Feeding the Fleet

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# Feeding the Fleet

**Performing Organization:**

**Abstract:**
Presented at the GreenGov Symposium, October 31 - November 2, 2011, Washington, DC
Introduction

- AFV Strategy
- GSA EV Pilot
- EV Charging Infrastructure
- Biodiesel
- E85
- Car Share Project
- Heavy Hybrid project
• **Our Goals**
  - Petroleum Reduction 2% per year (2005 baseline)
  - Petroleum Reduction 50% by 2015 (2009 baseline) *DoN only*
  - Alternative Fuel Use Increase 10% per year
  - 100% of new procurements AFVs by 2015

• **Our Plan**
  - Minimize petroleum use through right sizing and more efficient vehicles
  - Increase use of a variety of alternative fuels when and where they make sense (“Feed the Fleet” with alternative fuels!)
### Fleet Composition

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>Number of Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNG</td>
<td>287</td>
</tr>
<tr>
<td>E-85</td>
<td>13,506</td>
</tr>
<tr>
<td>Electric (low speed electric vehicles)</td>
<td>1,440</td>
</tr>
<tr>
<td>Hybrid</td>
<td>886</td>
</tr>
<tr>
<td>Total AFVs</td>
<td>16,119</td>
</tr>
<tr>
<td>Gas</td>
<td>17,636</td>
</tr>
<tr>
<td>Diesel</td>
<td>5,210</td>
</tr>
<tr>
<td>Total NTV’s</td>
<td>38,965</td>
</tr>
</tbody>
</table>

![Pie chart showing fuel types and percentages]

- Gas: 45%
- CNG: 13%
- E85: 35%
- Hybrid: 4%
- Electric: 2%
- Diesel: 1%
EV Charging Stations

- Working on Navy minimum requirements
- Current project in Northwest Region
  - 26 Level I/II stations should be installed end of CY2011
- GSA Pilot project for Southwest and Washington DC areas
  - 9 Chevy Volts and 2 Nissan Leafs
  - 10 Level I/II stations should be installed beginning of CY 2012

Source: EV Charge America
• Currently have E85 in the Midwest, Northwest, Norfolk, Pensacola, FL, Washington DC

• Pearl Harbor E85 station status
  – First Fuel delivery on July 6th
  – Completion is contingent on Fuel Master Integration

• Approximately 5 E85/B20 stations planned for FY 12
Car Share Project

• NAVSTA Norfolk demo completed in FY10
• NAVFAC Midwest completed pilot demo early FY 11
  – Expanding to additional sites as a transportation efficiency measure
• NAVFAC Northwest completed pilot demo of key manager technology only
• NAVFAC Southwest/GSA ZipCar Pilot

Picture of Key Manager
Heavy Hybrids

• Completed track testing at Aberdeen Proving Grounds
  – Found limited to moderate fuel efficiency gains for drive cycle modes (up to 25%) highly dependent on drive cycle
  – Found substantial fuel efficiency benefits (75%) for engine off work mode for bucket truck

• Initiated Site testing at NBK Bangor and NAVSTA San Diego
• The Navy is “Feeding the Fleet” with:
  – Continued Purchase of AFVs
  – Alternative Fuel Use
  – Alternative Fuel Infrastructure Projects

• ANY QUESTIONS?

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