#### **Innovation for Our Energy Future**

# Strategies for Decreasing Petroleum Consumption in the Federal Fleet

Vicky Putsche
FedFleet 2006
June 19-22, 2006
Los Angeles, California

NREL/PR-540-40157



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#### **Presentation Overview**

- Federal Fleet Status
  - EPAct
  - E.O. 13149
- Petroleum Reduction
  - Methods
  - Tools

#### 2005 Federal Fleet Status

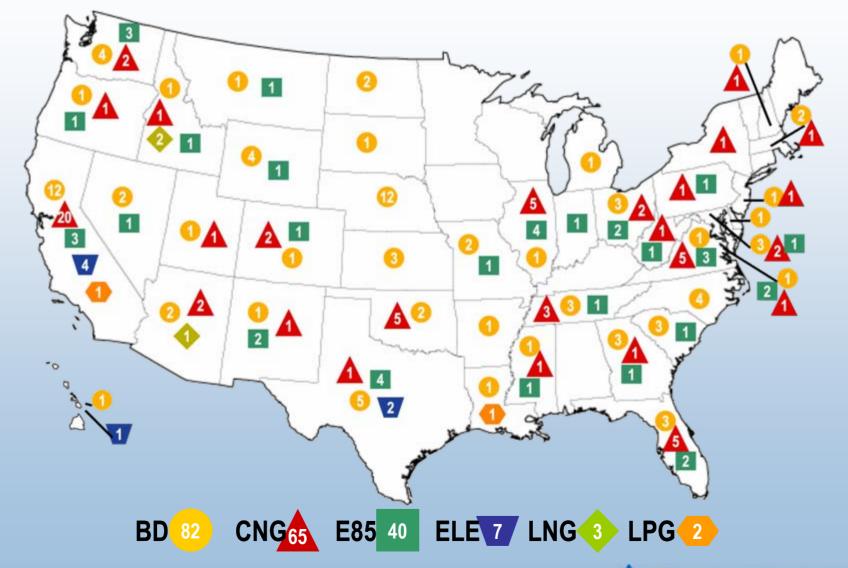
#### Problems

- 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

## Federal Fleet Refueling Infrastructure



#### **Alternative Fuel Use in Federal Fleets**

 Larger agencies with concentrated fleets, especially those with campuses where AFs can be located are doing well

– DOD - DOI

DOENASA

- 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...

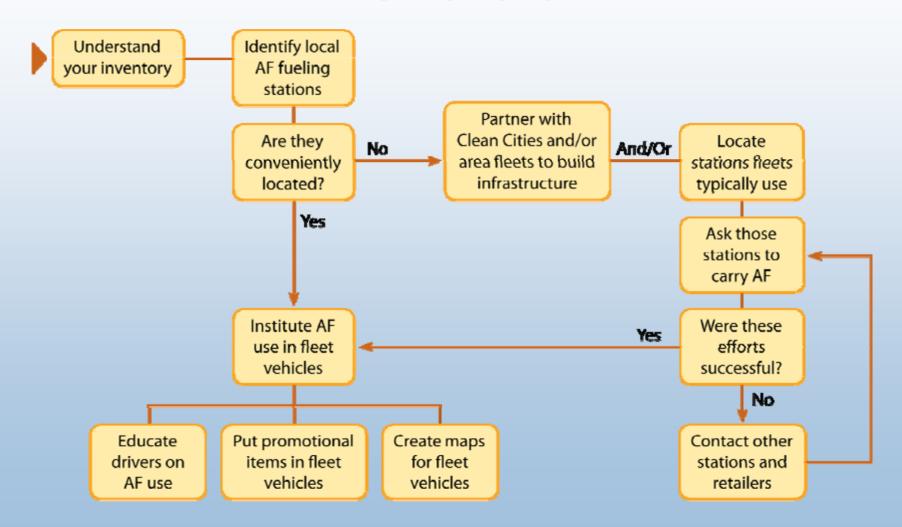


#### The Plan

- 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



#### **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



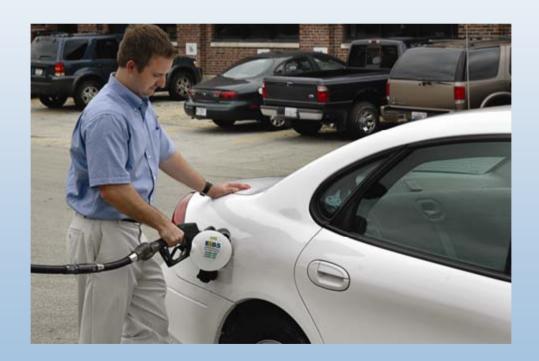
- 55 coordinators responded positively and are expecting calls
- List of contact information for interested Clean Cities coordinators

# Clean Cities Coordinators Eager to Assist Federal Fleets



#### 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

Company Name	Total
Cenex, Ampride or Cenex Ampride	103
Holiday	28
Gas City	23
Spinx	16
Kwik Trip	15
Conoco	14
Citgo	13
Fast Stop	11
Quik n EZ	11
BP	10
Marathon	10
MFA Oil	10

# Other Retailers Expressing Interest in E85

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

#### Wal-Mart May Start Pumping Ethanol

Retail Giant Owns And Operates 383 Gas Stations In U.S.

June 1, 2006



A tractor scoops up wet-cake, a corn meal byproduct of the ethanol process that is sold to farmers for cattle feed, May 23, 2000, at the Adkins Ethanol Plant near Lena, III. (AP)

FAST FACT

(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

#### 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 Belt'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.



#### Kroger Debuts Ethanol Fuel in Texas

JUNE 06, 2006 -- CINCINNATI -- The Kroger Co. here bowed its first ethanol-based E85 fuel station Monday, June 5, 2006, in Houston at 8550 Highway 6 North.

## 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 <u>heather\_white@nrel.gov</u> 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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- NREL Contacts
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  - kathleen nawaz@nrel.gov
  - heather white@nrel.gov

