EPAct Fleet and Stakeholder Workshops

National Conference of State Fleet Administrators

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Who Are We Bringing Together?

**State Fleets:**
Agencies, DOTs, and universities/colleges

**Alternative Fuel Providers:**
Gas, electric, and gas & electric utilities; municipal power generators; and electric cooperatives

**Federal:**
Civilian and military fleets, individual agencies as well as GSA
Why?

• Many regulated fleets lack access to the alternative fuels needed for EPAct compliance.
• Many voluntary fleets suffer the same fate.
• Fuel providers, marketers, and distributors may be willing to install alternative fuel infrastructure or otherwise supply alternative fuels if sufficient demand exists.
• The existing alternative fuel infrastructure may be underused.
What Workshops?

- U.S. Department of Energy (DOE)-sponsored
- National Renewable Energy Laboratory (NREL)- and Clean Cities Coalition (CCC)-hosted series of four regional workshops
- Crossing DOE program/activity boundaries involving the Energy Policy Act (EPAct)
  - Federal Fleets
  - State and Alternative Fuel Provider Fleets
  - Clean Cities
Workshops Goals

• Solve the infrastructure issue on a local basis.
• Single fleets typically insufficient to support infrastructure. Workshops foster links.
  – Bring to same room and table EPAct-mandated fleets, voluntary fleets, and fuel providers
  – Facilitate cooperation needed for new infrastructure
  – Educate about existing under-used infrastructure
Approach

• Explicitly bring in the regulated fleets in the region of each workshop to:
  – Serve as anchor fleets
  – Identify specific needs
  – Identify willingness to use specific infrastructure
  – Help determine where the infrastructure should be located
  – Identify willingness to share infrastructure
Approach

• Background
  – EPAct State and Fuel Provider Program
  – EPAct Federal Fleet Program
  – Clean Cities Program
SFP Fleet Overall Status

• ~300 fleets covered nationally
• 10-20,000 alternative fuel vehicles (AFVs) acquired annually. Nearly all are now E85 flexible fuel vehicles (FFVs)—and a few hundred natural gas vehicles (NGVs) per year
  – Since MY1997, 60% FFVs, ~25% NGVs, ~10% liquefied petroleum gas vehicles (LPGVs)
• 3-6 M gallons of B100 each year (over past 5 years)—several times amount credited
• Virtually 100% fleet compliance—usually a few that DOE needs to work things out with each year, but these do come into compliance
• Only a handful of fleets (~10) are in Alternative Compliance (AC), but MY2008 was first year
Fleet Requirements – Federal

• **EPAct 1992**: Federal fleets must acquire AFVs
  – AFVs; Credits for Biodiesel Use

• **EPAct 2005**: AFVs must use AF unless they receive a waiver from DOE (AF unavailable or too expensive)
  – 53% of federal dual-fueled AFVs waivered in FY2009

• **OMB**: Reduce the number of waivers received annually from DOE

• **E.O. 13423**: 2% annual petroleum reduction and 10% annual AF use increase requirements
Federal Fleet Overall Status – Acquisitions

Biodiesel credits

Feds acquired more than twice as many AFVs as required, but …

… more than 66,000 federal AFVs received waivers for AF use.
Federal Fleet Overall Status – Acquisitions & Inventory

Total FY2008 AFV Acquisitions by Covered Federal Agencies

- Hydrogen: 1 Vehicle
- Electric: 6 Vehicles
- LPG: 3 Vehicles
- CNG: 119 Vehicles

E85: 27,330 Vehicles

Total FY2008 AFV Inventory of Covered Federal Agencies

- LNG: 33 Vehicles
- Electric: 83 Vehicles
- Hydrogen: 2 Vehicles
- LPG: 216 Vehicles
- CNG: 8,195 Vehicles

E85: 128,491 Vehicles
Federal Fleet Overall Status – Acquisitions & Inventory

More than 66,000 Federal Diesel Vehicles Nationwide

2008 Diesel Use:
- More than 41 M GGE diesel
- Less than 7 M GGE biodiesel

Use of biodiesel (B20 and up) can be a cheap alternative for acquisition credits.
Approach

• Available Tools
  – Vehicles and locations, station locator, and more

• Fuel Presentations
  – Individual fuels

• Breakout Sessions
  – Regions broken into distinct geographic areas
Approach

• Tools
  – Waivered Vehicle Data for Federal Fleet
  – Info on SFP Fleets concerning local POCs/fleet locations
  – Station locator

• Combined provides for instructive and conversation-starting maps
Fleets and Fueling Locations by Region

GIS Analyses

Public Diesel Vehicle Density by ZIP code and Existing Biodiesel Stations
Denver Metro Area, Colorado
So Where’s this Leave Us?

• Fleets need help to increase use of alternative fuels, either to meet regulatory requirements, fleet initiatives, or voluntary commitments
  – Teaming with other fleets to create sufficient demand for alternative fuels
  – Fuel providers willing to install infrastructure

• Breakouts provide opportunity for fleet and fuel representatives to discuss needs and next steps

• The beginning of an ongoing dialogue!
Where/When Were They Held?

1. Williamsburg, VA: June 16
2. Denver, CO: Aug. 5
3. Dallas/Ft. Worth, TX: Aug. 18
4. Miami, FL: Sept. 17
Workshop Results

• Attendance averaged 50 stakeholders
• Questionnaires
• Team-led breakout sessions by REGIONS with MAPS – floating fuel providers
• Lessons learned
  – Successful
    • Capable CCC coordinator
    • Demand and active participation
• Preliminary indications
  – As many as 10 new alt fuel infrastructure sites
  – Helping open access to fuel at private stations
  – Helping stations know fleets out there with demand
  – Access to one another’s fuel
Next Steps for Workshops

• Follow-ups
• Additional EPAct Workshops
• Fuel Retailer Workshops (follow-up workshops)
• EPAct Workshop Toolkit
Steps for Your Fleet: Infrastructure Development Strategies

Know your fleet
- Inventory your fleet and estimate fuel demand by location

Locate and use existing alt fuel stations
- AFDC Tools – station locator and mobile locator
- Concentrate on fleet locations with most vehicles first

Locate other nearby fleets lacking alt fuel access
- Use available data
- E.g., Section 701 waiver data; aggregate demand
Partner with Clean Cities

- Fosters networking with non-feds to aggregate demand, attract development

Attract new public refueling stations

- Identify stations with existing interest in providing alternative fuel
- Determine how much alternative fuel your and partner fleets will require
- Identify fuel providers and infrastructure developers operating in your area
- *E85 Retail Business Case: When and Why to Sell E85*
Tools and Links

PREP: https://www.afdc.energy.gov/afdc/prep/index.php
Alt Fuel Station locator: http://www.afdc.energy.gov/afdc/locator/stations/
Mobile Locator: www.afdc.energy.gov/stations/m/
   (accessible from internet-capable mobile devices)
State Specific info: http://www.afdc.energy.gov/afdc/states/
Heavy Duty Vehicle Search:
   http://www.afdc.energy.gov/afdc/vehicles/heavy
State Assessment for biomass resources:
   http://www.afdc.energy.gov/afdc/sabre/index.php
Data, Analysis & Trends:
   http://www.afdc.energy.gov/afdc/data/index.html
AFDC RSS Feed: http://www.afdc.energy.gov/afdc/rss_feed.html