
EPACT Procurement Guidelines and Market Impacts of Federal & State Procurement Standards

Pit Stop: Timely Procurement Topics

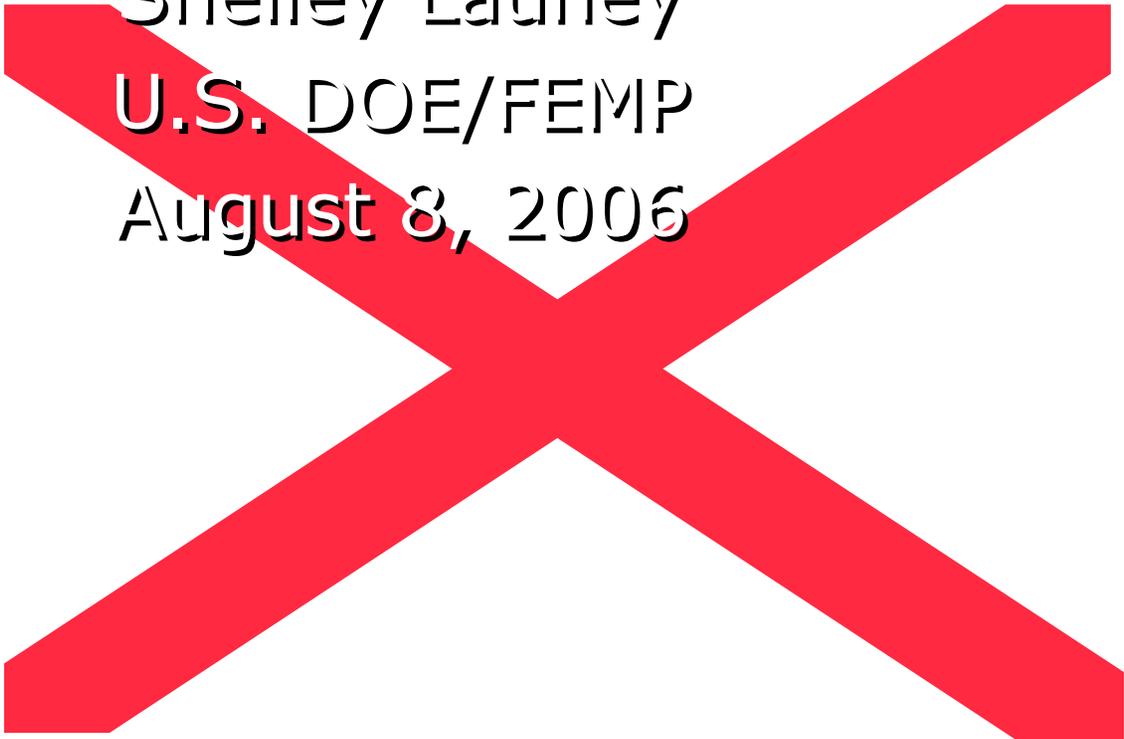
Session 6B

August 8, 2006



What Federal Purchasers Need to Know About EPA Act 2005

Shelley Launey
U.S. DOE/FEMP
August 8, 2006





**Pit Stop:
Timely
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Topics**

- Impact of Energy Efficient Procurement in the Federal Sector
- EAct 2005 Sec. 104 Requirements
- How FEMP is Assisting
- FAR Revision
- DOE Actions to Facilitate Procurement Requirements
- Conclusion



**Pit Stop:
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- U.S. Government is world's biggest purchaser
- \$10 –20 Billion spent annually on energy consuming equipment
- Purchasing equipment commits agencies to years of spending on utilities to operate them



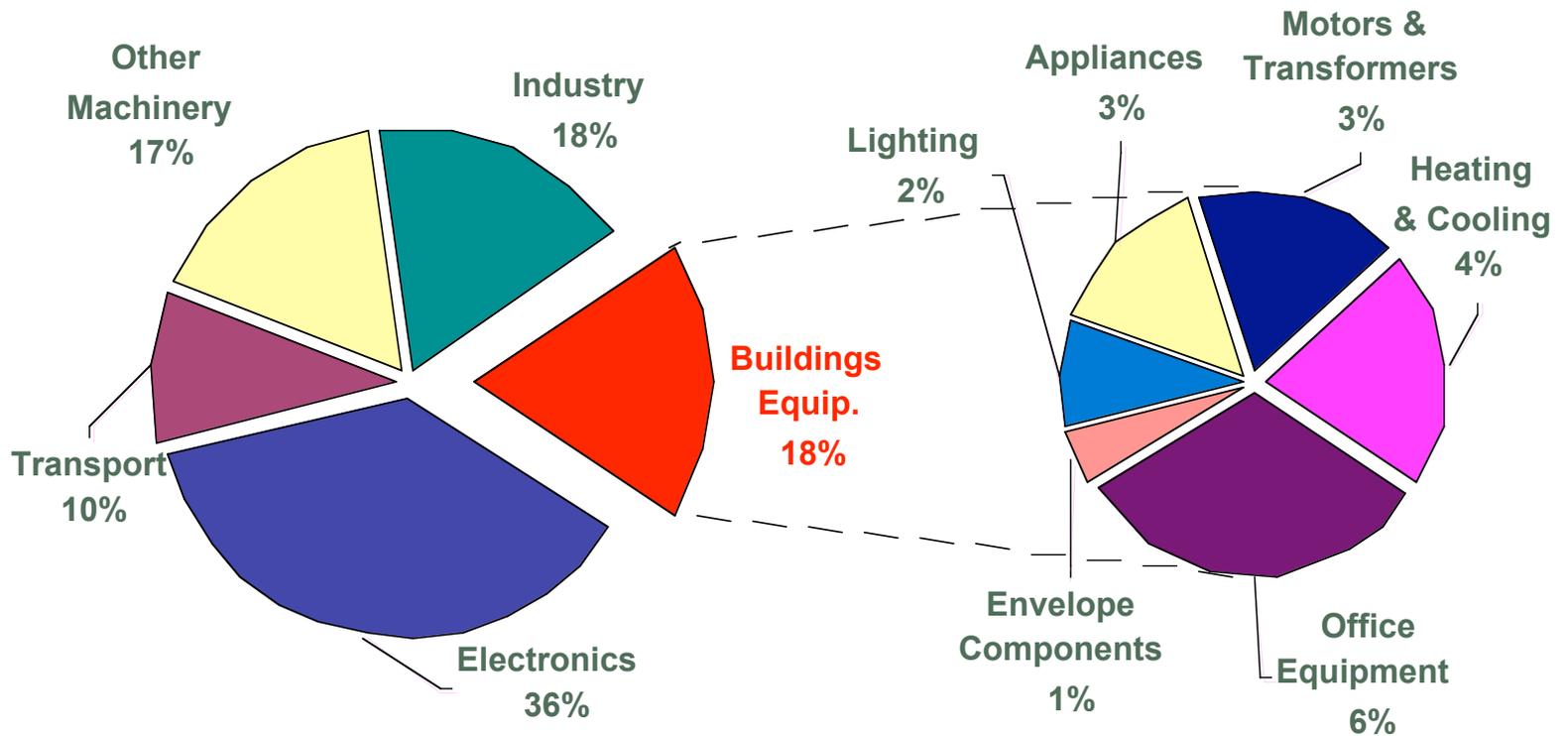
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- EAct 2005 requires agencies to reduce energy consumption by 2% per year through 2015
- About a quarter of this achievable through energy efficient procurement
- Substitute efficient products for those are already budgeted that would be purchased anyway
- Potential savings of 15 trillion Btu and \$220 million per year

Federal Purchases of Energy-Related Products



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Topics**



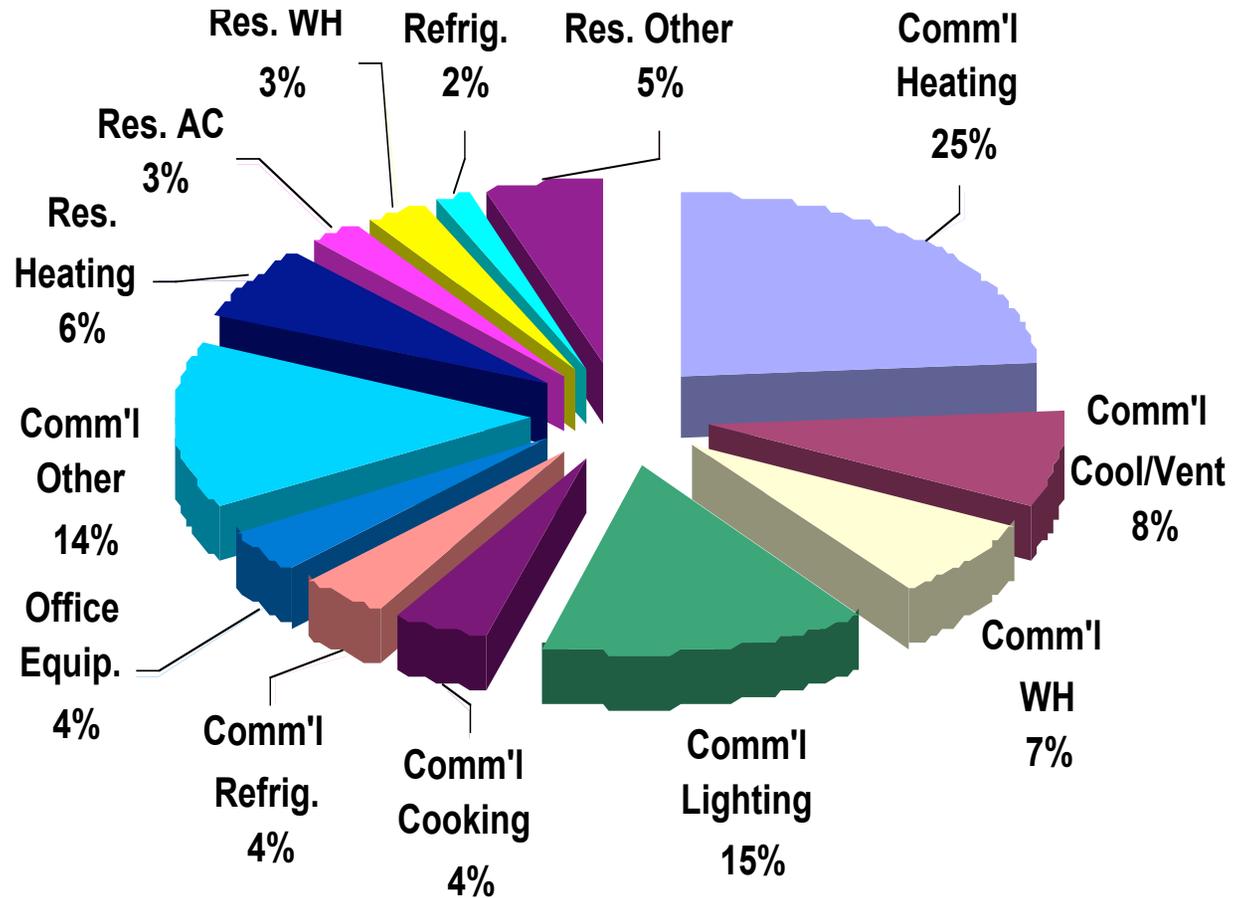
All Federal Purchases

Federal Buildings

Where the Energy is Used



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Topics**





**Pit Stop:
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Topics**

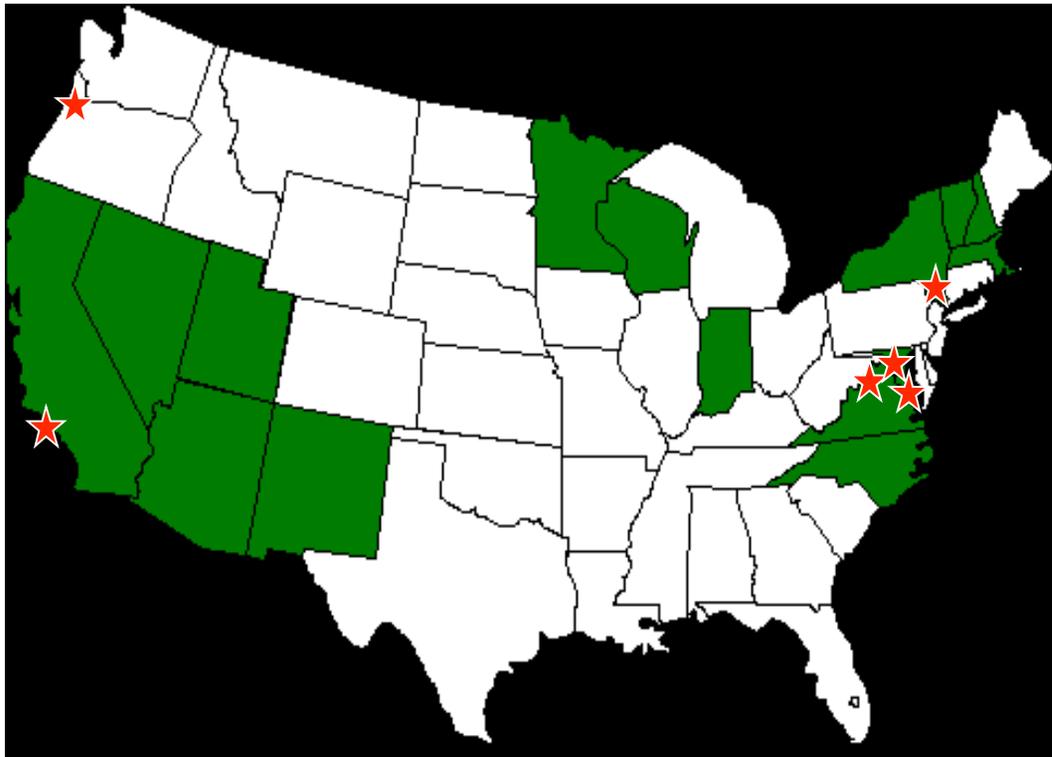
- State and local governments have 7 times the number of employees and floor area as the federal government

Category	Federal	State & Local
Employees (civilian only)	2,717,000	18,649,000
Floor Space (non-residential)	1,956,000,000	13,407,000,000

E.E. Procurement by State & Local Governments



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***80% of
government
spending is at
state and local
levels***

- **Federal procurement criteria (ENERGY STAR and FEMP) now used by 16 states, 2 counties and 4 cities**
- **These jurisdictions serve 40% of US population**



Hawaii – Procurement Policy



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"[[]§196-23[[]] Energy efficient products. (a) Agencies shall select, [where] when life-cycle cost-effective, ENERGY STAR and other energy efficient products when acquiring energy-using products. For product groups where ENERGY STAR labels are not yet available, agencies may select products that are in the upper twenty-five per cent of energy efficiency as designated by the United States Department of Energy, Office of Energy Efficiency and Renewable Energy, Federal Energy Management Program.

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New York City - Procurement Policy



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§6-306 Energy efficiency standards.

- a. Any energy-using product purchased or leased by any agency for which the United States environmental protection agency and the United States department of energy have developed energy efficiency standards for compliance with the Energy Star program shall be ENERGY STAR labeled...
- d. Beginning January 1, 2008, the director shall make a determination whether or not any product not specified in subdivisions a or b of this section that is purchased or leased by any agency for which the **Federal Energy Management Program of the United States Department of Energy** has issued product energy efficiency recommendations shall achieve no less energy efficiency or flow rate than the minimum recommended in such recommendations. The director shall review any such determination not to require compliance with the federal energy management program for any product at least once every two years.

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EE Procurement by Foreign Governments



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- China
- Denmark
- Mexico (9 municipalities)
- South Korea



EPA Act 2005 Procurement Regulations



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“If you want to make enemies,
try to change something.”

Woodrow Wilson

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EPA Act 2005 Section 104 Requirements



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- **Procurement:** Agencies shall buy only ENERGY STAR qualified or FEMP-designated products
- **Procurement Planning:** Agencies shall incorporate ENERGY STAR and FEMP criteria into:
 - Guide and project specifications
 - Construction, renovation, and services contracts
 - Evaluation of competitive offers

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EPA Act 2005

Section 104 Requirements



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■ **Energy Efficient Products in Federal Listings**

GSA and DLA shall:

- Supply only ENERGY STAR and FEMP designated products
- Clearly identify and prominently display ENERGY STAR and FEMP designated products



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- **Exceptions:** If **agency head** documents in writing that:
 - Product is not life-cycle cost-effective
 - No efficient product that meet functional requirements is “reasonably available”
 - Product/system is for combat or combat-related missions



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- Develop Product Lists
- Reach out to agencies
- Work with GSA and DLA
- Prepare Model Specifications
- Update and maintain:
 - Product Specifications
 - Model Contract Language
 - Cost Calculators



ENERGY STAR and FEMP- Designated Products



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- 65 product types in the following categories:
 - Lighting
 - Commercial & Industrial Equipment
 - Food Service Equipment
 - Office Equipment
 - Home Electronics
 - Residential Equipment & Appliances
 - Construction & Plumbing Products
- Complete list available from:
www.eere.doe.gov/femp/procurement/

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FEMP Purchasing Specifications



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FEMP Federal Energy Management Program
FEMP Designated Product:
Gas Water Heaters

**Purchasing Specifications
for Energy-Efficient Products**

*Leading by example,
making energy use
more efficient in
federal facilities*

Legal Authority:
Federal agencies are required by the Energy Policy Act of 2005 (EPA 109-06) and Federal Acquisition Regulation (48 CFR) 101-11.2 to specify and buy ENERGY STAR-qualified products as it compares with or exceeds (EPA) laws, EPCRA-regulated products which are among the highest 20 percent of equipment performance for energy efficiency.

Seasonal Energy Factor (SEER)	Energy Factor	Annual Energy Use
50 gallons or less	0.75 or higher	2-4% decrease/year or less

Energy Factor is an efficiency rate of the energy supplied to heat water divided by the energy input to the water heater.

Based on DOE test procedure (10 CFR 431, Subpart B, Appendix D)
10/1/2006, 10/1/2006

Buying Energy-Efficient Gas Water Heaters:
This purchasing specification applies to residential gas, storage-type water heaters with capacities between 20 and 50 gallons and maximum energy input of 75,000 Btu per hour. When purchasing gas water heaters energy from commercial sources, check the yellow EnergyGuide label for models with Annual Energy Use (AEUE) equal to or below the best model in the Department's database. In contracts and orders, specify the gas water heater model or model's energy factor (EF) values above.

The Federal Supply Catalog for gas water heaters and the General Services Administration (GSA) and the Defense Logistics Agency (DLA). DLA will accept orders through the Multiple Award Schedule program and online shopping cart tool, GSA Advantage! DLA offers orders through the Defense Supply System (DSS) and online shopping cart tool, DSS Advantage! DLA and GSA agencies include EF in the products data they list for water heaters. When buying from DLA or GSA, look for water heaters that meet or exceed the EF requirements of this specification.

Performance requirements apply to all forms of procurement, including gifts and paper procurement, contracts, statements of work, statements and energy white papers, lease agreements and solicitations for offers. Energy performance requirements should be included in all acquisition solicitations, requests for proposals or other agencies with incorporating these performance requirements into their procurement documents is available at www.energy.gov/femp/purchasing-specifications.

If a water heater is not energy efficient & available, check the water heater's make and model number against the product listed in the GSA Energy catalog for the specifications. The online website contains EF and other performance data for most of the gas water heaters sold in the US.

Buyer Tips
Storage-type water heaters are the most commonly used products, but aren't the best options. Before they buy, make list of water heaters at all times and, as typically, request only from the price of the storage-type water heaters from high quality brands. Builders who choose gas-water heaters should specify or communicate that water heater is needed and, due to their complexity, are typically located near the price of an electric water heater and should communicate that clearly when buying from a commercial source. Energy-efficient water heaters can provide a sufficient return on investment for a whole house. Depending on climate and energy rates, advanced water heaters may be cost-effective. Other efficient options include indirect water heaters, which are contained in a furnace boiler or integrated system.

U.S. Department of Energy
**Energy Efficiency
and Renewable Energy**
1000 Independence Avenue, SW
Washington, DC 20585-1204
www.eere.doe.gov

- 2 to 4 pages
- PDF format
- Available on FEMP's Web site
- Includes:
 - Performance criteria
 - Buyer and User Tips
 - Federal Supply Source information
 - Cost effectiveness example



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Motor Catalog Query - LIST

Query Help

Search Select Clear Detail Reset Cols [Print] [Help] Exit

Motor Characteristics

Motor type: NEMA Design B Enclosure: Totally Enclosed Fan-Cooled

Speed: 1200 RPM Definite Purpose: - General purpose motors -

Size: 25 HP NEMA Premium only U-Frame Vertical shaft C-Face D-Flange

Manufacturers (ALL)

ABB
AO_Smith/Magnetek
Baldor
Dayton
G.E.
Hemco

Sort Column: Efficiency Ascending Descending Utility Rebate Schedule: No rebate selection 39 motors found

Manufacturer	Model	Catalog	Voltage	Enclosure	Eff 100%	RPM 100%
WEG Electric Motors	NEMA Premium	02512ET3E324	208-230/460 volts	TEFC	93.0	1100
US Motors	BA81	Hw25V3VE2*	230/460 volts	TEFC	93.0	1100
US Motors	AT51	H25P3B	230/460 volts	TEFC	93.0	1100
US Motors	AF63	AF63	230/460 volts	TEFC	93.0	1100
Toshiba	Premium Efficient	B0256FLG3UM	230/460 volts	TEFC	93.0	1100
Toshiba	Premium Efficient	B0256FLF3UM	230/460 volts	TEFC	93.0	1100
Teco/Westinghouse	MAX-E1/HE	E0256	208-230/460 volts	TEFC	93.0	1100
Tatung	SUPER-MAX	WH0256FFA	208-230/460 volts	TEFC	93.0	1100
Reliance	P32G647	P32G647	230/460 volts	TEFC	93.0	1100
Reliance	P32G3349	P32G3349	230/460 volts	TEFC	93.0	1100
AO_Smith/Magnetek	E-PLUS 3	E638	230/460 volts	TEFC	93.0	1100

Last update: 01-01-2003

Under Development

- Electric Motors
- Chillers
- Water Heaters
- Boilers
- Spray Valves
- Commercial Lighting



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Gas Water Heaters

In accordance with the Energy Policy Act of 2005, the Federal Acquisition Regulations Section 23, and Presidential Executive Order 13123 the vendor shall provide gas water heaters that meet or exceed the latest Federal Energy Management Program (FEMP) energy-efficiency purchasing specifications. Refer to the FEMP Web site at www.eere.energy.gov/femp/procurement/ to obtain proper sizing and cost-effectiveness data, operating tips and other important information.

Energy Efficiency Recommendation for Gas Water Heaters – Effective 9/2004		
Rated Storage Volume	Energy Factor	Annual Energy Use
60 gallons or less	0.62 or more	242 therms/year or less

- Available from:
www.eere.energy.gov/femp/procurement/eep_modellang.cfm



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<i>FEMP's ENERGY COST CALCULATOR FOR COMMERCIAL BOILERS (Closed Loop, Space Heating Applications Only)</i>		
Vary equipment size, energy cost, hours of operation, and /or efficiency level.		
INPUT SECTION		
Input the following data (If any parameter is missing, calculator will set to default value).		<i>Defaults</i>
Project Type	New Installation	<i>New Installation</i>
Deliverable Fluid	Water	<i>Water</i>
Fuel Used	No. 2 oil	<i>Gas</i>
Existing Capacity *	MBtu/h	—
Existing Thermal Efficiency *	% Et	—
New Capacity	5000 MBtu/h**	<i>5000 MBtu/h</i>
New Thermal Efficiency	80 % Et	<i>80% Et</i>
Energy Cost	\$.80 per gallons	<i>\$.40 per therm</i>
Quantity of Boilers to be Purchased	1 unit(s)	<i>1 unit</i>
Annual Hours of Operation***	1500 hours	<i>1500 hours</i>
<small>* Existing values should only be entered when Project Type is a replacement. ** 1 MBtu/h = 1000 Btu/h; 1 Therm = 100,000 Btu; 1.4 Therms = 140,000 Btu *** Value entered should be equivalent full load hours (e.g., 1000 hours @ 50% load equals 500 hours).</small>		
<input type="button" value="Calculate"/> <input type="button" value="Reset"/>		

- Available from:
www.eere.energy.gov/femp/procurement/eep_eccalculators.cfm



Federal Acquisition Regulations (FAR)



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- **Subpart 23.2** – Energy and Water Efficiency and Renewable Energy

FAR being revised to incorporate EPAAct 2005 requirements



Agency Acquisition Letter



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POLICY FLASH 2006-43

POLICY FLASH 2006-43

DATE: July 26, 2006

TO: Procurement Division

FROM: Office of Procurement and Assistance Policy, MA-61
Office of Procurement and Assistance Management

SUBJECT: Acquisition Letter 2006-09 on Energy Efficiency

Federal Acquisition Regulation Clause 206-009 is in process to amend the Federal Acquisition Regulation to implement Section 104 of the Energy Policy Act of 2005 through the use of an energy efficiency clause in solicitations and contracts for energy-consuming products. The clause requires energy-consuming products to be ENERGYSTAR® or EEMP designated if they are available, meet functional requirements and be life cycle cost effective. This Acquisition Letter implements one of the clause within the Department in advance of the change to the FAR.

This Flash may be viewed at <http://procurement.acquisition.gov>

Questions may be addressed to Richard Langston at 202-287-1118 or Richard.Langston@hq.doe.gov.


Michael P. Fischer, Director
Office of Procurement and
Assistance Policy

Attachment

AL 2006-09 (07/24/06)

Department of Energy	No. AL 2006-09 Date 07/24/06
 ACQUISITION LETTER	
<small>The Acquisition Letter is used solely for activities of the Procurement Division of DOE and NNSA.</small>	

Subject: Energy Efficiency of Energy Consuming Products -- Implementation of Section 104 of the Energy Policy Act of 2005

References:

- Energy Policy Act of 2005, Section 104
- Executive Order 13121, Getting the Government through Energy Efficient Management, Section 411
- DOE Acquisition Guide Chapter 23, Getting the Government - Environmental Considerations in Contracting
- FAR Subject 23.1, Energy and Water Efficiency and Renewable Energy

When is this Acquisition Letter (AL) Effective?

This AL is effective immediately upon issuance.

When does this AL Expire?

The AL remains in effect until superseded by subsequent FAR coverage or it is cancelled.

Who are the Points of Contact?

Richard Langston, Office of Procurement and Assistance Policy, MA-61, (202) 287-1118 or Richard.Langston@hq.doe.gov; or for NNSA, Mr. Stephen Lee, Office of Acquisition and Supply Management Office, NA-63, (202) 586-4121 or stephen.lee@nnsa.doe.gov.

What is the Purpose of this AL?

This AL implements the requirements of Section 104 of the Energy Policy Act of 2005 within the Department of Energy while a pending FAR Case is processed to add the same coverage to the FAR.

What is the Background?

The ENERGYSTAR® trademark may be used on energy-consuming products that offer superior energy efficiency. The Federal Energy Management Program (FEMP) also offers "TEMP

1

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- Federal agencies required to purchase ENERGY STAR and FEMP-designated products
- Agencies must incorporate energy efficiency performance criteria into all contracts and specifications
- FEMP supports agencies with meeting requirements
- Federal purchasing requirements have implications far beyond Federal purchasing

I guess it *IS*
easy being
green.

Pro
Topics





Information Sources



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Shelley Launey
(202)586-1573
Shelley.Launey@ee.doe.gov

FEMP
800-363-3732
www.eere.doe.gov/femp/procurement/

ENERGY STAR
888-STAR-YES (888-782-7937)
www.energystar.gov/products/

Or stop by FEMP's booth (#315) in the exhibit hall

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