

## Buying Energy Efficient Products

As the world's largest-volume buyer of energy-related products, the Federal government can reduce energy consumption and achieve enormous cost savings by purchasing energy-efficient products. Federal buyers are directed by Executive Order 13123 to purchase products that are ENERGY STAR® labeled or – if no ENERGY STAR® program exists – products that are designated by the Department of Energy's (DOE) Federal Energy Management Program (FEMP) to be in the upper 25% of energy efficiency in their class. FEMP's Buying Energy Efficient Products program helps Federal purchasers identify highly efficient products, assists with specifying efficient products in capital projects and contracts, and provides buyers advice on everyday procurement issues.

### How can Federal buyers receive assistance with product procurement?

The Buying Energy Efficient Products program features a series of more than three dozen *Product Energy Efficiency Recommendations* which identify the efficiency levels that meet the criteria of Executive Order 13123 and the Federal Acquisition Regulations (48 CFR 23.704). In addition to the efficiency levels for each product, FEMP's *Recommendations* also:

- Identify Federal supply sources such as the General Services Administration (GSA) or the Defense Logistics Agency (DLA) that sell the product, provided that the supply agency offers complying models and highlights them.
- Offer product-buying tips to help the Federal purchaser (or specifier) select the right technology, size the product properly, and use it efficiently.
- Provide a cost-effectiveness example to aid the buyer in determining whether the first-cost premium for a more efficient model is really "worth it."

- List several organizations and publications that readers can use to research the product or system more thoroughly.

Products include such items as office fax machines and household dishwashers, to 2,000-ton centrifugal chillers and industrial luminaires. The *Recommendations* are published in FEMP's "Buying Energy Efficient Products" binder, and can be accessed at **[www.eren.doe.gov/femp/procurement](http://www.eren.doe.gov/femp/procurement)**. The guides can either be downloaded in their printed format or viewed directly on-line (the sections are organized into individual, easily navigable pages). Subscribers to the binder receive update packages twice annually when FEMP prints new material, covering both new products and revisions to previously issued *Recommendations*. Whenever there is a significant change in the market, the *Recommendations* are revised such that the recommended energy efficiency levels no longer represent a market-leading threshold.

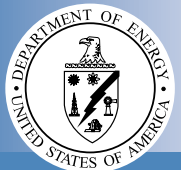
One valuable feature of the Web versions of the *Recommendations* is hot-links to lists of models that meet the recommended efficiency levels. These lists, which are available for all ENERGY STAR® labeled products (about half of those covered by the *Recommendations*), "close the circle" by actually identifying efficient models by brand name and model number. The lists are accessible through the "Complying Models" buttons on the bottom of each product's home page, or via the Environmental Protection Agency (EPA) DOE ENERGY STAR® Web site, **[www.energystar.gov/products](http://www.energystar.gov/products)**.



## Program Overview

U.S. Department  
of Energy

Office of Energy  
Efficiency and  
Renewable Energy



## How can buyers calculate energy savings from energy-efficient products?

FEMP has two analytical software tools to assist buyers with determining energy savings from energy-efficient products:

- FEMP Energy Cost Calculators compute lifetime energy cost savings for specific products at various efficiency levels and hours of operation. The calculators allow users to enter their own utility rates, hours of use, etc., to estimate the energy cost savings that are likely to accrue from buying a more efficient model. For more information on the energy cost calculators, visit: [www.eren.doe.gov/femp/procurement/calc-index.html](http://www.eren.doe.gov/femp/procurement/calc-index.html).
- FEMP Building Life-Cycle Cost (BLCC) performs a detailed life-cycle cost analysis. This computer-based tool allows the user to vary interest rates, installation costs, maintenance costs, salvage values, and life expectancy for a project. For more information on the BLCC tool, visit: [www.eren.doe.gov/femp/techassist/softwaretools/softwaretools.html](http://www.eren.doe.gov/femp/techassist/softwaretools/softwaretools.html).

## How has FEMP implemented energy-efficient purchasing practices?

FEMP has utilized its product efficiency *Recommendations* to affect Federal purchasing in two major ways:

- Guide, or master specifications – the agency-wide specifications that determine which products will be used in agency construction and major renovation jobs. These specifications are maintained by several of the Federal agencies engaged in significant amounts of construction. The Department of Defense maintains a set of “Unified Facilities Guide Specifications” which now incorporate FEMP *Recommendations* on motors, commercial packaged air conditioners, chillers, and various lighting products. The Veterans Administration,

U. S. Postal Service, and GSA have each modified some of their guide specifications to require ENERGY STAR® and FEMP-recommended efficiency levels.

- Federal supply agencies – GSA and DLA have special programs to highlight the models that comply with ENERGY STAR® and FEMP-recommended efficiency levels. Vendors selling products on the GSA Schedules through the agency’s on-line shopping network, *GSA Advantage!*, can highlight their complying models with an ENERGY STAR® symbol. Similarly, in DLA’s Federal Logistics Information System (FLIS), the database of all the products it supplies, cataloguers can highlight complying models with an “environmental attribute code.” FLIS is the basis of several electronic sales catalogues, such as FEDLOG, where the environmental attribute code also can be found.

## For more information

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