimbursement programs (1/31/13)
- 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 481 school buses, pickups and other vehicles to date
  • 15 refueling sites in operation

Program deployment will be complete by 1/31/13
  • Reporting and reimbursement processes developed and operational
  • Deobligation/reobligation process is working smoothly

Public education program exceeding targets
  • 54 events, 200 fleets, 1,576 fleet managers through 3/31/2012
  • Events covered by more than 156 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 3/31/2012; leveraged nationally through PERC