

**U.S. DEPARTMENT OF ENERGY
AFFIRMATIVE PROCUREMENT
AND RECYCLING
FISCAL YEAR 2006 REPORT**



pursuant to:

Resource Conservation and Recovery Act §6002

Farm Security and Rural Investment Act §9002

and

**Executive Order 13101 “Greening the Government through
Waste Prevention, Recycling, and Federal Acquisition”**

March 2007

FORWARD

This report has been prepared in response to the November 2, 2006, letter from the Office of Federal Procurement Policy (OFPP) and the Office of the Federal Environmental Executive (OFEE) to Federal Agency Environmental Executives and Agency Senior Procurement Officials. This letter transmitted a survey for reporting on agency purchases of recycled content products pursuant to Resource Conservation and Recovery Act, Section 6002 and Executive Order 13101, *Greening the Government through Waste Prevention, Recycling, and Federal Acquisition*.

Responsive to the OFPP/OFEE letter, this report contains the following:

- An Executive Summary;
- A table summarizing the Department of Energy's (DOE) Fiscal Year 2006 purchases of Environmental Protection Agency-designated recovered content products (i.e., products containing recycled materials); and
- A completed survey on DOE purchases in Fiscal Year 2006, and supplemental information on environmentally preferable purchasing, including biobased content products, and solid waste recycling.

EXECUTIVE SUMMARY

- This report summarizes the Department of Energy (DOE) Fiscal Year (FY) 2006 purchases of Environmental Protection Agency (EPA)-designated products that were obtained from non-Federal sources. DOE purchases from Federal sources of supply, such as the General Services Administration, Government Printing Office, and the Defense Logistics Agency are reported separately by those agencies.
- Table 1 summarizes DOE purchases of EPA-designated products with recovered content (i.e., containing recycled materials) for FY 2006. The purchase data are summarized in two ways:
 - Purchases of EPA-designated items containing recycled materials are compared to total purchases of these items. This yields percentages that reflect the overall effect of DOE purchasing on the “recovered content” marketplace.
 - A comparison of purchase data adjusted for allowable exceptions authorized by Federal Acquisition Regulation 23.405(c), where EPA-designated recovered content items could not be purchased due to cost, performance, or availability considerations. This yields percentages that reflect the overall performance of the Department’s Affirmative Procurement Program (also referred to as Environmentally Preferable Purchasing).
- In FY 2006, 63% of all DOE purchases in EPA-designated product categories contained recycled material. When adjusted for virgin-content products purchased due to product availability, cost viability, and product performance considerations, 91.9% of all DOE purchases of EPA-designated products qualified as environmentally preferable purchases (see Table 1). Figure 1 provides a breakdown of product categories by total purchases.
- The Department’s purchasing power continues to play an important role in DOE’s commitment to environmental sustainability and waste prevention. In FY 2006, DOE purchases of products containing recycled material exceeded \$28.5 million. Over the same period, the Department also recycled 37% of the solid wastes (non-radioactive/non-hazardous) generated by its production, analytical, and research and development activities across the country.

Table 1 – FY 2006 DOE Purchases of EPA-Designated Products

Product Category	Total Purchases	\$ with Recovered Content	% with Recovered Content	Adjusted Total*	Adjusted Performance**
Construction	\$5,980,780	\$4,401,887	73.6%	\$5,433,461	90.8%
Building Insulation Products	\$413,724	\$348,801	84.3%	\$408,396	98.7%
Carpet	\$444,952	\$313,419	70.4%	\$415,073	93.3%
Carpet Cushion	\$4,368	\$4,368	100.0%	\$4,368	100.0%
Cement and Concrete	\$3,862,263	\$3,017,930	78.1%	\$3,390,162	87.8%
Consolidated and Reprocessed Latex Paint	\$177,532	\$25,606	14.4%	\$174,054	98.0%
Floor Tiles	\$143,266	\$89,029	62.1%	\$115,618	80.7%
Flowable Fill	\$102,930	\$102,308	99.4%	\$102,423	99.5%
Laminated Paperboard	\$1,018	\$955	93.8%	\$1,018	100.0%
Modular Threshold Ramps	\$12,084	\$12,084	100.0%	\$12,084	100.0%
Nonpressure Pipe	\$585,951	\$383,993	65.5%	\$585,373	99.9%
Patio Blocks	\$3,211	\$3,211	100.0%	\$3,211	100.0%
Railroad Grade Crossing Surfaces	\$3,731	\$200	5.4%	\$3,731	100.0%
Roofing Materials	\$176,463	\$71,305	40.4%	\$176,463	100.0%
Shower and Restroom Dividers/Partitions	\$34,352	\$18,448	53.7%	\$26,552	77.3%
Structural Fiberboard	\$14,939	\$10,230	68.5%	\$14,939	100.0%
Landscaping	\$107,112	\$98,848	92.3%	\$101,561	94.8%
Compost	\$2,687	\$2,531	94.2%	\$2,531	94.2%
Garden and Soaker Hoses	\$18,071	\$13,562	75.0%	\$14,906	82.5%
Hydraulic Mulch	\$1,314	\$761	57.9%	\$1,314	100.0%
Landscaping Timbers	\$44,168	\$43,401	98.3%	\$44,168	100.0%
Lawn and Garden Edging	\$40,874	\$38,593	94.4%	\$38,644	94.5%
Non-Paper Office	\$19,134,288	\$10,502,353	54.9%	\$17,899,325	93.5%
Binders	\$877,403	\$462,036	52.7%	\$790,117	90.1%
Office Furniture	\$7,859,474	\$5,832,022	74.2%	\$7,471,047	95.1%
Office Recycling Containers	\$51,927	\$42,934	82.7%	\$49,330	95.0%
Office Waste Receptacles	\$67,151	\$39,399	58.7%	\$51,084	76.1%
Plastic Clip Portfolios	\$38,386	\$12,104	31.5%	\$12,142	31.6%
Plastic Clipboards	\$4,132	\$2,259	54.7%	\$2,841	68.8%
Plastic Desktop Accessories	\$219,722	\$102,007	46.4%	\$163,604	74.5%
Plastic Envelopes	\$26,158	\$15,137	57.9%	\$25,876	98.9%
Plastic File Folders	\$38,425	\$17,928	46.7%	\$27,164	70.7%
Plastic Presentation Folders	\$12,047	\$7,602	63.1%	\$11,440	95.0%

Product Category	Total Purchases	\$ with Recovered Content	% with Recovered Content	Adjusted Total*	Adjusted Performance**
Plastic Trash Bags	\$1,271,468	\$1,024,460	80.6%	\$1,269,904	99.9%
Printer Ribbons	\$44,763	\$11,050	24.7%	\$41,563	92.9%
Solid Plastic Binders	\$9,498	\$5,052	53.2%	\$7,441	78.3%
Toner Cartridges	\$8,613,734	\$2,928,363	34.0%	\$7,975,771	92.6%
Paper and Paper Products	\$12,762,775	\$10,099,531	79.1%	\$11,579,874	90.7%
Bristols	\$930,454	\$716,148	77.0%	\$821,713	88.3%
Coated Printing Papers	\$378,540	\$263,015	69.5%	\$334,838	88.5%
Commercial/Industrial Sanitary Tissue	\$2,850,005	\$2,241,465	78.6%	\$2,471,298	86.7%
Miscellaneous Paper Products (Tray Liners)	\$922,349	\$608,926	66.0%	\$802,274	87.0%
Newsprint	\$801,463	\$800,449	99.9%	\$801,463	100.0%
Paperboard and Packaging Products	\$361,581	\$285,015	78.8%	\$328,114	90.7%
Uncoated Printing and Writing Papers	\$6,518,382	\$5,184,515	79.5%	\$6,020,172	92.4%
Park and Recreation	\$55,856	\$24,463	43.8%	\$55,856	100.0%
Park Benches and Picnic Tables Containing Recovered Aluminum, Steel, Concrete, or Plastic	\$14,523	\$14,523	100.0%	\$14,523	100.0%
Plastic Fencing	\$25,522	\$9,941	39.0%	\$25,522	100.0%
Playground Equipment Containing Recovered Plastic, Steel, or Aluminum	\$15,811	\$0	0.0%	\$15,811	100.0%
Playground Surfaces	\$0	\$0	n.a.%	\$0	n.a.%
Running Track	\$0	\$0	n.a.%	\$0	n.a.%
Transportation	\$168,891	\$123,023	72.8%	\$168,662	99.9%
Channelizers	\$21	\$21	100.0%	\$21	100.0%
Delineators	\$47,338	\$47,338	100.0%	\$47,338	100.0%
Flexible Delineators	\$32,514	\$10,911	33.6%	\$32,514	100.0%
Parking Stops	\$12,621	\$12,621	100.0%	\$12,621	100.0%
Traffic Barriers	\$23,934	\$14,229	59.5%	\$23,934	100.0%
Traffic Cones	\$52,463	\$37,903	72.2%	\$52,234	99.6%
Vehicular	\$3,194,689	\$483,938	15.1%	\$2,767,055	86.6%
Re-refined Lubricating Oil	\$474,158	\$181,493	38.3%	\$321,226	67.7%
Rebuilt Vehicular Parts	\$1,270,044	\$168,666	13.3%	\$1,263,896	99.5%
Reclaimed Engine Coolants	\$149,741	\$77,627	51.8%	\$126,063	84.2%
Retread Tires	\$1,300,745	\$56,151	4.3%	\$1,055,869	81.2%

Product Category	Total Purchases	\$ with Recovered Content	% with Recovered Content	Adjusted Total*	Adjusted Performance**
Miscellaneous	\$3,992,043	\$2,845,351	71.3%	\$3,724,115	93.3%
Awards and Plaques	\$119,417	\$73,586	61.6%	\$114,559	95.9%
Bike Racks	\$3,108	\$3,108	100.0%	\$3,108	100.0%
Blasting Grit	\$26,945	\$19,535	72.5%	\$19,675	73.0%
Industrial Drums	\$2,446,047	\$2,139,981	87.5%	\$2,401,719	98.2%
Manual-Grade Strapping	\$82,269	\$14,879	18.1%	\$23,434	28.5%
Mats	\$103,231	\$59,307	57.5%	\$89,561	86.8%
Pallets	\$198,117	\$32,528	16.4%	\$139,077	70.2%
Signages	\$640,782	\$217,403	33.9%	\$608,664	95.0%
Sorbents	\$372,126	\$285,026	76.6%	\$324,317	87.2%
TOTALS:	\$45,396,434	\$28,579,394	63.0%	\$41,729,909	91.9%

* Adjusted total equals recovered content purchases plus justified exemptions (i.e., product availability, cost, and performance)

** Adjusted performance equals adjusted total divided by total purchases.

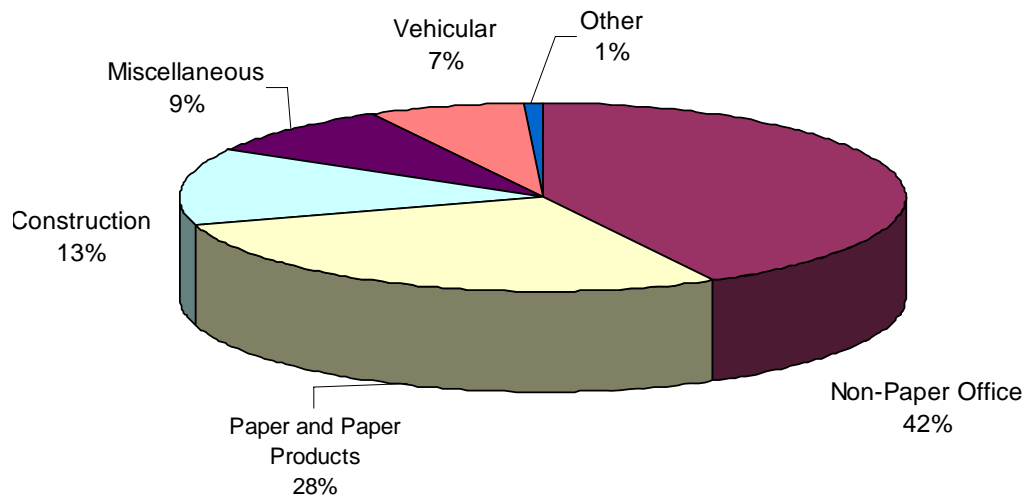


Figure 1: Product Category Breakdown of Recycled Content Purchasing by Total Purchases

Note: The "Other" category consists of Landscaping, Park and Recreation, and Transportation purchases

Date Prepared: March 2007

**Resource Conservation and Recovery Act §6002
Farm Security and Rural Investment Act §9002
Executive Order 13101, *Greening the Government
Through Waste Prevention, Recycling, and Federal Acquisition***

Agency Report for Fiscal Year: 2006

Agency or Department: United States Department of Energy

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1) **Federal Procurement Data System (FPDS) Data**

- a) Attach the Resource Conservation and Recovery Act (RCRA) Standard Report for FY 2006 data from FPDS. The report is available at http://www.hss.energy.gov/NuclearSafety/NSEP/p2/DOE_FPDS_data.html.
- b) Has the Agency reviewed the FY 2006 FPDS for compliance assessment and/or trend analyses? Yes, the Department has reviewed this year's data and made appropriate corrections to ensure that the data are accurate and as useful as possible.
- c) Please describe findings, changes and/or actions that were a direct result of the assessments or analyses above. As in previous years, some errors were found due to misunderstanding of the reporting procedures, and some entries that seemed erroneous were challenged until further explanation was provided. There were no significant changes in the FPDS data from prior years.

2) **Indicator Items for EPA-Designated Recycled Content Products**

The General Services Administration and the Defense Logistics Agency will provide data for agency purchases made directly from them. Please provide the amounts for your Agency's purchases from other sources, including GSA schedules' contractors and your service contractors, including construction, fleet maintenance, and facilities maintenance contractors.

- a) **Paper: Commercial Sanitary Tissue Products**
 - i) Does your Agency purchase this item (directly or through contracts)?
Yes No If no, skip to next section.

- ii) Total dollar amount¹ of these products purchased² by your Agency from sources *other than* GSA in FY 2006 **\$2,850,005** and dollar amount of these products containing recovered materials³ purchased by your Agency from sources *other than* GSA in FY 2006 **\$2,241,465**. Almost 87% of the purchases in this category qualified as containing the required recycled content or were justified exemptions.
 - OR -
 Number of janitorial services contracts that require the supply of recycled content sanitary tissue products. _____ - OR -
 Percentage of facilities using recycled content sanitary tissue products (either purchased directly or supplied by services contractors). _____
- iii) If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
 Yes No Not applicable
- iv) Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2006? Yes No If yes, please describe the impediment(s). Select DOE site statements on impediments are provided below:

Commercial Sanitary Tissue Products
Industrial wipes for cleaning optics and machine parts must be lint-free, anti-static, and non-abrasive. Recycled content wipes meeting those criteria are not yet available.
Higher quality sanitary tissues are only available as virgin material at some locations.

- b) Non-Paper Office Products: Toner Cartridges**
- i) Does your Agency purchase this item (directly or through contracts)?
 Yes No If no, skip to next section.
- ii) Total dollar amount of these products purchased by your Agency from sources *other than* GSA or DLA in FY 2006. **\$8,613,734**.
- iii) Dollar amount of these products containing recovered materials purchased by your Agency from sources *other than* GSA or DLA in FY 2006. **\$2,928,363**. Over 92% of purchases in this category qualified as remanufactured cartridges or were justified exemptions.
 - OR -
 Percentage of facilities using remanufactured toner cartridges (either purchased directly or supplied by services contractors).

1 "Total amount" equals the amount of product without recovered materials plus the amount of product with recovered materials.

2 Within this document, the term *purchased* includes both direct government purchases, as well as procurement of products through government contracts.

3 The products designated by EPA are commonly referred to as "CPG-items" or "recycled content products." RCRA refers to them as "products containing recovered materials," which is the term used in this reporting document unless a more specific term, such as re-refined oil or retread tires, is used.

- iv) If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes **No** **Not applicable**
- v) Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2006? **Yes** **No** If yes, please describe the impediment(s). Select DOE site statements on impediments are provided below:

Toner Cartridges
Remanufactured toner cartridges were either too expensive or did not perform adequately.
Many new printers do not have remanufactured toner cartridges available for purchase.
There is a perception that printer manufacturers are installing computer chips in certain lines of printers that require use of new replacement cartridges of their own manufacture (i.e., precludes the use of remanufactured cartridges from other suppliers).

c) Construction Products

- i) **Demonstrate how your agency complies with the requirement to purchase EPA-designated construction products containing recovered materials to the maximum extent practicable.**

In FY 2006, 28 sites reported purchases of \$4,401,887 in construction products containing recovered materials. The Deputy Secretary of Energy approved DOE Order 450.1 Chg 2 *Environmental Protection Program* (12/07/05) establishing pollution prevention and sustainable environmental stewardship goals for DOE sites to achieve through the use of Environmental Management Systems (EMSs). The Order (Chg 2) establishes an environmentally preferable purchasing goal and provides strategies for achieving the goal, including a “green” purchasing strategy that specifies environmentally preferable products, such as construction products containing recovered material, in the acquisition of DOE site supplies and services. Established policies for the acquisition of environmentally preferable products include: DOE Order 450.1, *Environmental Protection Program*, requirements for the specification and acquisition of environmentally preferable products (5.d (11&12)); DOE Acquisition Regulations (DEAR), *Acquisition and Use of Environmentally Preferable Products and Services* (48 CFR 970.5204), and *Affirmative Procurement Program* (48 CFR 970.5223-2), and; DOE Acquisition Letter, *Greening the Government Requirements in Contracting* (AL-2002-05), responsibilities of Green Acquisition Advocates (GAA) in promoting and implementing environmentally preferable purchasing. Additionally, the Deputy Secretary of Energy approved DOE Order 413.3A, *Program and Project Management for Capital Asset Acquisition* (07/28/06). The

Order establishes DOE policy to incorporate High Performance Sustainable Building principals, including environmentally preferable purchasing of construction products containing recovered material, in the design and construction of new facilities and major renovations of existing facilities.

d) Landscaping Products: Landscaping Timbers

- i) Does your Agency purchase this item (directly or through contracts or other mechanisms)? **Yes** **No** If no, skip to next section.
- ii) Total dollar amount of these products containing recovered materials purchased by your Agency in FY 2006 **\$44,168.**
- iii) Dollar amount of these products containing recovered materials purchased by your Agency in FY 2006 **\$43,401.** - OR -
Percentage of facilities using recycled content landscaping timbers (either purchased directly or supplied by services contractors).
- iv) If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes **No** **Not applicable**
- v) Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2006? **Yes** **No** If yes, please describe the impediment(s).

e) Park and Recreation Products: Park Benches and Picnic Tables

- i) Does your Agency purchase this item (directly or through contracts or other mechanisms)? **Yes** **No** If no, skip to next section.
- ii) Total dollar amount of these products containing recovered materials purchased by your Agency in FY 2006 **\$14,523.**
- iii) Dollar amount of these products containing recovered materials purchased by your Agency in FY 2006 **\$14,523.** 100% of the purchases in this category qualified as containing the required recycled content or were justified exemptions.
- OR -
Percentage of facilities using recycled content park benches and picnic tables (either purchased directly or supplied by services contractors).
- iv) If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes **No** **Not applicable**
- v) Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2006?
Yes **No** If yes, please describe the impediment(s).

f) Transportation Products: Traffic Barricades

- i) Does your Agency purchase this item (directly or through contracts or other mechanisms)? **Yes** **No** If no, skip to next section.
- ii) Total dollar amount of these products containing recovered materials purchased by your Agency in FY 2006 **\$23,934.**

- iii) Dollar amount of these products containing recovered materials purchased by your Agency in FY 2006 **\$14,229**. 100% of the purchases in this category qualified as containing the required recycled content or were justified exemptions.
- OR -
Percentage of facilities using recycled content traffic barricades (either purchased directly or supplied by services contractors).
- iv) If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes **No** **Not applicable**
- v) Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2006? **Yes** **No** If yes, please describe the impediment(s).

g) Vehicular Products: Re-refined Oil

- i) Does your Agency purchase this item (directly or through contracts or other mechanisms)? **Yes** **No** If no, skip to next section.
- ii) Total dollar amount of these products containing recovered materials purchased by your Agency in FY 2006 **\$474,158**.
- iii) Dollar amount of these products containing recovered materials purchased by your Agency in FY 2006 **\$181,493**. Almost 68% of the purchases in this category qualified as containing the required recycled content or were justified exemptions.
- OR -
Percentage of facilities using re-refined oil (either purchased directly or supplied by services contractors).
- iv) If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes **No** **Not applicable**
- v) Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2006? **Yes** **No** If yes, please describe the impediment(s). Select DOE site statements on impediments are provided below:

Re-refined Oil
Re-refined oil was not available for specialized equipment and application in specific grades or viscosity-weight.
Re-refined oil was not amenable to high temperature applications.
New equipment with warranty stipulations precludes the use of re-refined oil.

h) Miscellaneous Products: Signage

- i) Does your Agency purchase this item (directly or through contracts or other mechanisms)? **Yes** **No** If no, skip to next section.
- ii) Total dollar amount of these products containing recovered materials purchased by your Agency in FY 2006 **\$640,782**.

- iii) Dollar amount of these products containing recovered materials purchased by your Agency in FY 2006 **\$217,403**. Almost 95% of the purchases in this category qualified as containing the required recycled content or were justified exemptions.
- OR -
Percentage of facilities using recycled content signage (either purchased directly or supplied by services contractors).
- iv) If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes **No** **Not applicable**
- v) Were there any technical impediments to increasing the purchase of this tem by your Agency in FY 2006? **Yes** **No** If yes, please describe the impediment(s). Select DOE site statements on impediments are provided below:

Signage
Due to usage requirements, recycled content signage was not available through the local vendor, or not available after extensive searching.
Special order signs were needed to meet specific requirements. The manufacturer would not guarantee the end products if the signs were constructed with recycled content plastic material.
Signage was part of a construction project where vendor claimed inability to obtain recycled content in certain types of signs.

3) Solid Waste Prevention, Recycling, and Other E.O. 13101 Requirements

- a) Did you institute new, substantially improved, or updated solid waste prevention practices in FY 2006? **Yes** **No** . Please provide an explanation of your response.

In FY 2006, the Deputy Secretary of Energy approved DOE Order 450.1 Chg 2 *Environmental Protection Program (12/07/05)* establishing new pollution prevention and sustainable environmental stewardship goals, including waste prevention and recycling goals, for DOE sites to achieve through the use of Environmental Management Systems (EMSs). The Order (Chg 2) provides strategies for achieving these goals, including the conduct of pollution prevention opportunity assessments of waste generating activities, and based on such assessments, establishing objectives and measurable targets in site EMSs for the prevention, reduction, reuse and recycling of waste streams generated at sites. Provided below are 4 examples of the 59 waste reduction projects undertaken by DOE sites during this reporting period:

Idaho National Laboratory’s Nuclear Materials Completion Project consolidated waste from three different facilities into a single waste container for shipment to Nevada Test Site, reducing the overall amount of solid, radioactive waste generated. What would typically have been three individual shipments was

consolidated into one shipment which significantly decreased the amount of waste shipped off-site (45 cubic feet instead of 135 cubic feet) and the overall cost of waste disposition.

The two Pantex cafeterias used recyclable styrofoam dishware and plastic cutlery for all meals served to employees. Working through the Environmental Management System (EMS), Pantex completed a project to convert the cafeterias to the use of reusable dishware and flatware, resulting in an annual waste reduction of almost 50 metric tons and an annual cost savings of over \$200,000.

Los Alamos National Laboratory determined that existing stainless steel slip top cans used to store transuranic (TRU) material would not meet the Department of Energy requirements to allow for pressure relief. The TRU waste team determined that only the new lids would be required rather than purchasing the complete can and lid assembly as previously planned. With the new lids, only the unusable, non-filtered lids will be disposed of as TRU waste, reducing TRU waste generated by 55 cubic meters.

Brookhaven National Laboratory instituted a Work Planning and Control process that requires all work performed to undergo an environmental, safety, and health review. The objective of this review is to establish a systematic approach to integrating pollution prevention (i.e., waste minimization, recycling) and environmentally preferable purchasing into project planning and decision making. In FY 2006, Brookhaven recycled over 5,000 tons of concrete as part of the demolishing of ten buildings onsite.

- b) How has your agency promoted the use of Waste Reduction Plans (FAR Clause 52.223-10) in demolition, construction, and service contracts to achieve waste diversion goals? Provide specific examples. Provisions for the preparation of Waste Reduction Plans have been incorporated into the Critical Decision documentation for project management of DOE capital asset acquisitions involving remediation and demolition contracts as well as contracts for the construction of new facilities and major renovation of existing facilities.
- c) Does your Agency have sites or facilities with composting programs?
Yes No If yes, how many facilities or sites? 16 sites reported composting or chipping wood. Estimate the total weight of materials diverted to composting: 1578 metric tons.
- d) What percentage of offices/sites operated by your Agency have an active office products recycling program? 41 of 44 reporting sites (93%).
- e) What percentage of residential housing operated by your Agency has an active household products recycling program? 425 of 425 houses (100% of housing). All houses are at one DOE site.

- f) What percentage of demolition projects managed by and/or contracted by your Agency includes the recovery of construction materials? 157 of 217 demolition projects (70%) included the recovery of construction materials.
- g) What percentage of the total solid waste⁴ generated by your Agency was diverted to recycling? 135,330 of 362,200 metric tons (37 %). For purposes of DOE reporting, solid waste includes sanitary waste and construction and demolition debris.
- h) Does your Agency have an internal awards program in accordance with Executive Order 13101, Section 8002? Yes No Please provide details for your response, or if the response is no, please explain. DOE's Pollution Prevention (P2) Awards Program is timed to precede the White House Closing the Circle Awards Program. The 33 recipients of the DOE P2 Best-in-Class Awards and the P2 Star Awards for FY 2006 were recognized at an award ceremony hosted by the Agency Environmental Executive during the Department's Earth Day celebration. Four of the DOE P2 award recipients received Closing the Circle Awards and two received honorable mention. All of award winners were also recognized by the Secretary of Energy in a congratulatory memorandum to headquarters and field elements across the complex. (See http://www.hss.energy.gov/NuclearSafety/NSEP/p2/p2awards/2006_Sec_memo_P2Awards.pdf)

More information on the award winning activities and all nominated activities is available at: <https://www.eh.doe.gov/p2/p2awards/>.

- i) In FY 2006, did your Agency participate in a pilot project to purchase environmentally preferable products or services per the requirements of E.O. 13101, sections 503 (b) and 601 (c)? Yes No Please provide details for your response.

In response to the Department's early adoption and promotion of the USDA Biobased Product Program, many sites have already transitioned to biobased products through either immediate purchase or after field testing.

Idaho National Laboratory received a grant from the United Soybean Board to pilot the use of three biobased products in its Transportation Services Department: a glass cleaner, a penetrating lubricant to dissolve rust, and a metal cleaner. The 2006 pilot tests were so successful that the products are now in the Laboratory's procurement system because of the high degree of user satisfaction with them.

Pacific Northwest National Laboratory received funding from both the United Soybean Board and the carpet manufacturer association to pilot carpet with biobased backing and recycled facing. To date, the carpet meets traditional carpet

⁴ "Solid waste" refers to municipal solid waste as defined by EPA. Please indicate if your Agency is including other materials, such as construction and demolition debris.

specifications and Laboratory performance and cleaning requirements. Plus, the cost is roughly the same as high end commercial nylon carpet.

Sandia National Laboratories, NM, conducts facility product reviews on new chemical products. One such review resulted in the pilot testing of a biobased soy product for paint stripping. The product was well received and will potentially replace a paint solvent with hazardous properties.

After a costly spill cleanup of petroleum-based hydraulic oil at Brookhaven National Laboratory's motor pool, the Lab decided to retrofit all hydraulic systems in the motor pool to accept biobased hydraulic oil.

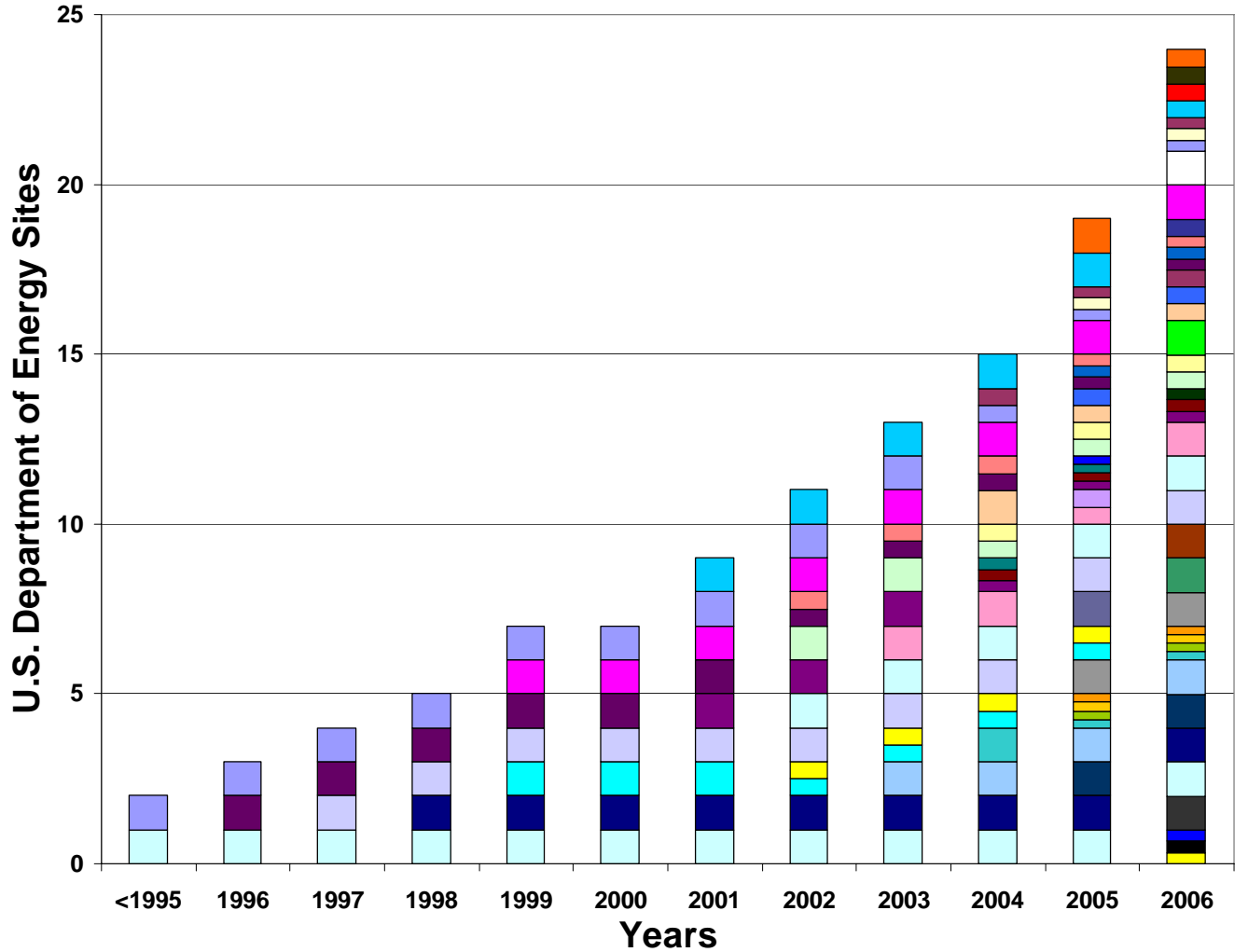
Additionally, DOE Acquisition Guide, *Greening the Government – Environmental Considerations in Acquisition* (Chapter 23) was issued in March 2006, addressing Green Acquisition Advocates role in promoting and implementing environmentally preferable purchasing, including the USDA Biobased Product Procurement Preference Program, in DOE contracting activities (Acquisition Guide Chapter 23 supercedes AL-2002-05).

- j) In FY 2006, did your Agency purchase or test any biobased products, other than biobased fuels? Yes No Please provide details for your response, including the source(s) of the products (e.g., GSA schedule, DLA, commercial source, support services contractor).

In FY 2006, the number of DOE sites using biobased products increased from 19 to 24 while the types of biobased products being purchased increased from 15 to 17. Figure 2 portrays DOE's purchase of biobased products in 2006, including general cleaners, windshield and wheel cleaners, lubricants, carpet, detergents, floor care products, absorbents, hydraulic fluid, strippers, roof sealant, insulation foam, and insulation cellulose, as well as biobased fuels and fuel additives.

- k) Is your Agency using green cleaning products or services at any of your facilities, including facilities managed by GSA and leased facilities? Yes No If yes, please elaborate. See Figure 2 below for the list of DOE sites using biobased products including cleaning products.

**Figure 2: U.S. Department of Energy Use of Biobased Products
FY 2006- In Use or Approved Use**



- | | |
|---|--|
| Albuquerque Ops Office - cleaners | Albuquerque Ops Office - lubricants |
| Albuquerque Ops Office - solvents | Ames Laboratory - ethanol |
| Argonne National Laboratory - ethanol | Brookhaven National Laboratory - hydraulic fluid |
| DOE-Headquarters - window cleaner | Fermi National Accelerator Laboratory - ethanol |
| Idaho National Laboratory - biodiesel | Idaho National Laboratory - lubricant |
| Idaho National Laboratory - wheel cleaner | Idaho National Laboratory - windshield cleaner |
| Lawrence Livermore National Laboratory - biodiesel | Los Alamos National Laboratory - hydraulic fluid |
| Los Alamos National Laboratory - absorbent | Los Alamos National Laboratory - lubricants |
| National Energy Technology Laboratory - cleaners | National Energy Technology Laboratory - fuel additives |
| National Renewable Energy Laboratory - ethanol | Nevada Test Site - biodiesel |
| Oak Ridge National Laboratory - ethanol | Oak Ridge National Laboratory - lubricant |
| Pacific Northwest National Laboratory - general cleaner | Pacific Northwest National Laboratory - floor care |
| Pacific Northwest National Laboratory - detergent | Pacific Northwest National Laboratory - carpet |
| Pacific Northwest National Laboratory - fuels | Pantex Plant - biodiesel |
| Pantex Plant - ethanol | Portsmouth- biodiesel |
| Princeton Plasma Physics Laboratory - hydraulic fluid | Princeton Plasma Physics Laboratory - general cleaner |
| Sandia National Laboratories CA - lubricants | Sandia National Laboratories NM - hydraulic fluid |
| Sandia National Laboratories NM - stripper | Sandia National Laboratories NM - ethanol |
| Sandia National Laboratories CA - cleaners | Savannah River Site - ethanol |
| West Valley Demonstration Project - cleaners | Weatherization Assistance Program - insulation cellulose |
| Weatherization Assistance Program - roof sealant | Weatherization Assistance Program - insulation foam |
| Western Area Power Administration - biodiesel | Western Area Power Administration - ethanol |
| Y-12 Security Complex - biodiesel | Y-12 Security Complex - cleaners |

4) **Management Controls**

a) **Green Purchasing Plan**

- i) Does your Agency have a formal, written, documented green purchasing plan, policy or procedure for the implementation of the statutory and executive order requirements to purchase green products? These include EPA-designated recycled content products under section 6002 of the Resource Conservation and Recovery Act, Energy Star and energy efficient products under section 104 of the Energy Policy Act of 2005, low standby power devices under E.O. 13221, USDA-designated biobased products under section 9002 of the Farm Security and Rural Investment Act, and environmentally preferable products and services under section 503 of E.O. 13101. **Yes** **No** **Some, but not all, program components**
(indicate which components your plan, policy or procedure addresses):
 EPA-designated recycled content products (RCRA section 6002)
 Energy Star and energy-efficient products (EPA Act 2005, section 104)
 Low standby power devices (E.O. 13221)
 Biobased products (FSRIA section 9002)
 Environmentally preferable products and services (E.O. 13101, section 503)
- ii) Does the Agency policy or green purchasing plan define responsibility for:
conducting awareness training? **Yes** **No**
Incorporating green purchasing requirements into specification and contracts⁵? **Yes** **No**
Establishing and measuring progress toward green purchasing objectives? **Yes** **No**
Reporting progress? **Yes** **No**
Management review? **Yes** **No**
If the answer to any question is no, please explain why not.
- iii) Does your Agency have a requirement to routinely update the green purchasing plan, policy or procedure? **Yes** **No** If so, has the plan been reviewed/updated in FY 2006? **Yes** **No**
- iv) FSRIA section 9002(d) requires procuring agencies that have responsibility for drafting or reviewing specifications to ensure that such specifications require the use of biobased products consistent with the requirements of section 9002. Does your Agency have responsibility for drafting or reviewing specifications? **Yes** **No** If yes, in FY 2006 did your Agency begin to review specification for the biobased products designated by the USDA in March 2006? **Yes** **No**
Please list specifications currently under review
Specifications for which review has been completed
Applicable specifications not yet under review
- v) Please attach a copy of, or provide the URL for, the website for your Agency green purchasing plan or policy if it has changed since the FY 2005

⁵ “Contracts” includes concession contracts, referring to non-FAR regulated business contracts authorized through applicable agency legislation.

report. DOE's Environmentally Preferable Purchasing Program Overview provides guidance on and web-based access to the policies, procedures and reporting related to the acquisition of recycled-content products, biobased-content products including biofuels, energy efficient products, and non-ozone depleting products. This Overview, in concert with the Acquisition Guide (Chapter 23), and the policies, procedures and reporting discussed therein constitute the Department's "green purchasing plan."

DOE's Environmentally Preferable Purchasing Program Overview is available at
http://www.hss.energy.gov/nuclearsafety/nsep/p2/epp/Interim_DOE_EPP_Overview_rev5%2022June06.pdf

Chapter 23 of the Acquisition Guide is available at
<http://management.energy.gov/documents/AcqGuide23pt0.doc>

b) Implementation

- i) Has your Agency contract writing system or enterprise asset management systems been revised to incorporate the supply and use of green products? Yes No N/A The Department of Energy is at an advanced stage in the development of a contract writing system which we expect to be operational in 2008. The STRIPES System will accommodate Green Purchasing as it will include the requisite provisions and clauses from both the FAR and our agency implementing regulation to facilitate Green Purchasing.
- ii) Is your Agency using or planning to use acquisition forecasts to promote its preference for green products? Yes No N/A
- iii) Is your Agency using or planning to use model solicitation and/or contract language to promote its preference for green products? Yes No N/A
- iv) If applicable, what other policies, procedures, or tools is your Agency using or planning to use to promote its preference for green products? In addition to the DEAR clauses (48 CFR 970.5204 & 5223-2) promoting green purchasing, the DOE Procurement Executive issued in FY 2006 an Acquisition Letter, *Energy Efficiency of Energy Using Products - Implementation of Section 104 of the Energy Policy Act of 2005* on specification of ENERGY STAR® qualified products or products conforming to Federal Energy Management Program (FEMP) Energy Efficiency Requirements in DOE acquisition contracts. This Acquisition Letter was issued in advance of a FAR Case adopting the energy efficiency model language for all Federal contracts. Also, an Acquisition Letter is pending (FY 2007) on DOE contractor purchasing of environmentally preferable *electronics*, and specification of Electronic Products Environmental Assessment Tool (EPEAT) - registered products in DOE acquisition contracts.

c) **Training**

- i) Who is responsible for conducting training of agency personnel with respect to the green purchasing requirements? Pursuant to DOE Order 450.1, Environmental Protection Program, the Office of Management, in coordination with other DOE elements (including the Office of Health, Safety, and Security, and the Office of Energy Efficiency and Renewable Energy), is responsible for including training on environmental requirements and environmental management system (EMS) in training programs for program managers, contracting personnel, procurement and acquisition personnel and facility managers, and for ensuring that procurement policies and procedures encourage the Department’s acquisition of environmentally preferable products.
- ii) How many acquisition personnel have documented⁶ green purchasing training within the past three years? 431 of 431 personnel (100 %).
- iii) Is training provided by Agency personnel, an outside source (e.g. Defense Acquisition University’s contracting officer training courses), or both? Both. Federal personnel have presented Green Acquisition training at both Federal and contractor-operated facilities. In addition, Acquisition Career Development Certification requirements for DOE’s contracting employees include a module on Green Purchasing.
- iv) What percentage of purchase cardholders has documented green purchasing training within the past three years, as required by Executive Order 13101? 2,305 of 2,305 (100 %) of all purchase cardholders and approving officials have completed Affirmative Procurement Training. available at: <https://www.eh.doe.gov/p2/ap/APPandEPPforPurchaseCards0205Rev.ppt>
- v) Who provides the training to purchase cardholders? Green purchasing training was developed by environmental and procurement personnel.
- vi) How is training of purchase cardholders documented? A Certificate of Completion is provided to cardholders and approving officials and then this information is furnished to the local purchase card coordinator.
- vii) Indicate which green purchasing program components the training for acquisition personnel and purchase holders, respectively, address:

Component	Acquisition Training (Y/N)	Purchase Card Holders (Y/N)
Recycled content products	Y	Y
Energy Star and energy efficient products	Y	Y
Low standby power devices	Y	Y
Biobased products	Y	Y
Environmentally preferable products and services	Y	Y

⁶ Document training other than the Green Purchasing course available through the Office of Personnel Management’s USALearning web site. OPM will provide data on use of this course to OMB and OFEE.

d) Program Management Review

- i) What percentage of Agency facilities conducted and documented contracting and/or environmental audits⁷ for green purchasing compliance during this reporting period? 33% of DOE contracting activities are required to complete a procurement self-assessment every three years which includes an Affirmative Procurement review.
- ii) Does the Agency conduct trend analysis of audit, training and FPDS data to assess green purchasing program effectiveness? **Yes** **No**
- iii) What types of trends are realized as a result of findings from these audits? While the auditing component of Green Purchasing is still too new to identify trends, DOE has tracked trends in environmentally preferable purchasing through its annual reports for several years. The trends vary by contracting activity but generally reveal greatest success in areas such as paper products and non-paper office products, and construction products. Impediments to greater APP compliance continue to be related to the non-availability or non-suitability of products for their required use. The trend analysis allows the DOE Green Acquisition Advocates to try to improve APP in areas when the Department has that are not been as successful.
- iv) Are audit findings reported to senior facility management? **Yes** **No**
- v) Does senior facility management track corrective actions from these audit findings? **Yes** **No**
- vi) Provide a copy of, or the URL for, the website for your Agency program management review protocol, procedure, or other similar program document, if you did not provide it in your FY 2004 or FY 2005 reports. http://management.energy.gov/policy_guidance/procurement_acquisition.htm

e) Agency Goals

- i) If not previously submitted or if changed in FY 2006, as required by E.O. 13101, what is your agency's goal for solid waste diversion by 2010? The 2005 goal for solid waste diversion was 35%. In FY 2006, the Deputy Secretary of Energy approved DOE Order 450.1 Chg 2 *Environmental Protection Program* establishing new performance-based pollution prevention and sustainable environmental stewardship goals, including waste prevention and recycling goals, for DOE sites to achieve through the use of Environmental Management Systems (EMSs). The Order (Chg 2) also provides strategies for achieving these goals, including the conduct of pollution prevention opportunity assessments of waste generating activities, and based on such assessments, establishing objectives and measurable targets in site EMSs for the prevention, reduction, reuse and recycling (i.e., diversion) of waste streams generated at sites.
- ii) What is your agency's current recycling or diversion rate? 37%
- iii) What is your agency's goal to increase the procurement of EPA-designated recycled content products? More focused training and communication to

⁷ Includes internal, corporate, external, or other audits

dispel some of the misconceptions about the use of recycled content products.

- iv) As required by E.O. 13101, does your agency have a goal for increasing the use of environmentally preferable products? **Yes** **No** If yes, what is the goal? 100% procurement of EPA-designated recycled content products. How are you measuring progress toward the goal? Total purchases with recovered content plus justified exceptions divided by total purchases is equal to the adjusted accomplishment. The adjusted accomplishment is over 91% for FY 2006.
- v) Has your agency established a goal for purchases of biobased products? **Yes** **No** In FY 2006, the Deputy Secretary of Energy approved DOE Order 450.1 Chg 2 *Environmental Protection Program (12/07/05)* establishing pollution prevention and sustainable environmental stewardship goals for DOE sites to achieve through the use of Environmental Management Systems (EMSs). The Order (Chg 2) establishes an environmentally preferable purchasing goal and provides strategies for achieving the goal, including a “green” purchasing strategy that specifies *biobased* among other environmentally preferable products in the acquisition of DOE site supplies and services.