

Environmental Stewardship Federal Facilities and Fleet Management



As a facility or fleet manager, your role in environmental stewardship is crucial because of the many environmental requirements that apply to what you do in your job every day.

For federal facilities, your responsibilities start before construction, continue into operations and maintenance, and include renovation and demolition. For federal fleets, managers must "green" their fleets by increasing fuel efficiency and using more alternate-fuel vehicles (AFVs) and fuels.

Federal agencies are required to prevent waste and recycle as an alternative to disposal. As a facility manager, you play a key role in ensuring that excess materials, including electronic equipment, are reused, donated, or recycled whenever possible.

Facility managers must purchase a certain amount of renewable energy – wind, solar, geothermal, hydropower and biomass – to light, heat, and cool their buildings.

Sustainable Facilities

Sustainable building is the practice of creating healthier and more resource-efficient models of construction, renovation, operation, maintenance, and demolition. Federal agencies are leading the way to reduce the environmental footprints of their facilities. In January 2006, more than 150 federal facility managers and decisionmakers came together to sign the **Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (MOU)**. The MOU is the flagship federal effort to define guiding principles of green building and provide leadership in design, construction, operation, and maintenance of high-performance, sustainable buildings.

What is required?

Executive Order (EO) 13423

EO 13423 made mandatory the five guiding principles defined in the 2006 MOU. The principles address:

- Employing integrated design
- Optimizing energy performance
- Protecting and conserving water
- Enhancing indoor environmental quality
- Reducing the environmental impact of materials

EO 13423 was issued to ensure the federal government leads in advancing the nation's energy security and environmental performance.

The order directs federal agencies that operate fleets of 20 or more vehicles within the United States to reduce their annual petroleum consumption by at least 2 percent annually by the end of fiscal year (FY) 2015 (compared to FY 2005 levels). Agencies must also increase their use of alternative fuels by at least 10 percent annually (compared to FY 2005) and purchase alternative-fuel, hybrid, and plug-in hybrid vehicles when commercially available.

Environmental Management Systems (EMS)

An agency's required EMS implements the components of a sustainable facility:

- Energy efficiency and renewable energy
- Water efficiency
- Environmentally preferable building materials and specifications
- Waste reduction
- Toxics reduction
- Indoor air quality
- Smart growth and sustainable development

EMS includes programs and practices at all federal facilities, such as waste prevention and recycling; buying products with recycled content; contracting services that are environmentally preferable; creating fleets that are energy-efficient and include alternative-fuel vehicles (AFVs); and buying, maintaining, and responsibly disposing of electronic equipment. The practices are often combined with safety and health requirements of a facility's operations and maintenance.



Comprehensive Procurement Guidelines (CPG)

CPG (<http://www.epa.gov/cpg>) requires of all federal facilities that any products bought in excess of \$10,000 per year must have recovered (recycled) content. CPG encompasses products and services in the following areas: construction, landscaping, paper and paper products, non-paper office products and furnishings, park and recreation, transportation, vehicular, and miscellaneous products.

Fleet Management

Federal fleet management efforts are driven by four important mandates, each with specific requirements:

Executive Order (E.O.) 13423

<http://www.epa.gov/greeningepa/practices/eo13423.htm>

Energy Independence and Security Act of 2007

http://www1.eere.energy.gov/femp/pdfs/eisa_femp.pdf

Energy Policy Act of 2005

http://www.epa.gov/oust/fedlaws/publ_109-058.pdf

Energy Policy Act of 1992

<http://www.ferc.gov/legal/maj-ord-reg/epa.pdf>

The 2005 EPC Act amends EPC Act 1992 to require that all dedicated and dual-fuel vehicles in covered federal fleets use alternative fuels at all times. The goal is to significantly reduce the carbon footprint of federal motor vehicle fleets while encouraging development of alternative-fuel infrastructure throughout the nation. EPA and other agencies have requirements for all purchased or leased vehicles that may be in addition to the legislative and other federally mandated requirements.

Resources

List of regulations, policies, and guidance:

<http://www.fedcenter.gov/programs/greenbuildings/#regs>

Links for sustainable building practices:

<http://www.epa.gov/oaintrnt/relpro/index.htm>

Office of the Federal Environmental Executive's resource page: <http://ofee.gov/sb/resources.asp>

The Whole Building Design Guide has identified key federal mandates that apply to the areas of building design, construction, and management: http://www.wbdg.org/references/federal_mandates.php and <http://wbdg.org/index.php>

Vehicle and Fuel Technologies:

<http://www1.eere.energy.gov/vehiclesandfuels/>

General Services Administration sustainable buildings information: http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentId=8154&contentType=GSA_OVERVIEW

Department of Energy's High Performance Buildings program: <http://www.eere.energy.gov/buildings/highperformance>

FedCenter.gov: <http://www.fedcenter.gov/programs/greenbuildings>

Electronics purchasing and recycling: <http://www.epa.gov/plugin> (general information), <http://www.epa.gov/cellphones> (cell phones), <http://www.epa.gov/epeat> (EPEAT program)

General compliance information: <http://www.fedcenter.gov/programs/compliance>

Green purchasing guides: http://www.responsiblepurchasing.org/purchasing_guides/all

Ozone Depleting policy and requirements (SNAP program): <http://www.epa.gov/ozone/snap/index.html>

Quiz

1. Federal agencies operating a fleet of 20 or more vehicles within the United States are required to reduce their annual petroleum consumption by at least:
 - A. 2% annually
 - B. 4% annually
 - C. 100 gallons per vehicle by the end of FY 2015.
2. Federal facilities must improve energy efficiency and reduce greenhouse gas emissions through reduction of energy intensity by:
 - A. 3 percent annually through the end of FY 2015
 - B. 30 percent by the end of FY 2015
 - C. A or B
 - D. none of the above
3. Sustainable building is the practice of creating healthier and more resource-efficient facilities during all of the following stages except:
 - A. construction
 - B. renovation
 - C. tax reduction
 - D. operation
 - E. maintenance
 - F. demolition