



Sustainable Acquisition Practices

U.S. Department of Energy



GovEnergy 2010 – SD Cannon



The Long-Range Goal



Government operations must respect our closed world system and not exceed its sustainable ecological and social footprints

(Jonathan Herz, *The New Sustainable Frontier* quoting Peter Head, Director Arup)



J. Slavens, PNNL



The Immediate Goal



Imbed DOE Sustainable Acquisition Policy in all Purchasing Activities:

Purchase designated products containing environmentally preferable attributes to the maximum extent practicable when available, affordable and effective

Reap Benefits:

- Conservation of nation's and DOE's resources
- Reduction of green house gases
- Compliance with federal regulations and DOE policy
- Good business \$ense





Economical as Well as Ecological Benefits



- Paint (latex)
Recycled paint (low VOC & meets commercial paint specs) \$19-\$33/gal
\$9/gal
- Toner cartridge (HP 2100/5500)
Remanufactured toner cartridge \$89/\$269
\$47/\$186
- Paper/ream (20lb, truck-load)
Recycled paper (30% pc) \$3.94/\$4.38
\$2.69/\$4.89
- Carpet (Nylon commercial grade)
Biobased back/recycled face \$35/sq yd
\$35/sq yd



Agency Drivers for Designated Product Purchases



- Legislation:
 - Resource Conservation & Recovery Act (RCRA)
 - Clean Air Act Title VI (CAA)
 - Farm Security and Rural Investment Act (FSRIA)
 - Energy Acts of 1992, 2005, 2007
- Executive Orders: 13221, 13423 (replace EO13101, 13123, 13134, 13148, 13149), **13514**
 - Specify environmental preferability in environmental management systems
 - Add Electronic Stewardship and Sustainable Design
 - Include standby power devices
 - Specify reducing green house gas emissions when purchasing
 - Specify designated products in a minimum of 95% of new contract actions, including task and delivery orders



Agency Drivers for Designated Product Purchases



- Memoranda of Understanding:
 - Federal Electronics Challenge
 - High Performance and Sustainable Buildings
- Federal Acquisition Regulation (FAR)
- DOE Acquisition Regulation (DEAR)
- DOE Orders 450.1A and 430.2B and 413.3A
- DOE Acquisition Guide (Chapter 23)
- See http://www.hss.doe.gov/pp/epp/drivers_and_guidelines.html for information on regulations affecting Green Purchasing



DEAR Flow Down Clause for Contractors Purchasing Designated Products



DEAR 970.5223-2 Affirmative procurement program.

As prescribed in 48 CFR (DEAR) 970.2304-2, insert the following clause in contracts for the management and operation of DOE facilities, including national laboratories.

AFFIRMATIVE PROCUREMENT PROGRAM (MAR 2003)

(a) In the performance of this contract, the Contractor shall comply with the requirements of Executive Order 13423 ...

(c) The Contractor shall prepare and submit reports,...

(d) If the Contractor subcontracts a significant portion of the operation which includes the acquisition of items designated, the subcontract shall contain a clause substantially the same as the clause for contractors:

- Construction or remodeling contract**
- Facility maintenance or supply contract**
- Motor vehicle fleet contract, etc.**



Principles of Sustainable Acquisition



- Reduce purchases
- Reuse products
- Embed sustainable acquisition in purchasing systems
- Use life cycle analyses to select sustainable products with
 - Designated attributes
 - Other environmentally preferable attributes, such as non-toxic, carbon neutral, etc.





Reduce Purchases



- Is the product needed?
Would specifying waxless flooring eliminate the cost of wax, polish, wax remover, and staff time?
- Is the product repairable rather than replaceable?
Can the carpet seam be mended?
- Is there an alternative?
Could replacing fluorescent tubes be reduced by connecting lights to motion sensors?
- Would a benign substitute perform as well?
Can hazardous cleaning chemicals be replaced with non-hazardous?



Reuse Products



- Is the product available for free through materials exchanges:
 - DOE Complex Wide Materials Exchange
 - Your local materials exchange
 - DOE-HQ office product/chemical/other materials exchange



PNNL Office Product Exchange



Imbed Sustainable Acquisition in Purchasing Systems



Integrate Sustainable Acquisition in Site's EMS



- Set goals and targets for the purchase of environmentally preferable products in your site's Environmental Management System
- Survey your organization's purchasing and resulting waste
- Recognize that products purchased today often become tomorrow's environmental management problems
- Identify mechanisms for buying environmental products
 - o Credit card purchases - Statements of work
 - o Service contracts - Requests for proposal
 - o Electronic catalogs
- Conduct pilot projects
- Evaluate progress and renew efforts according to results
- Communicate benefits



Guidelines for Integrating Sustainable Acquisition in Site EMS



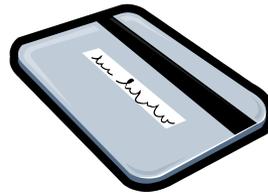
- EPA's *Integrating Green Purchasing into Your Environmental Management System* (<http://www.epa.gov/epp/pubs/ems.htm>)
- EPA's *Integrating Environmentally Beneficial Landscaping into Your Environmental Management System* (<http://www.epa.gov/epaoswer/non-hw/green/pubs/green-ems.pdf>)
- DOE Guide 450.1-5, *Implementation Guide for Integrating Pollution Prevention into Environmental Management Systems* (<http://www.directives.doe.gov/pdfs/doe/doetext/neword/450/g4501-5.pdf>)



Integrate Sustainable Acquisition in All Purchasing Systems



- Purchase card
- Purchasing request
- Statements of work and requests for proposal
- Contracts and preferred customer agreements – 95% of all new contracts must specify designated products: biobased/recycled, energy efficient (ENERGY STAR/FEMP), EPEAT, non-ozone depleting, non/less toxic, water efficient (WaterSense), or other environmentally preferable attributes





Template Language for Contracts



- General statement in all contracts that all designated products used in the course of the work must be compliant + reporting
- Language for specific designated products/services
 - Construction products and office supplies
(<http://www.hss.doe.gov/pp/epp/epspecs.html>)
 - Architecture Engineer, Construction, Computers, Janitorial Services, and General Services
(<http://www.management.energy.gov/documents/Flash2009-49Attachment.pdf>)
 - Biobased construction, custodial, food services, grounds, operations, vehicles—scroll down to “Contract Templates”
(<http://www.usda.gov/procurement/programs/biobased/procurementtools.htm>)
 - EPA’s Environmentally Preferable Purchasing website
(<http://yosemite.epa.gov/oppt/eppstand2.nsf/Pages/Search.html?Open>)





Verify Products and Services Meet the Requirements



- Ask for percentage of biobased/recycled content, not just yes or no
- Ask for demonstration of vendor's products and quality assurance program
- Verify products meet all other national standards (ANSI, ASTM) for commercial products
- Ask for free products to test
- Ask for free training on how to install and use products
- Set up closed loop contracts for carpet, cartridges, ceiling tiles

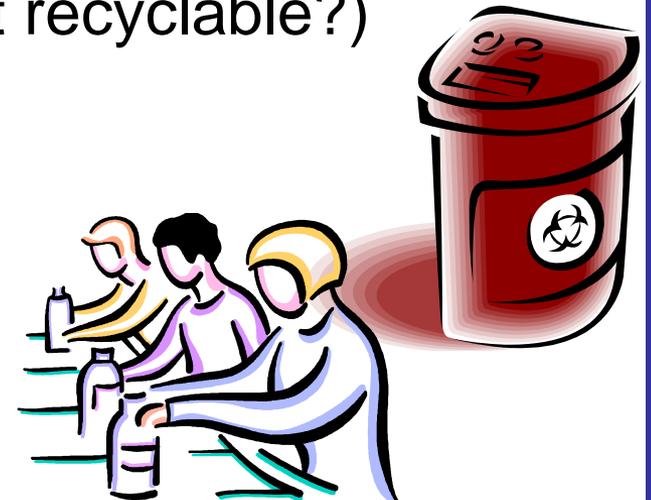




Use Life Cycle Analyses to Select Green Products by considering



- Raw materials (renewable resource?)
- Manufacturing process (energy/water efficient?)
- Packaging (returnable?)
- Distribution/transportation (locally produced?)
- Operation (energy/water efficient?)
- Maintenance (healthy for staff?)
- Special handling (toxic?)
- Disposal (reusable or at least recyclable?)





Join Forces to Push Prices Down



- Take advantage of Centralized Purchasing – Bulk purchasing prices An illustration showing a group of five business professionals in business attire pulling a large globe on a platform. The globe is green and blue, representing Earth.
- Take advantage of Decentralized Purchasing – Preferred Customer Agreements leverage same advantage
- Compare prices with other agencies or request agency to conduct price comparison of specific products
- Check out DOE-HQ Blanket Ordering Agreements (<http://www.management.energy.gov/1364.htm>)
- Check out DOE Integrated Contractor Purchasing Team BOAs (<https://icpt.llnl.gov/icptagreements.html>)



Designated Products Federal Agencies Are Required to Give Preference to



Preferred Procurement: Designated Product Categories



- Biobased content (Farm Security and Rural Investment Act)
- Recycled content (Resource Conservation and Recovery Act)
- Alternative fuels/vehicles (Energy Acts of 1992, 2005, 2007)
- Energy and water efficient (Energy Acts of 1992, 2005, 2007)
- Electronic Stewardship (EO13423, MOU, DOE O450.1)
- Non-ozone depleting substances (Clean Air Act Title VI, DOE O450.1)
- Sustainable buildings (EO13423/Memo of Understanding)
- Other environmentally preferable (reduced toxic/hazardous chemicals, carbon neutral) attributes



Examples of Products with Multiple Attributes



- Carpet (biobased*, carbon neutral*, recycled*)
- Insulation (biobased and recycled)
- Landscaping materials (biobased* and recycled*)
- Lubricants (biobased and recycled)
- Paints/coatings (biobased,* ENERGY STAR®,* recycled)
- Roofing (biobased, ENERGY STAR®, recycled)

* = quality commercial products with varying attributes available in a single product





Designated Products Tool



Office of Federal Environmental Executive tool lists designated products in purchasing categories for quick reference

http://www.fedcenter.gov/Documents/index.cfm?id=11767&pge_prg_id=20257

Building Construction	Roadway Construction
Building Finishes	Traffic Control
Building Interior	Vehicle Products
Cafeteria Services	Lube, Oil, Hydraulic, Grease
Cleaning Products	Non-Paper Office Products
Refrigeration	Office Electronics
Renewable Energy	Paper Office Products
Landscaping	Printing
Park and Recreation	Miscellaneous



DOE Contacts for Sustainable Acquisition Information



- **Procurement** - Richard Langston / Denise Clarke (P-Card), MA-61, 202-287-1339 / 202-287-1748
- **Environmentally Preferable Purchasing, Biobased and Recycled Products** – Corey Buffo HS-22, 202-586-9661
- **Alternative Fuels/Vehicles** – Brad Gustafson, FEMP, 202-586-5865
- **Electronic Stewardship** - Jeff Eagan, HS-22, 202-586-4598
- **Energy Efficient Products** – Stephen Walder, FEMP, 202-586-9209
- **Non-Ozone Depleting Substances** – Larry Stirling, HS-22, 202-586-2417
- **Water Efficient** – Will Lintner, FEMP, 202-586-3120
- **Technical Support** – Sandra Cannon, 509-529-1535, cannon@ecopurchasing.com