



Energy 2003

Army Energy

Transitioning and Looking Ahead

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Energy Awareness Quiz

1. E.O 13123 directs federal agencies to reduce energy usage by ___% by 2010 (from 1985):

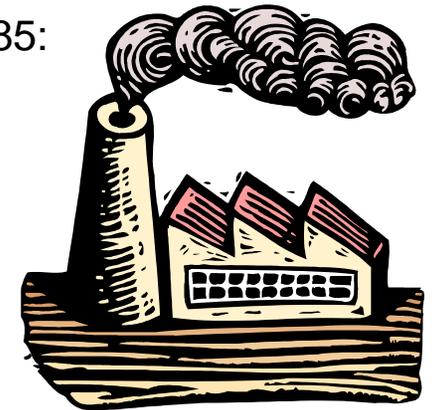
- a. 20% b. 25% c. 35% d. 50%

2. Federal buildings use about ___% less energy per square foot since 1985:

- a. 10% b. 20% c. 33% e. 66%

3. Army buildings use about ___% less energy per square foot since 1985:

- a. 14% b. 20% c. 28% d. 46%





Energy Awareness Quiz

4. Between 1973 & 2002, dependence on foreign oil rose from 35% to over ___% of consumption.

- a. 44% b. 50% c. 61% d. 88%

5. Share of disposable household income spent on energy:

- a. 1% b. 5% c. 8% d. 11%



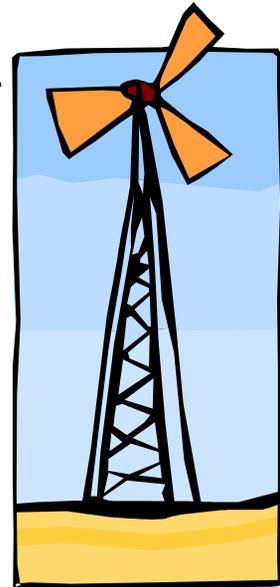
6. Current contribution of renewable/alternative energy to America's total electricity supply:

- a. <1% b. 6% c. 9% d. 11%



Energy Awareness Quiz

7. Which is currently the leading renewable energy source used by electric utilities to generate electric power?
- a. Solar b. Hydro(water) c. Wind d. Biomass (wood, waste, alcohol fuels)
8. Which of the following cannot be used to power an alternate-fuel vehicle?
- a. Liquefied petroleum gas (propane) b. Methanol c. Electricity d. Coal
9. Department of Defense is responsible for what share of federal energy usage.
- a. 15% b. 28% c. 62% d. 79%
10. Percentage of Army energy consumption attributed to facilities:
- a. 29% b. 50% c. 72% d. 83%





Investment in Energy Projects

- ✓ **Energy Saving Performance Contracts**
 - Private investment funded by savings
 - \$457M in investments thru FY 03

- ✓ **Alternate Fuel Vehicles**
 - Fort Leonard Wood – Operational Mar 03

- ✓ **Renewable Energy**
 - Yuma Solar Power
 - National Capital Region Wind Power

- ✓ **Utilities Privatization**
 - Privatized 78 of 351 eligible US systems

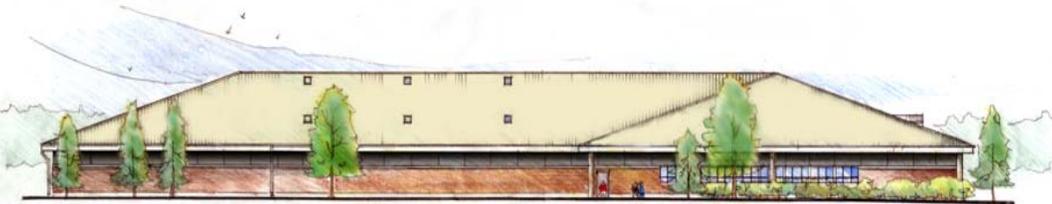


DA Energy Initiatives

- ✓ **Installation Energy Audits**
 - **17% of Army inventory in FY03**
- ✓ **Resource Efficiency Managers**
 - **Fort Lewis and Fort Polk**
- ✓ **Training**
 - **78 Certified Energy Managers**
- ✓ **SecArmy Energy & Water Management Awards**
 - **5 Installations and 3 Individuals**
- ✓ **Federal Energy Awards**
 - **Army: 5 FY03; 13 FY02; 6 FY01**
- ✓ **Alternate Fuel Vehicles**
 - **5 other inst programs operational by the end of FY03**



Sustainable Project Rating Tool (SPiRiT) for MILCON



<u>Standard</u>	<u>Points</u>
Platinum	75-100
Gold Minimum FY 06	50-74
Silver	35-49
Bronze Minimum FY 02	25-34

Engineer Technical Letter 1110-3-491 defines sustainability as “. . . the design, construction, operation and reuse/removal of the built environment (infrastructure as well as buildings) in an environmentally and energy efficient manner. . . meeting the needs of today without compromising the ability of future generations to meet their needs.”



Alternative Fueled Vehicles

Legal Requirements

- Energy Policy Act: 75% of all Light Duty Vehicles (<8,500 GVW) Acquired Must Be AFV
- Executive Order 13149
 - Use Alternative Fuel in AFV 51% of time
 - Reduce NTV Petroleum Consumption 20% by 2005

Limit Army Costs

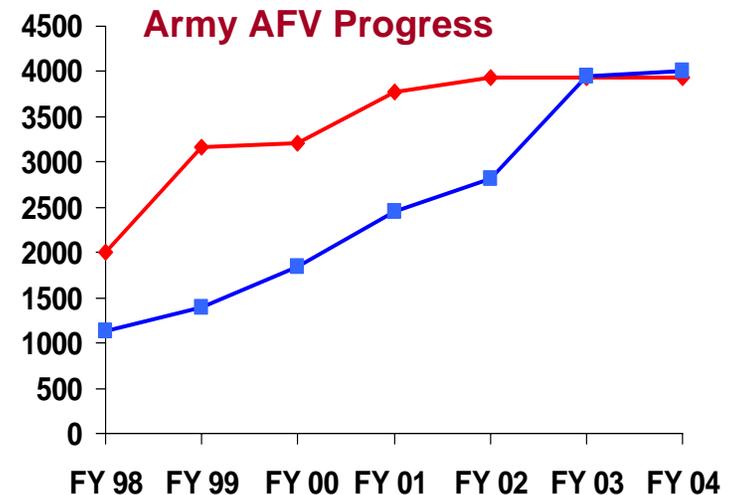
- Use B-20 Biodiesel
 - \$0.15 less a gallon vice diesel
 - Generate AFV credits
 - Reduce Petroleum Use
- DESC Maintenance, Repair and Environment Account can fund Tank Upgrade and Conversions

AFV Execution Plan

FY	MSA Base	Goal	Actual	% of Base
00	4,273	3,204	1,840	43
01	5,035	3,776	2,454	49
02	5,237	3,928	2,810	54
03	5,237	3,928	3,950	75
04	5,237	3,928	4,000	76

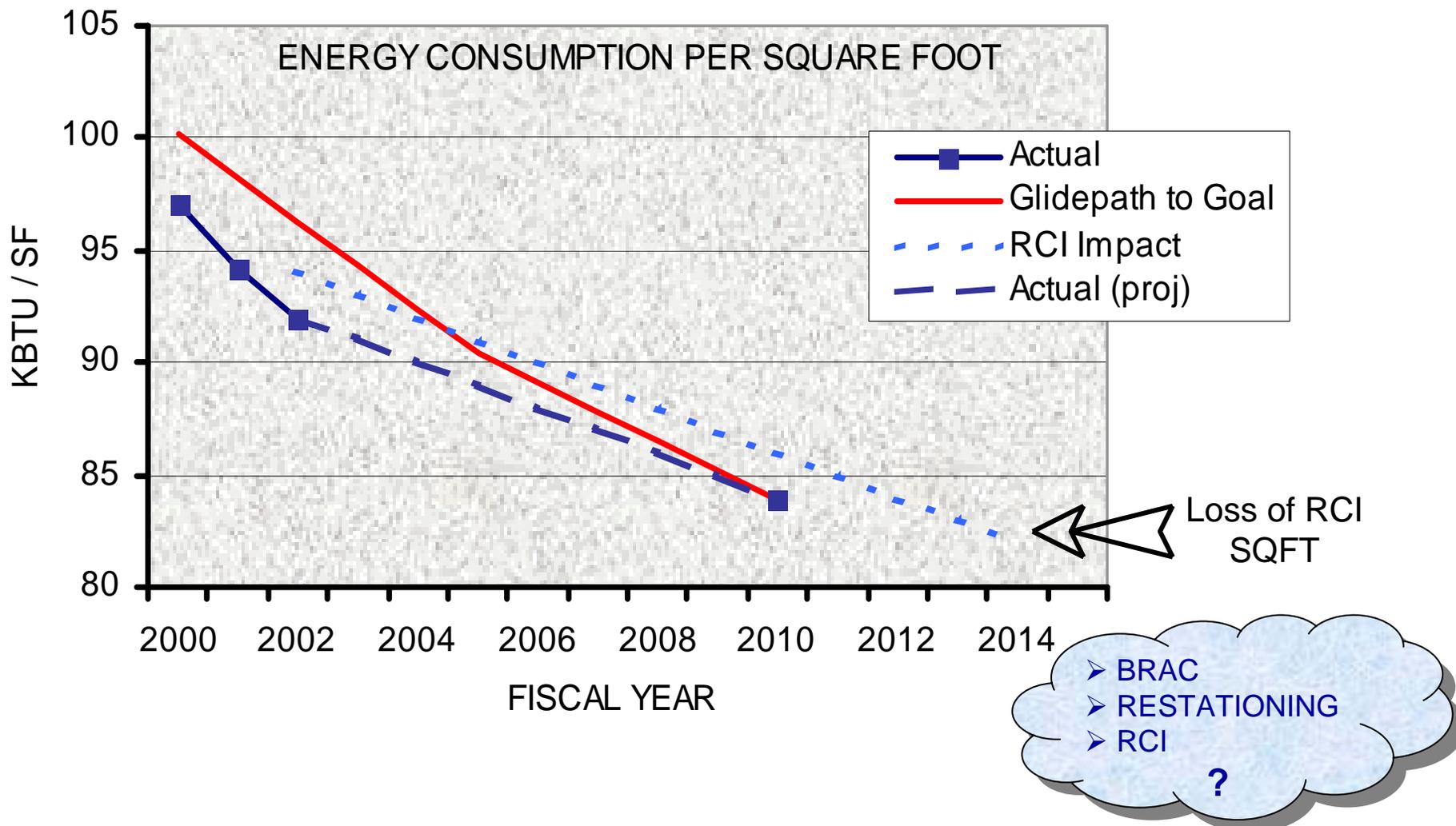
*Army imposed surcharge on vehicles leased from GSA

Fiscal Year	Funding (millions)*
- FY 01	6
- FY 02	4.5 (AFV Cost Declined)
- FY 03	6.5
- FY 04 +	6.5





Impact of RCI on Army Energy Program





Plan for Future

- **FY04 Energy Audits**
- **Conduct RADDs Training**
- **Increase Emphasis on SecArmy Energy & Water Management Awards**
- **DOE/FEMP Awards**
- **Enhanced Visibility on Energy Assessment Seminars**