Midwest Region
Alternative Fuels Project

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Metropolitan Energy Center
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Midwest Region Alternative Fuels Project
Overview

**Timeline**
- **Start:** Dec 28, 2009
- **Finish:** Dec 27, 2013
- **% Complete:** 15% thru 1FQ2011

**Budget**
- Total project: $31,744,788
  - $14,999,905 DOE
  - $16,744,883 contractor
- Budget expended thru 3/2011
  - $5.6M DOE
  - $7.9M contractor

**Targets: Alt Fuel Deployment**
- 333 alternative fuel vehicles
- 36 alternative fuel stations

**Barriers & Risks**
- Budget constraints of partners until FY2011
- Backlog in electric and CNG supply chain
- Added partners when projects under budget

**Partners**
17 varied public and private entities (see slide 4). Each procures or builds alternative fuel vehicles and/or refueling stations. Fuel and technology types: CNG, electric, biofuels, propane.
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Relevance

FY2010 - FY2013 Project Objectives

➢ In the national alternative fuel and advanced technology vehicle sector, create new jobs while preserving existing ones.
  ▪ **Benefit to related barrier**: encourages increased production in established and new U.S.– based electric and CNG supply chains
  ▪ **Benefit to related barrier**: provided basis for new sales and service jobs for alternative fuel vehicles within local private businesses

➢ In the three-state project region (MO, KS, NE):
  ▪ Spur economic activity and invest in long-term economic growth by creating a sustainable alternative fuel market
    ▪ **Benefit to related barrier**: outreach engendered interest in and knowledge of project and eased transition to new partners
  ▪ Demonstrate diversified approach to petroleum reduction through a targeted deployment of alternative fuel and advanced technology vehicles and infrastructure
Project Partners

- Each partner has named a team lead, who manages progress of its part in the project, monitors and collects required data and reports to Metropolitan Energy Center.
- Metropolitan Energy Center provides management of total project objectives, holds partners to DOE requirements, hosts monthly best practice and project status calls, administers invoices and expenditures, and aggregates project partner data for reporting to DOE.

- City of Kansas City, Missouri
- City of Lawrence, Kansas
- City of Lee's Summit, Missouri
- City of Wichita, Kansas
- Happy Cab Company
- Kansas City Power & Light®
- Kansas City Kansas School District USD500
- Kansas Gas Service
- Lee's Summit School District R-7
- Lincoln Airport Authority
- Margo Leasing (Wil Fischer)
- Metropolitan Community College - Omaha
- Metropolitan Utilities District
- New Bern Transport Corporation
- O' Daniel Honda
- University of Missouri at Kansas City
- Zarco 66, Inc.
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Approach

Technical Barriers and NEPA Status

- Partner procurement processes and fiscal year planning times differ
  - In some cases, this delayed initiating orders and resulted in later deployment dates than originally anticipated.
  - Some partners shifted funding to other project emphases than originally intended.

- Backlog in electric and CNG supply chain
  - Partners chose different vendors and vendors chose different parts when the intended supply chain was too slow.
  - No insurmountable supply chain barriers have arisen.

- Added partners when projects came in under budget
  - Outreach during first year of project very effectively reached other agencies interested in alt fuels. Resulted in easy transition to additional partners.
  - Chose new partners with accelerated project plans to meet overall project timelines.

- NEPA Status
  - NEPA Environmental Questionnaires are submitted according to requirements.
  - NEPA submittals by our staff and review by DOE staff are timely.
  - NEPA process is on track, with none overdue.
## Milestones

<table>
<thead>
<tr>
<th>Milestone No.</th>
<th>Description</th>
<th>Original Planned Completion Date</th>
<th>Revised Planned Completion Date</th>
<th>Actual Completion</th>
<th>Milestone Status</th>
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<tr>
<td>1</td>
<td>Statement of Project Objectives outlined below</td>
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<td>Task 1: Project Management and Planning</td>
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<td>Task 3: Infrastructure Deployment</td>
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* We are behind on finalizing agreements due to the addition of new partners and recent agreement to terms.
Midwest Region Alternative Fuels Project
Technical Accomplishments

Target: 333 Alternative Fuel and Advanced Technology Vehicles
- Orders placed for 158; or 46% of project objective
  - This is low due to supply chain barriers, which are now overcome
  - Compare to last year, reported at 23%
- Deployed 44; or 13% of project objective
  - This seems low but is due to long-lead equipment orders and is on track
  - Compare to last year, reported at 0%
- Gallons of alternative fuel used or petroleum fuel displaced: 3427 (2184 in 1FQ11)

Target: 36 Alternative Fuel Stations
- Design and Site Work is begun at 27 locations (80%)
  - Compare to last year, reported at 30%
- Completed 6 locations; or 16% of project objective
  - Compare to last year, reported at 0%
- Gallons of alternative fuel dispensed: 1066 (825 in 1FQ11)
- One project component with 7 biofuels stations is on hold, pending a budget revision

All statistics are through 1FQ11, as reported in Jan 2011
Midwest Region Alternative Fuels Project

Technical Accomplishments

Target: Outreach Events

- 4 events held last year, including
  - first-ever electric truck fleet in a school district (a $1M project component)
  - biodiesel station for regional beverage delivery fleet (<$1M)
  - CNG van and refueling for college (<$50,000)
- 4 events scheduled, including
  - March 16, 2011 CNG buses and refueling for Kansas City Kansas School District (a $7M component)
  - June 10, 2011 CNG vehicles and refueling for Metropolitan Utilities District (first completion in a $3.5M component)
    - Includes first public CNG refueling station in Nebraska.

Target: American Jobs

- Jobs created and saved is consistently between 3 and 4 per quarter
- Expected to increase substantially in 2011, as station design and site work are completed and construction begins in 20 stations
- This statistic does not include manufacturing jobs, which are positively impacted by this project but not directly employed by the partners or vendors and are not reimbursed under this project nor recorded as cost share

All statistics are through 1FQ11, as reported in Jan 2011
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Partnerships: Subrecipients

- City of Kansas City, Missouri
  vehicle deployment and public refueling station
- City of Lawrence, Kansas
  vehicle deployment
- City of Lee's Summit, Missouri
  vehicle deployment
- City of Wichita, Kansas
  vehicle deployment
- Happy Cab Company (fleet)
  vehicle deployment
- Kansas City Power & Light
  charging station installations
- Kansas City Kansas School District USD500
  bus deployment and private refueling
- Kansas Gas Service (utility)
  public refueling upgrade
- Lee's Summit School District R-7
  vehicle deployment
- Lincoln Airport Authority
  vehicle deployment and public refueling
- Margo Leasing (fleet)
  private refueling
- Metropolitan Community College – Omaha
  vehicle deployment and private refueling
- Metropolitan Utilities District (utility)
  vehicle deployment and public refueling
- New Bern Transport Corporation
  vehicle deployment
- O' Daniel Honda (industry)
  semi-public refueling
- University of Missouri at Kansas City
  vehicle deployment and public charging
- Zarco 66, Inc. (industry)
  public refueling upgrade
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Future Work

**Technical Work**

**Vehicle progress**
- 47% ordered and 13% deployed as of 1FQ11
- 100% deployment by Dec 2011

**Infrastructure progress**
- 80% site work started and 15% deployed as of 1FQ11
- 95% planned completion by Sept 2011
- 100% completion Dec 2011

**Project Administration**

**Continue Project Management**

**Continue Data Collection, Reporting and Monitoring**
Outreach and Training

Completed Marketing Toolbox and Begin Outreach Campaign

Media and Grand Opening Events

- Media Event and Ribbon Cutting: March 16, 2011– First CNG school bus fleet in Kansas and private CNG stations by Kansas City Kansas Unified School District
- Launch electric charging at UMKC in May 2011 and throughout Greater KC by KCPL
- Launch July 2011 for CNG fueling sites with CNG vehicles in Omaha & Lincoln NE

Develop and Deliver Training Curriculum

- Operator and Technician Training
- First Responder Training
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Summary: 333 Vehicles

- CNG (284)
- Hybrid (36)
- Electric (6)
- Other (7)
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Summary: 36 Infrastructure Locations

- CNG (16)
- Electric (12)
- Bio Fuels (1 B100 & 7 B20/E85)
## Midwest Region Alternative Fuels Project Summary

<table>
<thead>
<tr>
<th>sub-recipient</th>
<th>vehicle</th>
<th>infrastr</th>
<th>stage</th>
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<tbody>
<tr>
<td>City of Kansas City, Missouri</td>
<td>152</td>
<td>3</td>
<td>deployed &amp; ordering variety of vehicles/plan for public CNG fueling</td>
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<td>deployed electric truck</td>
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<td>City of Lee's Summit, MO</td>
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<td>Lincoln Airport Authority</td>
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<td>Margo Leasing</td>
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<td>Metropolitan Utilities District</td>
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<td>New Bern/ Pepsico Beverage Corp</td>
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<tr>
<td>Zarco 66, Inc.</td>
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<td>deployed 1, construct 6</td>
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330 34