Refuel Colorado

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- Colorado Energy Office
- June 19, 2014

TI047

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

Overview

Timeline

- February 1, 2013 through January 31, 2015
- 50% complete as of April 2014

Budget

- Total Allowed: \$607,129
 - DOE: \$500,000
 - Contractor: \$107,129
- DOE funding received as of March 2014: \$209,728.16
- Contractor expenditures: \$45,191.34
- 42% funds spent

Barriers

- Consumer Reluctance to Purchase New **Technologies**
- Lack of Technical Expertise with New Fuels and Vehicle Technologies
- Maintenance of Local Coalition Effectiveness

Partners

- Clean Energy Economy for the Region
- **Clean Cities**
- 4CORE
- State Fleet
- West Slope CNG Collaborative
- **EV Stakeholder Group**
- **Colorado Propane Gas Association**
- Colorado Hydrogen Coalition



Refuel Colorado – Objectives and Goals

Objectives

Reduce barriers to fleet incorporation of alternative fuels and efficiency technologies

- Provide fleet coaching to interested fleets
- Audit the state fleet and identify potential environmental and efficiency improvements

Disperse information to consumers and fleets

- Develop a website containing accurate and timely information for both consumers and fleets:
- www.refuelcolorado.com

Develop a roadmap for alternative fuels

- Convene stakeholder groups
- Identify proper vehicle technologies for proper settings and purposes

Support for VTP Deployment Goals

Assessing the business case for alternative fuels in fleets can identify opportunities to save money while supporting the US economy, reducing emissions from petroleum, and improving energy security

Organizing stakeholder groups allows private and governments actors to assess and address barriers to alternative fuels



Refuel Colorado – Milestones

Barrier Reduction

 Launched Colorado Fleet Coaching **April 2013**

Summer 2013 Enabled incorporation of 80 NGVs in state fleet

Investigated idling mitigation in state patrol November 2013

 Performing State Fleet Audit **Summer 2014**

Information Dispersement

• Launched <u>www.refuelcolorado.com</u> website **April 2014**

Roadmap Development

 Joined West Slope CNG Collaborative process February 2013

Completed study on CNG Market Plan **June 2013**

 Created an informal EV Stakeholder group September 2013

Began work with Colorado Hydrogen Coalition **April 2014**



Refuel Colorado – Approach

Task 1- Project Management

- Manage cost, schedule, and scope
- Provide status updates and deliverables to DOE

Task 2 – Policy Initiative

- Create stakeholder groups to assess policy and regulatory barriers and opportunities for alternative fuels
- Study market potential for alternative fuels

Task 3 – Barrier **Reduction Initiatives**

- Assess the regulatory environment for AFVs
- Incorporate AFVs into state fleets
- Complete an audit of the Colorado state fleet

Task 4 –Training and Outreach **Initiatives**

 Create a network of fleet coaches to provide technical assistance to fleets, demonstrate economic benefits, and engage in capacity-building efforts to help AFVs become self-sustaining

Task 5 – Market Development

 Develop a website containing accurate and timely information for Colorado consumers and businesses



Policy Initiative

Stakeholder Groups

- Developed or strengthened stakeholder groups for natural gas, electric, propane and hydrogen vehicles
- Worked with the Colorado Division of Oil and Public Safety to create safety regulations for public CNG stations
- Dispersed information about funding opportunities for alternative fuel vehicles and station

Study Market Potential

Commissioned Natural Gas Vehicle Market Study

Barrier Reduction in the State Fleet

Diversifying Colorado State Fleet

- Advised State Fleet on cost savings of AFVs
- State Fleet pursued incorporation of 80 CNG vehicles in 2013 using its own resources
- State Fleet incorporating 142 more CNG vehicles in 2014

State Fleet Audit

- Assessing viability of further and more diverse AFV incorporation
- Studying potential incorporation of other efficiency measures like idling mitigation and improvements from aerodynamic technologies

Training and Outreach Initiatives

Colorado Fleet Coaches

- Colorado Fleet Coaches identified 9 counties in which to conduct energy coaching
- The Fleet Coaches have engaged with over 72 fleet managers, 20 business owners, 15 government entities, and 6 station developers

Colorado Energy Office Outreach

- Delivered over a dozen presentations to local governments on the benefits of alternative fuels
- Developed a memorandum of understanding with 29 stakeholders to adopt CNG where appropriate



Market Development

www.refuelcolorado.com

- Developed a website to provide information to consumers and fleets about alternative fuel vehicles
- Focus on Colorado consumers with references to state tax credits and incentives
- Over 27 pages of content for the website across a spectrum of alternative fuels

Refuel Colorado – Collaboration and Coordination

Clean Cities

 Delivered presentations in outreach events with all three Colorado Clean Cities Coalitions

Regional Air Quality Council (RAQC)

 Worked with RAQC on outreach activities promoting electric vehicles and natural gas vehicles

Fleets and Local Governments

 Conversed with over 160 stakeholders in Colorado about the market for alternative fuels

Stakeholder Groups

 Worked with the Colorado Natural Gas Vehicle Coalition, the EV Stakeholder Group, Colorado Propane Gas Association, the West Slope CNG Collaborative, and the Colorado Hydrogen Coalition



Refuel Colorado – Alt Fuel Market Expansion Potential

Remaining Project Potential

Fleet conversions

 Fleet conversions to alternative fuels based on Refuel Fleet Coach assessments

Implementation

Implementation of state fleet audit recommendations

Idle-mitigation

Expansion of idle-mitigation measures

Refuel Colorado – Alt Fuel Market Expansion Potential

Independent Implementation Efforts (not project funded)

Alt Fuels Colorado

- Grants for alternative fueling infrastructure, focused on CNG
- Up to \$600,000 for a co-located CNG, LPG, and EV station
- Grants for natural gas, electric, and propane vehicles

Charge Ahead
Colorado

- Grants for electric vehicle charging stations
- Up to \$6,260 for Level 2 or Level 3 EVSE



Refuel Colorado – Summary

Roadmap for Alternative Fuels in Colorado

- Convening stakeholder groups
- Identifying and overcoming regulatory hurdles and market barriers

Leading by Example with the State Fleet

- Auditing the fleet to identify opportunities
- Incorporating AFVs and efficiency technologies into the fleet
- Encouraging local governments and the private sector to follow suit

Providing Information

- Colorado Fleet Coaches working directly with local fleets
- Launching <u>www.refuelcolorado.com</u> to share information publicly
- Participating in outreach events

