

Air Force Center for Engineering and the Environment

Integrity - Service - Excellence



Air Force and Sustainability: Normalizing the Concept

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Recognizing the Opportunities

**When life hands
you**



Most would ...



We chose to



Open a fruit stand



3 Pronged Attack

- **Advocacy/Outreach**
 - **Training/Education**
 - **Strengthen Strategic Relationships**
 - **Change the culture**
- **Programs**
 - **Demand reduction**
 - **Sustainable Design/Development Standards**
- **Process Improvements**
 - **Asset Management and VBT's**
 - **Operational Approach**
 - **LEED-EB campus concept**



Air Force As A Consumer...

The Air Force spent over \$7 billion for energy in FY06

AVIATION

- Total Sorties: 333K in FY06
- Total Fleet Size: 5,984
- Total Fuel Used: 2.6B gallons
- Total Fuel Cost: \$5.77B

FACILITIES

- Total Installations: 166
- Total Buildings: 16K
- Total Energy Used: 73M MMBTU
- Total Energy Costs: \$1.1B

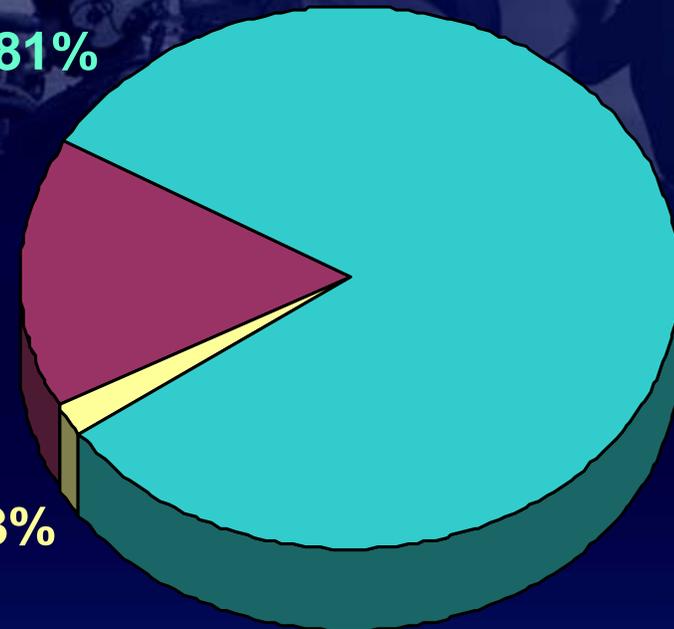
VEHICLES

- Total Fuel Used: 119.1M gallons
- Total Fuel Costs: \$231.2M

Aviation 81%

Facilities 16%

Vehicles 3%



Aviation fuel represented 81% of total energy costs.

Source: DESC FY06 Cost Data, AFTOC, Fuels Enterprise System & Defense Utility Reporting System, and VEMSO fuel reporting system



...A Consumer of Renewables

- **Renewable Energy**
 - Solar (Nellis AFB, Luke AFB, Fresno ANGB, March ARB)
 - Wind (F.E. Warren AFB, Dyes AFB)
 - Dyess and Fairchild—100% Green Power
- **Ground Vehicles**
 - Reduced fleet fossil fuel by 15% since 1999
 - Over 5,000 electric or low speed vehicles in use
 - Over 5,200 flex-fuel in use
 - Hickam Hydrogen fuel cell
- **Aviation**
 - Goal: Certify entire fleet to use 50/50 syn-fuel blend by 2011





QUESTIONS?

