

**Annual Report to Congress
on Federal Government
Energy Management and
Conservation Programs
Fiscal Year 2004**

February 24, 2006

**U.S. Department of Energy
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Federal Energy Management Program
Washington, DC 20585**

TABLE OF CONTENTS

I.	Overview of Federal Energy Consumption and Costs	1
A.	Standard Buildings	5
B.	Industrial, Laboratory and Other Energy Intensive Facilities	5
C.	Exempt Facilities	5
D.	Vehicles and Equipment	6
II.	Requirements of the National Energy Conservation Policy Act and Energy Policy Act and Related Findings	7
A.	Agency Progress in Meeting Energy Reduction Goals	8
B.	Investments in Energy Efficiency	9
1.	Direct Appropriations	9
2.	Energy Savings Performance Contracting	9
3.	Utility Energy Service Contracts	10
4.	Life-Cycle Costing (LCC)	10
III.	Interagency Exchange of Information	11
1.	Federal Coordination	11
2.	Training	12
3.	Awards and Recognition	13
4.	Public Education Programs	14

APPENDICES

Appendix A	Data Tables	A-1
Table 1-A	Total Primary Energy Consumption by Federal Agencies	A-2
Table 1-B	Total Site-Delivered Energy Consumption by Federal Agencies	A-3
Table 2	Federal Petroleum Usage in FY 2004	A-4
Table 3-A	Agency Direct Appropriations for Energy Conservation Retrofits and Capital Equipment, FY 1985 through FY 2004 (Thousands of Nominal Dollars)	A-5
Table 3-B	Agency Direct Appropriations for Energy Conservation Retrofits and Capital Equipment, FY 1985 through FY 2004 (Thousands of Constant 2004 Dollars)	A-6
Table 4-A	Primary Energy Consumption in Federal Standard Buildings	A-7
Table 4-B	Site-Delivered Energy Consumption in Federal Standard Buildings	A-8
Table 5	Consumption and Costs of Federal Standard Buildings Energy by Fuel Type in FY 2004, FY 2003, and FY 1985	A-9
Table 6-A	Federal Standard Buildings Site-Delivered Energy Use Per Gross Square Foot, FY 1985 and FY 2004	A-10
Table 6-B	Federal Standard Buildings Primary Energy Use Per Gross Square Foot, FY 1985 and FY 2004	A-11
Table 7	Site-Delivered Energy Consumption in Federal Energy Intensive Facilities	A-12
Table 8	Consumption and Costs of Federal Energy Intensive Facilities Energy By Fuel Type in FY 2004	A-13

Table 9	Energy Consumption, Costs, and Gross Square Footage of Federal Exempt Facilities, FY 2004	A-14
Table 10	Consumption and Costs of Federal Exempt Facility Energy By Fuel Type in FY 2004	A-14
Table 11	Federal Energy Consumption in Vehicle and Equipment Operations	A-15
Table 12	Consumption and Costs of Vehicle and Equipment Energy by Fuel Type in FY 2004	A-16
Table 13	Federal Energy Expenditures, FY 1985 through FY 2004	A-17

Appendix B Data Collection **B-1**

Appendix C Acronyms **C-1**

FIGURES

Figure 1	Federal Energy Consumption, FY 2004	3
Figure 2	Federal Energy Costs, FY 2004	4
Figure 3	Decrease in Btu per Gross Square Foot in Federal Standard Buildings from FY 1985	8

I. OVERVIEW OF FEDERAL ENERGY CONSUMPTION AND COSTS

This report on Federal Energy Management for fiscal year (FY) 2004 provides information on energy consumption in Federal buildings, operations, and vehicles and documents activities conducted by Federal agencies to meet the statutory requirements of Title V, Part 3, of the National Energy Conservation Policy Act (NECPA), as amended, 42 U.S.C. §§ 8251-8259, 8262, 8262b-k and Title VIII of NECPA, 42 U.S.C. § 8287-8287c. Activities undertaken during FY 2004 by the Federal agencies under the Energy Policy Act of 1992 (EPACT) are also discussed in this report.

Based on reports submitted to the Department of Energy (DOE) by 24 Federal agencies, the total primary energy consumption of the Government of the United States, including energy consumed to produce, process, and transport energy, was almost 1.7 quadrillion British Thermal Units (quads) during FY 2004 (Table 1-A)¹. These 1.7 quads consumed by the Government in buildings and operations to provide essential services to its citizens, including the defense of the Nation, represent approximately 1.7 percent of the total 99.74 quads² used in the United States. In total, the Federal Government is the single largest energy consumer in the Nation, although its pattern of consumption is widely dispersed geographically.

The Government consumed 1.2 quads during FY 2004 when measured in terms of energy delivered to the point of use (site-delivered energy consumption) (Table 1-B). Unless otherwise noted, this report uses the site-measured conversion factors to convert common units for electricity and steam to British Thermal Units (Btu). The total site-delivered energy consumption in FY 2004 was 18.7 percent less than the FY 1985 base year. This reduction of 271.7 trillion Btu, which reflects both a drop in Government activity and the success of energy management efforts, could satisfy the energy needs of the State of North Dakota for more than one year.³

The total cost of the 1.2 quads was \$11.3 billion in FY 2004 and represented approximately 0.5 percent of the total Federal expenditures of \$2.319 trillion⁴ for all purposes in FY 2004.⁵ In constant 2004 dollars, this equates to a decrease of 40.1 percent from \$18.8 billion in FY 1985 to

¹Primary energy consumption considers all energy resources used to generate and transport electricity and steam. Tables 1-A, 4-A, and 6-B show primary energy consumption for comparison with site-delivered consumption shown in Tables 1-B, 4-B, and 6-A respectively. Conversion factors of 11,850 Btu per kilowatt hour for electricity and 1,390 Btu per pound of steam are used to calculate gross energy consumption.

²DOE/EIA-0384(2004), *Annual Energy Review 2004*, August 2005, Table 1.3.

³Based on site-delivered energy consumption estimates for 2001 in the residential, commercial, industrial, and transportation sectors (248.0 trillion Btu). Source: DOE/EIA-0214(01), *State Energy Data: Consumption, 2001*, Table R1.

⁴*Analytical Perspectives, Budget of the United States Government, Fiscal Year 2005*

⁵Unless otherwise noted, all costs cited in this report are in constant 2003 dollars, calculated using Gross Domestic Product implicit price deflators. See DOE/EIA-0384(02), *Annual Energy Review 2003*, Table D1; October 2003. Costs noted as nominal dollars reflect the price paid at the time of the transaction and have not been adjusted to remove the effect of changes in the spending power of the dollar.

\$11.3 billion in FY 2004 (Table 13). The reductions in energy costs from 1985 are attributable primarily to reduced energy prices and reduced Government activity, although they also reflect the effects of agency energy management efforts.

The Federal energy bill for FY 2004 increased 12.1 percent compared to the previous year. Overall, the unit cost of all fuel types used increased 6.7 percent, from \$8.96 per million Btu to \$9.56 per million Btu. Contributing to the overall increase in unit costs were increases in the prices paid by the Government for:

- Jet Fuel (24.7 percent increase)
- Fuel Oil (9.9 percent increase)
- Natural Gas (13.1 percent increase)
- Diesel Fuel (27.4 percent increase)

In addition to prices and Federal energy management activities, many other variables contribute to changes in annual energy use and costs, including changes in square footage, building stock, weather, tempo of operations, fuel mix, and vehicle, naval, and aircraft fleet composition.

In FY 2004, the Department of Defense (DOD) spent \$8.3 billion for energy out of the total Federal energy expenditure of \$11.3 billion. Overall, DOD used 23.2 percent less site-delivered energy in FY 2004 than in FY 1985—a reflection of reduced Defense-related activity and successful energy management efforts. Consumption did increase 6.2 percent from the previous year, reflecting increased defense-related operations.

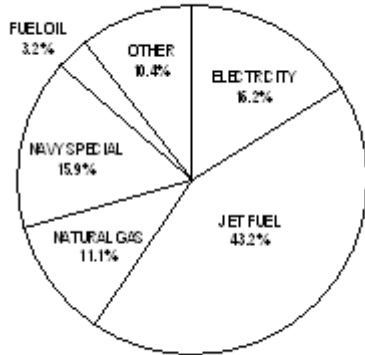
Figures 1 and 2 depict the percentage of total energy used by the Federal Government in FY 2004 and its cost. As illustrated, jet fuel and electricity account for approximately 59.4 percent of the total energy consumption represented in Figure 1 and approximately 70.5 percent of the total energy costs in Figure 2.

In FY 2004, petroleum-based fuels accounted for 0.82 quads (817,092.5 billion Btu) of the total 1.2 quads consumed by the Federal Government (Table 2). Of that, approximately 0.75 quads (754,730.2 billion Btu) were used by DOD primarily for jet fuel and distillate/diesel for vehicles and equipment energy. Only 0.03 quads (34,110.7 billion Btu) of petroleum-based fuels were used for Federal standard buildings energy.

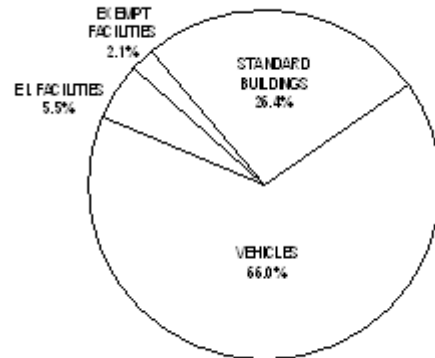
Federal agencies report energy consumption under four categories: 1) standard buildings; 2) industrial, laboratory and other energy intensive facilities; 3) exempt facilities; and 4) vehicles and equipment.

FIGURE 1
Federal Energy Consumption, FY 2004

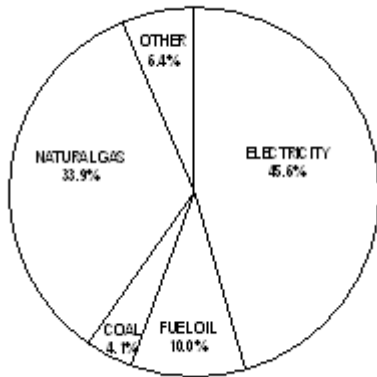
Total by Energy Type: 1.18 quads



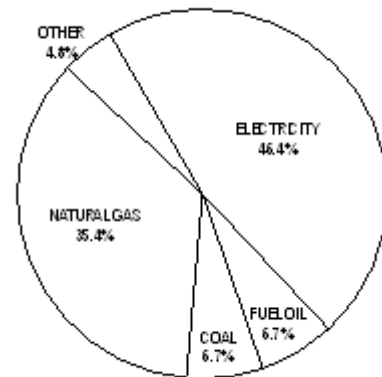
Total by Sector: 1.18 quads



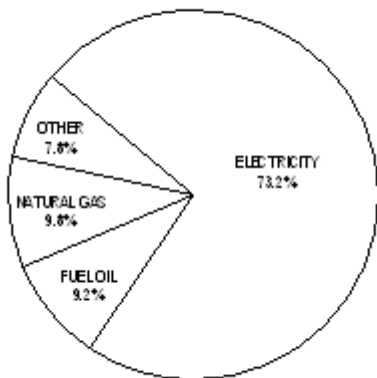
Standard Buildings: 0.31 quads



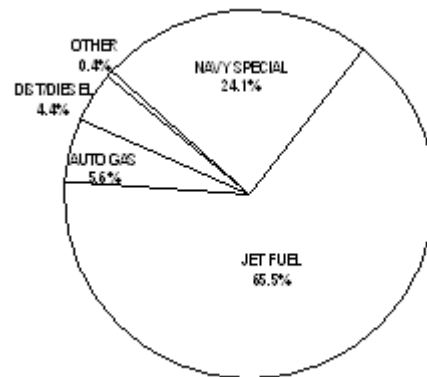
Energy Intensive Facilities: 0.06 quads



Exempt Facilities: 0.02 quads



Vehicles & Equipment: 0.78 quads



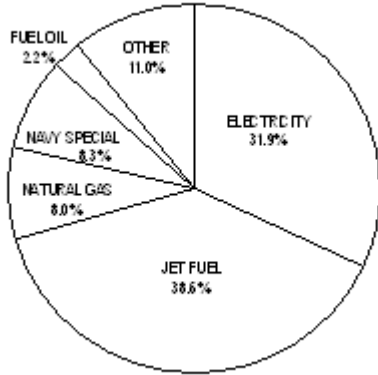
Data as of 05/05/05

Source: Federal Agency Annual Energy Management Data Reports

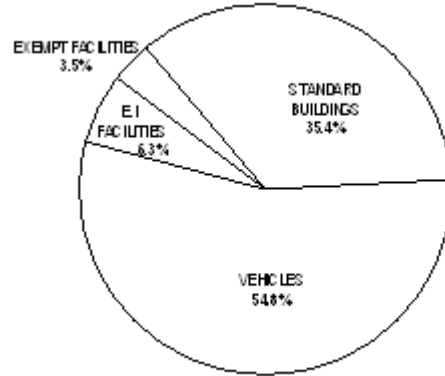
Note: Sum of components may not equal 100 percent due to independent rounding.

FIGURE 2
Federal Energy Costs, FY 2004

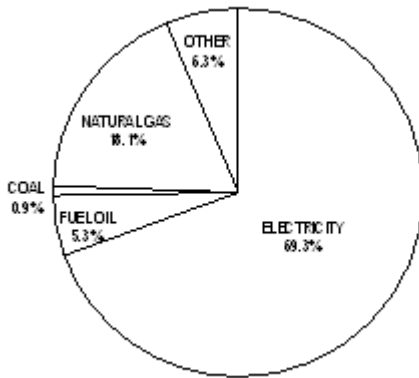
Total by Energy Type: \$11.26 Billion



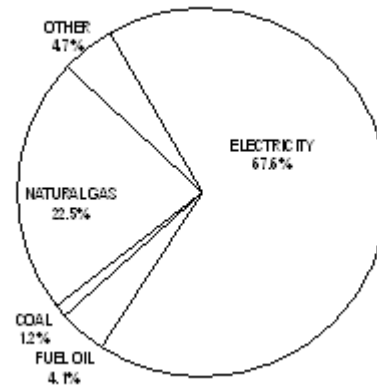
Total by Energy Type: \$11.26 Billion



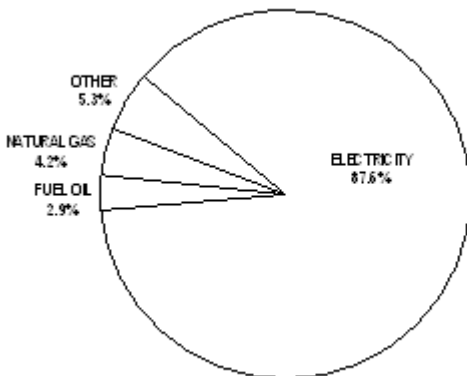
Standard Buildings: \$3.99 Billion



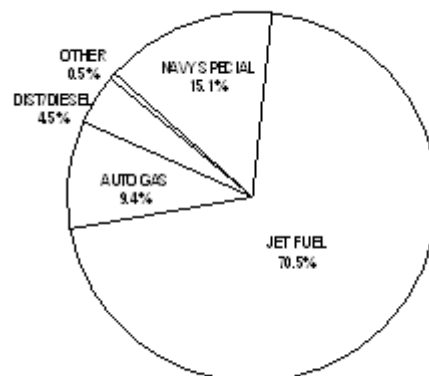
Energy Intensive Facilities: \$0.71 Billion



Exempt Facilities: \$0.39 Billion



Vehicles & Equipment: \$6.17 Billion



Data as of 05/05/05

Source: Federal Agency Annual Energy Management Data Reports

Note: Sum of components may not equal 100 percent due to independent rounding.

A. Standard Buildings

In FY 2004, the Federal Government used 311.1 trillion Btu to provide energy to 3.0 billion square feet of standard buildings space (Table 4-B). This consumption represents a 25.1 percent decrease compared to FY 1985 and a 2.8 percent decrease relative to FY 2003. The significant drop from FY 1985 reflects the success of Federal energy management efforts in reducing fossil fuel use in Federal facilities as well as reduced defense-related activity. The cost of energy for buildings and facilities in FY 2004 was \$4.0 billion, an increase of approximately \$117.7 million from FY 2003 expenditures, and a decrease of 37.0 percent from the FY 1985 expenditure of \$6.3 billion (Table 5).⁶ Of the \$4.0 billion spent for energy used in standard buildings, \$2,358.4 million was spent by DOD with the remaining \$1,627.4 million spent by the civilian agencies.

B. Industrial, Laboratory and Other Energy Intensive Facilities

In FY 2004, the Federal Government used 64.9 trillion Btu of energy in energy intensive operations, approximately 5.5 percent of the total 1.2 quads consumed. Total energy consumption in this category decreased 6.9 percent relative to FY 1990 and increased 3.7 percent relative to FY 2003 (Table 7). These changes resulted from both changes in agency activity levels and energy management efforts.

The Federal Government spent \$710.9 million on energy intensive operations in FY 2004 (Table 8), \$33.4 million more than the FY 2003 expenditure of \$677.5 million in constant dollars. Of the \$710.9 million spent for energy used in energy intensive operations, \$303.0 million was spent by DOD with the remaining \$407.9 million spent by the civilian agencies.

The industrial, laboratory, and other energy intensive facilities reported by the agencies under this category are listed at www.eere.energy.gov/femp/pdfs/eifacilities04.pdf.

C. Exempt Facilities

Ten agencies, DOD, DOE, the Departments of Health and Human Services, Homeland Security, State, and Transportation, the National Archives and Records Administration (NARA), the National Aeronautics and Space Administration (NASA), the General Services Administration (GSA), and the Tennessee Valley Authority have chosen to exempt facilities from energy management requirements. These facilities are listed at www.eere.energy.gov/femp/pdfs/exemptfac04.pdf and include:

- Structures such as outside parking garages which consume essentially only lighting energy, yet are classed as buildings.
- Buildings where energy usage is skewed significantly due to reasons such as: buildings entering or leaving the inventory during the year, buildings down-scaled operationally to prepare for decontamination, decommissioning and disposal, and buildings undergoing major renovation and/or major asbestos removal.

⁶Cost and consumption figures for FY 1985 may be different from those published in last year's Annual Report since Federal agencies update their files and provide revisions to their data.

- Federal ships that consume “Cold Iron Energy,” (energy used to supply power and heat to ships docked in port) and airplanes or other vehicles that are supplied with utility-provided energy.
- Buildings and facilities in which it is technically infeasible to implement energy efficiency measures or where conventional performance measures are rendered meaningless by an overwhelming proportion of process-dedicated energy.

In addition, the U.S. Postal Service has reported electricity consumption used in mail processing automation under the exempt category without reporting associated facility square footage. The Treasury Department also reported electricity used for parking lot lighting at two Internal Revenue Service sites because the electricity is separately metered.

Energy used in exempt facilities totaled 24.8 trillion Btu in FY 2004 (Table 9), approximately 2.1 percent of the total 1.2 quads used by the Federal Government. Electricity constitutes 73.2 percent of the energy used in exempt facilities, 9.8 percent is accounted for by natural gas, and 9.2 percent by fuel oil. Small amounts of purchased steam, liquefied petroleum gas (LPG)/propane, and “other” energy account for the remaining 7.8 percent.

The energy used in exempt facilities in FY 2004 accounted for approximately 3.5 percent of the total Federal energy bill. The Federal Government spent approximately \$394.9 million for this category’s energy during the fiscal year (Table 10).

D. Vehicles and Equipment

Vehicles and equipment energy includes aircraft and naval fuels, automotive gasoline, diesel fuel consumed by Federally-owned and leased vehicles and privately-owned vehicles used for official business, and the energy used in Federal construction.

In FY 2004, the Federal Government used approximately 776.4 trillion Btu of energy in vehicles and equipment, 66.0 percent of the total 1.2 quads consumed (Table 11). Total energy consumption in vehicles and equipment decreased 16.9 percent relative to FY 1985 and was 8.7 percent greater than the FY 2003 consumption of 714.6 trillion Btu. Most of this increase is attributable to increased use of Navy Special ship fuel by DOD. DOD consumed 723.0 trillion Btu or 93.1 percent of all vehicles and equipment energy used by the Federal Government.

The Federal Government spent \$6.2 billion on vehicles and equipment energy in FY 2004, almost \$1.1 billion more than the FY 2003 expenditure, a 21.1 percent increase in constant dollars. For all fuels, the cost per million Btu increased from \$7.12 in FY 2003 to \$7.94 in FY 2004. The unit cost of the most-used fuel, jet fuel, increased 24.7 percent from the previous year. Gasoline prices paid by the Government increased 3.6 percent from the previous year.

II. REQUIREMENTS OF THE NATIONAL ENERGY CONSERVATION POLICY ACT (NECPA) AND ENERGY POLICY ACT OF 1992 (EPACT) AND RELATED FINDINGS

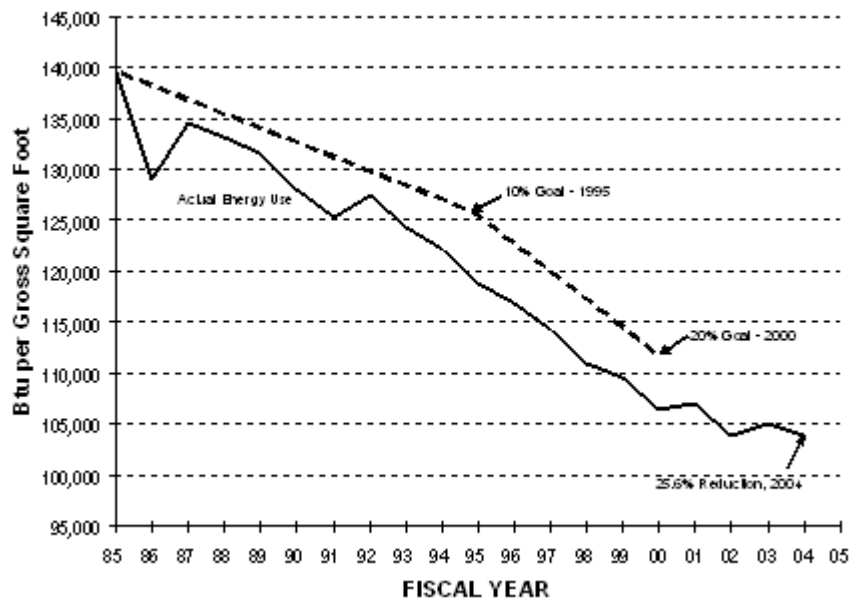
KEY REQUIREMENTS OF STATUTORY AUTHORITIES AND FY 2004 FINDINGS

Statute/Directive	Requirement	FY 2004 Findings
Section 543, NECPA, 42 U.S.C., § 8253(a)(1)	20 percent reduction (Btu/GSF) in Federal buildings by 2000 from 1985.	Federal agencies reported a 25.6 percent decrease in energy intensity of standard buildings in FY 2004, compared to FY 1985.
Section 544, NECPA, 42 U.S.C., § 8254	DOE to establish life-cycle cost methods to determine cost-effectiveness of proposed energy efficiency projects.	The 2004 edition of the energy price indices and discount factors for life-cycle cost analysis was published and distributed to Federal energy managers.
Section 545, NECPA, 42 U.S.C., § 8255	Transmit to Congress the amount of appropriations requested in each agency budget for electric and energy costs incurred in operating and maintaining facilities and for compliance with applicable statutes and directives.	Approximately \$173.8 million was appropriated and spent on energy efficiency projects in Federal facilities.
Section 546, NECPA, 42 U.S.C., § 8256(a)	Establishment of a program of incentives within Federal agencies to expedite ESPCs.	During the period covered by this report, agencies had no authority to enter into new ESPC contracts. The authority was re-established in FY 2005.
Section 546, NECPA, 42 U.S.C., § 8256(b)	DOE to establish a Federal Energy Efficiency Fund to provide grants to agencies.	There have been no appropriations for the Fund since FY 1995.
Section 157, EPACT, 42 U.S.C., § 8262(c)	Federal agencies to establish and maintain programs to train energy managers and to increase the number of trained energy managers within each agency.	Federal agencies reported spending \$2.9 million to train 7,659 Federal personnel in energy efficiency, renewable energy, and water conservation subjects.

A. Agency Progress in Meeting Energy Reduction Goals

During FY 2004 agencies provided data to DOE that indicated a decrease in energy consumption per gross square foot (Btu/GSF) of 25.6 percent relative to FY 1985 (Table 6-A). The Government's performance for each year since FY 1985 is illustrated in Figure 3. This reduction was the result of significant decreases in the consumption of fuel oil, natural gas, LPG/propane, and coal. The use of non-electric fuels in Federal buildings has declined 41.2 percent since 1985, while the consumption of electricity has increased by 11.1 percent. The installation and increased use of electricity-driven electronic equipment contributed to increases in electricity through the years. Electricity now represents about 69.3 percent of the total energy costs of Federal buildings and accounts for 45.6 percent of total site-delivered energy consumption in buildings. This is compared to 30.7 percent of the total site-delivered energy consumption in buildings in FY 1985.

Figure 3
Decrease in Btu per Gross Square Foot
in Federal Standard Buildings from FY 1985



Eight agencies, the Departments of Agriculture, Commerce, Defense, Energy, Justice, Transportation, NASA, and the Tennessee Valley Authority have reduced energy use per gross square foot in standard buildings by more than 25 percent from 1985.

Measured in terms of primary energy, the Federal Government shows a reduction of 10.1 percent in FY 2004 compared to FY 1985 (Table 6-B). Primary energy represents the average amount of energy required at the source of generation and includes energy resources used to generate, process, and transport electricity and steam. The large difference from the site-delivered Btu/GSF reduction of 25.6 percent reflects the significant declines in direct use of fossil fuels and the offsetting increases in the share of the fuel mix contributed by electricity.

Agency efforts undertaken in FY 2004 to improve energy efficiency in buildings included:

- improvement of operations and maintenance procedures;
- implementation of low-cost efficiency measures;
- energy-efficient building retrofits and capital improvements;
- energy awareness activities and employee training programs; and
- procurement of energy-efficient products.

B. Investments in Energy Efficiency

During FY 2004, Federal agencies had three primary options for financing energy efficiency, water conservation, and renewable energy projects in buildings and facilities: direct appropriated funding, energy savings performance contracts (ESPCs), and utility energy service contracts (UESCs). Known funding from the three sources totaled approximately \$311.5 million in FY 2004. Direct appropriations accounted for approximately \$173.8 million. ESPC contract modifications and awards by agencies with limited authority resulted in approximately \$83.7 million in estimated contractor investment in FY 2004 (\$22.3 million from DOE Super ESPC delivery orders and \$61.4 million from other agency ESPCs and shared energy savings contracts), and approximately \$54.1 million in private sector investment came from utility energy service contracts.

Since 1985, the Government has invested approximately \$6.8 billion in energy efficiency, almost \$3.9 billion of which was direct appropriations and \$2.9 billion from alternative financing mechanisms (\$1.9 billion from ESPCs and \$1.1 billion from UESCs).

1. Direct Appropriations

NECPA requires each agency, in support of the President's annual budget request to Congress, to specifically set forth and identify funds requested for energy conservation measures. Table 3-A presents agency funding (in nominal dollars) reported from FY 1985 through FY 2004 for energy conservation retrofits and capital equipment. Table 3-B presents the same information in constant 2004 dollars. Reports from Federal agencies indicated that \$173.8 million was spent on retrofit expenditures in FY 2004, compared with \$176.7 million in FY 2003. In some cases, the data provided by the agencies include funding from operation and maintenance accounts that was specifically identified as contributing to energy efficiency.

DOD funded \$121.4 million for energy efficiency projects in FY 2004, an increase of 12.4 percent from the previous year.

2. Energy Savings Performance Contracting

At the end of FY 2003, the authority granted by Congress to Federal agencies to enter into ESPCs expired. Authority was reinstated during FY 2005. However, agencies were able to modify existing delivery orders under DOE's Super ESPC contracts, the U.S. Air Force was able to award five delivery orders under existing contracts, and the U.S. Postal Service awarded 28 shared energy savings contracts which are their version of ESPCs. The total project investment from this activity is estimated to be \$83.7 million.

Six modifications to existing delivery orders under DOE's Super ESPCs resulted in project investment of \$22.3 million. One of these modifications, for the Super ESPC at DOT's U.S. Merchant Marine Academy, resulted in reduced payments for the overall contract. The five delivery orders awarded by the U.S. Air Force resulted in project investment of \$9.3 million. The project investment from the 28 shared energy savings contract awards by the U.S. Postal Service total \$52.1 million.

**Energy Savings Performance Contracts, Delivery Orders, and Contract Modifications
Awarded by Federal Agencies in FY 2004**

Agency	Number of Delivery Orders/ Modifications/ Contracts	Project Investment (Thou. \$)	Allocation of Project Cost Savings (Thousand \$)			Annual Energy Savings (MMBtu)
			Total Guaranteed Cost Savings	Payment to Contractor	Net Savings to Government	
Defense	5	\$9,330	\$17,383	\$16,175	\$1,207	148,512
National Archives	1	\$2,490	\$7,592	\$7,296	\$296	26,320
Energy	1	\$2,339	\$4,989	\$4,984	\$4	36,617
DHS/Coast Guard	1	\$3,700	\$5,956	\$5,577	\$379	16,515
Transportation	1	\$197	\$407	-\$217	\$624	31,886
GSA	2	\$13,594	\$34,893	\$34,787	\$106	186,266
USPS	28	\$52,080	NR	\$61,944	NR	39,048
Total	39	\$83,729	\$71,220	\$130,546	\$2,616	485,164

NR=Not Reported

3. Utility Energy Service Contracts

In FY 2004, a total of 30 UESCs were implemented by Federal agencies. Private sector investment in the projects totaled approximately \$54.1 million. The estimated annual energy savings from the 30 projects is 846.5 billion Btu.

Projects were undertaken by agencies to accomplish a wide variety of energy efficiency improvements. Of the 30 UESCs awarded in FY 2004, 20 were implemented by the DOD. Contracts were put in place to perform infrastructure upgrades and purchase new equipment to help installations reduce energy and water consumption. Examples of equipment purchased with the UESC financing tool include: new thermal storage systems, chillers, boilers, lights, motors, EMCS systems and water reducing devices.

4. Life-Cycle Costing (LCC)

The Federal Energy Management Program (FEMP) publishes updated fuel energy price indices and discount factors for life-cycle cost analyses on April 1 of each year. The most recent *Energy Price Indices and Discount Factors for Life-Cycle Cost Analysis, Annual Supplement to Handbook 135* was published and distributed to Federal energy managers in April 2004.

A set of Building Life-Cycle Cost (BLCC) computer programs have been developed and supported by the National Institute of Standards and Technology (NIST) under FEMP sponsorship. The latest update of the BLCC5 version of the software, which incorporates the 2003 DOE/FEMP discount rate and the latest energy price projections from the Energy Information Administration, was released April 1, 2003. Version BLCC 5.1-02 includes two new modules for evaluating Military Construction (MILCON) projects. BLCC 5.1-02 now contains the following four modules for analyzing energy and water conservation and renewable energy projects:

- Analyses for Federal agency-funded projects;

- Analyses for Federal agency projects financed through energy savings performance contracts or utility energy savings contracts;
- MILCON analyses for DOD-funded projects; and
- MILCON analyses for projects under DOD's Energy Conservation Investment Program.

III. INTERAGENCY EXCHANGE OF INFORMATION

1. Federal Coordination

Federal Interagency Energy Policy Committee

The members of the Federal Interagency Energy Policy Committee met in January 2004 during a meeting of Federal Senior Energy and Environmental Officials to review Federal agency progress in implementing Executive Orders 13101, 13123, 13148, and 13149. Executive Order progress reports were presented for energy, transportation, and environmental requirements, including a discussion on the future of energy legislation. Mr. William McDonough, McDonough & Partners, made a presentation on environmental leadership and corporate responsibility. For most agencies, the Senior Energy Official is also their Federal Interagency Energy Policy Committee member.

Federal Interagency Energy Management Task Force

In FY 2004, meetings of the Federal Interagency Energy Management Task Force were held on October 16, 2003; January 22, 2004; May 5, 2004; and July 28, 2004. The memoranda of record from these meetings are posted at www.eere.energy.gov/femp/about/fiemtf.cfm. Issues highlighted in the these meetings included the following:

- Agency energy management programs, budgets, challenges, opportunities, and activities to meet Executive Order energy reduction goals for FY 2005.
- Guidance for completing annual reports and scorecards.
- Energy security planning, infrastructure hardening, and Federal agency preparedness in cases of electric and natural gas power outages and other potential emergencies, including the viability of using combined heat and power (CHP) and other on-site generation.
- Energy legislation updates including energy savings performance contracting reauthorization, and the use of alternative financing solutions including Bonneville Power Administration programs and UESCs during the hiatus in the ESPC authority.
- Progress toward meeting the Federal renewable energy goal, renewable energy purchasing programs, and green tags.
- Assessment of Energy and Load Reduction Techniques (ALERT) assessments for improved natural gas efficiency.
- Federal Energy and Water Management Awards and the Presidential Awards for Leadership in Federal Energy Management event status and successes.

- The sustainable design initiative, sustainable design criteria, and Leadership in Energy and Environmental Design (LEED™).
- FEMP's technical assistance programs, workshops, and conferences related to Federal energy management.

2. Training

Many agencies have their own internal training and recognition programs. Overall, Federal agencies reported spending \$2.9 million to train 7,659 Federal personnel in energy efficiency, renewable energy, and water conservation subjects. During FY 2004, FEMP conducted 66 training workshops and symposia for more than 3,600 attendees in the efficient use and conservation of energy, water, and renewable energy in Federal facilities. FEMP workshops conducted during FY 2004 included the following.

- Advanced ESPC/Financing
- Advanced Facility Energy Decision System (FEDS)
- Alternative Financing Workshop for Stalled ESPC Projects
- Building Energy and Water Conservation Workshops
- Building Operator Certification Courses (BOC)
- Design Strategies for Low-Energy, Sustainable, Secure Buildings
- Distributed Generation and Combined Heat and Power for Federal Facilities
- Energy 2004
- Energy Management Telecourse: Part 1a, Life-Cycle Costing - Basic
- Energy Management Telecourse: Part 1b, Buying Energy Efficient Products
- Energy Management Telecourse: Part 2a, Operations and Maintenance Management
- Energy Management Telecourse: Part 3a, Utility Energy Services Contracting
- Energy Management Telecourse: Part 3b, Energy Savings Performance Contracting
- Enhancing Sustainability in the Procurement of A & E Services
- Evolving Energy Markets
- FEMP Lights Lighting and Health Workshop
- FEMP Lights Online Course
- Federal Renewable Energy
- Federal Renewable Energy Forum
- Hands-On Distributed Energy Resources (DER) Training
- Implementing Renewable Energy Projects
- Introduction to ESPC
- Introduction to Facility Energy Decision System (FEDS)
- Labs21 High Performance, Low Energy Laboratory Design Course
- Life-Cycle Costing (Combined: Basic & Project-Oriented)
- Midwest Workshop for Greening the Federal Government
- Operations and Maintenance Management
- Resource Efficiency Manager (REM)
- Securing Energy Savings Projects for Your Facility
- Technical and Financial Assistance to Improve the Energy Efficiency of Federal Facilities
- Utility Energy Service Contracting

- Water Conservation Strategies for Facility Managers
- Water Resource Management

“Energy 2004,” the energy efficiency workshop and exposition sponsored by FEMP, and co-sponsored by DOD and GSA, was held August 8-11, 2004 in Rochester, NY. The conference provided participants with opportunities to explore such topics as strategies for energy projects, selling energy projects, and alternative financing. The conference had panel discussions, an exhibit hall showcasing energy technologies, and opportunities for relationship building. More than 820 were in attendance and more than 121 companies exhibited at the event.

3. Awards and Recognition

Outstanding accomplishments in energy efficiency and water conservation in the Federal sector were recognized with the presentation of the 2004 Federal Energy and Water Management Awards on October 28, 2004, in Arlington, Virginia. Awards were selected from outstanding Federal energy managers and contributors who:

- Implemented proven energy efficiency, energy, and water conservation techniques;
- Developed and implemented energy-related training programs and employee energy awareness programs;
- Succeeded in receiving utility incentives, or awarding ESPC and other Federal-approved performance-based energy and water contracts;
- Applied advanced strategies and load reduction techniques to decrease or eliminate grid-dependence and increase the assurance of critical functions;
- Made successful efforts to fulfill compliance with energy and water reduction mandates;
- Improved energy efficiency or reduction in energy costs for Federal mobile equipment including aircrafts, ships, and vehicles; and
- Provided leadership in purchasing or supplying energy-efficient, renewable energy, or water-conserving products to one or more Federal agencies.

Recipients of the 2004 awards were selected from 98 nominees submitted by 17 Federal agencies. There were 27 awardees representing 12 different Federal agencies. Distribution of awards among the Federal agencies for accomplishments in the previous fiscal year is indicated in the following table.

2004 Federal Energy and Water Management Awards by Group and Type

Agency	Individual	Small Group	Organization	Total	Energy Efficiency	Renewable Energy	Mobility	Water Management.	Energy Security	Exceptional Service
Army	1	1		2	1	1				
DOE			2	2	2					
EPA	2			2				1		1
DHS		1		1					1	
DOI	1			1						1
DOJ	1			1						1
GSA	1	2	1	4	3				1	
NASA			1	1		1				
Navy		3	5	8	5		3			
SSA			1	1	1					
USAF	2	1		3	2					1
USMC			1	1	1					
TOTAL	8	8	11	27	15	2	3	1	2	4

4. Public Education Programs

The DOE's Office of Energy Efficiency and Renewable Energy (EERE) Information Center provides basic, technical, and financial information on various energy efficiency and renewable energy technologies and programs. The EERE Information Center telephone number is 877-337-3463. The EERE Information Center has two operations—the Message Center and the Mail Center. The Message Center is the location where the calls are answered and emails/letters received. The Mail Center ships the products requested from the orders received from the Message Center.

The EERE Information Center processed 13,463 inquiries during FY 2004. These inquiries were received via telephone, email, fax, and U.S. mail. Customers included consumers, utilities, businesses, technology companies, individual manufacturing plants, federal facilities, building energy code officials, and the hydrogen energy community. The Mail Center processed 12,283 orders and shipped 202,823 products during FY 2004.

EERE also hosts a Web site at www.eere.energy.gov and offers free subscriptions to the EERE Network News e-mail newsletter.

The Energy Information Administration's National Energy Information Center (NEIC) responds to public and private sector questions on energy production, consumption, prices, resource availability, and projections of supply and demand. NEIC provides information to Federal employees and the public at www.eia.doe.gov. Electronic inquiries may be sent to infoctr@eia.doe.gov. During FY 2004, NEIC staff responded to 31,266 inquiries. The EIA web site recorded 15.5 million user sessions during FY 2004.

The Office of Scientific and Technical Information (OSTI), as part of the Office of Science, provides leadership and coordination for the DOE-wide Scientific and Technical Information Program (STIP). In this capacity, OSTI assures access by DOE, the scientific research community, academia, U.S. industry, and the public to DOE research results in support of the DOE mission. Key collections developed and maintained by OSTI on behalf of DOE include *Energy Citations Database (ECD)*, the *DOE Information Bridge*, the *E-print Network*, *Research*

and Development (R&D) Project Summaries, and EnergyFiles. In FY 2004, approximately 18.6 million user transactions were accommodated via systems residing on OSTI servers.

The DOE public information mechanisms include several direct service programs designed to provide technical assistance to specific target groups. Two of these programs are the State Energy Program (SEP) and the Industrial Assessment Center Program.

SEP provides funding to States to design and implement their own energy efficiency and renewable energy programs. Formula grants are given to states using Congressionally-appropriated funds and are distributed according to a formula that depends on criteria such as the state's size and population. Special Projects grants are the second type of SEP grant. Unlike formula grants, Special Projects are funded entirely by EERE technology programs and are awarded on a competitive basis. Additional information is provided on the program Web site at http://www.eere.energy.gov/state_energy_program.

The Office of Industrial Technology's Industrial Assessment Center (IAC) Program provides no-cost energy, waste, and productivity assessments to help small and mid-sized manufacturers identify measures to maximize energy-efficiency, reduce waste, and improve productivity. The assessments are conducted by local teams of engineering faculty and students from 26 participating universities across the country. Additional information is provided on the program Web site at www.eere.energy.gov/industry.

**APPENDIX A
DATA TABLES**

TABLE 1-A
TOTAL PRIMARY ENERGY CONSUMPTION BY FEDERAL AGENCIES
(In Billions of Btu, with Conversions to Millions of Barrels of Oil Equivalent [MBOE], and Petajoules [Joule x 10¹⁵])

CIVILIAN AGENCY	FY 1985...	FY 1990...	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	%Change 85-04	%Change 03-04
USPS	51,668.1	59,961.0	72,178.0	74,083.1	78,333.1	78,883.0	80,083.3	89,381.4	86,142.5	85,320.9	83,069.4	84,553.5	63.6	1.8
DOE	98,876.9	90,859.5	88,840.8	89,070.0	86,928.2	71,555.2	57,999.7	72,041.6	72,338.7	72,682.0	73,732.1	73,854.2	-25.3	0.2
VA	43,456.9	44,918.6	47,827.9	49,377.1	50,286.4	50,957.9	51,217.7	50,557.0	52,945.1	53,074.2	55,014.6	55,729.1	28.2	1.3
GSA	47,624.0	38,685.5	36,626.3	37,490.0	37,680.0	37,437.4	38,433.2	42,409.1	42,969.5	42,297.8	43,413.3	43,057.0	-9.6	-0.8
DHS ¹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24,340.6	29,351.8	NA	20.6
DOJ	11,112.5	11,610.3	17,193.4	20,845.6	20,307.8	24,960.3	24,961.1	30,431.8	30,338.1	28,515.1	29,679.1	29,118.2	162.0	-1.9
NASA	23,771.3	28,741.6	29,434.4	27,159.0	28,814.8	27,936.2	27,275.8	26,087.4	25,210.0	24,726.7	24,152.1	23,302.1	-2.0	-3.5
HHS	10,501.4	13,188.5	12,189.6	12,825.4	14,965.7	14,626.4	14,148.6	15,255.5	16,078.3	15,903.6	16,712.4	17,033.8	62.2	1.9
DOI	11,596.7	10,969.3	10,552.2	7,622.1	10,255.0	10,213.7	11,292.7	12,041.4	14,497.5	12,999.8	12,222.4	14,206.3	22.5	16.2
DOT	28,959.2	28,666.3	28,971.2	32,612.7	30,842.9	32,001.4	41,881.8	41,018.6	32,503.7	30,707.3	13,522.5	12,897.4	-55.5	-4.6
USDA	12,266.6	14,620.4	14,324.3	14,249.7	12,419.1	13,124.4	12,590.1	12,365.5	12,096.6	11,622.1	13,079.6	12,056.6	-1.7	-7.8
TVA	8,856.0	8,214.3	7,913.9	7,591.5	7,425.7	7,183.6	7,998.4	8,325.7	8,392.7	7,945.1	7,517.8	7,332.2	-17.2	-2.5
TRSY	3,878.3	7,015.4	7,783.1	7,238.9	9,164.5	8,951.7	9,145.7	9,651.3	9,550.3	9,910.8	7,878.2	6,193.5	59.7	-21.4
DOL	3,966.3	4,155.2	4,336.2	4,438.2	4,473.4	4,517.7	3,614.8	4,761.1	5,024.8	5,177.0	5,466.3	5,395.0	36.0	-1.3
DOC	4,085.5	6,383.7	5,667.2	5,370.1	5,328.8	5,008.6	5,227.3	4,117.5	5,489.0	4,760.0	4,918.2	4,935.5	20.8	0.4
EPA	1,776.4	1,643.0	2,264.7	2,205.5	2,245.1	2,212.6	2,455.1	2,057.7	2,407.0	2,204.4	2,455.3	2,577.8	45.1	5.0
ST	717.3	868.5	1,342.3	1,903.8	7,363.5	7,361.5	6,898.4	7,631.9	6,503.0	1,669.3	2,047.1	2,130.9	197.1	4.1
HUD	356.2	435.0	347.7	364.7	355.0	339.9	347.5	362.0	370.1	365.8	356.1	345.5	-3.0	-3.0
OTHER*	2,250.4	5,591.2	8,649.2	11,254.4	12,044.4	9,919.1	9,683.4	9,454.3	9,353.3	11,388.7	10,830.5	6,747.9	199.9	-37.7
Civilian Agencies Subtotal	365,719.9	376,527.1	396,442.6	405,701.8	419,233.4	407,190.8	405,254.6	437,950.8	432,210.4	421,270.7	430,407.5	430,818.5	17.8	0.1
DOD	1,502,111.8	1,545,014.4	1,197,891.7	1,166,540.8	1,134,674.9	1,087,225.4	1,059,455.0	1,042,511.1	1,043,757.4	1,097,163.4	1,159,365.8	1,223,168.6	-18.6	5.5
Total	1,867,831.7	1,921,541.5	1,594,334.3	1,572,242.6	1,553,908.4	1,494,416.2	1,464,709.6	1,480,462.0	1,475,967.9	1,518,434.1	1,589,773.2	1,653,987.1	-11.4	4.0
MBOE	320.7	329.9	273.7	269.9	266.8	256.6	251.5	254.2	253.4	260.7	272.9	283.9		
Petajoule	1,970.5	2,027.2	1,682.0	1,658.7	1,639.3	1,576.6	1,545.2	1,561.8	1,557.1	1,601.9	1,677.2	1,744.9		

DATA AS OF 05/05/05

¹FY 2003 was the first year for reporting by the Department of Homeland Security. Significant declines in energy use were also evident in that year for agencies such as the Departments of Transportation and the Treasury which transferred functions to the new Department.

*Other includes, for certain years, CFTC, CIA, EEOC, FEMA, FTC, NARA, NSF, NRC, OPM, RRB, SSA, BBG/IBB, and FERC.

Note: This table uses a conversion factor for electricity of 11,850 Btu per kilowatt hour and 1,390 Btu per pound of steam. Agencies are listed in descending order of consumption for the current year. Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 1-B
TOTAL SITE-DELIVERED ENERGY CONSUMPTION BY FEDERAL AGENCIES
(In Billions of Btu, with Conversions to Millions of Barrels of Oil Equivalent [MBOE], and Petajoules [Joule x 10¹⁵])

CIVILIAN AGENCY	FY 1985...	FY 1990...	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	%Change 85-04	%Change 03-04
USPS	27,762.5	30,616.2	36,220.9	36,427.1	40,760.0	39,487.3	39,774.0	43,284.2	43,397.4	41,617.4	42,606.2	40,664.4	46.5	-4.6
DOE	52,201.6	43,454.6	47,255.4	44,609.3	43,070.4	31,520.2	26,998.3	30,492.9	31,065.5	30,668.3	30,701.1	31,398.5	-39.9	2.3
VA	25,144.7	24,898.4	25,428.9	26,832.9	27,261.1	27,597.2	27,472.4	27,043.9	27,661.9	27,722.6	29,644.5	29,888.5	18.9	0.8
DHS ¹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18,333.3	23,527.9	NA	28.3
GSA	19,256.1	15,656.6	13,671.8	14,499.2	14,364.3	14,095.0	14,359.9	17,632.3	18,415.8	17,473.9	18,591.3	18,291.6	-5.0	-1.6
DOJ	8,176.0	6,961.6	10,193.3	12,127.7	11,999.9	15,805.1	15,366.2	19,693.0	19,681.9	17,692.4	18,028.3	17,544.4	114.6	-2.7
NASA	10,855.1	12,399.0	12,394.7	11,459.7	11,996.1	11,731.4	11,433.4	11,120.8	10,934.5	10,677.0	10,075.5	9,858.1	-9.2	-2.2
HHS	5,953.5	7,119.0	6,129.7	6,628.9	7,852.7	7,400.8	7,131.2	7,952.5	8,541.0	7,999.8	8,659.9	8,761.5	47.2	1.2
DOI	7,816.3	7,391.9	6,378.4	4,326.6	6,612.2	6,427.3	7,456.0	7,845.9	9,504.5	8,224.9	7,559.4	8,742.6	11.9	15.7
USDA	8,358.7	9,573.4	9,045.8	9,056.9	7,370.7	7,917.0	7,828.6	7,446.7	7,373.6	7,170.5	7,216.9	6,978.5	-16.5	-3.3
DOT	19,568.0	18,965.2	18,688.7	19,564.1	19,125.9	18,509.8	22,570.8	21,215.6	17,810.2	18,256.8	5,618.1	5,159.4	-73.6	-8.2
DOL	2,385.2	2,376.0	2,385.7	2,491.5	2,490.2	2,540.4	2,048.1	2,480.7	2,671.4	2,775.1	2,964.3	2,896.2	21.4	-2.3
TVA	2,975.9	2,717.7	2,687.9	2,627.8	2,483.3	2,379.3	2,609.2	3,006.6	3,005.8	2,824.0	2,838.2	2,717.7	-8.7	-4.2
TRSY	2,868.3	3,643.0	4,132.6	3,764.1	4,597.6	4,816.3	4,899.4	5,337.0	5,355.6	5,506.3	4,144.4	2,585.3	-9.9	-37.6
DOC	2,489.1	4,476.3	2,882.8	2,883.1	2,721.4	2,470.3	2,684.3	1,907.1	2,521.9	2,197.3	2,333.9	2,216.8	-10.9	-5.0
EPA	904.5	747.0	1,120.5	1,100.0	1,149.3	1,120.4	1,290.8	1,038.1	1,228.3	1,094.5	1,388.4	1,421.3	57.1	2.4
ST	246.9	302.7	437.3	653.3	2,938.8	2,934.2	3,053.1	3,379.1	2,700.7	626.6	1,033.3	1,032.5	318.1	-0.1
HUD	116.9	140.3	131.3	140.8	137.6	126.4	129.6	144.1	149.0	148.0	144.3	142.8	22.1	-1.0
OTHER*	1,156.1	3,072.0	4,108.4	4,814.5	5,040.5	3,889.4	3,865.9	3,731.3	3,727.1	4,606.6	4,293.7	2,694.5	133.1	-37.2
Civilian Agencies Subtotal	198,235.5	194,510.7	203,294.2	204,007.7	211,971.9	200,767.7	200,971.4	214,752.0	215,746.1	207,281.9	216,175.1	216,522.4	9.2	0.2
DOD	1,250,613.8	1,241,655.8	926,022.9	904,456.2	880,007.7	837,115.8	810,663.0	779,055.2	787,216.4	837,525.4	904,356.1	960,668.6	-23.2	6.2
Total	1,448,849.4	1,436,166.5	1,129,317.1	1,108,463.9	1,091,979.6	1,037,883.5	1,011,634.4	993,807.2	1,002,962.5	1,044,807.3	1,120,531.1	1,177,191.0	-18.7	5.1
MBOE	248.7	246.6	193.9	190.3	187.5	178.2	173.7	170.6	172.2	179.4	192.4	202.1		
Petajoule	1,528.5	1,515.1	1,191.4	1,169.4	1,152.0	1,094.9	1,067.2	1,048.4	1,058.1	1,102.2	1,102.2	1,241.9		

DATA AS OF 05/05/05

¹FY 2003 was the first year for reporting by the Department of Homeland Security. Significant declines in energy use were also evident in that year for agencies such as the Departments of Transportation and the Treasury which transferred functions to the new Department.

*Other includes, for certain years, CFTC, CIA, EEOC, FEMA, FTC, NARA, NSF, NRC, OPM, RRB, SSA, BBG/IBB, and FERC.

Note: This table uses a conversion factor for electricity of 3,412 Btu per kilowatt hour and 1,000 Btu per pound of steam. Agencies are listed in descending order of consumption for the current year. Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 2
FEDERAL PETROLEUM USAGE IN FY 2004
(in Thousands of Gallons, Billions of Btu,
and Petajoules [Joule x 10¹⁵])

	Unit Total (KGal)	BBTU* DOD	BBTU* Civilian	BBTU* Total	Petajoules* Total
Standard Buildings					
Fuel Oil	224,763.5	25,894.0	5,280.7	31,174.7	32.9
LPG/Propane	28,649.4	1,492.7	1,243.3	2,736.0	2.9
Energy Intensive Operations					
Fuel Oil	31,230.8	2,339.8	1,991.9	4,331.7	4.6
LPG/Propane	1,506.7	29.5	114.4	143.9	0.2
Exempt Buildings					
Fuel Oil	16,452.1	1,965.5	316.4	2,281.9	2.4
LPG/Propane	99.0	0.0	9.5	9.5	0.0
Vehicles & Equipment					
Motor Gas	348,097.2	14,390.7	29,121.5	43,512.2	45.9
Dist-Diesel & Petrol.	244,591.5	17,565.3	16,359.5	33,924.8	35.8
Aviation Gas	1,483.3	30.5	155.0	185.4	0.2
Jet Fuel	3,909,285.3	500,949.5	7,257.6	508,207.1	536.1
Navy Special	1,351,589.7	187,464.4	1.1	187,465.5	197.8
LPG/Propane	365.2	5.2	29.7	34.9	0.0
Other	3,085.0	2,603.3	481.7	3,085.0	3.3
Total		754,730.2	62,362.3	817,092.5	862.0

DATA AS OF 05/05/05

*Uses a conversion factor of:

95,500 Btu/gallon for LPG/propane

138,700 Btu/gallon for fuel oil, distillate-diesel & petroleum, and navy special

125,000 Btu/gallon for motor gasoline and aviation gasoline

130,000 Btu/gallon for jet fuel

947.9 Billion Btu/Petajoule

Note: Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 3-A
 AGENCY DIRECT APPROPRIATIONS FOR ENERGY CONSERVATION RETROFITS AND CAPITAL EQUIPMENT,
 FY 1985 THROUGH FY 2004 (THOUSANDS OF NOMINAL DOLLARS)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
DOD	136,100	120,000	5,550	5,280	1,500	1,020	10,000	49,669	14,444	109,000	189,600	112,487	118,970	191,446	91,243	44,442	57,113	60,600	103,490	121,400
NASA	11,800	12,100	1,700	1,400	4,499	2,943	7,556	7,086	25,072	24,658	20,666	30,266	15,919	13,813	18,509	11,731	6,045	9,389	8,501	11,118
TRSY	0	0	2,977	2,393	2,823	1,134	836	0	1,344	4,826	2,810	170	2,990	1,400	1,495	2,152	4,670	8,678	7,854	8,662
DOI	3,198	5,535	0	0	4,338	0	1,272	9,800	4,859	1,662	779	891	0	160	1,730	23,999	3,220	22,800	26,134	5,740
GSA	6,700	6,100	2,900	9,400	4,868	11,125	30,123	37,000	30,000	37,000	7,242	7,400	20,000	0	25,000	17,000	5,000	4,500	4,800	5,000
DOC	0	0	0	0	0	0	0	872	0	51	0	0	0	330	0	257	257	1,883	621	3,537
EPA	0	0	0	0	0	0	0	0	500	0	1,720	1,600	1,600	0	0	0	1,963	1,684	2,439	3,458
USDA	2,500	0	0	500	500	1,547	1,752	7,300	7,045	7,277	2,894	5,983	3,891	1,765	994	1,954	2,100	3,818	2,000	2,958
HHS	0	0	0	427	427	427	427	0	1,813	1,915	1,271	2,676	2,879	2,200	4,793	8,440	8,640	1,771	3,700	2,934
VA	13,000	11,500	9,500	9,860	5,500	11,200	9,970	10,000	12,100	9,050	11,960	3,700	7,400	13,000	10,500	0	15,000	898	686	2,000
DOE	14,800	14,500	16,500	18,900	19,400	19,500	20,400	20,650	20,950	24,850	30,200	0	0	0	0	0	2,000	1,400	1,500	1,963
DHS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,700	1,740
DOJ	0	0	0	195	484	6,100	26,400	0	0	1,284	994	1,559	2,091	1,500	1,615	1,170	489	968	223	1,300
DOT	13,650	15,000	12,104	12,700	2,908	0	460	143	593	5,970	3,793	2,585	3,176	3,000	9,005	2,664	4,321	2,085	1,243	978
SSA	0	0	0	0	0	0	0	0	0	0	0	0	0	2,776	1,000	1,000	1,000	500	175	500
TVA	0	0	0	0	0	0	0	0	475	844	4,277	522	1,158	1,466	1,022	284	300	365	400	336
NARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	68	140	100
STATE	0	0	0	0	0	0	0	0	0	67	0	0	1,902	51	1,238	0	260	4	847	70
RRB	0	0	0	0	0	0	0	0	16	13	33	0	38	23	0	0	35	10	15	15
HUD	0	0	0	0	0	0	0	0	43	30	43	0	2,418	0	0	0	55	22	68	8
CIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18,600	0	2,770	0
NRC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	226	0	0	0
DOL	238	31	106	142	584	17	35	16	0	0	0	366	0	0	40	0	0	0	0	0
PCC	1,274	73	1,174	600	378	361	807	249	500	608	14	23	3	104	0	0	0	0	0	0
USPS	55,300	9,300	5,100	3,800	4,000	4,000	4,000	2,293	1,116	1,123	10,050	9,000	16,000	31,000	38,000	6,000	0	0	0	0
Total	258,560	194,139	57,611	65,597	52,209	59,374	114,038	145,078	120,870	230,228	288,346	179,228	200,435	264,034	206,184	121,093	131,302	121,442	169,306	173,815

Notes: **Bold** indicates top five primary energy users in buildings and facilities (DOD, DOE, VA, USPS, GSA). In past years, DOE also included funds for energy surveys. Does not include energy savings performance contracts and utility demand side management incentives. Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 3-B
 AGENCY DIRECT APPROPRIATIONS FOR ENERGY CONSERVATION RETROFITS AND CAPITAL EQUIPMENT,
 FY 1985 THROUGH FY 2004 (THOUSANDS OF CONSTANT 2004 DOLLARS)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
DOD	243,907	207,612	9,296	8,489	2,329	1,555	15,267	73,366	20,783	150,761	255,870	146,467	148,157	229,002	104,397	49,107	62,624	65,231	108,027	121,400
NASA	21,147	20,934	2,848	2,251	6,986	4,486	11,536	10,467	36,075	34,105	27,889	39,409	19,824	16,523	21,177	12,962	6,628	10,107	8,874	11,118
TRSY	0	0	4,987	3,847	4,384	1,729	1,276	0	1,934	6,675	3,792	221	3,724	1,675	1,711	2,378	5,121	9,341	8,198	8,662
DOI	5,731	9,576	0	0	6,736	0	1,942	14,476	6,992	2,299	1,051	1,160	0	191	1,979	26,518	3,531	24,543	27,280	5,740
GSA	12,007	10,554	4,858	15,113	7,559	16,959	45,989	54,653	43,165	51,176	9,773	9,635	24,907	0	28,604	18,785	5,482	4,844	5,010	5,000
DOC	0	0	0	0	0	0	0	1,288	0	71	0	0	0	395	0	284	282	2,027	648	3,537
EPA	0	0	0	0	0	0	0	0	719	0	2,321	2,083	1,993	0	0	0	2,152	1,813	2,546	3,458
USDA	4,480	0	0	804	776	2,358	2,675	10,783	10,137	10,065	3,906	7,790	4,846	2,111	1,137	2,159	2,303	4,110	2,088	2,958
HHS	0	0	0	686	663	651	652	0	2,608	2,649	1,715	3,484	3,585	2,632	5,484	9,326	9,474	1,906	3,862	2,934
VA	23,297	19,896	15,913	15,852	8,540	17,073	15,221	14,771	17,410	12,517	16,140	4,818	9,215	15,550	12,014	0	16,447	967	716	2,000
DOE	26,523	25,087	27,638	30,386	30,124	29,726	31,145	30,502	30,144	34,371	40,756	0	0	0	0	0	2,193	1,507	1,566	1,963
DHS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,775	1,740
DOJ	0	0	0	314	752	9,299	40,305	0	0	1,776	1,341	2,030	2,604	1,794	1,848	1,293	536	1,041	233	1,300
DOT	24,462	25,952	20,275	20,418	4,516	0	702	211	853	8,257	5,119	3,366	3,955	3,589	10,303	2,944	4,738	2,244	1,297	978
SSA	0	0	0	0	0	0	0	0	0	0	0	0	0	3,321	1,144	1,105	1,096	538	183	500
TVA	0	0	0	0	0	0	0	0	683	1,167	5,772	680	1,442	1,753	1,169	314	329	393	418	336
NARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	73	146	100
STATE	0	0	0	0	0	0	0	0	0	93	0	0	2,369	61	1,416	0	285	4	884	70
RRB	0	0	0	0	0	0	0	0	24	18	45	0	47	27	0	0	38	11	16	15
HUD	0	0	0	0	0	0	0	0	62	41	58	0	3,011	0	0	0	60	24	71	8
CIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,395	0	2,891	0
NRC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	248	0	0	0
DOL	427	54	178	228	907	26	53	24	0	0	0	477	0	0	46	0	0	0	0	0
PCC	2,283	126	1,966	965	587	550	1,232	368	719	841	19	30	4	124	0	0	0	0	0	0
USPS	99,104	16,090	8,543	6,109	6,211	6,098	6,107	3,387	1,606	1,553	13,563	11,719	19,925	37,081	43,478	6,630	0	0	0	0
Total	463,369	335,881	96,501	105,461	81,070	90,509	174,104	214,295	173,914	318,434	389,131	233,370	249,607	315,830	235,908	133,805	143,972	130,723	176,729	173,815

Notes: **Bold** indicates top five primary energy users in buildings and facilities (DOD, DOE, VA, USPS, GSA). In past years, DOE also included funds for energy surveys. Does not include energy savings performance contracts and utility demand side management incentives.

Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 4-A
PRIMARY ENERGY CONSUMPTION IN FEDERAL STANDARD BUILDINGS
(In Billions of Btu, with Conversions to Millions of Barrels of Oil Equivalent [MBOE], and Petajoules [Joule x 10¹⁵])

CIVILIAN AGENCY	FY 1985...	FY 1990...	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	%Change 85-04	%Change 03-04
USPS	40,143.9	47,824.8	57,606.8	59,866.0	54,696.6	57,068.7	58,333.5	66,217.4	62,202.1	62,145.5	60,810.9	63,678.4	58.6	4.7
VA	42,864.1	44,400.3	47,474.3	48,716.5	49,087.3	49,577.6	49,880.1	49,633.7	52,031.5	52,217.8	53,840.6	54,694.9	27.6	1.6
DOE	48,300.5	47,636.0	44,231.2	44,087.6	41,373.4	40,680.7	39,588.4	37,938.9	39,238.3	36,880.6	37,300.2	35,758.2	-26.0	-4.1
GSA	40,198.6	32,099.4	33,523.9	34,903.9	35,121.4	35,106.2	35,413.0	31,717.6	31,683.3	31,076.1	31,500.2	30,953.2	-23.0	-1.7
DOJ	9,048.5	9,512.4	12,004.2	14,600.8	14,881.7	15,488.4	16,117.8	18,612.5	18,967.3	18,806.1	20,676.7	21,442.6	137.0	3.7
DOI	8,542.8	7,616.8	7,770.1	6,274.6	7,311.3	7,533.8	7,631.3	8,202.1	9,685.2	9,690.9	9,071.2	11,428.7	33.8	26.0
NASA	8,899.9	10,764.0	11,435.9	11,671.5	11,524.9	11,532.2	11,174.5	10,970.3	11,259.8	10,838.8	10,650.5	10,109.5	13.6	-5.1
DHS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10,300.9	9,489.4	NA	-7.9
USDA	4,156.4	5,203.3	5,210.4	5,369.7	4,782.6	5,054.8	4,501.0	4,919.6	4,902.2	5,182.3	6,286.0	5,628.3	35.4	-10.5
DOL	3,734.1	3,916.2	3,979.2	4,100.5	4,137.2	4,167.4	3,264.6	4,392.2	4,666.0	4,813.7	5,068.9	4,997.8	33.8	-1.4
DOT	8,746.5	7,217.0	8,472.5	9,647.7	10,021.9	9,062.4	8,996.8	8,810.5	8,849.0	9,326.2	1,979.3	1,969.9	-77.5	-0.5
TVA	1,349.0	1,440.3	2,517.7	2,438.5	2,298.7	2,267.9	2,243.5	2,131.2	2,161.6	1,949.3	1,956.4	1,918.6	42.2	-1.9
DOC	1,208.3	953.1	1,387.8	1,338.3	1,328.8	1,231.2	1,268.2	1,232.5	1,379.3	1,331.9	1,415.2	1,398.6	15.7	-1.2
ST	702.6	833.6	260.3	795.4	299.9	301.7	306.3	389.6	324.4	738.6	840.9	975.1	38.8	16.0
TRSY	1,094.9	719.9	3,822.9	3,670.7	4,890.2	4,638.7	4,680.0	1,456.8	1,504.6	1,398.9	824.6	875.5	-20.0	6.2
HHS	677.7	734.4	593.9	586.8	573.9	538.6	524.5	582.7	590.1	576.1	614.9	608.6	-10.2	-1.0
HUD	356.2	435.0	322.3	339.2	326.7	316.5	324.2	324.2	336.7	327.8	324.8	312.8	-12.2	-3.7
EPA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA
OTHER*	1,087.7	1,703.8	3,261.6	5,266.4	5,542.7	5,172.1	5,446.6	5,309.5	5,283.5	6,900.6	6,432.4	2,647.3	143.4	-58.8
Civilian Agencies Subtotal	221,111.6	223,010.6	243,875.0	253,674.1	248,199.0	249,738.9	249,694.1	252,841.2	255,064.7	254,201.2	259,894.5	258,887.3	17.1	-0.4
DOD	512,581.0	587,974.8	483,052.7	459,175.5	443,225.4	434,713.1	433,321.6	426,630.8	425,948.7	423,330.2	414,841.3	408,273.9	-20.3	-1.6
Total	733,692.6	810,985.4	726,927.7	712,849.6	691,424.4	684,451.9	683,015.6	679,472.0	681,013.4	677,531.4	674,735.8	667,161.1	-9.1	-1.1
MBOE	126.0	139.2	124.8	122.4	118.7	117.5	117.3	116.6	116.9	116.3	115.8	114.5		
Petajoul	774.0	855.6	766.9	752.0	729.4	722.1	720.6	716.8	718.4	714.8	711.8	703.8		

DATA AS OF 05/05/05

*Other includes for certain years the CFTC, CIA, EEOC, FEMA, FTC, NARA, NSF, NRC, OPM, RRB, SSA, BBG/IBB, and FERC.

Note: This table uses a conversion factor for electricity of 11,850 Btu per kilowatt hour and 1,390 Btu per pound of steam.

Contains estimated data for the following agencies: FEMA (1997, 1998), FCC (1997, 1998, 1999, 2000, 2001, 2002), FTC (1997, 1998, 1999, 2000, 2001, 2002), and OPM. (1997, 1998, 1999, 2000, 2001, 2002).

Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 4-B
SITE-DELIVERED ENERGY CONSUMPTION IN FEDERAL STANDARD BUILDINGS
(In Billions of Btu, with Conversions to Millions of Barrels of Oil Equivalent [MBOE], and Petajoules [Joule x 10¹⁵])

CIVILIAN AGENCY	FY 1985...	FY 1990...	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	%Change 85-04	%Change 03-04
VA	24,552.0	24,380.1	25,075.4	26,172.3	26,062.0	26,216.9	26,134.8	26,120.6	26,748.3	26,866.2	28,470.5	28,854.2	17.5	1.3
USPS	16,238.3	18,480.0	21,649.7	22,210.0	22,006.4	22,683.9	23,127.0	25,238.3	24,974.3	23,671.1	23,968.6	23,388.2	44.0	-2.4
DOE	28,603.8	25,610.7	23,740.0	21,456.5	19,818.3	19,363.7	18,533.5	17,350.2	18,356.4	17,021.6	16,991.9	16,202.0	-43.4	-4.6
DOJ	6,112.0	4,863.8	6,303.9	7,490.6	8,003.7	7,783.0	8,047.1	9,374.6	9,798.9	9,547.8	10,790.6	11,773.8	92.6	9.1
GSA	15,897.7	11,174.5	12,366.7	13,439.4	13,353.7	13,123.7	13,083.9	11,728.0	12,024.9	11,436.9	11,940.5	11,638.4	-26.8	-2.5
DOI	4,762.4	4,039.4	3,596.3	2,979.1	3,668.5	3,747.4	3,794.6	4,006.6	4,692.2	4,916.0	4,408.3	5,965.0	25.3	35.3
DHS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,508.6	4,146.5	NA	-8.0
NASA	3,760.1	4,381.0	4,381.2	4,436.1	4,350.7	4,404.8	4,303.3	4,263.7	4,418.3	4,231.6	4,153.0	3,926.2	4.4	-5.5
DOL	2,153.0	2,137.1	2,028.8	2,153.9	2,153.9	2,190.2	1,697.9	2,111.8	2,312.5	2,411.8	2,566.9	2,499.0	16.1	-2.6
USDA	1,953.6	2,204.9	2,083.1	2,261.3	1,996.0	2,111.1	1,901.8	2,052.5	2,070.8	2,410.8	2,631.2	2,384.9	22.1	-9.4
DOT	4,614.5	3,750.4	3,669.1	4,058.0	3,959.6	3,779.5	3,828.1	3,716.4	3,913.8	3,971.4	721.6	713.8	-84.5	-1.1
TVA	402.4	427.8	748.5	728.4	665.6	658.4	650.8	617.7	626.2	565.0	565.9	557.0	38.4	-1.6
DOC	540.3	399.4	494.9	490.1	457.2	429.9	449.4	437.0	471.4	442.0	509.9	492.7	-8.8	-3.4
ST	232.2	267.8	92.9	289.2	114.0	113.2	114.7	152.9	123.2	245.5	300.8	323.8	39.5	7.6
TRSY	426.0	396.0	1,418.3	1,484.9	1,904.4	1,741.2	1,815.0	530.0	573.0	498.0	295.5	309.1	-27.4	4.6
HHS	253.0	273.1	201.7	204.7	200.1	188.8	184.8	212.3	219.6	200.9	236.8	225.0	-11.1	-5.0
HUD	116.9	140.3	105.9	115.4	109.3	103.1	106.3	106.3	115.6	109.9	112.9	110.2	-5.8	-2.4
OTHER*	406.8	660.0	1,235.8	1,929.8	2,035.7	1,911.5	1,982.6	1,946.3	1,944.9	2,592.1	2,437.9	946.1	132.6	-61.2
Civilian Agencies														
Subtotal	111,025.2	103,586.2	109,191.8	111,899.6	110,859.1	110,550.2	109,755.6	109,965.3	113,384.3	111,138.6	115,611.3	114,455.6	3.1	-1.0
DOD	304,190.0	321,101.6	247,166.9	235,994.1	227,070.0	220,567.6	217,958.2	210,965.0	211,528.2	206,315.2	204,435.4	196,654.0	-35.4	-3.8
Total	415,215.2	424,687.7	356,358.8	347,893.7	337,929.1	331,117.8	327,713.8	320,930.3	324,912.5	317,453.7	320,046.7	311,109.6	-25.1	-2.8
MBOE	71.3	72.9	61.2	59.7	58.0	56.8	56.3	55.1	55.8	54.5	54.9	53.4		
Petajoules	438.0	448.0	375.9	367.0	356.5	349.3	345.7	338.6	342.8	334.9	337.6	328.2		

DATA AS OF 05/05/05

*Other includes for certain years the CFTC, CIA, EEOC, FEMA, FTC, NARA, NSF, NRC, OPM, RRB, SSA, BBG/IBB, and FERC.

Note: This table uses a conversion factor for electricity of 3,412 Btu per kilowatt hour. Contains estimated data for the following agencies: FEMA (1997, 1998), FCC (1997, 1998, 1999, 2000, 2001, 2002), FTC (1997, 1998, 1999, 2000, 2001, 2002), and OPM. (1997, 1998, 1999, 2000, 2001, 2002).

Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 5
CONSUMPTION AND COSTS OF FEDERAL STANDARD BUILDINGS ENERGY
BY FUEL TYPE IN FY 2004, FY 2003, AND FY 1985
(Constant 2004 Dollars)

ENERGY TYPE	BILLIONS OF BTU	COST (IN MILLIONS OF DOLLARS)	COST PER MMBTU	COST PER FAMILIAR UNIT
2004				
ELECTRICITY	141,876.9	\$2,763.510	\$19.48	\$66.46/MWH
FUEL OIL	31,174.7	\$210.864	\$6.76	\$0.94/Gallon
NATURAL GAS	105,418.8	\$723.251	\$6.86	\$7.07/Thou. Cubic. Ft.
LPG/PROPANE	2,736.0	\$29.809	\$10.90	\$1.04/Gallon
COAL	12,782.7	\$35.703	\$2.79	\$68.65/Short Ton
PURCHASED STEAM	13,294.1	\$182.047	\$13.69	\$13.69/MMBtu
OTHER	3,826.3	\$40.583	\$10.61	\$10.61/MMBtu
TOTAL	311,109.6	\$3,985.767		
AVERAGE COST PER MMBTU = \$12.811				
2003				
ELECTRICITY	141,250.5	\$2,720.716	\$19.26	\$65.72/MWH
FUEL OIL	35,547.0	\$209.937	\$5.91	\$0.82/Gallon
NATURAL GAS	112,205.1	\$666.600	\$5.94	\$6.13/Thou. Cubic. Ft.
LPG/PROPANE	2,392.5	\$24.224	\$10.13	\$0.97/Gallon
COAL	12,503.5	\$34.324	\$2.75	\$67.48/Short Ton
PURCHASED STEAM	13,772.8	\$178.569	\$12.97	\$12.97/MMBtu
OTHER	2,375.2	\$33.678	\$14.18	\$14.18/MMBtu
TOTAL	320,046.7	\$3,868.049		
AVERAGE COST PER MMBTU = \$12.086				
1985				
ELECTRICITY	127,649.0	\$3,827.235	\$29.98	\$102.30/MWH
FUEL OIL	92,947.1	\$994.486	\$10.70	\$1.48/Gallon
NATURAL GAS	127,690.3	\$1,055.776	\$8.27	\$8.52/Thou. Cubic. Ft.
LPG/PROPANE	3,162.1	\$39.215	\$12.40	\$1.18/Gallon
COAL	52,380.1	\$218.036	\$4.16	\$102.32/Short Ton
PURCHASED STEAM	7,171.4	\$150.977	\$21.05	\$21.05/MMBtu
OTHER	4,215.1	\$36.722	\$8.71	\$8.71/MMBtu
TOTAL	415,215.2	\$6,322.446		
AVERAGE COST PER MMBTU = \$15.227				

DATA AS OF 05/05/05

Note: This table uses a conversion factor for electricity of 3,412 Btu per kilowatt hour.
Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 6-A
FEDERAL STANDARD BUILDINGS SITE-DELIVERED ENERGY USE
PER GROSS SQUARE FOOT, FY 1985 AND FY 2004

	FISCAL YEAR 1985			FISCAL YEAR 2004			%CHANGE 1985-2004
	GSF (Thousands)	BTU (Billions)	BTU/GSF	GSF (Thousands)	BTU (Billions)	BTU/GSF	
VA †	123,650.0	24,552.0	198,560	152,758.0	<i>28,854.0</i>	188,887	-4.9
USPS	189,400.0	16,238.3	85,736	350,086.7	23,388.2	66,807	-22.1
DOE †	60,457.1	28,603.8	473,126	70,011.4	<i>16,202.0</i>	231,419	-51.1
DOJ	20,768.8	6,112.0	294,289	53,656.2	11,773.8	219,431	-25.4
GSA †	189,976.9	15,897.7	83,682	175,275.1	<i>11,257.3</i>	64,226	-23.2
DOI †	54,154.4	4,762.4	87,940	62,062.4	<i>5,955.7</i>	95,964	9.1
DHS †	0.0	0.0	NA	39,403.8	<i>4,146.3</i>	105,225	NA
NASA	14,623.4	3,760.1	257,130	22,296.6	3,926.2	176,089	-31.5
DOL †	18,268.3	2,153.0	117,852	22,329.5	<i>2,490.4</i>	111,532	-5.4
USDA	24,061.0	1,953.6	81,195	39,480.5	2,384.9	60,406	-25.6
DOT †	32,291.1	4,614.5	142,904	7,208.5	<i>688.8</i>	95,552	-33.1
TVA †	4,886.6	402.4	82,357	9,215.2	<i>553.0</i>	60,015	-27.1
DOC	4,522.6	540.3	119,476	5,649.5	492.7	87,203	-27.0
ST	2,597.0	232.2	89,392	2,731.4	323.8	118,535	32.6
TRSY	4,225.0	426.0	100,830	3,532.4	309.1	87,502	-13.2
HHS †	2,649.8	253.0	95,491	2,706.3	225.0	83,143	-12.9
HUD	1,432.0	116.9	81,668	1,432.0	110.2	76,934	-5.8
OTHER* †	3,172.0	406.8	128,249	9,770.9	<i>943.1</i>	96,526	-24.7
Civilian Agencies							
TOTAL †	751,136.0	111,025.2	147,810	1,029,606.4	<i>114,024.5</i>	110,746	-25.1
DOD †	2,224,527.3	304,190.0	136,744	1,936,394.5	<i>193,883.6</i>	100,126	-26.8
TOTAL †	2,975,663.3	415,215.2	139,537	2,966,000.9	<i>307,908.0</i>	103,813	-25.6

DATA AS OF 05/05/05

*Other includes the FCC, FTC, FEMA, NARA, NSF, NRC, OPM, PCC, RRB, SSA, BBG/IBB, and FERC.

†Indicates that reductions were made to FY 2004 energy use and Btu/GSF (shown in italics) to reflect purchases of renewable energy. When calculating Btu/GSF, the following amounts were subtracted from agency energy use for FY 2004: DOD, 2,200.0 BBtu; DOE, 124.2 BBtu; DOI, 9.2 BBtu; DOL, 8.5 BBtu; DOT, 25.0 BBtu; GSA, 381.1 BBtu; TVA, 4.0 BBtu; VA, 0.2 BBtu; DHS, 0.2 BBtu; RRB, 0.2 BBtu; and SSA, 2.8 BBtu. RRB and SSA are included under the Other category because they lack FY 1985 baseline data.

Note: This table uses a conversion factor for electricity of 3,412 Btu per kilowatt hour.
Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 6-B
FEDERAL STANDARD BUILDINGS PRIMARY ENERGY USE
PER GROSS SQUARE FOOT, FY 1985 AND FY 2004

	FISCAL YEAR 1985			FISCAL YEAR 2004			%CHANGE 1985-2004
	GSF (Thousands)	BTU (Billions)	BTU/GSF	GSF (Thousands)	BTU (Billions)	BTU/GSF	
USPS	189,400.0	40,143.9	211,953	350,086.7	63,678.4	181,893	-14.2
VA †	123,650.0	42,864.1	346,657	152,758.0	54,694.3	358,045	3.3
DOE †	60,457.1	48,300.5	798,922	70,011.4	35,758.2	510,748	-36.1
GSA †	189,976.9	40,198.6	211,597	175,275.1	29,629.7	169,047	-20.1
DOJ	20,768.8	9,048.5	435,679	53,656.2	21,442.6	399,629	-8.3
DOI †	54,154.4	8,542.8	157,748	62,062.4	11,396.7	183,632	16.4
NASA	14,623.4	8,899.9	608,608	22,296.6	10,109.5	453,410	-25.5
DHS †	0.0	0.0	NA	39,403.8	9,488.7	240,806	NA
USDA	24,061.0	4,156.4	172,746	39,480.5	5,628.3	142,559	-17.5
DOL †	18,268.3	3,734.1	204,404	22,329.5	4,968.2	222,494	8.9
DOT †	32,291.1	8,746.5	270,863	7,208.5	1,882.9	261,208	-3.6
TVA †	4,886.6	1,349.0	276,067	9,215.2	1,904.7	206,695	-25.1
DOC †	4,522.6	1,208.3	267,167	5,649.5	1,398.6	247,562	-7.3
ST	2,597.0	702.6	270,529	2,731.4	975.1	356,996	32.0
TRSY	4,225.0	1,094.9	259,142	3,532.4	875.5	247,848	-4.4
HHS †	2,649.8	677.7	255,759	2,706.3	608.6	224,883	-12.1
HUD	1,432.0	356.2	248,708	1,432.0	312.8	218,436	-12.2
OTHER* †	3,172.0	1,087.7	342,897	9,770.9	2,637.1	269,898	-21.3
Civilian Agencies							
TOTAL †	751,136.0	221,111.6	294,370	1,029,606.4	257,389.9	249,989	-15.1
DOD †	2,224,527.3	512,581.0	230,422	1,936,394.5	399,922.5	206,529	-10.4
TOTAL †	2,975,663.3	733,692.6	246,564	2,966,000.9	657,312.4	221,616	-10.1

DATA AS OF 05/05/05

*Other includes the FCC, FTC, FEMA, NARA, NSF, NRC, OPM, PCC, RRB, SSA, BBG/IBB, and FERC.

†Indicates that reductions were made to FY 2004 energy use and Btu/GSF (shown in italics) to reflect purchases of renewable energy. When calculating Btu/GSF, the following amounts were subtracted from agency energy use for FY 2004: DOD, 6,370.5 BBtu; DOE, 431.4 BBtu; DOI, 32.0 BBtu; DOL, 29.6 BBtu; DOT, 87.0 BBtu; GSA, 1,323.5 BBtu; TVA, 13.9 BBtu; VA, 0.6 BBtu; DHS, 0.7 BBtu; RRB, 0.6 BBtu; and SSA, 9.6 BBtu. RRB and SSA are included under the Other category because they lack FY 1985 baseline data.

Note: This table uses a conversion factor for electricity of 11,850 Btu per kilowatt hour and 1,390 Btu per pound of steam. Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 7
SITE-DELIVERED ENERGY CONSUMPTION IN FEDERAL ENERGY-INTENSIVE FACILITIES
(In Billions of Btu, with Conversions to Millions of Barrels of Oil Equivalent [MBOE], and Petajoules [Joule x 10¹⁵])

CIVILIAN AGENCY	FY 1985...	FY 1990...	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	%Change 90-04	%Change 03-04
HHS	5,327.2	6,845.9	5,822.6	6,405.6	7,217.7	6,764.3	6,498.6	7,138.8	7,597.8	7,612.2	7,842.5	8,193.8	19.7	4.5
DOE	6,991.4	7,507.9	6,939.1	7,262.5	7,429.3	6,415.8	2,431.6	6,663.3	5,090.0	7,242.2	7,403.5	7,412.1	-1.3	0.1
GSA ¹	3,214.3	4,354.0	1,213.8	961.0	890.7	849.2	1,150.8	5,093.8	5,799.4	5,453.3	5,997.6	5,948.5	36.6	-0.8
NASA	3,496.3	4,142.9	3,900.6	3,535.9	3,835.6	3,897.9	3,794.5	3,585.5	3,413.9	3,382.0	3,294.7	3,211.9	-22.5	-2.5
USDA	2,085.5	2,416.2	2,141.0	2,140.8	2,221.6	2,416.5	2,589.0	2,368.5	2,826.7	2,216.1	2,209.1	2,085.6	-13.7	-5.6
TRSY	287.3	1,773.8	941.0	928.3	1,131.8	996.5	964.2	2,303.7	2,204.8	2,130.1	1,992.7	1,965.6	10.8	-1.4
DOC	938.6	976.6	1,627.4	1,823.0	1,335.2	1,332.0	1,400.4	1,315.8	1,454.6	1,395.3	1,464.1	1,593.0	63.1	8.8
EPA	772.3	747.0	1,020.9	1,023.5	1,012.1	1,022.7	1,170.2	940.3	1,118.3	979.7	1,255.3	1,311.2	75.5	4.5
DOJ	0.0	0.0	707.8	944.1	846.9	850.7	862.8	862.2	845.1	838.7	961.3	1,208.9	NA	25.8
BBG/IBB	0.0	1,406.9	878.2	936.2	1,092.2	1,020.4	951.4	951.4	951.4	1,229.6	1,033.2	943.9	-32.9	-8.6
DHS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	239.0	534.3	NA	123.6
SSA	0.0	0.0	0.0	215.5	204.7	211.4	199.1	237.5	201.9	190.6	186.1	181.8	NA	-2.3
TVA	124.0	112.2	80.6	80.0	86.4	83.4	99.1	85.1	76.5	75.1	76.1	77.6	-30.8	2.1
FCC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	6.3	6.3	6.3	0.0	NA	NA
PCC	167.2	190.8	209.4	218.6	221.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA
Civilian Agencies Total	23,404.0	30,474.0	25,482.2	26,475.1	27,525.1	25,860.8	22,111.9	31,551.9	31,586.7	32,751.4	33,961.4	34,668.1	13.8	2.2
DOD	55,743.9	39,209.1	37,962.6	37,260.1	35,702.3	36,588.4	32,919.0	32,280.9	28,649.8	28,459.4	28,614.5	30,196.8	-23.0	5.5
Total	79,148.0	69,683.2	63,444.8	63,735.2	63,227.4	62,449.2	55,030.9	63,832.8	60,236.4	61,210.8	62,575.8	64,864.9	-6.9	3.7
MBOE	13.6	12.0	10.9	10.9	10.9	10.7	9.4	11.0	10.3	10.5	10.7	11.1		
Petajoules	83.5	73.5	66.9	67.2	66.7	65.9	58.1	67.3	63.5	64.6	66.0	68.4		

DATA AS OF 05/05/05

Note: This table uses a conversion factor for electricity of 3,412 Btu per kilowatt hour. Sum of components may not equal total due to independent rounding.

¹GSA's large increase in energy reported under this category beginning in FY 2000 is a result of the agency reclassifying buildings from the standard buildings inventory for FY 1990 and FY 2000 and subsequent years without adjusting data for the intervening years.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 8
CONSUMPTION AND COSTS OF FEDERAL ENERGY INTENSIVE FACILITIES ENERGY
BY FUEL TYPE IN FY 2004

ENERGY TYPE	BILLIONS OF BTU	COST (IN MILLIONS OF DOLLARS)	COST PER MMBTU	COST PER FAMILIAR UNIT
ELECTRICITY	30,126.9	\$480.291	\$15.94	\$54.40/MWH
FUEL OIL	4,331.7	\$29.050	\$6.71	\$0.93/Gallon
NATURAL GAS	22,984.5	\$159.638	\$6.95	\$7.16/Thou. Cubic. Ft.
LPG/PROPANE	143.9	\$1.549	\$10.77	\$1.03/Gallon
COAL	4,324.3	\$8.590	\$1.99	\$48.83/Short Ton
PURCHASED STEAM	2,466.0	\$25.187	\$10.21	\$10.21/MMBtu
OTHER	487.5	\$6.571	\$13.48	\$13.48/MMBtu
TOTAL	64,864.9	\$710.877		

AVERAGE COST PER MBTU = \$10.959

DATA AS OF 05/05/05

Note: This table uses a conversion factor for electricity of 3,412 Btu per kilowatt hour.
Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 9
ENERGY CONSUMPTION, COSTS, AND GROSS SQUARE FOOTAGE OF
FEDERAL EXEMPT FACILITIES, FY 2004

AGENCY	ENERGY CONSUMPTION		ENERGY COSTS		FACILITY GROSS SQUARE FEET	
	(BBTU)	% OF AGENCY'S TOTAL FACILITY USE	(\$ MILLION)	% OF AGENCY'S TOTAL FACILITY COSTS	(THOU. SQ. FT.)	% OF AGENCY'S TOTAL FACILITY SPACE
DOD	10,809.1	4.5%	\$150.804	1.8%	0.0	0.0%
DOE	5,047.9	17.6%	\$66.814	19.9%	11,608.8	11.0%
DOT	3,298.8	82.2%	\$76.051	73.1%	19,395.8	72.9%
NASA	1,457.0	17.0%	\$21.107	16.5%	4,440.2	11.5%
USPS	1,455.3	5.9%	\$35.531	5.0%	0.0	0.0%
TVA	1,237.7	66.1%	\$18.138	45.7%	18,848.6	66.2%
GSA	655.6	3.6%	\$12.726	4.1%	13,316.1	6.4%
NARA	565.5	100.0%	\$7.951	100.0%	3,787.6	100.0%
ST	257.0	44.3%	\$5.347	31.6%	2,598.8	48.8%
DHS	10.1	0.2%	\$0.232	0.1%	20.5	0.0%
HHS	7.7	0.1%	\$0.150	0.2%	882.8	3.2%
TRSY	0.1	0.0%	\$0.002	0.0%	0.0	0.0%
Total	24,801.7	NA	\$394.852	NA	74,899.2	NA

DATA AS OF 05/05/05

TABLE 10
CONSUMPTION AND COSTS OF FEDERAL EXEMPT FACILITY ENERGY
BY FUEL TYPE IN FY 2004

ENERGY TYPE	BILLIONS OF BTU	COST (IN MILLIONS OF DOLLARS)	COST PER MMBTU	COST PER FAMILIAR UNIT
ELECTRICITY	18,157.6	\$345.911	\$20.04	\$65.00/MWH
FUEL OIL	2,281.9	\$11.359	\$6.92	\$0.69/Gallon
NATURAL GAS	2,418.9	\$16.670	\$6.79	\$7.10/Thou. Cubic. Ft.
LPG/PROPANE	9.5	\$0.112	\$12.18	\$1.13/Gallon
COAL	265.6	\$0.619	\$2.56	\$57.28/Short Ton
PURCHASED STEAM	957.5	\$10.926	\$10.65	\$11.41/MMBtu
OTHER	710.6	\$9.255	\$11.77	\$13.02/MMBtu
TOTAL	24,801.7	\$394.852		

AVERAGE COST PER MMBTU = \$15.920

DATA AS OF 05/05/05

This table uses a conversion factor for electricity of 3,412 Btu per kilowatt hour. Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 11
FEDERAL ENERGY CONSUMPTION IN VEHICLE AND EQUIPMENT OPERATIONS
(In Billions of Btu, with Conversions to Millions of Barrels of Oil Equivalent [MBOE], and Petajoules [Joule x 10¹⁵])

CIVILIAN AGENCY	FY 1985...	FY 1990...	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	%Change 85-04	%Change 03-04
DHS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,583.9	18,837.1	NA	38.7
USPS	11,524.2	12,136.2	14,571.2	14,217.1	16,779.2	14,777.2	14,583.7	15,976.3	16,192.1	15,831.8	17,173.5	15,821.0	37.3	-7.9
DOJ	2,064.0	2,097.9	3,181.6	3,693.0	3,149.3	7,171.4	6,456.3	9,456.3	9,037.9	7,305.9	6,276.4	4,561.7	121.0	-27.3
DOI	3,053.9	3,352.5	2,782.2	1,347.5	2,943.7	2,679.9	3,661.4	3,839.3	4,812.3	3,308.9	3,151.2	2,777.6	-9.0	-11.9
DOE	2,882.0	2,520.4	1,841.9	1,561.0	1,971.0	1,955.6	1,444.6	1,803.4	1,714.4	1,587.0	1,417.1	2,736.6	-5.0	93.1
USDA	4,319.6	4,952.3	4,821.7	4,654.8	3,153.0	3,389.4	3,337.9	3,025.7	2,476.2	2,543.5	2,376.6	2,508.0	-41.9	5.5
NASA	1,972.7	1,736.7	1,750.9	1,539.3	1,622.1	1,428.3	1,412.8	1,490.1	1,455.1	1,372.2	982.8	1,263.1	-36.0	28.5
DOT	11,957.0	12,150.8	12,193.7	12,222.9	12,347.9	10,145.0	10,870.5	11,122.9	8,739.3	10,865.9	1,476.4	1,146.8	-90.4	-22.3
VA	592.8	518.3	353.6	660.7	1,199.1	1,380.3	1,337.6	923.4	913.6	856.4	1,174.0	1,034.2	74.5	-11.9
TVA	578.5	476.6	541.7	583.8	479.5	429.1	423.3	850.1	822.3	747.9	942.3	845.3	46.1	-10.3
ST	14.8	34.9	0.0	0.0	44.7	40.9	40.9	486.4	37.1	49.4	444.2	451.7	NA	1.7
DOL	232.2	239.0	356.9	337.7	336.2	350.2	350.2	368.9	358.9	363.3	397.4	397.2	71.1	0.0
HHS	373.3	0.0	105.5	18.6	435.0	447.7	447.7	593.2	715.2	178.5	572.4	335.1	-10.2	-41.5
TRSY	2,155.0	1,473.2	1,773.4	1,350.9	1,561.4	2,078.6	2,120.2	2,503.3	2,577.8	2,878.3	1,856.3	310.5	-85.6	-83.3
DOC	1,010.2	3,100.3	760.6	570.1	929.1	708.4	834.5	154.3	595.8	360.0	360.0	131.1	-87.0	-63.6
EPA	132.3	0.0	99.6	76.5	137.2	97.7	120.6	97.9	110.0	114.8	133.1	110.1	-16.8	-17.3
GSA	144.1	128.1	91.3	98.8	119.9	122.2	125.2	127.0	112.7	74.9	80.3	49.2	-65.9	-38.8
HUD	0.0	0.0	25.4	25.4	28.3	23.3	23.3	37.8	33.4	38.0	31.4	32.6	NA	4.0
OTHER*	582.1	732.4	992.9	951.4	914.0	154.2	150.6	45.3	48.8	58.8	51.7	57.3	-90.2	10.8
Civilian Agencies														
Total	43,588.5	45,649.7	46,244.1	43,909.5	48,150.6	47,379.4	47,741.4	52,901.5	50,753.0	48,535.5	52,480.9	53,406.1	22.5	1.8
DOD	890,679.9	881,345.1	640,893.4	631,202.0	617,235.4	579,959.8	559,785.8	526,234.1	537,168.4	593,506.3	662,116.2	723,008.8	-18.8	9.2
Total	934,268.4	926,994.8	687,137.4	675,111.5	665,386.0	627,339.2	607,527.2	579,135.6	587,921.5	642,041.8	714,597.1	776,414.9	-16.9	8.7
MBOE	160.4	159.1	118.0	115.9	114.2	107.7	104.3	99.4	100.9	110.2	122.7	133.3		
Petajoule	985.6	977.9	724.9	712.2	702.0	661.8	640.9	611.0	620.2	677.3	753.9	819.1		

DATA AS OF 05/05/05

*Other includes for certain years the CFTC, CIA, FEMA, NSF, NRC, OPM, and BBG/IBB.

Note: Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 12
CONSUMPTION AND COSTS OF VEHICLE AND EQUIPMENT
ENERGY BY FUEL TYPE IN FY 2004

ENERGY TYPE	BILLIONS OF BTU	COST (IN MILLIONS OF DOLLARS)	COST PER MMBTU	COST PER FAMILIAR UNIT
AUTO GASOLINE	43,512.2	\$579.673	\$13.32	\$1.67/Gallon
DIST/DIESEL	33,924.8	\$274.590	\$8.09	\$1.12/Gallon
LPG/PROPANE	34.9	\$0.352	\$10.11	\$0.96/Gallon
AVIATION GASOLINE	185.4	\$4.089	\$22.05	\$2.76/Gallon
JET FUEL	508,207.1	\$4,349.467	\$8.56	\$1.11/Gallon
NAVY SPECIAL	187,465.5	\$932.603	\$4.97	\$0.69/Gallon
OTHER	3,085.0	\$25.234	\$8.18	\$8.18/MMBtu
TOTAL	776,414.9	\$6,166.009		

AVERAGE COST PER MMBTU = \$7.942

DATA AS OF 05/05/05

Note: Sum of components may not equal total due to independent rounding.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 13
FEDERAL ENERGY EXPENDITURES, FY 1985–FY 2004
(CONSTANT 2004 DOLLARS)

Year	Annual Energy Use (BBTU)	Annual Energy Cost (\$ MILLION)	Annual Energy Cost (\$/MMBTU)	Change in Energy Costs from 1985 ¹ (\$ MILLION)
<u>Standard Buildings & Facilities</u>				
1985	415,215.2	\$6,322.446	\$15.227	\$0.000
1986	443,667.3	\$6,393.791	\$14.411	\$71.344
1987	465,393.9	\$6,366.596	\$13.680	\$44.150
1988	440,381.3	\$5,752.283	\$13.062	-\$570.163
1989	437,487.3	\$5,354.163	\$12.238	-\$968.283
1990	424,687.7	\$5,841.433	\$13.755	-\$481.013
1991	394,459.0	\$5,600.737	\$14.199	-\$721.709
1992	401,667.6	\$5,264.362	\$13.106	-\$1,058.084
1993	391,492.2	\$5,490.119	\$14.024	-\$832.327
1994	373,532.2	\$5,159.369	\$13.812	-\$1,163.077
1995	356,358.8	\$4,795.795	\$13.458	-\$1,526.651
1996	347,893.7	\$4,613.078	\$13.260	-\$1,709.368
1997	337,929.1	\$4,300.856	\$12.727	-\$2,021.591
1998	331,117.8	\$4,063.532	\$12.272	-\$2,258.914
1999	327,713.8	\$3,800.093	\$11.596	-\$2,522.354
2000	320,930.3	\$3,673.192	\$11.445	-\$2,649.254
2001	324,912.5	\$4,267.305	\$13.134	-\$2,055.141
2002	317,453.7	\$3,958.724	\$12.470	-\$2,363.722
2003	320,046.7	\$3,868.049	\$12.086	-\$2,454.397
2004	311,109.6	\$3,985.767	\$12.811	-\$2,336.679
<u>Energy Intensive Facilities</u>				
1985	79,148.0	\$1,271.805	\$16.069	\$0.000
1986	20,321.6	\$461.701	\$22.720	-\$810.104
1987	24,827.5	\$430.191	\$17.327	-\$841.614
1988	55,666.3	\$852.794	\$15.320	-\$419.010
1989	52,355.4	\$664.758	\$12.697	-\$607.047
1990	69,683.2	\$991.282	\$14.226	-\$280.523
1991	78,976.9	\$1,077.624	\$13.645	-\$194.180
1992	92,335.0	\$1,204.774	\$13.048	-\$67.031
1993	65,689.6	\$789.478	\$12.018	-\$482.327
1994	65,725.8	\$747.199	\$11.368	-\$524.605
1995	63,444.8	\$678.698	\$10.697	-\$593.107
1996	63,735.2	\$701.969	\$11.014	-\$569.836
1997	63,227.4	\$686.198	\$10.853	-\$585.607
1998	62,449.2	\$601.536	\$9.632	-\$670.269
1999	55,030.9	\$549.676	\$9.989	-\$722.128
2000	63,832.8	\$610.414	\$9.563	-\$661.390
2001	60,236.4	\$693.826	\$11.518	-\$577.979
2002	61,210.8	\$635.163	\$10.377	-\$636.642
2003	62,575.8	\$677.517	\$10.827	-\$594.288
2004	64,864.9	\$710.877	\$10.959	-\$560.928

¹Changes in energy costs from 1985 should not be construed as savings resulting from Federal energy management activities. Many variables contribute to fluctuations in annual energy costs, including changes in square footage, building stock, weather, energy efficiency investments, service level, fuel mix, fuel prices, and vehicle, naval, and aircraft fleet composition. This table incorporates revisions to previously published energy consumption and cost data submitted to DOE by Federal agencies.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 13 (Continued)
 FEDERAL ENERGY EXPENDITURES, FY 1985–FY 2004
 (CONSTANT 2004 DOLLARS)

Year	Annual Energy Use (BBTU)	Annual Energy Cost (\$ MILLION)	Annual Energy Cost (\$/MMBTU)	Change in Energy Costs from 1985 ¹ (\$ MILLION)
<u>Exempt Facilities</u>				
1985	20,217.9	\$331.742	\$16.408	\$0.000
1986	17,878.5	\$279.100	\$15.611	-\$52.642
1987	17,195.9	\$263.881	\$15.346	-\$67.861
1988	17,367.6	\$255.034	\$14.684	-\$76.708
1989	14,840.0	\$243.188	\$16.387	-\$88.554
1990	14,800.8	\$266.425	\$18.001	-\$65.317
1991	17,851.3	\$335.631	\$18.801	\$3.889
1992	17,677.5	\$272.532	\$15.417	-\$59.210
1993	16,981.0	\$259.688	\$15.293	-\$72.054
1994	16,172.3	\$267.046	\$16.513	-\$64.696
1995	22,376.0	\$240.525	\$10.749	-\$91.217
1996	21,723.5	\$247.516	\$11.394	-\$84.226
1997	25,437.2	\$343.842	\$13.517	\$12.100
1998	16,977.4	\$293.304	\$17.276	-\$38.438
1999	21,362.5	\$281.204	\$13.163	-\$50.538
2000	29,908.5	\$434.334	\$14.522	\$102.592
2001	29,892.1	\$508.287	\$17.004	\$176.545
2002	24,101.0	\$445.328	\$18.478	\$113.586
2003	23,311.5	\$403.198	\$17.296	\$71.456
2004	24,801.6	\$394.852	\$15.920	\$63.110
<u>Vehicles & Equipment</u>				
1985	934,268.4	\$10,866.470	\$11.631	\$0.000
1986	924,833.7	\$6,500.178	\$7.028	-\$4,366.291
1987	958,904.3	\$6,865.446	\$7.160	-\$4,001.024
1988	846,896.2	\$6,460.450	\$7.628	-\$4,406.019
1989	959,994.6	\$7,280.256	\$7.584	-\$3,586.213
1990	926,994.8	\$8,031.752	\$8.664	-\$2,834.718
1991	970,454.3	\$10,296.183	\$10.610	-\$570.286
1992	783,122.4	\$6,069.733	\$7.751	-\$4,796.737
1993	772,633.8	\$6,373.357	\$8.249	-\$4,493.113
1994	722,790.5	\$4,497.089	\$6.222	-\$6,369.381
1995	687,137.4	\$4,624.821	\$6.731	-\$6,241.649
1996	675,111.5	\$4,464.064	\$6.612	-\$6,402.406
1997	665,386.0	\$5,020.233	\$7.545	-\$5,846.237
1998	627,339.2	\$5,193.386	\$8.278	-\$5,673.083
1999	607,527.2	\$4,470.078	\$7.358	-\$6,396.392
2000	579,135.6	\$3,548.336	\$6.127	-\$7,318.134
2001	587,921.5	\$5,095.180	\$8.666	-\$5,771.290
2002	642,041.8	\$5,409.012	\$8.425	-\$5,457.458
2003	714,597.1	\$5,089.719	\$7.123	-\$5,776.750
2004	776,414.9	\$6,166.009	\$7.942	-\$4,700.461

¹Changes in energy costs from 1985 should not be construed as savings resulting from Federal energy management activities. Many variables contribute to fluctuations in annual energy costs, including changes in square footage, building stock, weather, energy efficiency investments, service level, fuel mix, fuel prices, and vehicle, naval, and aircraft fleet composition. This table incorporates revisions to previously published energy consumption and cost data submitted to DOE by Federal agencies.

Source: Federal Agency Annual Energy Management Data Reports

TABLE 13 (Continued)
 FEDERAL ENERGY EXPENDITURES, FY 1985–FY 2004
 (CONSTANT 2004 DOLLARS)

Year	Annual Energy Use (BBTU)	Annual Energy Cost (\$ MILLION)	Annual Energy Cost (\$/MMBTU)	Change in Energy Costs from 1985 ¹ (\$ MILLION)
<u>Total Energy - All End-Use Sectors</u>				
1985	1,448,849.5	\$18,792.462	\$12.971	\$0.000
1986	1,406,701.1	\$13,634.770	\$9.693	-\$5,157.692
1987	1,466,321.6	\$13,926.114	\$9.497	-\$4,866.348
1988	1,360,311.4	\$13,320.561	\$9.792	-\$5,471.901
1989	1,464,677.3	\$13,542.365	\$9.246	-\$5,250.097
1990	1,436,166.5	\$15,130.892	\$10.536	-\$3,661.571
1991	1,461,741.5	\$17,310.176	\$11.842	-\$1,482.287
1992	1,294,802.5	\$12,811.400	\$9.894	-\$5,981.062
1993	1,246,796.6	\$12,912.642	\$10.357	-\$5,879.821
1994	1,178,220.8	\$10,670.703	\$9.057	-\$8,121.760
1995	1,129,317.0	\$10,339.838	\$9.156	-\$8,452.624
1996	1,108,463.9	\$10,026.626	\$9.046	-\$8,765.836
1997	1,091,979.7	\$10,351.128	\$9.479	-\$8,441.334
1998	1,037,883.6	\$10,151.758	\$9.781	-\$8,640.704
1999	1,011,634.4	\$9,101.050	\$8.996	-\$9,691.412
2000	993,807.2	\$8,266.276	\$8.318	-\$10,526.186
2001	1,002,962.5	\$10,564.598	\$10.533	-\$8,227.865
2002	1,044,807.3	\$10,448.227	\$10.000	-\$8,344.235
2003	1,120,531.1	\$10,038.483	\$8.959	-\$8,753.980
2004	1,177,191.1	\$11,257.505	\$9.563	-\$7,534.957

¹Changes in energy costs from 1985 should not be construed as savings resulting from Federal energy management activities. Many variables contribute to fluctuations in annual energy costs, including changes in square footage, building stock, weather, energy efficiency investments, service level, fuel mix, fuel prices, and vehicle, naval, and aircraft fleet composition. This table incorporates revisions to previously published energy consumption and cost data submitted to DOE by Federal agencies.

Source: Federal Agency Annual Energy Management Data Reports

APPENDIX B DATA COLLECTION

Standard Buildings and Facilities, Energy Intensive Facilities, and Exempt Facilities

The Federal agencies that own or control buildings are required to report the energy consumption in these buildings to FEMP by January 1 after the end of each fiscal year. The General Services Administration (GSA) reports the energy of buildings it owns and operates, including usage by other Federal agency occupants. For buildings which have been delegated by GSA to other agencies, the individual agencies are responsible for reporting the energy consumption and square footage figures.

The data shown in this report do not include leased space in buildings where the energy costs are a part of the rent and the Federal agency involved has no control over the building's energy management.

The Federal agencies submit their annual reports expressed in the following units: megawatthours of electricity; thousands of gallons of fuel oil; thousands of cubic feet of natural gas; thousands of gallons of liquefied petroleum gas (LPG) and propane; short tons of coal; billions of Btu of purchased steam; and billions of Btu of "other." DOE reviews this data for accuracy and confers with the submitting agency to clarify any apparent anomalies. The data are then entered into a computer database management program.

The tables shown in this Annual Report are expressed in billions of Btu derived from the following conversion factors:

Electricity	-	3,412 Btu/kilowatt hour
Fuel Oil	-	138,700 Btu/gallon
Natural Gas	-	1,031 Btu/cubic foot
LPG/Propane	-	95,500 Btu/gallon
Coal	-	24,580,000 Btu/short ton
Purchased Steam	-	1,000 Btu/pound

The above conversion factors for electricity and purchased steam refer to site-delivered energy (or heat content) and do not account for energy consumed in the production and delivery of energy products. Table 6 of this report accounts for primary energy use, which is the sum of the energy directly consumed by end users (site energy) and the source energy consumed in the production and delivery of energy products. Using 2002 data from EIA, a blended heat rate of 10,191 Btu/kWh was calculated for fossil and nuclear steam-electric plants. In addition to conversion losses, transmission and distribution losses (9 percent) and power plant use (5 percent) are also factored into the delivered heat content, resulting in a total source energy input for electricity of 11,850 Btu/kWh. DOE uses this conversion factor to calculate primary energy use for electricity and 1,390 Btu per pound for purchased steam.

In addition, the Federal agencies annually report to FEMP the gross square footage of their buildings and the cost of their buildings' energy.

Vehicles and Equipment

Federal agencies are required to report the energy consumption of their fleet vehicles through DOE's Federal Automotive Statistical Tool (FAST) no later than November 1 after the end of each fiscal year. Energy consumption in other types of equipment not reported through FAST is required to be reported to FEMP by January 1 after the end of each fiscal year.

The fuels used in vehicles and equipment are automotive gasoline, diesel and petroleum distillate fuels, aviation gasoline, jet fuel, navy special, liquefied petroleum gas/propane, and "other." All the fuels in this category with the exception of "other" are reported in thousands of gallons. "Other" is reported in billions of Btu.

The conversion factors for these fuels are:

Gasoline	-	125,000 Btu/gallon
Diesel-Distillate	-	138,700 Btu/gallon
Aviation Gasoline	-	125,000 Btu/gallon
Jet Fuel	-	130,000 Btu/gallon
Navy Special	-	138,700 Btu/gallon
LPG/Propane	-	95,500 Btu/gallon

This report excludes those agencies that have been unable to provide complete fiscal year consumption data prior to the publication date. All agency omissions, as well as any anomalies in the data, are indicated by footnotes on the tables or in the text of the report.

APPENDIX C ACRONYMS

Agency Acronyms

Broadcasting Board of Governors/ International Broadcasting Bureau	BBG/IBB
Commodity Futures Trading Commission	CFTC
Central Intelligence Agency	CIA
Department of Agriculture	USDA
Department of Commerce	DOC
Department of Defense	DOD
Department of Energy	DOE
Department of Health and Human Services	HHS
Department of Homeland Security	DHS
Department of Housing and Urban Development	HUD
Department of the Interior	DOI
Department of Justice	DOJ
Department of Labor	DOL
Department of State	ST
Department of Transportation	DOT
Department of the Treasury	TRSY
Department of Veterans Affairs	VA
Environmental Protection Agency	EPA
Equal Employment Opportunity Commission	EEOC
Federal Communications Commission	FCC
Federal Emergency Management Agency	FEMA
Federal Energy Regulatory Commission	FERC
Federal Trade Commission	FTC
General Services Administration	GSA
International Broadcasting Bureau	IBB
National Aeronautics and Space Administration	NASA
National Archives and Records Administration	NARA
National Science Foundation	NSF
Nuclear Regulatory Commission	NRC
Office of Personnel Management	OPM
Panama Canal Commission	PCC
Railroad Retirement Board	RRB
Social Security Administration	SSA
Tennessee Valley Authority	TVA
United States Postal Service	USPS

Other Acronyms

Assessment of Load and Energy Reduction Techniques	ALERT
Building Life-Cycle Cost	BLCC
British Thermal Unit(s)	Btu
Energy Citations Database	ECD
Energy Information Administration	EIA
Office of Energy Efficiency and Renewable Energy	EERE
Energy Management Control Systems	EMCS
Energy Policy Act of 1992	EPACT
Energy Efficiency and Renewable Energy Clearinghouse	EREC
Energy Service Company	ESCO
Energy Savings Performance Contract	ESPC
Facility Energy Decision System	FEDS
Federal Automotive Statistical Tool	FAST
Federal Energy Management Program	FEMP
Fiscal Year	FY
Gross Square Foot	GSF
Industrial Assessment Center	IAC
Indefinite-Delivery, Indefinite Quantity Contract	IDIQ
Life-Cycle Cost	LCC
Liquefied Petroleum Gas	LPG
Megawatthours	MWH
Military Construction	MILCON
Million Barrels of Oil Equivalent	MBOE
Million British Thermal Units	MMBtu
National Energy Conservation Policy Act	NECPA
National Energy Information Center	NEIC
National Institute of Standards and Technology	NIST
Office of Industrial Technologies	OIT
Office of Scientific and Technical Information	OSTI
Quadrillion British Thermal Units	Quad
Research and Development	R&D
State Energy Program	SEP
Utility Energy Service Contract	UESC