Defense Logistics Agency Energy
Alternative Fuels Overview

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DLA Energy
Mission, Vision and Values

Mission
To provide the Department of Defense and other government agencies with comprehensive energy solutions in the most effective and efficient manner possible.

Vision
Our customers first choice for energy solutions.

Values
• Warfighter needs guide us
• Integrity defines us
• Diversity strengthens us
• Excellence inspires us
**DLA Energy Enterprise**

### Military Fuel FY10

<table>
<thead>
<tr>
<th>Description</th>
<th>FY10 Quantity</th>
<th>FY10 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory</td>
<td>59.9M barrels*</td>
<td></td>
</tr>
<tr>
<td>Storage Locations</td>
<td>630</td>
<td></td>
</tr>
<tr>
<td>Barrels Sold</td>
<td>130.5M</td>
<td></td>
</tr>
<tr>
<td>Fuel Cards</td>
<td>$699.7M</td>
<td></td>
</tr>
<tr>
<td>Aerospace Energy Sales</td>
<td>$69.6M</td>
<td></td>
</tr>
</tbody>
</table>

### Petroleum Sales: All Customers

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Net Sales (barrels)</th>
<th>Value (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY06</td>
<td>133.9M</td>
<td>$12.7B</td>
</tr>
<tr>
<td>FY07</td>
<td>132.4M</td>
<td>$12.6B</td>
</tr>
<tr>
<td>FY08</td>
<td>132.5M</td>
<td>$17.5B</td>
</tr>
<tr>
<td>FY09</td>
<td>129.0M</td>
<td>$12.2B</td>
</tr>
<tr>
<td>FY10 Estimate</td>
<td>130.5M</td>
<td>$15.3B</td>
</tr>
<tr>
<td>FY11 Estimate</td>
<td>125.5M</td>
<td>$18.0B</td>
</tr>
</tbody>
</table>

### Expanding Energy Solutions FY10

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas Business</td>
<td>$492M</td>
</tr>
<tr>
<td><em>Electricity Business</em></td>
<td>$36.5M</td>
</tr>
<tr>
<td><em>Coal Contract Business</em></td>
<td>$31.8M</td>
</tr>
<tr>
<td>Renewables</td>
<td>$1M</td>
</tr>
<tr>
<td>Energy Savings Performance</td>
<td>$33.5M</td>
</tr>
<tr>
<td><em>Estimated U.P. Awards</em></td>
<td>$616M</td>
</tr>
</tbody>
</table>
*multi year awards*

### Forward Presence FY10

- **Co-located:** 3 Service Control Points
- **4 Geographic Regions:** approx. 283 personnel

### Personnel On Board FY10

<table>
<thead>
<tr>
<th>Category</th>
<th>FY10 Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilians</td>
<td>1148</td>
</tr>
<tr>
<td>Military</td>
<td>63</td>
</tr>
</tbody>
</table>

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* 42 Gallons = 1 Barrel

**FY06 Net Sales**: 133.9M barrels - $12.7B

**FY07 Net Sales**: 132.4M barrels - $12.6B

**FY08 Net Sales**: 132.5M barrels - $17.5B

**FY09 Net Sales**: 129.0M barrels - $12.2B

**FY10 Estimate**: 130.5M barrels - $15.3B

**FY11 Estimate**: 125.5M barrels - $18.0B
How We Support the Warfighter

DLA Energy Regions

- DLA Energy Fort Belvoir
- DLA Energy Europe & Africa
- DLA Energy Middle East
- DLA Energy Pacific
- DLA Energy Americas
  - West
  - East

Approximately 1100 military and civilians worldwide
### Established Military Service Alt Energy Goals

#### Air Force
- **AF Energy Plan 2010** – “Increase Supply” Goals
  - By 2016, be prepared to acquire 50 percent of domestic aviation fuel via alternative blends greener than petroleum
  - Increase non-petroleum-based fuel use by 10 percent per annum in motor vehicle fleet

#### Navy
  - 2012 - Green Strike Group local ops in 2012
  - By 2016 - Sail Green Fleet
  - By 2015 - Reduce petroleum by 50 percent in the commercial vehicle fleet
  - By 2020 – 50 percent of total energy consumption from alternative sources

#### Army
- **Army Energy Security Implementation Strategy** – 2009
  - ESG 3: Increased use of Renewable/Alternative Energy
  - ESG 4: Assured Access to Sufficient Energy Supply
  - ESG 5: Reduced Adverse Impacts on the Environment
  - Established a Tactical Fuel and Energy Implementation

#### Quantification of Goals
- **Air Force**
  - 2016: **387,000,000** USG HRJ

- **Navy**
  - 2012: **100,000** USG HRJ-5; **350,000** USG HRF-76
  - 2016: **1,680,000** USG HRJ-5; **1,680,000** USG HRF-76
  - 2020: **336,000,000** USG HRJ-5 & HRF-76

Quantities are “neat”
Alternative Fuel Supply Chain “Pillars”

- Must be a drop-in-replacement fuel
- “Competitive” price
- Environmentally compliant with Section 526
- Complies with existing procurement statutes/regulations
- Leverage private sector demand
Efforts to Date

• Support Service testing & certification efforts

• Fischer-Tropsch
  – Four contracts: JP8, F76
  – 730,000 USG delivered
  – Coal-to-liquid, Gas-to-Liquid

• Hydrotreated Renewable
  – Seven contracts: HRJ8, HRJ5, HRF76
  – 761,500 USG

• B-20/E-85
  – Over 36,000,000 USG since 2006
Service Test and Certification

- **Air Force**
  - FY11: Entire Fleet certified on FT 50-50 blend
  - FY12: Entire Fleet certified on HRJ

- **Navy**
  - FY12: Platform certification & “Great Green Fleet” demonstration
Industry Qualification (ASTM D4054 Process)

There is a rigorous specification approval process!
Strategic Considerations

• Alternative fuels have a growing role in our economy
  – Mandates under Renewable Fuel Standards (RFS) 2

• Strong projections of Renewable and Cellulosic Biodiesels
  – Unlike FAME, is fungible with existing infrastructure
    – Cost competitive
    – Potential for ships bunker fuel support

• But…. 
Strategic Considerations (cont’d)

• No RFS2 mandates for jet fuel
  – Competition for refining capacity/biomass feedstocks

• Unclear price competitiveness

• Jet Fuel ~ 4 percent of U.S. energy consumption
  – DoD only 10 percent of total jet fuel demand

• Section 526 compliance

• Departmental assessment of recent relevant studies
• Continued support of testing & certification efforts
  – Must have approved specifications to solicit

• Continued intergovernmental & private sector collaboration
  – Synergism required to make alternative aviation fuels a reality

• Blue-print to feasible objectives
  – A game of “singles” vs. home runs

• Continued unified commitment: Budget, requirements
BACKUP
Strategic Alliance for Alternative Aviation Fuels

RDML Kurt Kunkel and ATA President and CEO James May sign the Strategic Alliance for Alternative Aviation Fuels agreement March 19, 2010.
Air Transport Association Strategic Alliance

• Shared goal
  – Advancing the development & deployment of commercially viable, environmentally friendly, alternative aviation fuel

• Joint Steering Group established to direct activities

• Three Collaborative Teams
  – Contract and Finance
  – Environment
  – Deployment and Logistics
Not later than February 1, 2010, the Secretary of Defense shall submit to the Committees on Armed Services of the Senate and House of Representatives a report on the use and potential use of renewable fuels in meeting the energy requirements of the Department of Defense. Such report shall include each of the following: (1) An assessment of the use of renewable fuels, including domestically produced algae-based, biodiesel, and biomass-derived fuels, as alternative fuels in aviation, maritime, and ground transportation fleets (including tactical vehicles and applications). Such assessment shall include technical, logistical, and policy considerations. (2) An assessment of whether it would be beneficial to establish a renewable fuel commodity class that is distinct from petroleum-based products.”
Section 334 Status

• Report completed Nov. 24, 2010

• Submitted to Director of Operational Energy Plans & Programs Office

• DOEPP Office will conduct Departmental Coordination prior to submission to Congress