Strategies for Decreasing Petroleum Consumption in the Federal Fleet

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Presentation Overview

• Federal Fleet Status
  – EPAct
  – E.O. 13149

• Petroleum Reduction
  – Methods
  – Tools
2005 Federal Fleet Status

• Problems
  – 1.2% increase in petroleum use
  – Continued data issues
  – Confusion about reporting
• Good News
  – 109% EPAct acquisitions
  – Fleets with campuses show good AF use
  – Almost 200 Federal AF stations
Alternative Fuel Use in Federal Fleets

• Larger agencies with concentrated fleets, especially those with campuses where AFs can be located are doing well
  – DOD
  – DOE
  – DOI
  – NASA

• Smaller more dispersed fleets have a more difficult time
  – Rely on public infrastructure
  – Driver motivation
  – E85 tracking
How Can Smaller, Dispersed Fleets Be More Effective?

- Truth is, we don’t know
- Very difficult due to the lack of infrastructure
- However, we have a plan…
The Plan

• Know **your fleet**
• Locate and utilize **existing public refueling stations**
• Locate and utilize **other fleet infrastructure**
• Attract **new public refueling stations**
• Consider **other fuels**
• **Motivate** your drivers
• Utilize **non-AF technologies**
• **Keep trying**
Improving Alternative Fuel Use

Flowchart

1. Understand your inventory
2. Identify local AF fueling stations
   - Are they conveniently located?
     - Yes → Institute AF use in fleet vehicles
       - Educate drivers on AF use
       - Put promotional items in fleet vehicles
       - Create maps for fleet vehicles
     - No → Partner with Clean Cities and/or area fleets to build infrastructure
6. Locate stations fleets typically use
   - Ask those stations to carry AF
     - Yes → Were these efforts successful?
       - Yes → Contact other stations and retailers
       - No → Educate drivers on AF use
     - No → Put promotional items in fleet vehicles

And/or

- Partner with Clean Cities and/or area fleets to build infrastructure
Know Your Fleet

- **Inventory** existing AFVs by location
- **Estimate fuel** demand
- Determine most popular **current refueling stations** by location
- **Concentrate** on locations with the **highest number of AFVs** first
- **Move vehicles, if** appropriate
Locate Existing AF Stations

• Alternative Fuels Data Center (AFDC)
• Federal fleet AF station list
• Listserv (new service coming soon)
• Develop driver aids/incentives
  – Map to the refueling stations
  – Stickers, mirror hangers, other marketing tools (NEVC, CD)
Fleet’s Current Refueling Station

• Identify the most popular refueling stations for your fleet
  – Determine how many vehicles and/or how much fuel you purchase from the station each year

• Meet with the owner/operator and outline:
  – Federal fleet mandate to use alternative fuel
  – Current business from your fleet
  – Any additional fleets that may be interested
  – Tax incentives for installing infrastructure

• Give E85 flyer to owner
Partner with Clean Cities

- All Clean Cities coordinators were **pre-screened** for interest in partnering with Federal fleets to install public AF stations in their areas
- **55 coordinators** responded positively and are expecting calls
- List of **contact information** for interested Clean Cities coordinators
Clean Cities Coordinators Eager to Assist Federal Fleets

*Connecticut Clean Cities Include:
  - Norwich
  - Connecticut Southwestern Area
Partner with Other Fleets in the Area

- List of Federal fleet contacts by zip code
- Contact state, local or other private fleets
Attract New Public Refueling Stations

- **Identify refueling stations** convenient to your vehicles
- **Determine fuel needs** for AFVs or diesel for your fleet and all partner fleets
- Follow the same procedures as current refueling station
- May want to **target companies** that have already **shown an interest** in E85 or biodiesel
## Most Common E85 Station Companies in AFDC

<table>
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<tr>
<th>Company Name</th>
<th>Total</th>
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<tr>
<td>Cenex, Ampride or Cenex Ampride</td>
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<tr>
<td>Holiday</td>
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<tr>
<td>Gas City</td>
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<td>Kwik Trip</td>
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<td>Conoco</td>
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<tr>
<td>Quik n EZ</td>
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<td>BP</td>
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<td>Marathon</td>
<td>10</td>
</tr>
<tr>
<td>MFA Oil</td>
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</tbody>
</table>
Other Retailers Expressing Interest in E85

NEWS RELEASE
H-E-B NAMES FIVE SITES TO OFFER E-85 FUEL ALONG THE IH-35 CORRIDOR

Meijer to offer 20 E85 fueling locations in the Midwest

Posted Apr 19th 2006 2:55PM by Eric Bryant
Filed under: Trends, Hybrids/Alternative, Green, GM

Meijer, a supermarket chain that's little known outside of the US but arguably represents the Salt Bell's best defense against Wal-Mart, plans to offer E85 at 20 locations in Michigan. That may not sound like a lot, but there are currently only five locations that offer E85 in the state at this time. Meijer's involvement will represent the first major effort by a retailer to add E85 fueling capacity in the state.

Meijer will be working with General Motors - currently trying to push its ethanol capabilities through the Live Green, Go Yellow promotion - to publicize the new effort.

Wal-Mart May Start Pumping Ethanol
Retail Giant Owns And Operates 383 Gas Stations In U.S.

June 1, 2006

(AP) Wal-Mart Stores Inc. may offer ethanol made from corn at its 383 U.S. gas stations, a company spokesman said Wednesday.

Wal-Mart stressed it is not ready yet to make any announcements, but corn growers said Wal-Mart's entry into a market now mainly made up of scattered independent gas stations would be a significant boost to a budding new fuel industry.

Ethanol made from U.S.-grown corn has become a hot topic this year as Congress, the Bush

Kroger Debuts Ethanol Fuel in Texas
EPAct 2005, Section 1342
Tax Incentives

- **Tax credit** equal to **30%** of the cost of alternative refueling property, up to $30,000 for business property
- Natural gas, propane, hydrogen, E85, or biodiesel blends of B20 or more qualify
- **Credit** can be passed back to the equipment seller
- Effective on purchases put into service after **12/31/2005** and before **12/31/2009** (hydrogen purchases expire in **2014**)
- Replaces the Tax Deduction Timeline for the refueling property tax deduction extended by the Working Families Tax Relief Act of 2004
Educate and Motivate Your Drivers

- Performance Review (NREL)
- Key cards (Savannah River)
- Receipts
- Mirror hangers, stickers
- Maps to nearby stations
What about Other Fuels?

• **Natural gas** and **propane** are viable options in some areas
  – Salt Lake City, New York, California – CNG
  – Texas, North Carolina – LPG
  – Consider these vehicles

• **Biodiesel** is an option for all diesel vehicles
  – Several DOE fleets operate all diesel vehicles and equipment on B20
  – Nevada Test Site, Pantex
Non-AF Strategies

• Proven
  – NEVs (USMC)
  – LSVs (DOE – Argonne)
  – Smaller vehicles (HUD)

• Potential?
  – Savings from Petroleum Reduction
  – Teleconferencing, Ride sharing
  – Others

• Email heather_white@nrel.gov with ideas, successes
Where Do We Go From Here?

- **Infrastructure Cookbook**
  - Checklist/Flowchart
  - Retailer Flyer
  - Vehicle materials (CD, stickers, information)
  - Clean Cities
  - AFDC
  - E85 Toolkit
  - List of Federal Stations

- **Help with Clean Cities Coordination**
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