




Energy Center of Expertise

# Energy Forum: Achieving Efficiency, Sustainability, Maintainability,



Federal Facilities Council  
February 15, 2007

# Overview

- GSA's Energy Measures
  - Process for setting measures
  - Importance of measures
  - Role of the Energy Center
  - Strategies and Resources
  - How does this measure fit into GSA's strategic goals and planning
- 
- A solid, light beige horizontal bar located at the bottom of the slide.

# What is the GSA measure?

- Percent reduction in energy consumption measured in British Thermal Units per gross square foot of office space as compared from a 1985 baseline to the most current rolling 12 months.

**9.0 Energy Consump**

15 10 5 0

**Period:** 01 Dec 2004 - 31 Dec 2004

**Acceptable Trend Deviation Range:** [100,-100]

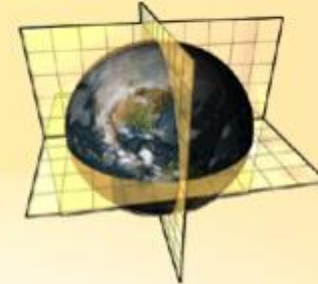
**Responsible:** Linda Garner (202) 208-1111

**Unit Goal:** 9. Reduce energy consumption in Federal facilities

**Description:**  
Improve energy reduction in standard facilities. The National goal for FY05 is 30% reduction from the FY85 baseline as outlined in Executive Order 13123

**Associated website:**

**Measures:**  
Actual: 62,545.92  
Target: 58,426.34



Region	1	2	3	4	5	6	7	8	9	10	11	GSA
FY85	91,052	98,172	85,551	64,101	80,688	85,454	62,915	119,490	50,108	54,948	98,333	83,238
Current	65,188	67,637	63,897	58,323	69,332	66,832	46,386	84,280	42,009	53,842	77,735	62,649
% Change	-28.4%	-31.1%	-25.3%	-9.0%	-14.1%	-21.8%	-26.3%	-29.5%	-16.2%	-2.0%	-20.9%	-24.7%

UP	Energy Consump	Energy Consump Target	Energy Consump Target Dev
01-New England Region	65,188.00	62,139.00	4.91
02-Northeast and Caribbean Region	67,637.00	66,036.00	2.42
03-Mid-Atlantic Region	63,897.00	62,679.00	1.94
04-Southeast Sunbelt Region	58,323.00	52,149.00	11.84
05-Great Lakes Region	69,332.00	65,209.00	6.32
06-Heartland Region	66,832.00	64,204.00	4.09
07-Greater Southwest Region	46,386.00	43,899.00	5.67
08-Rocky Mountain Region	84,280.00	71,941.00	17.15
09-Pacific Rim Region	42,009.00	41,547.00	1.11
10-Northwest/Arctic Region	53,842.00	51,325.00	4.90
11-National Capital Region	77,735.00	67,195.00	15.69

# Where does it come from?

- This measurement was originally established in the National Energy Policy Act in 1979 which was amended by the Energy Policy Act of 1992. The original goal went called for 10% reduction from 1985 to 1995 and was then extended to 20% reduction thru 2000.
- EPACT 05 further directed agencies to reduce 20% by 2015 starting from a new baseline of 2003.

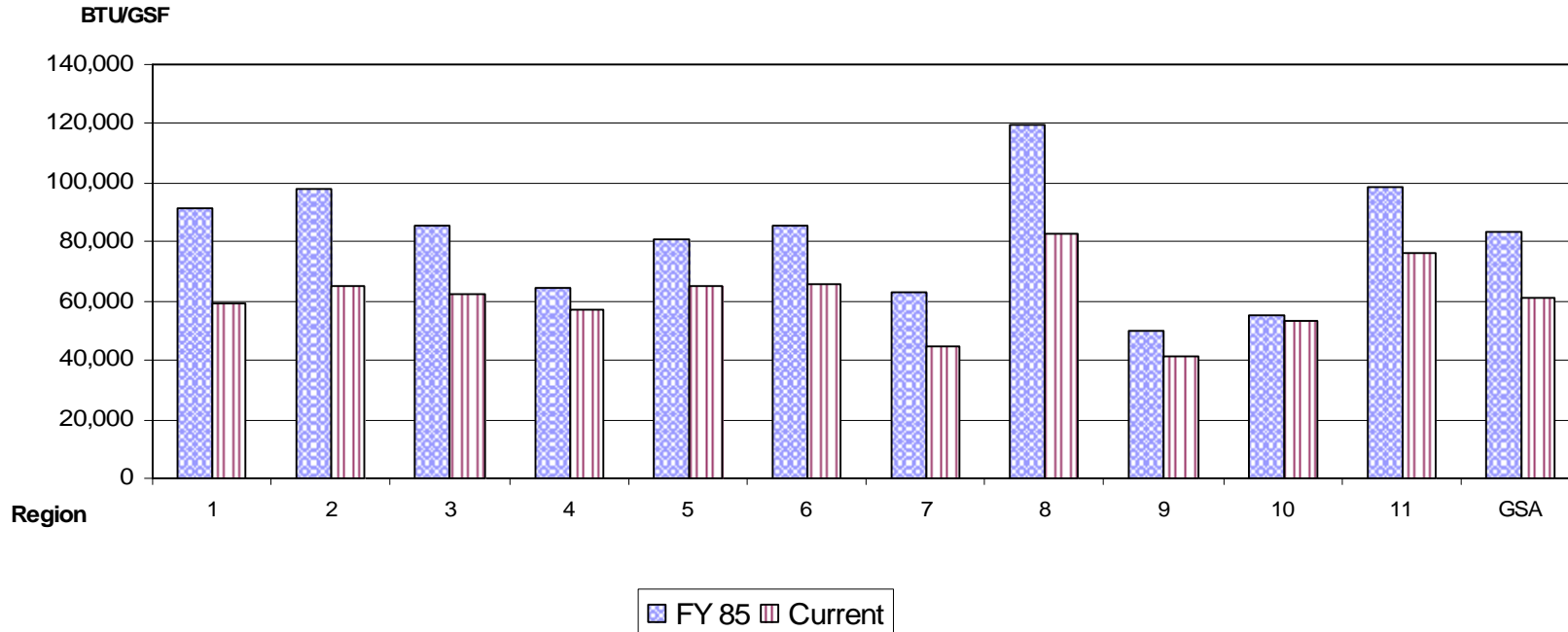
# How is it generated?

- The Energy Center of Expertise maintains the Energy Usage and Analysis System which is a database containing GSF and utility information on every GSA building receiving a utility bill.
- GSF information is the result of PBS information systems and regional validation.
- Energy information is derived directly from utility invoices paid by GSA Finance.
- EUAS staff transfer utility commodity information into BTUs.



## ENERGY PERFORMANCE - STANDARD GOAL BUILDINGS

12 Months Through February 2005 vs. FY 1985



Region	1	2	3	4	5	6	7	8	9	10	11	GSA
FY 85	91,052	98,172	85,551	64,101	80,688	85,454	62,915	119,490	50,108	54,948	98,333	83,238
Current	59,043	64,949	62,281	57,362	65,295	65,778	44,935	82,679	41,727	53,094	76,392	60,845
% Change	-35.2%	-33.8%	-27.2%	-10.5%	-19.1%	-23.0%	-28.6%	-30.8%	-16.7%	-3.4%	-22.3%	-26.9%
FY 2005 GSF	5,922,489	16,780,047	16,660,596	19,806,833	20,108,716	17,241,531	18,628,129	9,714,754	21,189,709	8,136,349	22,719,237	176,940,366



Energy Usage Analysis System :: WELCOME :: - Microsoft Internet Explorer provided by GSA NCR

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Energy Usage

ANALYSIS SYSTEM

Fiscal Year :: 2005 ::

REPORTS

Welcome to GSA's Energy Usage Analysis System (EUAS) Reporting Website

This site allows GSA managers, regional energy coordinators, and other interested parties to view and print reports showing the latest energy usage and cost data available for GSA operated buildings.

Data for these reports is provided by the National Energy and Water Management Center (NEWMC).

ENERGY PROGRAM

LOGIN

User Name

Password

SUBMIT

RESET

No login required for reports

Click on the "REPORTS" tab above to proceed

Internet



Energy Usage Analysis System - Microsoft Internet Explorer provided by GSA NCR

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REPORTS

LOGOUT

User :: Guest :: 

Fiscal Year :: 2005 ::

Actual Data

Comparison Report

Energy Status

Vendor Accounts

Facility History

Building History

Building Address


Sorted Building

% Variance

Energy Comparison Graph

Energy Performance (with weather data)

Un-Formatted Energy Data Report



Welcome to GSA's  
Energy Usage Analysis System ( EUAS )

This section of the site allows GSA Managers, Regional Energy Co-ordinators, and other interested parties to view and print reports showing the latest energy usage and cost data available for GSA operated buildings.

Data for these reports is provided by the National Energy and Water Management Center (NEWMC).

**Report data is current through November, 2004.**

Contact Information

Lee Ann Walker

Public Utilities Specialist

National Energy and Water Management Center (NEWMC)

Phone: (817) 489-2090

Email: [leeann.walker@gsa.gov](mailto:leeann.walker@gsa.gov)

Steven White

Technical Assistant to the Director

Energy Center of Expertise (PLA)

Phone: (202) 260-9716

Email: [steve.white@gsa.gov](mailto:steve.white@gsa.gov)


Additional Contacts

Energy Usage Analysis System 


Internet

# Who sets the regional goals

- Starting in FY05, the Energy Center of Expertise began establishing regional Btu/GSF reduction goals.
- Process reflects regional reduction proportionate to regional baseline and targeted levels.
- There is some additional percent added or subtracted from straight line reduction goals based on individual regional factors.
- National Business Solution



## How does the Energy Center help regions get to reach goals?

- The same database that generates regional energy performance measure can be used to identify specific utility trends and individual building analysis.
  - Regions can pinpoint individual building energy usage patterns that are not contributing to reduction.
  - EUAS reports can be used to trigger energy audits and energy conservation opportunities, as well as, impact building operational practices.
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Energy Usage Analysis System - Microsoft Internet Explorer

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http://65.213.90.236/rptVarianceReport.asp?nav=r

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My Search

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Yahoo!

Ask Jeeves

LookSmart

Highlight

WeatherBug 50°

Region : 11

Date : 12/1/2004

Comparison for the period of Entire Fiscal Year 2004 and 2003

Time : 11:13:41 AM

Buildings in Region : 11

Variance : 015 or more

Building	Building Name	2004 Information			2003 Information			% Variance
		Category	GSF	mmBTUs	Category	GSF	mmBTUs	
DC0084ZZ	FOB 10B	A	425,616	44,458.85	A	425,616	35,711.05	24.50%
DC0345ZZ	1990 K STREET N W	C	153,716	2,052.71	C	153,716	1,748.00	17.43%
DC0389ZZ	1110 VERMONT AVE	C	154,832	448.54	C	154,832	280.75	59.76%
DC0463ZZ	601 - 4TH ST, NW	A	537,588	53,049.20	A	537,588	42,105.56	25.99%
MD0782ZZ	SPRINGHILL LAKE SUBD	D	36,222	2,781.66	D	36,222	862.77	222.41%
VA0359ZZ	TWO STERLING PARK	C	5,460	163.50	C	5,460	141.01	15.95%
VA0843ZZ	RIDGEWOOD I	C	41,725	13,969.07	D	41,725	6,014.73	132.25%
VA0858ZZ	OAKVILLE INDUSTRIAL	C	11,542	398.02	D	11,542	47.29	741.75%
DC1147ZZ	1291 TAYLOR ST NW	C	82,705	8,522.44	C	82,705	6,990.09	21.92%
MD0067ZZ	6400 OLD BRANCH AVEN	B	7,459	2,086.87	A	7,459	1,020.23	104.55%
MD0331ZZ	WHITE OAK CAMPUS	A	407,498	60,562.60	A	407,498	32,153.90	88.35%
VA0259ZZ	XEROX WAREHOUSE	C	38,895	2,046.49	C	38,895	1,372.85	49.07%
VA0309ZZ	PLAZA 500	C	115,052	1,736.46	C	115,052	1,411.35	23.04%
VA0360ZZ	INTERSTATE PLAZA	C	107,320	3,032.38	C	107,320	2,236.20	35.60%
MD0204ZZ	BOWERS WAREHOUSE	C	3,475	9.95	C	3,475	2.25	341.57%
MD0806ZZ	CENTER POINT 1	D	18,943	270.74	D	18,943	10.62	2,449.51%
MD1279ZZ	MAT LAND CO WHSE 1	C	46,400	571.89	C	46,400	410.57	39.29%

BACK

PRINT

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VIEW LEGENDS

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Energy Usage Analysis System

Internet



## Energy Comparison Graph

Show All Report Details

Region Summary for building categories : A

Reporting Unit : mMBTUs, Energy Types : All Energy

Date : 12/1/2004

Time : 11:15:46 AM

Year1 : Entire Fiscal Year 2004

Year2 : Entire Fiscal Year 2000

Year3 : Entire Fiscal Year 1985

Region : 11

Building : DC0010ZZ

Field Office : 7001 DC SERVICES DIVISION

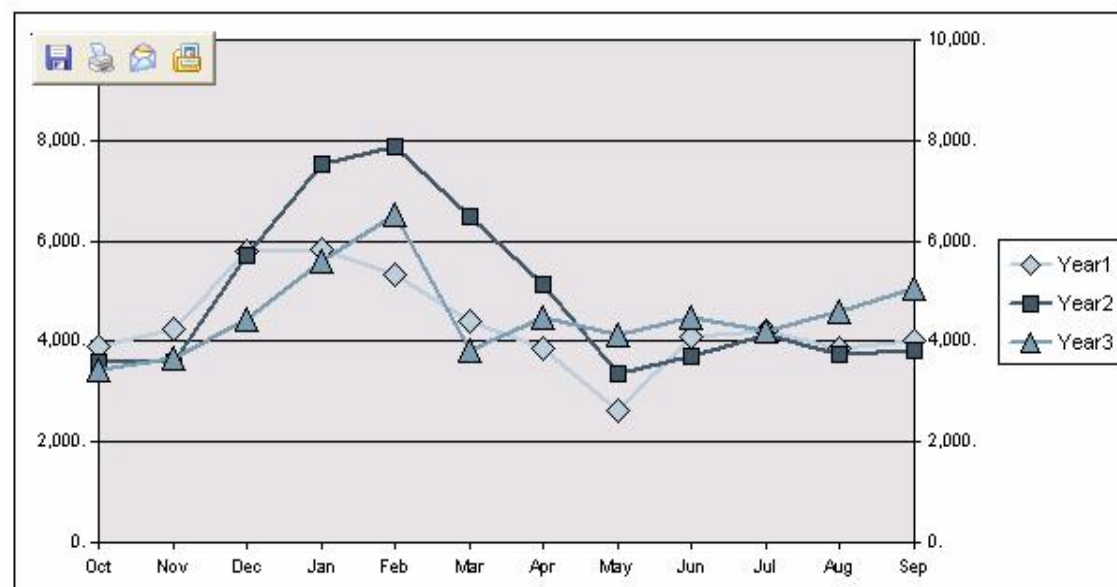
District : DC SERVICES DIVISION

Building Name : FOB 6

City : WASHINGTON D C

Gross Space : 643,019

Category : A



\* For details on calculations please see help

**Energy Performance (with weather data)**

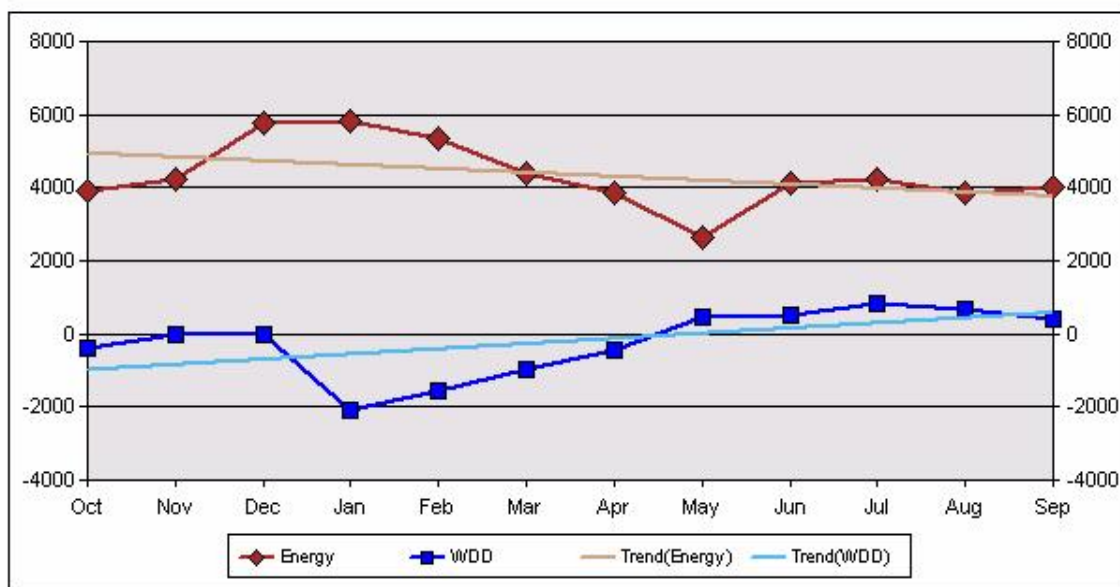
Region Summary for building categories : A

Region : 11

Date : 12/1/2004 Report for the period of Fiscal Year 2004

Time : 11:17:16 AM

Region :	11	Building Name :	FOB 6
Building :	DC0010ZZ	City :	WASHINGTON D C
Field Office :	7001 DC SERVICES DIVISION	Gross Space :	643,019
District :	DC SERVICES DIVISION	Category :	A







## What help can regions get to reach goals

- The Energy Center generates BA55 line item energy retrofit budget request in GSA's annual appropriations
- Regions submit energy projects to us for funding.
- \$30 million is being allocated by the Energy Center this year to regions






# What help can regions get to reach goals

- The Energy Center interprets DOE policy to place buildings in certain categories which impact energy performance reporting
- The Energy Center contracts for renewable energy on behalf of regions and counts credit towards BTU/GSF goals in EUAS.
- The Energy Center calculates quantities of reduction required and estimates renewable power purchases required for goal.

# What help can regions get to reach goals

- The Energy Center maintains public utility area-wide contracts in over 160 markets nationwide, many of which allow for alternative financing of demand side management projects.
  - To date, approximately \$1 billion has been financed government-wide thru our contract mechanism.
  - The Energy Center provides policy guidance on Energy Savings Performance Contracts.
- 



## How does this measure fit into GSA's strategic goals and planning?

- The Energy Center has instituted a Strategic Assessment Plan Initiative for FY06 for \$5 million in green power funding to assist the agency in reaching the goal.
- Additionally, the Energy Center has requested \$30 million for energy retrofits in FY06
- For FY07, the Energy Center has developed a Strategic Assessment plan for \$30 million in energy project funding, expanding the capabilities of EUAS, and continued funding for green power premiums.



# Mission and Goals

*“The Energy Center supports GSA’s mission to provide best value services to our customers by providing resources to GSA associates to effectively manage energy usage and costs enterprise-wide.”*

- We promote responsible asset management through energy and water conservation projects. In doing this, we will provide expertise to project managers engaged in new building design and major renovation.
- We will work to insure energy stability and reliability where appropriate.
- We provide leadership by promoting energy efficiency and renewable energy.



## Mission and Goals (continued)

- We will effectively and appropriately purchase utilities in deregulated markets, aggregating loads to achieve the best value
- We will be a source of centralized energy data to Regional and National management.
- We will excel at customer satisfaction
- We will exchange information with external customers and provide services for other governmental agencies when it is cost effective and appropriate.





Mark Ewing  
Director  
Energy Center of Expertise  
(202) 708-9296

