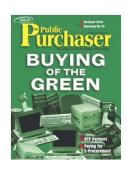
Sustainable Procurement 101 Definitions, Benefits & Best Practices











Anne Jackson, DGS
Mike Haifley, MDOT
Maryland Green Purchasing Committee





Project Partners









What are Environmentally Preferable Goods & Services?

"...products and services that have a lesser or reduced effect on human health and the environment when compared to competing products and services that serve the same purpose."



Green Maryland Act of 2010





Environmentally Preferable Purchasing (EPP)

EPP =
Environment +
Price +
Performance





Green Products are...

- Made with recycled content
- Highly energy efficient
- Designed to be long lasting
- Recyclable or compostable
- Made from renewable resources
- Less toxic than conventional goods
- Manufactured locally and responsibly
- Safely managed at the end of their life









The 7 "Sins" of Greenwashing

Sin of Vagueness "100% Natural"

No Proof "Just trust us"

Irrelevance "CFC-Free"

Hidden
Trade-Off
Compostable
food containers
with
"Teflon" coating

Fibbing "Non-Toxic"

Lesser of Two Evils Hybrid SUVs

Worshipping False Labels



www.sinsofgreenwashing.org

Best Practice: Require Claims to be Verified

"A bidder or offerer for a procurement contract with the Department of General Services shall certify in writing that any claims of environmental attributes made relating to a product or service are consistent with the Federal Trade Commission's *Guidelines for* the Use of Environmental Marketing Terms"



Environmental Claims Validated Mark

Source: Green Maryland Act (2010)





Bid Specification Language

"Products/services purchased under this contract must be _____ certified or provide demonstrable proof of meeting the _____ standard and certification requirements.

The _____ standard and certification requirements are available at >."



Multi-Attribute Certifications

EPEAT



e-Stewards



Green Seal



Fair Trade





Eco Logo



FSC





Single Attribute Certifications

Energy Star



Compostable



FEMP



Greenguard



WaterSense



Chlorine Free



Biobased



Green-e





Manufacturer- or Retailercreated "Eco" Labels





Shades of Green: How Much?

- Recycled content
- Bio-based content





- Mercury content (in fluorescent lamps)
- Energy, fuel or water consumption



Race to the Top

Tiered eco-labels set minimum threshold and encourage improvement













"Best Value" Procurement Favors Efficient Products

Considers overall (life-cycle) costs of ownership:

- Initial price
- Utility costs (energy, water)
- Maintenance costs (labor and replacement)
- End-of-life costs (disposal and recycling)







ENERGY STAR-rated LED Lamps

- Energy-efficient
 (75% less than incandescent)
- Long life (≥25,000 hours rated life =15X longer than incandescent;
 3X longer than CFLs)
- Mercury-free

Qualified list: www.energystar.gov



Toner and Ink Cartridges

- Evaluate toner/ink costs BEFORE purchasing imaging equipment
- Remanufactured toner/ink cartridges cost 30-60% less per copy than "virgin" cartridges
 - **✓** Need strict performance standards
 - **✓** Can support local jobs
- Require vendors to take-back empties to reduce disposal costs (ask for rebates)
- High-yield (X or XL) toner and ink cartridges reduce replacement costs







Hand Dryers vs. Paper Towels

Cost of Hand Dryers vs Paper Towels

CALCULATE YOUR SAVINGS

Did you know that converting from paper towels to Hand Dryers could represe COST SAVINGS? No more repetitive paper towel purchases or labor costs to re towel dispenser. No more cleaning up the towel mess or servicing the paper to

Fill in the shaded boxes and click "Calculate" to analyze the impact on 'operation.

(*If the form is not working properly click the <u>printable version</u> and print the I manually*)

PAPER TOWEL COSTS

Number of Cases of Paper Towels Used Annually

Cost per Case Delivered (Include Freight and tax)

(typically \$15.00 - \$25.00/case)

Number of Towels per Case

For example:

2,400/case for C-fold towels

4,000/case for Multi-fold towels

4,800 linear ft/case for Roll Towels

Your KWH Rate

(typically \$.10 per KWH)

Total Paper Towel Costs per Year

Handling Cost (50% of item 3 - Includes the cost of generating requisitions and purchase orders, receiving, storing, servicing towel dispensers, collecting and disposing of used towels.)

TOTAL COST OF USING PAPER TOWELS PER YEAR





HAND DRYER COSTS

Number of paper towels used annually (Item 1 multiplied by total sheets per case)

Number of Hand Dryings annually (Item 6 divided by 2.5 towels per hand dry)

8. Hours of hand dryer usage

(Item 7 divided by 120 hand dries per hour) (Use 240 hand dries per hour for XLERATOR®)

9. Cost of electricity per hour

(2.2 KW multiplied by your KWH rate) (Use 1.5 KW for XLERATOR®)

10. TOTAL ANNUAL HAND DRYER COSTS

(Line 8 multiplied by Line 9)
11. YOUR ANNUAL SAVINGS (Item 5 minus

Item 10)

COMPUTE YOUR % SAVINGS (Item 11 divided by Item 5)

CALCULATE YOUR PAYBACK

Cost of Each Dryer

Installation Cost

(Typically \$50 - \$125/dryer)

Number of Hand Dryers Purchased

(See Note Below)



Cut Paper Consumption Seattle's Paper Cuts Program

- Set 30% paper reduction goal (vs. 2004)
- Established duplex printing standard
- Copy paper spec = 100% post-consumer recycled content/processed chlorine-free
- 2010 => 36% reduction
- ~\$80K annual savings (2009)





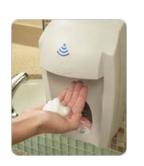
Cut Battery Use ... and Waste

- Batteries increase price and environmental impact of equipment
- Factor in cost of battery replacement and disposal when ordering equipment
- Rechargeable batteries work well for many applications and have quick payback
- Use industry-financed battery recycling program to reduce disposal costs















Best Practice: Reduce Packaging Impacts

- Prohibit unsustainable packaging
- Encourage vendors to use reusable and easily recyclable packaging
- Buy concentrated and long-lasting products
- Consolidate orders





Best Practice: Reduce Transportation Impacts

 Avoid overnight shipping, whenever possible



- Ask vendors to offer incentives for reducing the frequency of deliveries
- Give preference to local manufacturers and distributors





Best Practice: Specify Green Services





- Incorporate "green" criteria into service agreements for landscaping, pest management, facility cleaning and maintenance, etc.
- Give preference to other certified green businesses



Best Practice: Require Vendors to Recycle

 Shifts responsibility for recycling to product suppliers



 Creates efficient recycling infrastructure





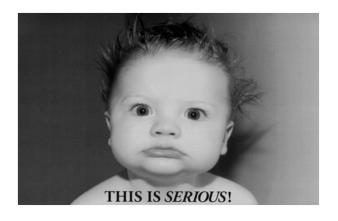
 Encourages manufacturers to redesign their products





Best Practice: Plan and Prioritize

- Largest potential impact
- Ability to meet environmental/health goals
- Opportunities for change (contracts re-bid)
- Ease of implementation (use existing specs and certifications)



Potential to save money/create local jobs



Best Practice: Green Your Market Basket List

 Add "green" products to your core/market basket lists so they become eligible for vendor's deepest discounts



 Remove non-green products from core/market basket list (or contract) to get better price breaks on green products



Best Practice: Cooperative Purchasing









Save Time:

Ask Suppliers to...

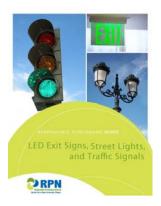
- Accurately label their certified green products
- Conduct training and outreach
- Provide "green" spend reports



• Calculate environmental benefits/cost savings of purchasing their green products



Resource: RPN



- Responsible Purchasing Guides for 15 product categories
- Webinars on "green" procurement issues
- Quarterly newsletter highlighting "green" purchasing activities and resources



- Sustainable purchasing policies and specifications
- Model Responsible Purchasing Report
- Calculators and other tools



Resource: EPPNet



State Information
 Projects
 Topic Areas
 Policy Positions
 Tools
 Membership

EPPnet

SUBSCRIBE TO NERC'S ENVIRONMENTALLY PREFERABLE PRODUCTS PROCUREMENT LISTSERV (EPPnet)

The EPPnet listserv was established by the Northeast Recycling Council, Inc. (NERC) in 1998. EPPnet links federal, state, and local environmental officials; and private procurement specialists charged with purchasing green products and services and developing policies for the procurement of these products. EPPnet is intended to provide subscribers with quick access to information, such as: availability of

nerc.org/eppnet

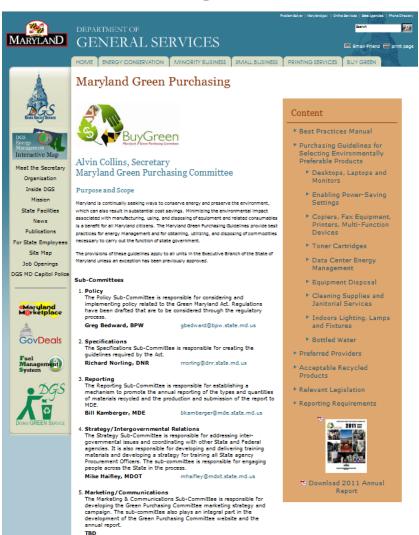
- Product specifications
- Vendors of green products
- Pricing information
- Strategies to meet green procurement goals

Not available for private vendors



Maryland Green Purchasing Committee Purchasing Guidelines

Green Purchasing Committee information and resources, including this presentation, can be found on the DGS website under the "BuyGreen" tab.





- Desktops, Laptops and Monitors
- Enabling Power-Saving Settings
- Copiers, Fax Equipment, Printers, Multi-Function Devices
- Refrigerators, Televisions, Clothes Washers, Heating/Cooling
- Other Electric Appliances or Products
- Toner and Ink Cartridges
- Data Center Energy Management
- Equipment Disposal
- Cleaning Supplies and Janitorial Services
- Indoor Lighting Lamps and Fixtures
- Bottled Water
- Packaging
- Food and Beverage Containers and Utensils









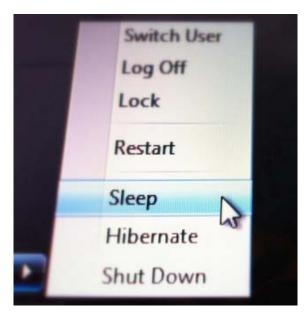


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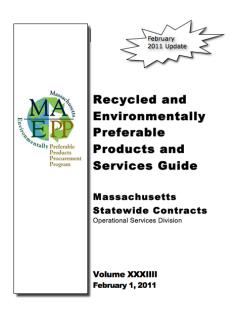
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Other State Green Purchasing Resources







Multi-Attribute Certifications

EPEAT



e-Stewards



Green Seal



Fair Trade





Eco Logo



FSC







Electronic Product Environmental EPEATAssessment Tool (EPEAT)



Home

Your resource for greener electronics

EPEAT® is a comprehensive environmental rating that helps identify greener computers and other electronic equipment. View the EcoBenefits of purchasing greener EPEAT-registered electronics (NEW!).

The EPEAT system was conceived and developed through the collaboration of stakeholders from the business, advocacy, government and academic arenas.

EPEAT is used by hundreds of companies, universities and government agencies in dozens of countries. Its rigorous requirements and searchable product database let buyers bypass marketing hype and confusing specifications.

For participating manufacturers, EPEAT is a chance to showcase and validate greener designs and cleaner production.

Announcements

- >> Verification Round 2013-01 Launched
- >> EPEAT Television Conformity Assessment Protocols Final
- >> PC/Display Verification 2012-05 Report Published
- >> EPEAT Online Trainings and Live Webinars Available

Latest News

- >> Waste & Recycling News: EPEAT Registry Expands
- >> Green IT Review: EPEAT green certification expands





Electronic Product Environmental Assessment Tool (EPEAT) Scope

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Electronic Product Environmental Assessment Tool (EPEAT) Product Categories Covered

DEVICE CATEGORY	Computers & Displays 💌	
* PRODUCT TYPE	□ DESKTOPS	DISPLAYS
	■ NOTEBOOKS	■ INTEGRATED DESKTOP COMPUTERS
	WORKSTATION DESKTOPS	THIN CLIENTS
	WORKSTATION NOTEBOOKS	TABLET NOTEBOOKS
DEVICE CATEGORY	Imaging Equipment	
* PRODUCT TYPE	COPIER	DIGITAL DUPLICATOR
	FACSIMILE MACHINE (FAX MACHINE)	MAILING MACHINE
	MULTIFUNCTION DEVICE (MFD)	PRINTER
	SCANNER	





Electronic Product Environmental Assessment Tool (EPEAT) Sample Specification Language

All desktops, laptops, and computer monitors provided under this contract are required to have achieved Bronze registration or higher in the EPEAT system in [the USA]. EPEAT is a procurement tool designed to help large volume purchasers evaluate, compare, and select electronic products based upon their environmental attributes as specified in the consensus-based IEEE Standard for the Environmental Assessment of Personal Computer Products (IEEE 1680.1).

[Purchaser] will prefer products that have achieved EPEAT Silver or EPEAT Gold registration. The EPEAT registration criteria and a database of all registered products are provided at http://www.epeat.net.

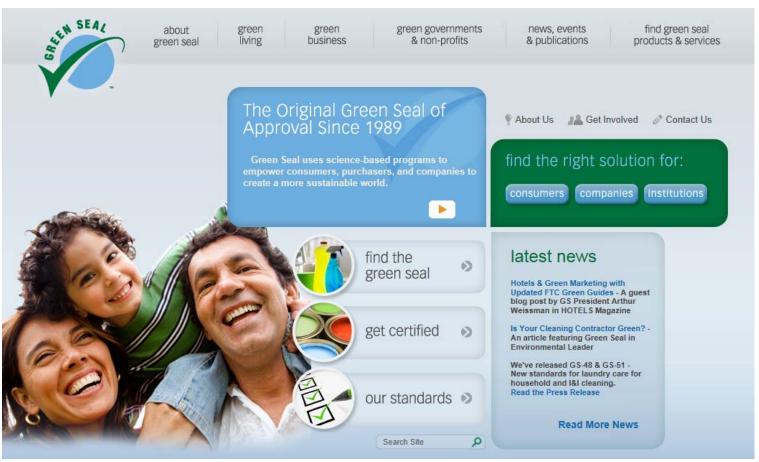
Suppliers are required to block non-EPEAT registered products on their electronic catalogs or web portals that customers may buy from through this contract.

Suppliers are required to provide [quarterly/semiannual/annual] reporting on the number of EPEAT registered products purchased under this contract. For each piece of equipment sold, EPEAT Registration Status (i.e. Bronze, Silver, Gold or Unregistered) must be provided.



SEAL SEAL

Green Seal





Green Seal Scope

Green Seal is a non-profit organization that uses science-based programs to empower consumers, purchasers and companies to create a more sustainable world.

Green Seal was founded in 1989, when there were no other environmental certification programs in the US, to develop a tool to help shoppers find truly green products. The Green Seal stands for absolute integrity and over the years has grown to symbolize environmental leadership by continuing to represent unquestionably green products and services.





Green Seal Product Categories Covered



Household Products (GS-8, GS-21)



Construction Materials & Equipment (GS-13, GS-31, GS-36)



Paints & Coatings (GS-11, GS-43, GS -47)



Printing & Writing Paper (GS-7, GS-10, GS-15)



Cleaning Services (GS-42 & GS-49)



Hotels & Lodging Properties (GS-33)



Paper Towels, Napkins & Tissue Paper (GS-1, GS-9)



Food Packaging (GS-18, GS-35)



Institutional Cleaning Products (GS-34, GS-37, GS -40, GS-53)



Hand Soaps & Cleaners (GS-41)



Personal Care Products (GS-50)





Green Seal Scope – Institutional Cleaners (GS-37)

- Low toxicity
- No cancer-causing ingredients
- No asthmagens
- Not corrosive to eyes or skin or skin sensitizer
- Won't pollute air or deplete ozone layer
- Won't kill fish
- Low phosphorous

- Will biodegrade
- Package recyclable
- Available as concentrate
- Limits on fragrances used
- Certain ingredients prohibited
- Performance tested
- Vendor training available





Eco Logo







Get Certified

EcoLogo is North America's largest, most respected environmental standard and certification mark.

Are you an environmental leader? Get EcoLogo-certified...

About Ecologo

Founded in 1988 by the Government of Canada but now recognized world-wide, EcoLogoTM is North America's largest, most respected environmental standard and certification mark. EcoLogo provides customers – public, corporate and consumer – with assurance that the products and services bearing the logo meet stringent standards of environmental leadership. With THOUSANDS of EcoLogo Certified products, EcoLogo certifies environmental leaders covering a large variety of categories, helping you find and trust the world's most sustainable products.

The EcoLogo Program is a Type I eco-label, as defined by the International Organization for Standardization (ISO). This means that the Program compares products/services with others in the same category, develops rigorous and scientifically relevant criteria that reflect the entire lifecycle of the product, and awards the EcoLogo to those that are verified by an independent third party as complying with the criteria.

The EcoLogo Program is one of two such programs in North America that has been successfully audited by the Global EcoLabelling Network (GEN) as meeting ISO 14024 standards for eco-labelling.



Press Releases

- Second edition of EcoLogo Toy Standard released.more...
- New EcoLogo Printing Cartridges Standardmore...
- Help revise EcoLogo's Sanitary Paper Standard. more...

more >

FAQs

- How do I know that EcoLogo is a legitimate eco-label?
- Where can I browse for EcoLogo products and services?

more >





Eco Logo Scope

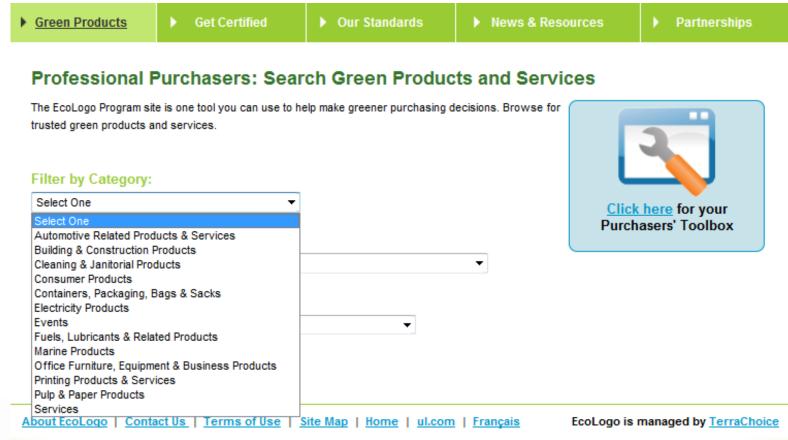
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Eco Logo Product Categories Covered





e-Stewards







e-Stewards Scope

The e-Stewards Initiative is a project of the Basel Action Network (BAN), which is a 501(c)3 non-profit, charitable organization of the United States, based in Seattle, Washington. It is against the backdrop of the growing e-waste crisis that the e-Stewards Initiative was born.

The e-Stewards Standard for Responsible Recycling and Reuse of Electronic Equipment® is an industry-specific environmental management system standard designed as the basis for the e-Stewards Certification. It was developed with detailed input from experts in the recycling and asset recovery industries, the environmental community, occupational health and safety professionals, and the certification and accreditation industries.





e-Stewards Services Covered

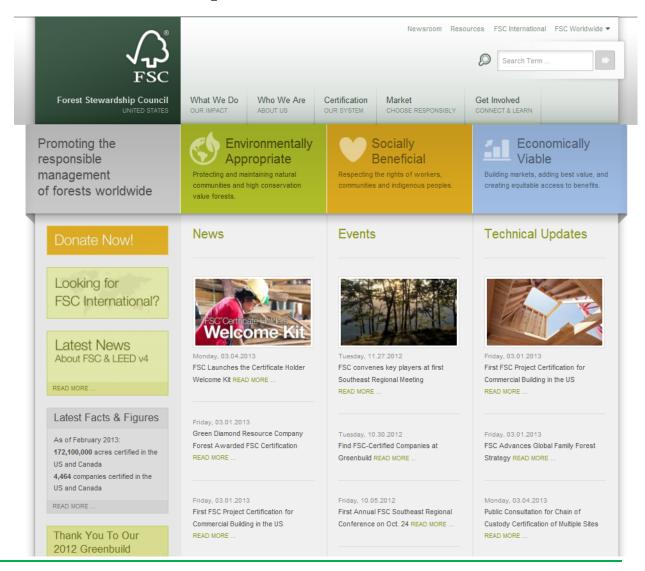
While there are other guidelines written for the recycling industry, the e-Stewards Standard is the only e-waste standard that:

- Is "All-In-One" encompasses a certified ISO 14001 environmental management system and R2 (Responsible Recycling) Practices.
- Prohibits all toxic waste from being disposed of in solid waste landfills and incinerators
- Requires full compliance with existing international hazardous waste treaties for exports and imports of electronics, and specifically prohibits the export of hazardous waste from developed to developing countries
- Prohibits the use of prison labor in the recycling of toxic electronics, which often have sensitive data embedded
- Requires extensive baseline protections for and monitoring of recycling workers in every country, including developed nations where toxic exposures are routinely taking place
- Is written for international use





Forest Stewardship Council (FSC)







Forest Stewardship Council (FSC) Sample Specification Language

FSC certification ensures that products come from responsibly managed forests that provide environmental, social and economic benefits.

The FSC system includes two different types of certificates: Forest Management and Chain of Custody. Forest Management certification is awarded to forest managers or owners whose management practices meet the requirements of the FSC US Forest Management Standard.

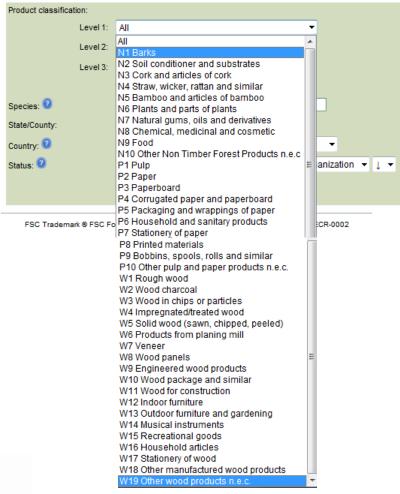
Chain-of-Custody certification applies to manufacturers, processors and traders of FSC-certified forest products. It ensures the validity of claims associated with all FSC-certified material and products throughout the production chain.

To achieve its mission and vision, FSC has developed a set of 10 principles and 57 Criteria that apply to FSC-certified forests around the world.





Forest Stewardship Council (FSC) Sample Specification Language

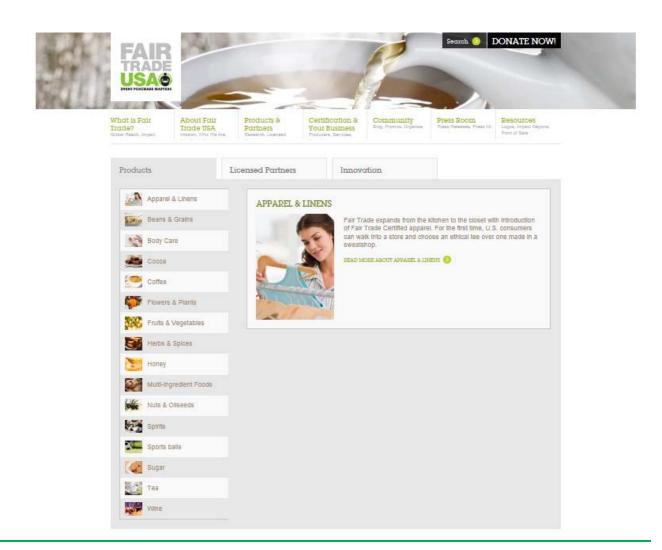








Fair Trade









Fair Trade Scope

Fair Trade USA is a 501 (c) (3) nonprofit organization and the leading third-party certifier of Fair Trade products in the United States. Fair Trade USA uses a market-based approach that gives farmers fair prices, workers safe conditions, and entire communities resources for fair, healthy and sustainable lives. Fair Trade USA also provides farmers in developing nations the tools to thrive as international business people, instead of creating dependency on aid.







Fair Trade Product Categories Covered









Single Attribute Certifications

Energy Star



Compostable



FEMP



Greenguard



WaterSense



Chlorine Free



BioPreferred



Green-e







Energy Star







Energy Star Scope

ENERGY STAR is a trusted, government-backed program for energy efficiency.

The ENERGY STAR label was established to:

Reduce greenhouse gas emissions and other pollutants caused by the inefficient use of energy; and

Make it easy for consumers to identify and purchase energy-efficient products that offer savings on energy bills without sacrificing performance, features, and comfort.

Products are independently certified and earn the ENERGY STAR label by meeting the energy efficiency requirements set forth in ENERGY STAR product specifications.





Energy Star Product Categories Covered

All Products			
For Your Home	Business & Government	Products in Developm	nent Can't Find a Product?
Building Products > Seal and Insulate > Roof Products > Windows, Doors and Skylights Commercial Appliances > Commercial Clothes Washers > Vending Machines > Water Coolers	Commercial Food Service Equipment Commercial Kitchen Package Commercial Dishwashers Commercial Fryers Commercial Griddles Commercial Hot Food Holding Cabinets Commercial Ice Machines Commercial Ovens Commercial Refrigerators & Freezers Commercial Steam Cookers	Computers Computers Computers Displays 2 Enterprise Servers Imaging Equipment 2 Uninterruptible Power Supplies Electronics Audio/Video Cordless Phones Set-top Boxes & Cable Boxes Televisions Battery Chargers Handheld Vacuums with Qualified Chargers	Heating & Cooling Air Conditioning, Central Boilers Fans, Ventilating Heat pumps, Geothermal Light Commercial Heating & Cooling Lighting Commercial LED Lighting Light bulbs Light Fixtures Water Heaters Water Heater, Gas Condensing Water Heater, Heat Pump Water Heater, High
		Personal Care Products with Qualified Chargers	Efficiency Gas Storage >> Water Heater, Solar
		Power Tools with Qualified Chargers	Water Heater, Whole Home Gas Tankless
		» Yard Care Tools with Qualified Chargers	



Energy Star Sample Specification Language

ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS (DEC 2007)

- (a) Definition. As used in this clause—"Energy-efficient product" means a product that—
 - (1) Meets Department of Energy and Environmental Protection Agency criteria for use of the Energy Star® trademark label; or
 - (2) Is in the upper 25 percent of efficiency for all similar products as designated by the Department of Energy's Federal Energy Management Program.
- (b) The Contractor shall ensure that energy-consuming products are energy efficient products (i.e., ENERGY STAR products or FEMP designated products) at the time of contract award, for products that are—
 - (1) Delivered;
 - (2) Acquired by the Contractor for use in performing services at a Government facility;
 - (3) Furnished by the Contractor for use by the Government; or
 - (4) Specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance.
- (c) The requirements of paragraph (b) apply to the Contractor (including any subcontractor) unless—
 - (1) The energy-consuming product is not listed in the ENERGY STAR Program or FEMP; or
 - (2) Otherwise approved in writing by the Contracting Officer.
- (d) Information about these products is available for—
 - (1) ENERGY STAR at http://www.energystar.gov/products; and
 - (2) FEMP at www.femp.energy.gov/technologies/eep_purchasingspecs.html.





Energy Star Case Study

Chicago, IL public housing authority cut its annual electricity bill \$500,000 by purchasing 10,000 ENERGY STAR-rated refrigerators



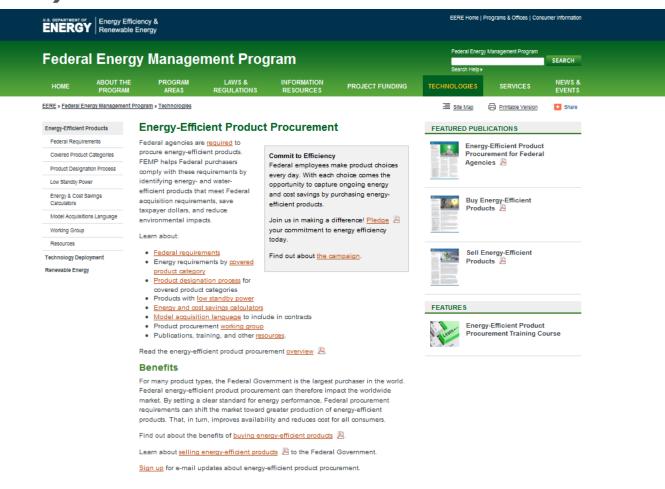
The US Air Force has approximately 525,000 computers in us. It undertook a power management implementation and reporting program beginning in 2009, completed in 2010, to ensure 95% of all computers and monitors are ENERGY STAR qualified, with anticipating savings of \$15 million annually.







Federal Energy Management Program (FEMP)







Federal Energy Management Program (FEMP) Scope

Federal agencies are required to procure energy-efficient products. FEMP helps Federal purchasers comply with these requirements by identifying energy- and water-efficient products that meet Federal acquisition requirements, save taxpayer dollars, and reduce environmental impacts. Specifically, each product categories identified are either covered by FEMP-designated or ENERGY STAR®. Some office equipment and electronics are also covered by EPEAT or low standby power requirements.





Federal Energy Management Program (FEMP)

Product Categories Covered

Heating & Cooling (Space & Water) IT & Electronics Food Service Lighting Appliances Other **Appliances Lighting Components** Information Technology Commercial Space Heating and Cooling Boilers Fluorescent Ballasts Computers Clothes Washers (Commercial) Light Commercial Heating and Cooling Displays and Monitors Fluorescent Tube Lamps Clothes Washers (Residential) Chillers: Enterprise Servers Light Bulbs: Dishwashers (Residential) Air-Cooled Electric Compact Fluorescent (CFLs) Imaging Equipment Freezers (Residential) Water-Cooled Electric Light Emitting Diodes (LEDs) Uninterruptible Power Supplies Refrigerators (Residential) Ground-Source Heat Pumps Decorative Light Strings Room Air Cleaners and Purifiers Electronics Commercial Water Heating Room Dehumidifiers **Lighting Systems** Audio/Video Gas Water Heaters Battery Chargers Light fixtures: Commercial Cordless Phones Residential Set-Top and Cable Boxes Televisions (TVs) Exterior Fluorescent Luminaires



Federal Energy Management Program (FEMP)

Sample Specification Language

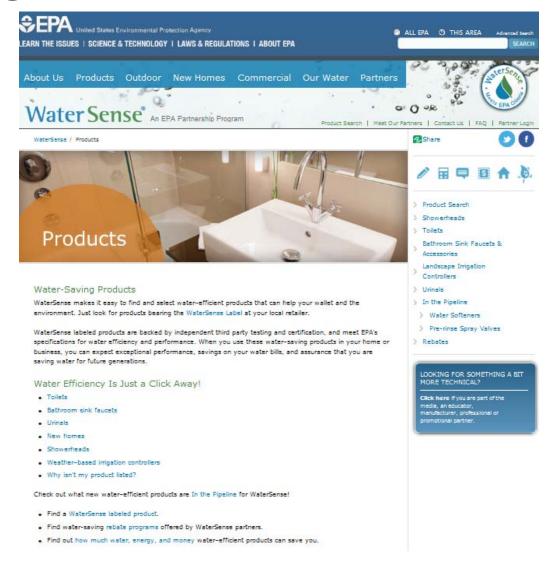
ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS (DEC 2007)

- (a) Definition. As used in this clause—"Energy-efficient product" means a product that—
 - (1) Meets Department of Energy and Environmental Protection Agency criteria for use of the Energy Star® trademark label; or
 - (2) Is in the upper 25 percent of efficiency for all similar products as designated by the Department of Energy's Federal Energy Management Program.
- (b) The Contractor shall ensure that energy-consuming products are energy efficient products (i.e., ENERGY STAR products or FEMP designated products) at the time of contract award, for products that are—
 - (1) Delivered;
 - (2) Acquired by the Contractor for use in performing services at a Government facility;
 - (3) Furnished by the Contractor for use by the Government; or
 - (4) Specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance.
- (c) The requirements of paragraph (b) apply to the Contractor (including any subcontractor) unless—
 - (1) The energy-consuming product is not listed in the ENERGY STAR Program or FEMP; or
 - (2) Otherwise approved in writing by the Contracting Officer.
- (d) Information about these products is available for—
 - (1) ENERGY STAR at http://www.energystar.gov/products; and
 - (2) FEMP at www.femp.energy.gov/technologies/eep_purchasingspecs.html.





WaterSense







WaterSense Scope

WaterSense helps people save water with a product label and tips for saving water around the house. Products carrying the WaterSense label perform well, help save money, and encourage innovation in manufacturing.

WaterSense partners with manufacturers, retailers and distributors, and utilities to bring WaterSense labeled products to the marketplace and make it easy to purchase high-performing, water-efficient products. WaterSense also partners with irrigation professionals and irrigation certification programs to promote water-efficient landscape irrigation practices.

Since the program's inception in 2006, WaterSense has helped consumers save a cumulative 287 billion gallons of water and over \$4.7 billion in water and energy bills.





WaterSense Product Categories Covered

Water Efficiency Is Just a Click Away!

- Toilets
- Bathroom sink faucets
- Urinals
- New homes
- Showerheads
- Weather-based irrigation controllers







WaterSense Sample Specification Language

1.0 Scope and Objective

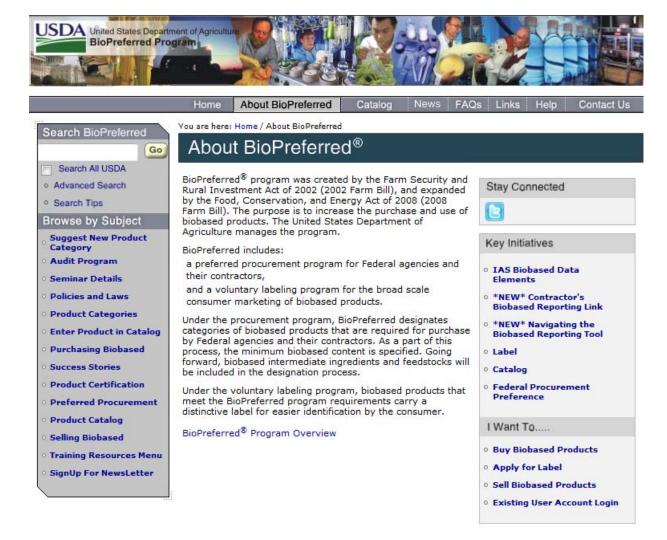
This specification establishes the criteria for high-efficiency lavatory faucets and faucet accessories under the U.S. Environmental Protection Agency's (EPA's) WaterSense® program. It is applicable to lavatory faucets, lavatory faucet accessories specifically designed to control the flow of water, and any other lavatory faucet technologies that meet these performance specifications. The specification is designed to ensure both sustainable, efficient water use and a high level of user satisfaction with lavatory faucet and lavatory faucet accessory performance.

- 2.0 Water Efficiency and Performance Criteria
- 2.1 Lavatory faucets and lavatory faucet accessories must conform to applicable requirements in ASME A112.18.1/CSA B125.1 and NSF/ANSI Standard 61, Section 9.2
- 2.2 The flow rate of the lavatory faucet or the lavatory faucet accessory shall be tested in accordance with the procedures in ASME A112.18.1/CSA B125.1 and shall meet the following criteria:
- The maximum flow rate shall not exceed 1.5 gallons per minute (gpm)3 (5.7 liters per minute [L/min]) at a pressure of 60 pounds per square inch (psi) at the inlet, when water is flowing; and
- The minimum flow rate shall not be less than 0.8 gpm (3.0 L/min) at a pressure of 20 psi at the inlet, when water is flowing. A
 lavatory faucet is also considered to meet this flow rate requirement if equipped with a lavatory faucet accessory that meets this
 requirement.
- 2.3 The flow rate, tested in accordance with the procedures in ASME A112.18.1/CSA B125.1, shall meet the testing verification protocol as described in 10 CFR 430 Subpart F, Appendix B.





BioPreferred







BioPreferred Scope

The BioPreferred® program was created by the Farm Security and Rural Investment Act of 2002 (2002 Farm Bill), and expanded by the Food, Conservation, and Energy Act of 2008 (2008 Farm Bill). The purpose is to increase the purchase and use of biobased products. The United States Department of Agriculture manages the program.

The program includes a preferred procurement program for Federal agencies and their contractors and a voluntary labeling program for the broad scale consumer marketing of biobased products.

Under the procurement program, BioPreferred designates categories of biobased products that are required for purchase by Federal agencies and their contractors. As a part of this process, the minimum biobased content is specified.

Under the voluntary labeling program, biobased products that meet the BioPreferred program requirements carry a distinctive label for easier identification by the consumer.





BioPreferred Product Categories Covered

BioPreferred Program Product CategoriesJanuary 2013



Janitorial	Minimum Bjobased Content
Adhesive and Mastic Removers	58%
Air Fresheners and Deodorizers	97%
Bathroom and Spa Cleaners	74%
Carpet and Upholstery Cleaners:	
General Purpose	54%
Spot Removers	796
Dishwashing Products	58%
Electronic Components Cleaners	91%
Floor Cleaners and Protectors	77%
Floor Strippers	78%
Furniture Cleaners and Protectors	71%
General Purpose Household Cleaners	39%
Glass Cleaners	49%
Graffiti and Grease Removers	34%
Industrial Cleaners	41%
Ink Removers and Cleaners	79%
Laundry Products:	
General Purpose	34%
Pretreatment/Spot Removers	46%
Leather, Vinyl, and Rubber Care Products*	55%
Multipurpose Cleaners	56%
Oven & Grill Cleaners	66%
Specialty Precision Cleaners and Solvents*	56%

Groundskeeping	Minimum Biobased Content
Agricultural Spray Adjuvants*	50%
Animal Repellents	79%
Bioremediation Materials	86%
Compost Activators and Accelerators	95%
Concrete and Asphalt Cleaners	70%
Dethatchers*	87%
Dust Suppressants	85%
Erosion Control Materials	77%
Fertilizers	71%
General Purpose De-Icers	93%
Mulch and Compost Materials	95%
Sorbents	89%

Miscellaneous	Minimum Bjøbased Content
Bedding, Bed Linens, and Towels	12%
Candles and Wax Melts	88%
Thermal Shipping Containers:	
Durable	21%
Non-Durable	82%
Films:	
Non-Durable	85%
Semi-Durable	45%
Packing and Insulating Materials	74%
Water Clarifying Agents*	92%

Food Service	Minimum Bjøbesed Content
Disposable Containers	72%
Disposable Cutlery	48%
Disposable Tableware	72%
Food Cleaners	53%

Industrial Lubricants and Fluids	Minimum Bjobesed Content
2-Cycle Engine Oils	34%
Asphalt and Tar Removers	80%
Asphalt Restorers	68%
Chain and Cable Lubricants	77%
Concrete and Asphalt Release Fluids	87%
Corrosion Preventatives	53%
Diesel Fuel Additives	90%
Expanded Polystyrene (EPS) Foam Recycling Products	90%
Firearm Lubricants	49%
Fluid-Filled Transformers:	
Synthetic Ester-Based	66%
Vegetable Oil-Based	95%
Forming Lubricants	68%
Fuel Conditioners*	64%
Gear Lubricants	58%
Greases:	
Food Grade	42%
Multipurpose	72%
Other	75%
Rail Track	30%
Truck	71%
Heat Transfer Fluids	89%
Hydraulic Fluids:	
Mobile Equipment	44%
Stationary Equipment	44%

Inks:	
Specialty Inks	66%
Sheetfed - Color	67%
Sheetfed - Black	49%
Printer Toner - <25 pages per minute (ppm)	34%
Printer Toner - >25 ppm	20%
News	32%
Metalworking Fluids:	
General Purpose Soluble, Semi-Synthetic, and Synthetic Oils	57%
High Performance Soluble, Semi-Synthetic, and Synthetic Oils	40%
Straight Oils	66%
Multipurpose Lubricants	88%
Parts Wash Solution	65%
Penetrating Lubricants	68%
Pneumatic Equipment Lubricants	67%
Slide Way Lubricants	74%
Turbine Drip Oils	87%





BioPreferred Sample Specification Language

Affirmative Procurement of Biobased Products Under Service and Construction Contracts

- (a) In the performance of this contract, the Contractor shall make maximum use of biobased products that are USDA-designated items, unless the product cannot be acquired-
- (1) Competitively within a time frame providing for compliance with the contract performance schedule;
- (2) Meeting contract performance requirements; or
- (3) At a reasonable price.
- (b) Information about this requirement and these products is available at www.biopreferred.gov.





Compostable







Compostable Scope

The Biodegradable Products Institute (BPI) is a not-for-profit association of key individuals and groups from government, industry and academia.

The Institute has created the Compostable Logo, which is designed to identify products that have been scientifically proven to biodegrade, leaving no persistent synthetic residues. The Compostable logo builds credibility and recognition for products that meet the ASTM D6400 and/or D6868 standards so consumers, composters, regulators and others can be assured that the product will biodegrade as expected.

The logo is designed to be easily recognizable and able to be placed on the actual product as well as packaging materials and sales literature.





Compostable Product Categories Covered

Find Certified Compostable Products

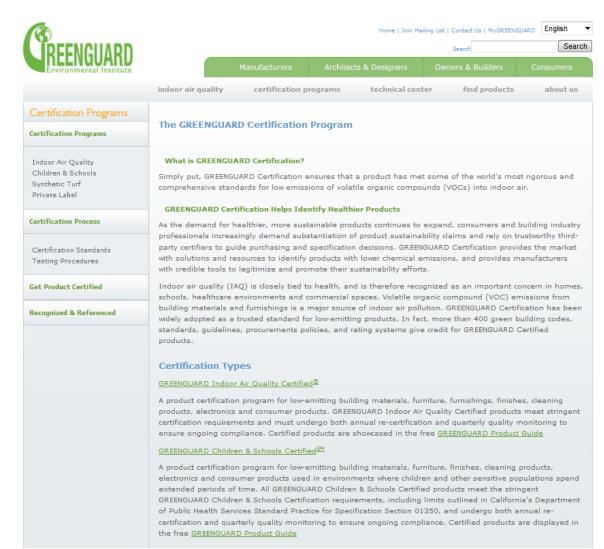
This directory lists products that have been tested and certified to be biodegradable in a managed composting facility. To be listed on this site, a company must submit its products for testing at a certified laboratory.







Greenguard







Greenguard Scope

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Greenguard **Product Categories Covered**

Find Products

Product Category

Adhesives/Sealants

Air Filters Floor Finish Panels:

Plastic Fabrication Bathroom Products Flooring

Signage **Furniture** Building Construction

Materials

Gymnasium Equipment Storage Solutions Cabinetry

Insulation Surfacing Materials

Ceiling Systems Lighting **Textiles**

Cleaning Products/Systems Mattresses & Bedding Visual Display Products

Countertops Medical Devices Wall Finish

> Paints and Coatings Window Treatments



Doors

Electronics



Chlorine Free



Home
How to Get Certified
About Us
Membership
KIDS ZONE
Archie Beaton Bio
Medical Hazards of Chlorine
Artides and Events
Donate
Advisory Board
Photo Album
Contact Us
Members Only
Printers/Designers PCF mark

About Us

Chlorine Free Products Association

The Chlorine Free Products Association (CFPA) is an independent not-for-profit accreditation & standard setting organization, incorporated in the state of Illinois. The primary purpose of the association is to promote Total Chlorine Free policies, programs, and technologies throughout the world.

Our mission is to provide market awareness by providing facts, drawing direct comparisons, and highlight process advantages for Totally Chlorine Free (TCF) and Processed Chlorine Free (PCF) products.

CFPA Goals and Purpose

-Serve as a balanced, authoritative national, continental, and international leadership group.

-Enhance market visibility and awareness of the Chlorine Free approach, including products, systems and benefits. -Stimulate research and development programs at federal agencies.

-Assist in developing Chlorine Free products appropriate for demonstration and consumer marketplace.

-Initiate and promote the development of Chlorine Free demonstration programs for commercial, academic, community, government, trade shows and conferences.

-Develop and implement a strategy to incorporate specifications into purchasing requirements.

-Assist in setting government Chlorine Free priorities.

-Stimulate the creation and adoption of national, continental and international specifications, standards and certification.

-Develop a program to conduct economic analysis of the benefits of Chlorine Free products and technologies, -Collaborate with national, continental and international organization and associations.

-Publish information and stimulate education on Chlorine Free products and technologies.

CFPA Programs & Activities

Benefits Program
Demonstration Program
Educational Program
Government Collaboration
International Program
Market Development Program
Research & Development Program
Standards & Codes





Chlorine Free Scope

The Chlorine Free Products Association (CFPA) is an independent not-for-profit accreditation & standard setting organization, incorporated in the state of Illinois. The primary purpose of the association is to promote Total Chlorine Free policies, programs, and technologies throughout the world.

The CFPA's mission is to provide market awareness by providing facts, drawing direct comparisons, and highlight process advantages for Totally Chlorine Free (TCF) and Processed Chlorine Free (PCF) products.





Green-e







Green-e Scope

Green-e is the nation's leading independent certification and verification program for renewable energy and greenhouse gas emission reductions in the retail market.

It has two certification and one verification programs:

Green-e Climate is a voluntary certification program launched in 2008 that sets consumer-protection and environmental-integrity standards for greenhouse gas (GHG) emission reductions sold in the voluntary market.

Green-e Energy is the nation's leading independent certification and verification program for renewable energy.

Green-e Marketplace is a program that allows companies to display the logo when they have purchased a qualifying amount of renewable energy and passed our verification standards

The program is administered by the Center for Resource Solutions (CRS).





Green-e **Organizations Qualified**

Organizations Using Renewable Energy

We welcome the opportunity to work with organizations to maximize the impact of their renewable energy commitment through Green-e Marketplace. Want to reduce your footprint? Please buy renewable energy and support the following organizations that purchase or generate a qualifying amount of certified renewable energy. The EPA's Green Power Partnership @ is another good resource where you can learn more about organizations committed to using renewable energy.



Americrast

Commitment Level: 100%

Member since: 2007

Category: Home & Office

Renewable Product: Utility Green

Power

Utopia

Commitment Level:

Member since: 2011

Printing & Packaging Category: Renewable Renewable Energy

Product:

Certificate

Appleton Coated purchases Green-e Energy Certified renewable energy to offset 20% of the electricity used for its entire operations and 100% of the manufacturing of all Utopia product

Americraft LLC purchases Green-e

its manufacturing operations.

Energy Certified renewable energy to offset 100% of the electricity used for

AROMAFLORIA'

Commitment Level: 100%

Member since:

Category: Health & Beauty Renewable Product: Utility Green

Power

Aromafloria's manufacturing facility is powered with 100% Green-e Energy Certified wind energy.

lines that display the Green-e logo.

AVEDA.

Commitment Level: 100%

Member since:

Category: Health & Beauty

Renewable Product: Utility Green

Power

2007

AVEDA purchases Green-e Energy Certified renewable energy to offset 100% of the electricity used for its headquarters and primary distribution





Design for the Environment (DfE)





The U.S. EPA's Design for the Environment

program helps consumers, businesses, and

institutional buyers identify cleaning and

Look for products with the DfE label and

protect your family's health and the planet.

effective, and are safer for the

environment.

other products that perform well, are cost-

Are you concerned about household cleaning products that contain potentially harmful ingredients?

Learn more >









Where can I find a list of

Frequently Asked Ouestions

products with the

DfE label?



How do I apply to get the DfE label on my products?

Find Products with the DfE Label

Industrial & Institutional Purchasers Consumers

- All-Purpose Cleaners
- Window Cleaners
- Tub/Tile Cleaners
- Laundry Detergents
- more...

La información sobre los productos más seguros en español



What's New with DfE?

September 19, 2012 - Through its DfE program, EPA has posted a List of Safer Chemical Ingredients for use in DfE-labeled products. Read more about the list and accompanying changes to the DfE Standard (PDF). Please send questions to Bridget Williams (Williams.Bridget@epa.gov)

July 31, 2012 - Through its DfE program, EPA has released for comment the draft report "Bisphenol A





Design for the Environment (DfE) Scope

EPA's Design for the Environment (DfE) works in partnership with industry, environmental groups, and academia to reduce risk to people and the environment by finding ways to prevent pollution. For more than 15 years, through partnership projects, DfE has evaluated human health and environmental concerns associated with traditional and alternative chemicals and processes in a range of industries.

The Design for the Environment (DfE) label enables consumers to quickly identify and choose products for which the DfE scientific review team has screened each ingredient for potential human health and environmental effects and established that—based on currently available information, EPA predictive models, and expert judgment—the product contains only those ingredients that pose the least concern among chemicals in their class.





Design for the Environment (DfE) Product Categories Covered

Air Conditioner Coil Cleaners

Aircraft Cleaning Products

All-Purpose Cleaners Athletic Field Paints

Automatic Dishwasher Detergents

Biological-Based Products : Bilge Maintainers Biological-Based Products : Bioremediators Biological-Based Products : Drain Maintainers

Biological-Based Products: Grease Trap/Lift Station Maintainers

Biological-Based Products : Septic System Treatments Biological-Based Products : Wastewater Inoculants

Brick and Masonry Cleaners

Car Care Products
Carpet Cleaners

Degreasers Deicers

Descalers

Dish Soaps

Fire-Fighting Products

Floor Care Products : Floor Cleaners Floor Care Products : Floor Finishes Floor Care Products : Floor Strippers Hand Soaps

Kitchen/Countertop Cleaners

Laundry Products : Fabric Softeners Laundry Products : Laundry Detergents

Laundry Products : Pre-Treaters

Leather Cleaners Marine/RV Cleaners

Medical Instrument Cleaners

Metal Cleaner/Polishes

Odor Removers

Oven/Grill/Barbeque Cleaners

Parts Washers Soluble Films

Stainless Steel Cleaners

Tire Additives

Toilet Bowl Cleaners

Tub/Tile Cleaners

Upholstery Cleaners

Window/Glass Cleaners

Wood Cleaners

Other Industrial/Institutional Products



Reference Standards

EPA Comprehensive Procurement Guidelines (CPF)



EPA National Emission Standards for Hazardous Air Pollutants (NESHAP)



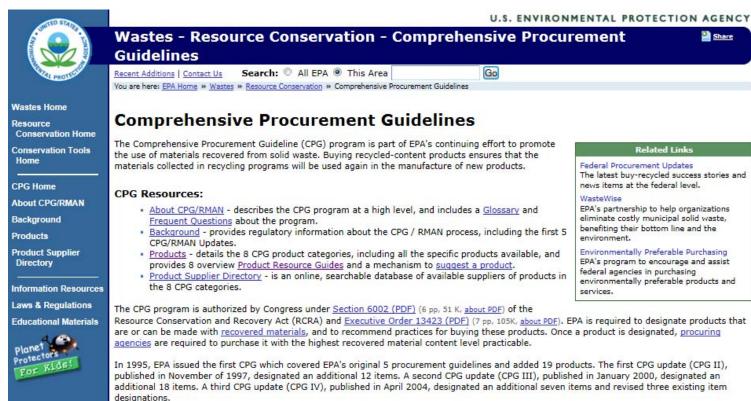
EPA Significant New Alternatives Policy (SNAP)



marketplace conditions change.



EPA Comprehensive Procurement Guidelines (CPG)



EPA also issues guidance on buying recycled-content products in Recovered Materials Advisory Notices (RMANs). The RMANs recommend recycled-content ranges for CPG products based on current information on commercially available recycled-content products. RMAN levels are updated as





EPA Comprehensive Procurement Guidelines (CPG) Scope

The Comprehensive Procurement Guideline (CPG) program is part of EPA's continuing effort to promote the use of materials recovered from solid waste. Buying recycled-content products ensures that the materials collected in recycling programs will be used again in the manufacture of new products.

The CPG program designates products that are or can be made with recovered materials, and recommends practices for buying these products. Once a product is designated, procuring agencies are required to purchase it with the highest recovered material content level practicable.

EPA also issues guidance on buying recycled-content products in Recovered Materials Advisory Notices (RMANs). The RMANs recommend recycled-content ranges for CPG products based on current information on commercially available recycled-content products. RMAN levels are updated as marketplace conditions change.





EPA Comprehensive Procurement Guidelines (CPG) Product Categories Covered

Product Resource Guides Suggest a Product

Product Resource Guides

EPA's Comprehensive Procurement Guideline (CPG) program helps agencies "close the loop" by buying recycled products. EPA published a series of product resource guides summarizing information on the CPG program; EPA's recovered materials content recommendations; case studies from around the country; and key resources, associations, and Web sites.

There are 8 product resource guides in all, one for each CPG product category.

- 2007 Buy-Recycled Series: Construction Products (PDF)(9 pp, 360K)
- 2007 Buy-Recycled Series: Landscaping Products (PDF)(7 pp, 404K)
- 2007 Buy-Recycled Series: Nonpaper Office Products (PDF) (6 pp. 316K)
- 2007 Buy-Recycled Series: Paper Products (PDF) (8 pp., 343K)
- 2007 Buy-Recycled Series: Park and Recreation Products (PDF) (6 pp, 342K)
- 2007 Buy-Recycled Series: Transportation Products (PDF) (8 pp., 335K)
- 2007 Buy-Recycled Series: Vehicular Products (PDF) (8 pp. 455K)
- 2007 Buy-Recycled Series: Miscellaneous Products (PDF) (7 pp, 409K)

You will need Adobe Reader to view some of the files on this page. See EPA's PDF page to learn more.





EPA National Emission Standards for Hazardous Air Pollutants (NESHAP)







EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) Scope

National Emission Standards for Hazardous Air Pollutants (NESHAPS) are stationary source standards for hazardous air pollutants. Hazardous air pollutants (HAPs) are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects.

NESHAPs are found in 40 CFR Part 61 and 40 CFR Part 63.

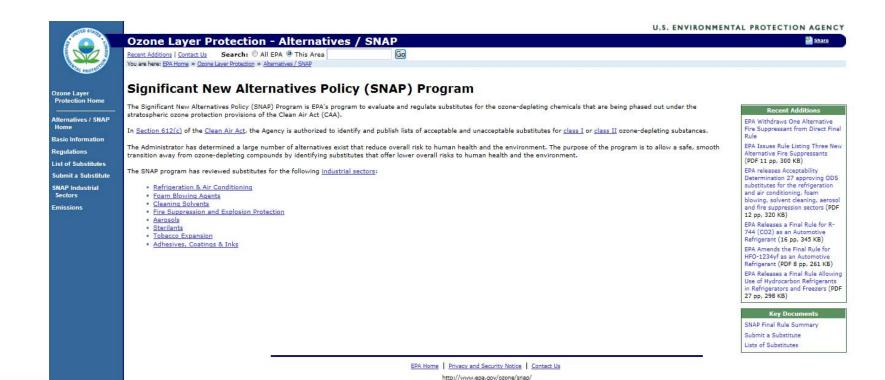
Part 61 NESHAPs regulate only 7 hazardous air pollutants:

Asbestos, Beryllium, Mercury, Vinyl chloride, Benzene, Arsenic, and Radon/radionuclides

Part 63 NESHAPs lists 187 hazardous air pollutants to be regulated by source category.



EPA Significant New Alternatives Policy (SNAP)



Print As-Is
Last updated on Thursday, January 10, 2013

EPA Significant New Alternatives Policy (SNAP) Scope

The Significant New Alternatives Policy (SNAP) Program is EPA's program to evaluate and regulate substitutes for the ozone-depleting chemicals that are being phased out under the stratospheric ozone protection provisions of the Clean Air Act (CAA).

The SNAP program has reviewed substitutes for the following industrial sectors:

- Refrigeration & Air Conditioning
- Foam Blowing Agents
- Cleaning Solvents
- Fire Suppression and Explosion Protection
- Aerosols
- Sterilants
- Tobacco Expansion
- Adhesives, Coatings & Inks



Questions?



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