DLA Energy
Supply-Chaining Alternative Aviation Fuels
Within the DoD

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Aug 25, 2010
DLA Energy

**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**
- People
- Service
- Excellence
- Innovation
- Trust
DLA Energy Enterprise

**Military Fuel FY09**
- Inventory: 59.6M barrels*
- Storage Locations: 625
- Transactions: 23.8M
- Barrels Sold: 129.0M
- Fuel Cards: $829M
- Aerospace Energy Sales: $79.6M

**Petroleum Sales: All Customers**
- FY05 Net Sales: 132.5M barrels, $8.5B
- 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: 129.0M barrels, $15.2B

**Foreign Military Sales FY09**
- Net Sales: 3.0M barrels - $202.2M

**Expanding Energy Solutions FY09**
- National Gas Business: $292M
- Electricity Business: $863M
- Coal Contract Business: $68.9M
- Renewables: $819K
- Estimated U.P. Awards: $1.2B

**Forward Presence FY09**
- Co-located: 3 Service Control Points
- 5 Geographic Regions: approx. 254 personnel

**Personnel On Board FY09**
- Civilians: 1,033
- Military: 63

* 42 Gallons = 1 Barrel
“Now, the Pentagon isn’t seeking these alternative fuels just to protect our environment; they’re pursuing these homegrown energy sources to protect our national security. Our military leaders recognize the security imperative of increasing the use of alternative fuels, decreasing energy use, reducing our reliance on imported oil, making ourselves more energy-efficient.”
## Focused Customer Change

### Air Force

- **AF Energy Plan 2010** – “Increase Supply” Goals
  - By 2016, be prepared to acquire 50% of domestic aviation fuel via alternative blends greener than petroleum
  - Increase facility renewable energy at annual targets
  - Increase non-petroleum-based fuel use by 10% per annum in motor vehicle fleet

### 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 Plan Working Group (DLA Energy supporting)

### Navy

- **Navy Energy Goals**, published Oct 2009
  - Green Strike Group by 2012
  - Reduce petroleum by 50% in the commercial vehicle fleet by 2015
  - Produce 50% of shore based requirements from alternative sources by 2020
  - Supply 50% of total energy consumption from alternative sources by 2020

### Other

- **NDAA FY10 Section 334 mandated study**
  - Comprehensive assessment of the use of renewable fuels as alternative fuels in aviation, maritime and ground transportation fleets
Alternative Fuel Supply Chain “Pillars”

- Must be a drop-in-replacement fuel
  - Use existing transportation and distribution infrastructure
  - No modifications to weapons platforms

- “Competitive” price
  - Requires Departmental/Service definition (i.e. what is the acceptable premium for “greenness” and/or energy security)

- Environmentally compliant with Section 526

- Complies with existing procurement statutes/regulations
Synthetic Fuel Support

• Fischer-Tropsch (FT) contracts supporting AF platform certification (JP-8)
  – June 2007 – 315,000 USG – Gas-to-Liquid
  – June 2008 – 60,000 USG – Coal-to-Liquid
  – July 2008 – 335,000 USG – Coal-to-Liquid

• FT contracts supporting Navy platform certification (F-76)
  – Sept 2009 – 20,000 USG – Gas-to-Liquid

• Specification exists
  – AF seeking to certify all platforms by 2011
Biofuel Support

• **Hydrotreated Renewable Jet (HRJ)-8**
  – Camelina & Tallow derived - 100,000 gal basic / 100,000 gal option each

• **HRJ-5**
  – Camelina derived - 40,000 gal basic / 150,000 gal option
  – Algae derived – 1500 gal total quantity

• **HRF-76**
  – Algae derived – 20,055 gal total quantity

• **Army HRJ-8**
  – 34,950 gal
  – Awarded 7/26/10.
Alaska Fischer-Tropsch Initiative

• Encourage commercial production of synthetic fuel
  – Feedstock neutral
  – All jet requirements in AK, WA, OR, under 50/50 blend specification

• Lessons learned from industry
  – Feedstock availability challenges
  – Credit availability challenges
  – Requirement size challenges

• Currently on “strategic pause”
Strategic Alliance for Alternative Aviation Fuels

RDMI Kurt Kunkel and ATA President and CEO James May sign the Strategic Alliance for Alternative Aviation Fuels agreement Mar. 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

• 3 Collaborative Teams
  – Contract and Finance
  – Environment
  – Deployment and Logistics
GIFTPAC

• Green Initiative for Fuels Transition Pacific (GIFTPAC)
  – PACOM initiative
  – Displace at least 25% of the fuel used by the DoD in Hawaii with locally produced “green” fuel
  – Support PACOM energy security requirements by developing organic capability to replace 100% reliance on outside sources
  – DLA Energy as Acquisition Manager

• Request for Information issued
  – Elicit industry interest
  – Sharing of information

• Industry Day Sep 2010
Challenges

• RFS2 - Renewable Identification Number
  – Credits only apply to ground fuel, not aviation fuel

• Long Term Contracting Authority
  – DLA Energy-drafted legislative proposal seeks 20 years

• Specifications
  – Services still testing/approving platforms for Fisher-Tropsch specification
  – Hydrotreated renewable biomass specification tracking for 2011 approval

• EISA Section 526 compliance
  – Applies to Government only – causes potential market challenges
  – Acceptable life cycle greenhouse gas measurement criteria/methodology
Potential “Enablers”
Legislative Mandates
Environmental Concerns
Long-Term Vision/Strategy
Petroleum Supply Instability
Favorable Financing Climate

• When is the best time to create this industry?
  – *Five years ago is probably a good answer*
  – *So is “today”*
Next Steps

• Continued support of testing & certification efforts
  – Must have approved specifications to solicit

• Continued intergovernmental & private sector collaboration
  – DOE, USDA, DoD, FAA, ATA, CAAFI, others
  – Synergism required to make alternative aviation fuels a reality

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