

# FY 2005 DOD ENERGY MANAGEMENT DATA REPORT

Agency: Department of Defense  
 Date: 15-Dec-05

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## PART 1: ENERGY CONSUMPTION AND COST DATA

### 1-1. Standard Buildings/Facilities FY 2005

Energy Type	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)	Unit Cost (\$)	Site-Delivered Btu (Billion)	Est. Source Btu (Billion)	Est. Carbon Emissions (Metric Tons)
Electricity	MWH	24,414.515.0	1,619,198.2	\$0.07 /KWh	83,302.3	289,312.0	4,168,448
Fuel Oil	Thou. Gal.	169,755.7	207,799.0	\$1.22 /gallon	23,546.1	23,545.1	469,725
Natural Gas	Thou. Cubic Ft.	64,804,856.7	532,077.8	\$8.24 /Thou Cu Ft	66,607.6	66,607.6	963,812
LPG/Propane	Thou. Gal.	18,837.3	22,035.2	\$1.17 /gallon	1,799.0	1,799.0	30,564
Coal	S. Ton	442,984.4	34,627.0	\$78.17 /S. Ton	10,888.6	10,888.6	280,271
Purch. Steam	BBtu	8,128.8	53,643.6	\$6.60 /MMBtu	8,128.8	11,299.0	290,837
Other	BBtu	3,806.8	57,190.8	\$15.02 /MMBtu	3,806.8	3,806.8	
		Total Costs:	\$2,526,571.7		198,078.2	407,258.1	6,203,659
Standard Buildings/Facilities (Thou. Gross Square Feet)			1,953,859.2				

Btu/GSF:	101,378	208,438
Btu/GSF w/ RE Purchase Credit:	99,049	206,109
Btu/GSF w/ RE & Sec. 502(e) Credit:	98,201	206,109

### 1-1a. Standard Buildings/Facilities Out Year Projection

Energy Type	Consumption Units	FY 2006		FY 2007	
		Annual Consumption	Annual Cost (Thou. \$)	Annual Consumption	Annual Cost (Thou. \$)
Electricity	MWH	23,672,875.5	1,617,960.4	23,376,863.1	1,630,832.3
Fuel Oil	Thou. Gal.	164,153.3	272,617.8	161,614.9	287,090.8
Natural Gas	Thou. Cubic Ft.	62,419,254.3	571,307.2	61,607,000.7	631,873.4
LPG/Propane	Thou. Gal.	18,395.5	25,440.8	18,182.6	30,025.8
Coal	S. Ton	425,720.0	36,923.0	420,055.4	40,953.9
Purch. Steam	BBtu	7,965.4	59,188.0	7,878.4	68,394.3
Other	BBtu	3,570.9	53,529.6	3,520.6	52,901.9
		Total Costs:	\$2,636,966.8		\$2,742,072.3
Standard Buildings/Facilities (Thou. Gross Square Feet)			1,916,946.3		1,916,507.0



1-3. Exempt Facilities  
FY 2005

Energy Type	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)	Unit Cost (\$)	Site-Delivered Btu (Billion)	Est. Source Btu (Billion)	Est. Carbon Emissions (Metric Tons)
Electricity	MWH	1,640,733.0	122,168.2	\$0.07 /kWh	5,598.2	19,442.7	280,133
Fuel Oil	Thou. Gal.	12,179.7	11,263.8	\$0.92 /gallon	1,689.3	1,689.3	33,702
Natural Gas	Thou. Cubic Ft.	435,219.2	3,523.2	\$8.10 /Thou Cu Ft	448.7	448.7	6,493
LP/G/Propane	Thou. Gal.	42.2	62.0	\$1.47 /gallon	4.0	4.0	69
Coal	S. Ton	3,634.1	214.9	\$59.14 /S. Ton	89.3	89.3	2,299
Purch. Steam	BBtu	526.4	4,976.5	\$9.45 /MMBtu	526.4	731.7	18,834
Other	BBtu	625.7	8,997.5	\$14.38 /MMBtu	625.7	625.7	
Total Costs:				\$151,206.1		23,031.5	341,630
Exempt Facilities (Thou. Gross Square Feet)				0.0			

Total:	8,981.7	23,031.5	341,630
BU/GSF:	#DIV/0!	#DIV/0!	#DIV/0!
BU/GSF w/ RE Purchase Credit:	#DIV/0!	#DIV/0!	#DIV/0!
BU/GSF w/ RE & Sec 502(e) Credit:	#DIV/0!	#DIV/0!	#DIV/0!

1-3a. Exempt Facilities Out Year Projection

Energy Type	Consumption Units	FY 2006		Annual Cost (Thou. \$)	Standard Buildings/Facilities (Thou. Gross Square Feet)	FY 2007	
		Annual Consumption	Annual Cost (Thou. \$)			Annual Consumption	Annual Cost (Thou. \$)
Electricity	MWH	1,640,733.0	122,168.2	122,168.2		1,640,733.0	122,168.2
Fuel Oil	Thou. Gal.	12,179.7	24,359.4	24,359.4		12,179.7	24,359.4
Natural Gas	Thou. Cubic Ft.	435,219.2	3,523.2	3,523.2		435,219.2	3,523.2
LP/G/Propane	Thou. Gal.	42.2	62.0	62.0		42.2	62.0
Coal	S. Ton	3,634.1	214.9	214.9		3,634.1	214.9
Purch. Steam	BBtu	526.4	4,976.5	4,976.5		526.4	4,976.5
Other	BBtu	625.7	8,997.5	8,997.5		625.7	8,997.5
Total Costs:				\$164,301.7		Total Costs:	\$164,301.7
Exempt Facilities (Thou. Gross Square Feet)				0.0		Standard Buildings/Facilities (Thou. Gross Square Feet)	
						0.0	

1-4. Non-Fleet Vehicles and Other Equipment

	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)	Unit Cost (\$)	Btu (Billion)	Est. Carbon Emissions (Metric Tons)
Auto Gasoline	Thou. Gal.	53,673.5	\$100,906.1	\$1.88 /gallon	6,709.2	129,823
Diesel-Distillate	Thou. Gal.	154,036.4	\$240,296.8	\$1.56 /gallon	21,364.9	426,229
LPG/Propane	Thou. Gal.	13.6	\$6.2	\$0.46 /gallon	1.3	22
Aviation Gasoline	Thou. Gal.	605.1	\$2,596.0	\$4.29 /gallon	75.6	1,427
Jet Fuel	Thou. Gal.	3,727,746.0	\$6,337,168.2	\$1.70 /gallon	484,607.0	9,367,453
Navy Special	Thou. Gal.	1,229,585.5	\$1,266,473.0	\$1.03 /gallon	170,543.5	3,664,980
Other (Lubricating oils)	Bbtu	1,432.3	\$4,626.2	\$3.23 /MMBtu	1,432.3	
Total Costs			\$7,952,072.6		684,733.7	13,589,934

1-5. WATER CONSUMPTION, COST AND EFFICIENCY MEASURES

	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)
Water	Million Gal.	124,293.2	240,056.6
Best Management Practice Implementation Tracking Data			
Number of facilities* in agency inventory			
Number of facilities with completed water management plans			
Number of facilities with at least four (4) BMPs fully implemented			
*Number in the agency inventory, can be buildings, bases, or campuses			

1-6. RENEWABLE ENERGY/RENEWABLE ENERGY CERTIFICATE PURCHASES IN FY 2005

(Only include renewable energy purchases from resources developed after 1990)

Description of Each Renewable Energy Purchase (examples below, insert additional rows as necessary)	Amount Purchased after 1990		of Generation or Source	(Standard, EI, or Exempt)
	Amount Purchased (MWH)	or Amount Purchased (Million Btu)		
Total Electricity from Renewable Source				
USAFA	60		CO	Standard
Edwards AFB	132,780		CA	Standard
Grand Forks AFB	2,520		ND	Standard
Goodfellow, TX	14,884		TX	Standard
Lackland, TX	1,800		TX	Standard
Laughlin, TX	13,842		TX	Standard
Sheppard, TX	45,596		TX	Standard
Cannon	1,800		NM	Standard
Ellsworth	13,013		SD	Standard
Minot AFB	103,202		ND	Standard
RAF Lakenheath	11,178		England	Standard
Fort Lewis	17,072		WA	Standard
Rock Island				
Arsenal	18,279		IL	Standard
Fort Carson	130,878.0		CO	Standard
NSY Portsmouth	114,611.0		VA	EI
Iceland		1,843.0	Iceland	EI
Renewable Energy Certificates				
Fairchild AFB	67,278		WA	Standard
Altus AFB	3,000		OK	Standard
Columbus AFB	42,610		AR	Standard
Goodfellow AFB	3,000		TX	Standard
Gunter	45,906		AL	Standard
Keesler, MS	42,000		MS	Standard
Lackland, TX	69,000		TX	Standard
Laughlin, TX	3,000		TX	Standard
Little Rock, AR	39,000		AR	Standard
Luke, AZ	3,000		AZ	Standard
Maxwell, AL	3,000		AL	Standard
Randolph, TX	36,000		TX	Standard
Sheppard, TX	3,000		TX	Standard
Tyndall, FL	50,400		FL	Standard
Vance, OK	12,000		OK	Standard
WHMC	5,084		TX	Standard
F.E. Warren, WY	4,547		WY	Standard
Barksdale	15,817		LO	Standard
Beale	14,579		CA	Standard
Cannon	7,557		NM	Standard
Davis-Monthan	13,146		AZ	Standard
Dyess	72,885		TX	Standard
Dyess Commissary	1,788		TX	Standard

Dyess - Off base sites		602						
Elsworth		10,853				TX	Standard	
Holloman		13,150				SD	Standard	
Langley		21,891				NM	Standard	
Mountain Home		9,282				VA	Standard	
Nellis		23,749				ID	Standard	
Offutt		23,587				NV	Standard	
Seymour Johnson		12,520				NE	Standard	
Shaw		15,869				NC	Standard	
Whiteman		18,000				SC	Standard	
Fort Carson		40,000				MI	Standard	
Fort Lewis		12,071				CO	Standard	
						WVA	Standard	
Natural Gas from Landfill/Biomass								
Renewable Thermal Energy								
Norfolk				222,647.0		VA	Standard	
Iceland				378,674.0		Iceland	EI	
Natick				2,291.2		MA	Standard	
Iceland				8,688.0		Iceland	EI	
Other Renewable Energy (describe)				0.0				
Total All Purchases				1,382,967.5				
Total Purchases for Standard Buildings				1,268,356.5				
Total Purchases for Exempt Facilities				114,611.0				
Total Purchases for Exempt Facilities				0.0				

1-7. SELF-GENERATED RENEWABLE ENERGY INSTALLED AFTER 1990

Consumption Units	Total Annual Energy	Energy Used by Agency*
Electricity from Renewables	MWH	387,452.0
Natural Gas from Landfill/Biomass	MMBtu	695.8
Renewable Thermal Energy**	MMBtu	1,600,489.1
Other Renewable Energy ***	MMBtu	99,859.9

\*Energy used by agency equals total annual generation unless a project sells a portion of the energy it produces to another agency or the private sector. It can equal zero in the case of non-Federal energy projects developed on

\*\*Examples are geothermal, solar thermal, and geothermal heat pumps, and the thermal portion of combined heat and power projects. Energy savings from geothermal heat pumps should be based on energy savings compared to

\*\*\*For other renewable energy that does not fit any category, fill in the type, units used, annual consumption and

1-8. TOTAL RENEWABLE ENERGY USE AS A PERCENTAGE

Energy Use (Bbtu)	Facility Electricity Use (Bbtu)	Percentage of Electricity Use
8353.6	100,977.1	8.3%

OF FACILITY ELECTRICITY USE

**PART 2: ENERGY EFFICIENCY IMPROVEMENTS**

**2-1. DIRECT AGENCY OBLIGATIONS**

(Agencies may attach their final OMB Circular A-11 Energy and Transportation Efficiency Management Exhibit in

	FY 2005	Projected FY 2006
Direct obligations for facility energy	(MMBTU) (Thou. \$)	(MMBTU) (Thou. \$)
Estimated annual savings	1,826,196.3 188,960.7	1,331,117.1 190,562.8
	39,245.9	32,201.7

**2-2. ENERGY SAVINGS PERFORMANCE CONTRACTS (ESPC)**

	Annual savings (MMBTU)	(number/Thou. \$)
Number of ESPC Task/Delivery	456,537.0	15.0
Investment value of ESPC Task/Delivery Orders		71,192.3
Amount privately financed under ESPC Task/Delivery		67,347.8
Cumulative guaranteed cost savings of ESPCs		141,685.6
Total contract award value of ESPCs awarded in fiscal		140,954.9
Total payments made to all ESP contractors in fiscal		156,002.0

**2-3. UTILITY ENERGY SERVICES CONTRACTS (UESC)**

	Annual savings (MMBTU)	(number/Thou. \$)
Number of UESC Task/Delivery	602,368	22
Investment value of UESC Task/Delivery Orders		63,648
Amount privately financed under UESC Task/Delivery		61,781
Cumulative cost savings of UESCs awarded in fiscal		140,361
Total contract award value of UESCs awarded in fiscal		83,524
Total payments made to all UESC contractors in fiscal		86,795

**2-4. UTILITY INCENTIVES (REBATES)**

	Annual savings (MMBTU)	(Thou. \$)
Incentives received and estimated	99,691.5	\$4,428.6
Funds spent in order to receive		\$8,486.0

**2-5. TRAINING**

	(number)	(Thou. \$)
Number of personnel	3,481	\$1,602.5