

**U.S. DEPARTMENT OF ENERGY  
AFFIRMATIVE PROCUREMENT  
AND RECYCLING  
FISCAL YEAR 2007 REPORT**



*pursuant to:*

**Resource Conservation and Recovery Act §6002  
Farm Security and Rural Investment Act §9002  
and  
Executive Order 13423 “Strengthening Federal  
Environmental, Energy, and Transportation Management”**

**March 2008**

## FORWARD

This report has been prepared in response to the November 6, 2007, 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 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*.

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 2007 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 2007, and supplemental information on environmentally preferable purchasing, including biobased content products, electronics, and solid waste recycling.

## EXECUTIVE SUMMARY

- This report summarizes the Department of Energy (DOE) Fiscal Year (FY) 2007 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 all EPA-designated products with recovered content (i.e., containing recycled materials) for FY 2007. 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 2007, 62% of all DOE purchases in EPA-designated product categories contained recycled material. When adjusted for virgin-content products purchased due to lack of product availability, cost, or product performance considerations, 90% of all DOE purchases of EPA-designated products qualified as environmentally preferable purchases (see Table 1). Figure 1 provides a breakdown of purchasing categories.
- The Department’s purchasing power continues to play an important role in DOE’s commitment to environmental sustainability and waste prevention. In FY 2007, DOE purchases of products containing recycled material exceeded \$32.2 million.
- In FY 2007, the Department recycled 42.8% of the solid wastes (non-radioactive/non-hazardous) generated by its production, analytical, and research and development activities across the country.
- The survey component of the report provides specific purchasing data on the eight (8) identified indicator products containing recycled material, access to the Department’s RCRA Standard Report for FY 2007, and information on environmentally preferable products containing biobased material (see Figure 2).
  - Attachment 1 provides information on DOE solid waste diversion performance for FY 2007, including recycling rates and a breakdown of recycling categories.
  - Attachment 2 provides information on purchases of environmental preferable electronics, specifically, Electronic Product Environmental Assessment Tool (EPEAT)-registered desktop computers, laptops and monitors in FY 2007.

**Table 1 – FY 2007 DOE Purchases of EPA-Designated Products**

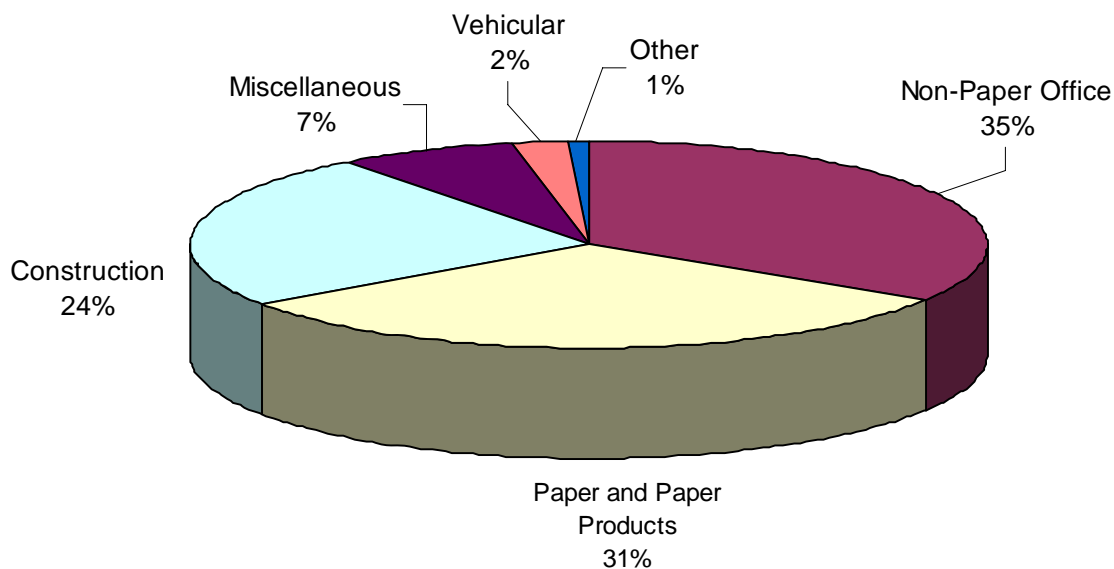
<b>Product Category</b>	<b>Total Purchases</b>	<b>\$ with Recovered Content</b>	<b>% with Recovered Content</b>	<b>Adjusted Total*</b>	<b>Adjusted Performance**</b>
<b>Construction</b>	<b>\$10,014,354</b>	<b>\$7,870,153</b>	<b>78.6%</b>	<b>\$9,599,506</b>	<b>95.9%</b>
Building Insulation Products	\$428,790	\$370,746	86.5%	\$394,669	92.0%
Carpet	\$660,888	\$531,031	80.4%	\$573,690	86.8%
Carpet Cushion	\$31	\$31	100.0%	\$31	100.0%
Cement and Concrete	\$7,006,245	\$6,514,881	93.0%	\$6,962,294	99.4%
Consolidated and Reprocessed Latex Paint	\$317,670	\$41,454	13.0%	\$312,673	98.4%
Floor Tiles	\$137,916	\$25,438	18.4%	\$94,246	68.3%
Flowable Fill	\$458,092	\$90,365	19.7%	\$273,615	59.7%
Laminated Paperboard	\$26,747	\$26,747	100.0%	\$26,747	100.0%
Modular Threshold Ramps	\$6,990	\$6,700	95.9%	\$6,990	100.0%
Nonpressure Pipe	\$129,312	\$78,434	60.7%	\$129,162	99.9%
Patio Blocks	\$8,211	\$2,986	36.4%	\$8,211	100.0%
Railroad Grade Crossing Surfaces	\$0	\$0	NA	\$0	NA
Roofing Materials	\$731,101	\$110,528	15.1%	\$726,963	99.4%
Shower and Restroom Dividers/Partitions	\$74,346	\$48,715	65.5%	\$62,716	84.4%
Structural Fiberboard	\$28,015	\$22,099	78.9%	\$27,499	98.2%
<b>Landscaping</b>	<b>\$276,497</b>	<b>\$117,415</b>	<b>42.5%</b>	<b>\$275,732</b>	<b>99.7%</b>
Compost	\$79,499	\$79,400	99.9%	\$78,999	99.4%
Garden and soaker hoses	\$10,809	\$3,002	27.8%	\$10,544	97.5%
Hydraulic Mulch	\$170,086	\$20,951	12.3%	\$170,086	100.0%
Landscaping Timbers	\$12,270	\$10,228	83.4%	\$12,270	100.0%
Lawn and Garden Edging	\$3,834	\$3,834	100.0%	\$3,834	100.0%
<b>Non-Paper Office</b>	<b>\$22,207,120</b>	<b>\$10,914,941</b>	<b>49.2%</b>	<b>\$18,974,514</b>	<b>85.4%</b>
Binders	\$751,528	\$395,818	52.7%	\$655,228	87.2%
Office Furniture	\$10,352,027	\$6,817,979	65.9%	\$8,200,937	79.2%
Office Recycling Containers	\$52,684	\$40,074	76.1%	\$52,279	99.2%
Office Waste Receptacles	\$67,133	\$23,782	35.4%	\$47,572	70.9%
Plastic Clip Portfolios	\$39,828	\$5,402	13.6%	\$11,759	29.5%
Plastic Clipboards	\$17,687	\$7,908	44.7%	\$16,314	92.2%
Plastic Desktop Accessories	\$252,452	\$89,285	35.4%	\$128,806	51.0%
Plastic Envelopes	\$45,302	\$23,330	51.5%	\$42,140	93.0%
Plastic File Folders	\$168,872	\$67,518	40.0%	\$159,545	94.5%
Plastic Presentation Folders	\$14,505	\$11,216	77.3%	\$13,768	94.9%

<b>Product Category</b>	<b>Total Purchases</b>	<b>\$ with Recovered Content</b>	<b>% with Recovered Content</b>	<b>Adjusted Total*</b>	<b>Adjusted Performance**</b>
Plastic Trash Bags	\$1,065,420	\$882,837	82.9%	\$1,025,893	96.3%
Printer Ribbons	\$14,210	\$4,664	32.8%	\$11,607	81.7%
Solid Plastic Binders	\$65,455	\$43,025	65.7%	\$47,065	71.9%
Toner Cartridges	\$9,300,017	\$2,502,103	26.9%	\$8,561,602	92.1%
<b>Paper and Paper Products</b>	<b>\$12,787,748</b>	<b>\$10,125,387</b>	<b>79.2%</b>	<b>\$11,835,282</b>	<b>92.6%</b>
Bristols	\$1,256,822	\$952,710	75.8%	\$1,073,178	85.4%
Coated Printing Papers	\$357,982	\$244,184	68.2%	\$326,188	91.1%
Commercial/Industrial Sanitary Tissue	\$2,606,257	\$2,156,515	82.7%	\$2,544,011	97.6%
Miscellaneous Paper Products (Tray Liners)	\$310,121	\$175,234	56.5%	\$293,097	94.5%
Newsprint	\$66,195	\$62,382	94.2%	\$66,195	100.0%
Paperboard and Packaging Products	\$699,108	\$541,684	77.5%	\$609,017	87.1%
Uncoated Printing and Writing Papers	\$7,491,260	\$5,992,677	80.0%	\$6,923,593	92.4%
<b>Park and Recreation</b>	<b>\$88,772</b>	<b>\$66,281</b>	<b>74.7%</b>	<b>\$88,772</b>	<b>100.0%</b>
Park Benches and Picnic Tables Containing Recovered Aluminum, Steel, Concrete, or Plastic	\$20,139	\$17,209	85.5%	\$20,139	100.0%
Plastic Fencing	\$36,208	\$18,072	49.9%	\$36,208	100.0%
Playground Equipment Containing Recovered Plastic, Steel, or Aluminum	\$1,425	\$0	0.0%	\$1,425	100.0%
Playground Surfaces	\$31,000	\$31,000	100.0%	\$31,000	100.0%
Running Track	\$0	\$0	NA	\$0	NA
<b>Transportation</b>	<b>\$104,356</b>	<b>\$84,580</b>	<b>81.0%</b>	<b>\$99,988</b>	<b>95.8%</b>
Channelizers	\$251	\$251	100.0%	\$251	100.0%
Delineators	\$6,680	\$4,927	73.8%	\$6,574	98.4%
Flexible Delineators	\$4,271	\$4,271	100.0%	\$4,271	100.0%
Parking Stops	\$2,547	\$2,547	100.0%	\$2,547	100.0%
Traffic Barriers	\$59,079	\$55,535	94.0%	\$59,079	100.0%
Traffic Cones	\$31,528	\$17,049	54.1%	\$27,266	86.5%
<b>Vehicular</b>	<b>\$3,172,427</b>	<b>\$757,827</b>	<b>23.9%</b>	<b>\$2,942,486</b>	<b>92.8%</b>
Re-refined Lubricating Oil	\$641,190	\$297,518	46.4%	\$518,774	80.9%
Rebuilt Vehicular Parts	\$1,410,330	\$220,541	15.6%	\$1,392,103	98.7%
Reclaimed Engine Coolants	\$26,912	\$6,040	22.4%	\$24,450	90.9%
Retread Tires	\$1,093,996	\$233,729	21.4%	\$1,007,160	92.1%

Product Category	Total Purchases	\$ with Recovered Content	% with Recovered Content	Adjusted Total*	Adjusted Performance**
<b>Miscellaneous</b>	<b>\$3,747,219</b>	<b>\$2,320,659</b>	<b>61.9%</b>	<b>\$3,357,491</b>	<b>89.6%</b>
Awards and Plaques	\$135,634	\$58,726	43.3%	\$125,042	92.2%
Bike Racks	\$9,206	\$1,400	15.2%	\$9,206	100.0%
Blasting Grit	\$10,090	\$0	0.0%	\$10,090	100.0%
Industrial Drums	\$2,264,426	\$1,770,885	78.2%	\$2,223,750	98.2%
Manual-Grade Strapping	\$87,027	\$5,511	6.3%	\$22,272	25.6%
Mats	\$170,815	\$71,293	41.7%	\$137,229	80.3%
Pallets	\$156,043	\$13,515	8.7%	\$68,050	43.6%
Signages	\$558,971	\$232,076	41.5%	\$476,178	85.2%
Sorbents	\$355,008	\$167,254	47.1%	\$285,675	80.5%
<b>TOTALS:</b>	<b>\$52,398,493</b>	<b>\$32,257,243</b>	<b>61.6%</b>	<b>\$47,173,771</b>	<b>90.0%</b>

\* 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: Category Breakdown of Recycled Content Purchasing**

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

Date Survey Prepared: March 2008

**Resource Conservation and Recovery Act §6002  
Farm Security and Rural Investment Act §9002  
Executive Order 13423, *Strengthening Federal Environmental,  
Energy, and Transportation Management***

Agency Report for Fiscal Year: 2007

Agency or Department: United States Department of Energy

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

- a) Attach the RCRA Standard Report for FY 2007 data from FPDS (“Recycled Content Product Purchasing Data Report”). The report is available at <http://www.hss.energy.gov/pp/archives/FPDS07AwardDetail.xls>.
- b) Has the Agency reviewed the FY 2007 FPDS data 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 amount<sup>1</sup> of these products purchased<sup>2</sup> by your Agency from sources *other than* GSA in FY 2007 **\$2,606,257** and dollar amount of

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<sup>1</sup> “Total amount” equals the amount of product without recovered materials plus the amount of product with recovered materials.

these products containing recovered materials<sup>3</sup> purchased by your Agency from sources *other than* GSA in FY 2007 **\$2,156,515**. Over 97% of 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 2007? Yes  No  If yes, please describe the impediment(s). Select DOE site statements on impediments are provided below:

<b>Commercial Sanitary Tissue Products</b>
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 2007 **\$9,300,017**.
- iii) Dollar amount of these products containing recovered materials (remanufactured toner cartridges or replacement cartridges containing recovered materials) purchased by your Agency from sources *other than* GSA or DLA in FY 2007 **\$ 2,502,103**. Over 92% of purchase 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).
- iv) If this product is purchased using an Agency specification, does that specification require the use of remanufactured toner cartridges or cartridges containing recovered materials? Yes  No  Not applicable

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.



- v) Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2007? Yes  No  If yes, please describe the impediment(s). Select DOE site statements on impediments are provided below:

<b>Toner Cartridges</b>
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 modifying certain lines of printers to require the use of new replacement cartridges of their own manufacture (i.e., precludes the use of remanufactured cartridges from other suppliers).

c) **Construction Products**

**Demonstrate how your agency complies with the requirement to purchase EPA-designated construction products containing recovered materials or USDA-designated biobased construction products to the maximum extent practicable. Examples include integrating specific recycled content or biobased content product requirements with the use of the U.S. Green Building Council’s LEED-NC or LEED-EB, incorporating recycled content or biobased content product requirements into design specifications, and inserting recycled content or biobased content product requirements in design/build contracts.**

In FY 2007, 24 sites reported purchases of \$7,870,153 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 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);

- Acquisition Guide, Chapter 23, Environment, Conservation, and Occupational Safety, revised and issued June 2007, provides clauses to be inserted into service and construction contracts specifying the use of recycled and biobased content products (see [http://management.energy.gov/policy\\_guidance/Acquisition\\_Guide.htm](http://management.energy.gov/policy_guidance/Acquisition_Guide.htm)).
- 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 principles, including environmentally preferable purchasing of construction products containing recovered material, in the design and construction of new facilities and major renovations of existing facilities;
- DOE's Transformational Energy Action Management (TEAM) Initiative, announced on August 8, 2007, is a Department-wide effort aimed at meeting or exceeding the goals of E.O. 13423, including the High Performance Sustainable Building (HPSB) goal. As part of this Initiative, DOE is aspiring to Leadership in Energy and Environmental Design (LEED) Gold Certification as the means for achieving and documenting HPSB.

**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 purchased by your Agency from sources *other than GSA or DLA* in FY 2007 **\$12,270**.
- iii) Dollar amount of these products containing recovered materials purchased by your Agency in FY 2007 **\$10,228**. 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 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 2007? **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 purchased by your Agency from sources *other than GSA* in FY 2007 **\$20,139**.
- iii) Dollar amount of these products containing recovered materials purchased by your Agency in FY 2007 **\$17,209**. 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 2007? **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 purchased by your Agency from sources *other than GSA* in FY 2007 **\$59,079.**
- iii) Dollar amount of these products containing recovered materials purchased by your Agency in FY 2007 **\$55,535.** 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 2007? **Yes**  **No**  If yes, please describe the impediment(s).

**g) Vehicular Products: Engine Lubricating 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 purchased by your Agency from sources *other than DLA* in FY 2007 **\$641,190.**
- iii) Dollar amount of these products containing recovered materials (i.e., re-refined oil) purchased by your Agency in FY 2007 **\$297,518.** Almost 81% 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 2007? **Yes**  **No**  If yes, please describe

the impediment(s). Select DOE site statements on impediments are provided below:

<b>Engine Lubricating Oil</b>
Re-refined oil of specific grades and viscosity-weight were unavailable, or unavailable in small quantities needed.
Re-refined oil was not amenable to high temperature applications.
Re-refined oil was not amenable to off-road, rugged terrain vehicle applications.

**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 purchased by your Agency from sources *other than GSA* in FY 2007 **\$558,971.**
- iii) Dollar amount of these products containing recovered materials purchased by your Agency in FY 2007 **\$232,076.** Over 85% 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 item by your Agency in FY 2007? **Yes**  **No**  If yes, please describe the impediment(s). Select DOE site statements on impediments are provided below:

<b>Signage</b>
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.

**3) Solid Waste Prevention, Recycling, and Other E.O. 13423 Requirements**

- a) Did you institute new, substantially improved, or updated solid waste prevention practices in FY 2007? **Yes**  **No**  Please provide an explanation of your response.

In FY 2007, DOE continued to strive to meet the sustainable environmental stewardship goals established in DOE Order 450.1 Chg 2 *Environmental Protection Program (12/07/05)*. These goals, including waste prevention and recycling, are to be achieved through the EMSs in-place at DOE sites. Provided

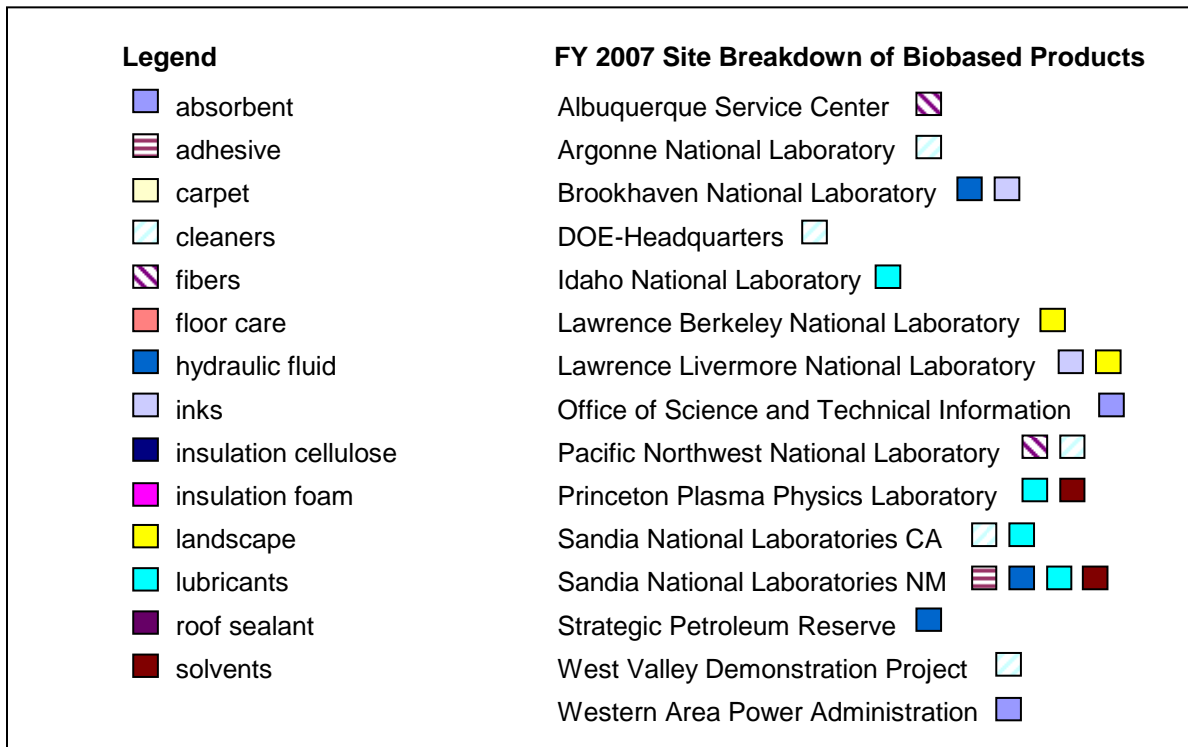
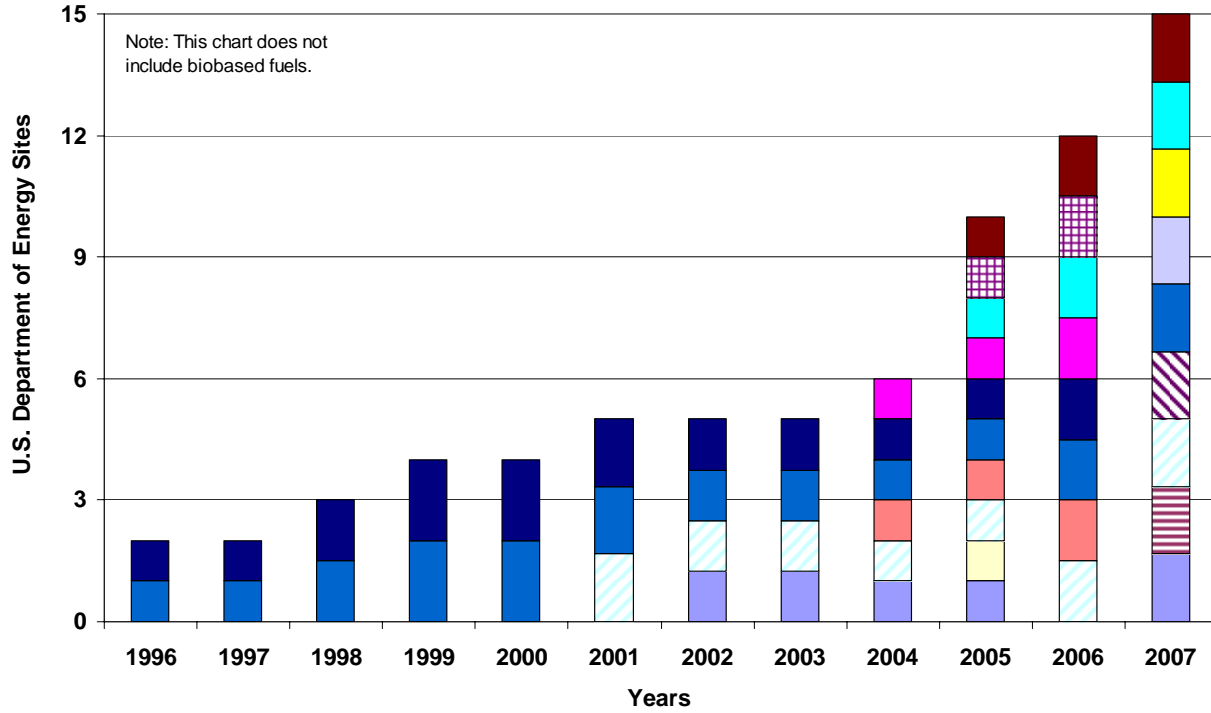
below are 5 examples of the 56 waste reduction projects reported by DOE sites during FY 2007:

- Brookhaven National Laboratory's (BNL) Biology Department developed a technique that uses fluorescently labeled oligonucleotides to replace the use of radioactive labels, saving \$67,000 and avoiding the generation of mixed low-level radioactive and hazardous wastes (MLLW);
- At the Savannah River Site, H Canyon's Shift N4 decontaminated the third level of the canyon over a 20 shift period. This decontamination effort eliminated a radiological barricade, and personnel assigned to third level no longer have to don and doff radiological protective clothing, eliminating the need for over 2,300 required dress-outs and saving over \$27,000 per year;
- At the Hanford Site, the reuse of metal boxes used for packaging and transporting low-level radioactive wastes and MLLW offsite for size reduction and/or treatment prior to final disposal has enhanced safety in decontamination activities and yielded a cost savings of over \$200,000 per year;
- The Argonne National Laboratory invested in a solvent recycler to eliminate the need to continually purchase and dispose of toluene and isopropanol, thereby avoiding 350 gallons of hazardous waste and \$61,000 each year; and
- Sandia National Laboratories developed methods to safely reduce the amount of personal protective equipment needed in a clean lead processing area. Based on sampling and industry standards, it was determined that the personal protective equipment, including shoe covers, respirator cartridges and hoods could be reused while still maintaining a ultra-conservative safety envelope.

- 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? 19 sites reported composting or chipping wood. Estimate the total weight of materials diverted to composting: 1,923 metric tons.
- d) What percentage of offices/sites operated by your Agency has 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? 214 of 214 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? 105 of 171 demolition projects (61%) included recovery of construction materials.

- g) What percentage of the total solid waste generated by your Agency was diverted? 94,136 of 220,101 metric tons (42.8 %). For purposes of DOE reporting, solid waste includes sanitary waste and construction and demolition debris.
- h) Does your Agency have a leadership awards program to recognize outstanding environmental, energy, or transportation management performance in accordance with Executive Order 13423, Section 3(c)(iii)? **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 recipients of the DOE P2 Best-in-Class and the P2 Star Awards are recognized at an award ceremony during the Department's annual Earth Day celebration. In FY 2007, two of the DOE P2 award recipients received White House Closing the Circle Awards and two received Honorable Mention. All of the FY 2007 award winners were also recognized by the Secretary of Energy in a congratulatory memorandum to headquarters and field elements across the complex.
- i) In FY 2007, did your Agency purchase environmentally preferable products or services per the requirements of E.O. 13423? **Yes**  **No**  Please provide details for your response. In addition to recycled content products identified in Table 1, a broad suite of products covered by E.O.13423 were purchased by DOE sites: alternative fuels/vehicles, biobased content, electronics (EPEAT-registered), energy/water efficient (Energy Star® and FEMP-designated energy efficient), non-ozone depleting, and other non-toxic or less-toxic products. See Attachment 2 for further details of the Department's purchase of EPEAT-registered electronics.
- j) In FY 2007, did your Agency purchase or test any biobased products, other than biobased fuels or the products designated by USDA? **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. See Figure 2 below for the list of DOE sites using biobased products, including USDA designated products.
- 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 a list of DOE sites using biobased products, including cleaners.

**Figure 2: U.S. Department of Energy Use of Biobased Products  
FY 1996 to 2007- In Use or Approved for Use**



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 FEMP-designated 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 sec. 2(d) of E.O. 13423.  
**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 and E.O. 13423)  
 Energy Star and energy-efficient products (EPAct 2005, section 104, and E.O. 13423)  
 Low standby power devices (E.O. 13221)  
 Biobased products (FSRIA section 9002 and E.O. 13423)  
 Environmentally preferable products and services (E.O. 13423)
- ii) Does the Agency policy or green purchasing plan define responsibility for:  
Conducting awareness training? **Yes**  **No**   
Incorporating green purchasing requirements into specification and contracts<sup>4</sup>? **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, was the plan reviewed/updated in FY 2007? **Yes**  **No**  In June 2007, DOE's Acquisition Guide, *Strengthening Federal Environmental, Energy, and Transportation in Acquisition—Chapter 23*, which in conjunction with DOE's *Environmentally Preferable Purchasing Program Overview* forms DOE's green purchasing plan, was renamed and updated to implement the sustainable acquisition requirements of E.O. 13423, including new items such as the EPEAT- registered electronics, WaterSense water efficiency labeling program, Plug-In Hybrid Vehicles, and Sustainable Design/High Performance Building.
- iv) FSRIA section 9002(d) requires procuring agencies that have responsibility for drafting or reviewing specifications to ensure that such

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<sup>4</sup> "Contracts" includes concession contracts, referring to non-FAR regulated business contracts authorized through applicable agency legislation.



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 2007 did your Agency review specifications 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 2006 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%2022.June06.pdf](http://www.hss.energy.gov/nuclearsafety/nsep/p2/epp/Interim_DOE_EPP_Overview_rev5%2022.June06.pdf)

Chapter 23 of the Acquisition Guide is available at

[http://management.energy.gov/policy\\_guidance/Acquisition\\_Guide.htm](http://management.energy.gov/policy_guidance/Acquisition_Guide.htm)

**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 is expected to be operational in 2008. The STRIPES System will accommodate the supply and use of green products and will include the requisite provisions and clauses from both the FAR and DEAR implementing regulations to facilitate environmentally preferable 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, in June 2007, issued an update of Acquisition Guide Chapter 23 to implement the sustainable

acquisition requirements of E.O. 13423, including new items such as the EPEAT- registered electronics, WaterSense water efficiency labeling program, Plug-In Hybrid Vehicles, and Sustainable Design/High Performance Building. DOE also holds quarterly teleconferences for all DOE sites to promote the purchase of green products.

**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 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 documented green purchasing training within the past three years? 493 of 493 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 Purchasing 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? 2,040 of 2,040 (100 %) of all purchase cardholders and approving officials have completed Green Purchasing 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 and updated in 2007.
- 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

**d) Program Management Review**

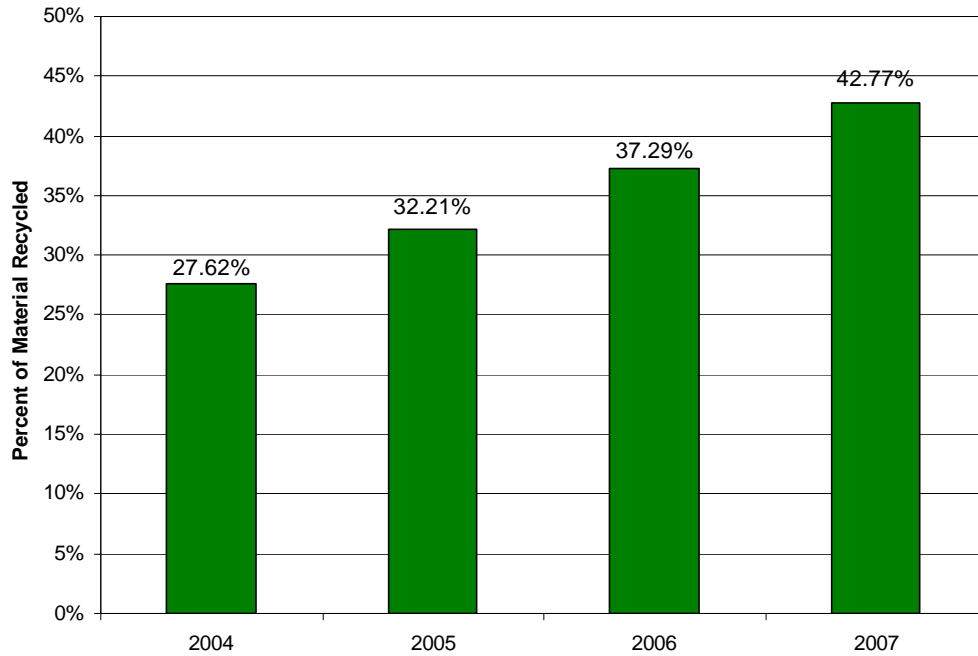
- i) What approach does your agency use for reviewing compliance with the green purchasing requirements? Examples include reviewing a representative sample of contracting actions, on-site audits, and the use of the TEAM Guide or CP Track. Sites conduct and document contracting reviews for green purchasing compliance. In addition, DOE Headquarters staff review site environmental preferable purchasing data for consistency and trending prior to compilation for the Department’s annual Affirmative Procurement and Recycling report. All flagged entries are brought to the site’s attention for confirmation or correction. Additionally, an attempt is made to contact each site to review its individual performance to help overcome compliance obstacles, technical impediments, and facilitate continued improvement.
- ii) What percentage of Agency facilities conducted and documented contracting and/or environmental reviews 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
- iii) Does the Agency conduct trend analysis of program management review, training, and FPDS data to assess green purchasing program effectiveness? **Yes**  **No**
- iv) What types of trends are realized as a result of findings from these audits? 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 focus on APP areas that are not as successful. DOE issued Acquisition Letter, *Environmentally Preferable Purchasing Through the Use of the Electronic Product Environmental Assessment Tool (EPEAT) (AL-2007-08)* in April 2007, in advance of the FAR clause on EPEAT (December 2007). This Acquisition Letter established the Department as an early adopter of EPEAT-registered electronics in DOE acquisition contracts.
- v) Are findings reported to senior facility management? **Yes**  **No**

- vi) Does senior facility management track corrective actions from these findings? **Yes**  **No**
- vii) 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, FY 2005, or FY 2006 reports. Previously provided in the FY 2006 report.

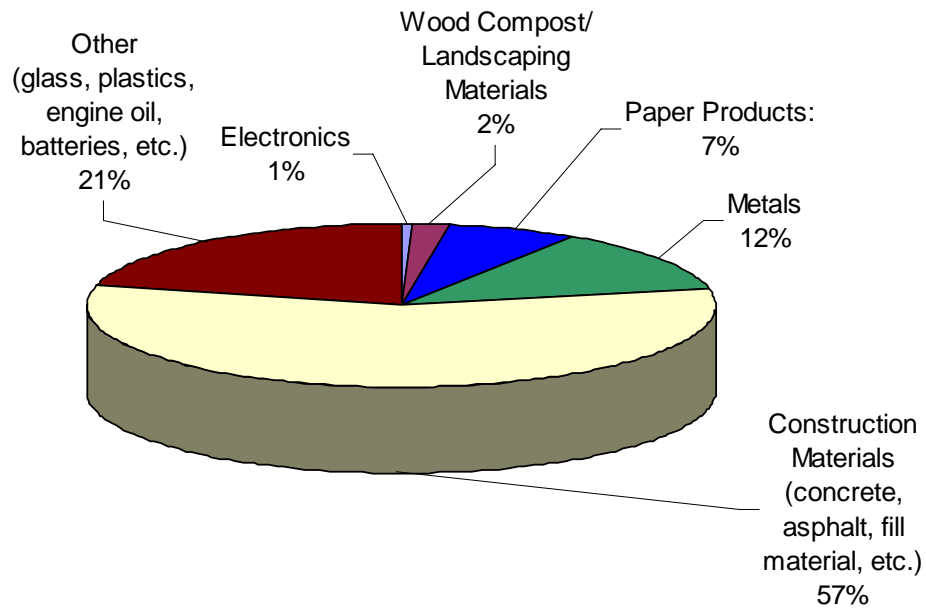
## Attachment 1 – Recycling Efforts

- DOE recycled 42.8% of the solid wastes (non-radioactive/non-hazardous) generated by its production, analytical, and research and development activities across the country. Figure 1 shows the trend for DOE’s recycling efforts. Figure 2 provides a breakdown by category.

**Figure 1. DOE Recycling Data Trends (2004-2007)**



**Figure 2. Breakdown of Materials Recycled for 2007**



## Attachment 2 – Electronic Stewardship

- DOE is a leader in the environmental stewardship of electronics, becoming the first Federal agency to obtain a green score on the electronics stewardship component of the 2007 OMB Environmental Stewardship Scorecard.
- For FY 2007, the Department purchased over 34,000 EPEAT-registered personal desktop computers, laptops, and monitors were reported by 21 procurement officials across the DOE complex.
- Sites reported reusing or recycling over 98.6% of electronics disposed in FY 2007.

**Figure 1. Breakdown of Computer Purchases by Type**

