# ENVIRONMENTAL STEWARDSHIP SCORECARD Department of Energy

	CURRENT STATUS (As of January 1, 2008)	PROGRESS	COMMENTS
ENVIRON- MENTAL STEWARDSHIP  Senior Agency Official: Alexander Karsner  Lead EOP Analysts: Cyndi Vallina and		Actions taken since July 1, 2007: DOE continued to address implementation of the new EMS requirements in EO 13423: • Revising DOE Order 450.1, Environmental Protection Program to establish EMS as the management framework for implementing the sustainable practices and goals of EO 13423 Draft Order is in the formal departmental review and comment process.	<ul> <li>DOE Order 450.1, Environmental Protection Program (01/15/03), requires implementation of EMS at DOE sites, pursuant to EO 13148.</li> <li>100% of DOE "appropriate facilities" declared that an EMS is in place (06/30/07).</li> <li>Detailed information on DOE's implementation of EMS at "appropriate facilities" across the</li> </ul>
Dana Arnold		<ul> <li>Training sessions on new EMS requirements in EO 13423 and "Integration of EMS and Integrated Safety Management" were conducted at DOE's annual Integrated Safety Management workshop in November.</li> <li>Continued to develop the DOE Environmental Management System Assistance Network (EMSAN) with monthly conference calls to share information and assistance among DOE and contractor staff on EO 13423 new EMS requirements and revision of</li> </ul>	complex is reported annually to the EPA and OFEE, based on site information reported in the on-line FedCenter reporting database.

DOE Order 450.1.  • Continued participation in Interagency Environmental
Leadership Workgroup subgroups on EMS metrics and organization- wide EMS guidance.  • DOE sites continued annual reporting on EMS metrics status; for FY 2007, 79% are "green" under the EMS scorecard metrics.
Planned actions for next six months:  • Finalize and issue revised DOE Order 450.1A, Environmental Protection Program implementing new EMS requirements, sustainable environmental practices and goals at DOE sites.
Complete tabulation of DOE site-specific, self-reported data for the DOE FY 2007 EMS metrics status report, and submit final report to EPA and OFEE for the OMB Environmental Stewardship Scorecard.
Conduct a DOE EMS Training     Workshop following the Western     Federal Environmental Symposium     in Montana in June.
Continue to support and expand EMSAN to provide technical assistance to DOE sites on implementing EO 13423 sustainable practices and goals in the site's EMS.

	Continue to support the Interagency Environmental Leadership Workgroup subgroups on metrics and organization-wide EMSs.	
	Continue to assist EPA and OFEE in developing Federal guidance on incorporating EO 13423 goals, including the multi-year energy and transportation goals, into EMSs.	

Six Month Progress Report (July–December, 2007)

- Green purchasing:
- \_√\_Agency has affirmative procurement program (APP) for all green products and services, demonstrates & monitors compliance, develops corrective actions if applicable, and conducts training (G)
- \_\_\_\_Agency has APP and representative acquisitions for all covered areas (Y)

## Actions taken since July 1, 2007

- DOE continued to acquire environmentally preferable products, when available, affordable and effective.
- DOE contracting activities perform a procurement self-assessment every three years which includes an affirmative procurement review. Approximately one-third of the contracting activities procurement self-assessments were conducted in FY 2007.
- Conducted annual Pollution
   Prevention Tracking and Reporting
   System data call covering
   Department-wide purchases of
   environmentally preferable
   products in FY 2007. Data call
   includes DOE purchases of USDA
   designated biobased products and
   EPEAT-registered electronics.
- Training workshop provided (07/26/07) to DOE site pollution prevention coordinators and green acquisition advocates (procurement personnel) on DOE Acquisition Guide Chapter 23 and environmentally preferable purchasing including purchases of designated biobased products and EPEAT-registered electronics under EO 13423.

- DOE established policies for the acquisition of environmentally preferable products, including:
  - 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)
- 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. GAAs have been in place at all major DOE sites since 2002 [Replaced by the updated DOE Acquisition Guide, Chapter 23, Strengthening Federal Environmental, Energy, and Transportation Management in Acquisition].
- DOE Acquisition Letter, Energy Efficiency of Energy Using Products - Implementation of Section 104 of the Energy Policy Act of 2005 on specification of

- Training televideo conference conducted (12/13/07) on environmentally preferable purchasing under EO 13423, and USDA Biobased Preference Program.
- On-site technical support provided to Brookhaven National Laboratory and the Princeton Plasma Physics Laboratory on environmentally preferable purchasing including purchases of designated biobased products and EPEAT-registered electronics under EO 13423.
- Revising DOE Order 450.1, Environmental Protection Program to integrate EO 13423 sustainable acquisition practices and goals into EMSs at DOE sites.
  - Draft Order is in the formal departmental review and comment process.

### Planned actions for next six months:

- Prepare FY 2007 annual progress report for activities related to EO 13423 sustainable acquisition practices and goals, highlighting DOE purchases of recycled-content products, expansion of biobasedcontent product purchasing, EPEAT-registered electronics purchasing, and solid waste diversion (recycling).
- Continue to support and expand the Environmental Management

- ENERGY STAR® qualified products or products conforming to FEMP Energy Efficiency Requirements in DOE acquisition contracts.
- DOE Acquisition Letter, Environmentally Preferable Purchasing Through the Use of the Electronic Product Environmental Assessment Tool (EPEAT) (AL-2007-08) on DOE contractor purchasing of environmentally preferable electronics, and specification of EPEAT-registered products in DOE acquisition contracts.
- 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 in the acquisition of DOE site supplies and services.
- DOE Acquisition Guide, (formally)
   Greening the Government –
   Environmental Considerations in
   Acquisition (Chapter 23)

System Assistance Network (EMSAN) to provide training and technical assistance to DOE sites on implementing EO 13423 sustainable acquisition practices and goals in the site's EMS.  • Continue outreach and education program on environmentally preferable purchasing at DOE, including the conduct of training workshops, televideo conferences, and quarterly conference calls with site green acquisition advocates (procurement personnel) and pollution prevention coordinators.  • Finalize and issue revised DOE Order 450.1A, Environmental Protection Program implementing new EMS requirements, and sustainable acquisition practices and goals at DOE sites.	addresses the role of the Green Acquisition Advocates in promoting and implementing environmentally preferable purchasing, including the USDA Biobased Product Procurement Preference Program in DOE contracting activities (Acquisition Guide Chapter 23.0 supersedes AL-2002-05).  In June 2007, DOE Acquisition Guide, Strengthening Federal Environmental, Energy, and Transportation in Acquisition — Chapter 23 was renamed and updated to implement the sustainable acquisition requirements of EO 13423. Includes new items such as the Electronic Product Environmental Assessment Tool (EPEAT-network), the WaterSense water efficiency labeling program, Plug-In Hybrid Vehicles, and Sustainable Design/High Performance Buildings  DOE Environmentally Preferable Purchasing Program Overview provides guidance on and webbased access to the policies, procedures and reporting related to the acquisition of recycled-content products, biobased-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."  • Detailed information on DOE's Environmentally Preferable Purchasing, including acquisitions of recycled-content, biobased-content, and EPEAT-registered products, is reported in the annual APP progress report to the OFEE and OMB. This report also includes DOE information on solid waste diversion (recycling), green purchasing promotion, training, and compliance monitoring and auditing.  • DOE purchases of recycled-content products exceeded \$28.5 million, and 37% of solid waste diverted/ recycled in FY2006  • In 2006, four DOE sites and DOE headquarters won White House Closing-the-Circle Awards for exemplary achievement in the "green" purchasing category.
	<ul> <li>DOE received a 2007 White House Closing-the-Circle Honorable Mention for "Early and Continuing Promotion of Biobased Products" in the green purchasing category.</li> </ul>

- Sustainable design/green bldgs:
  - \_\_\_ Implements Guiding
    Principles and on track to meet
    the 15% goal by 2015 (G)
  - \_\_\_ Implements Guiding
    Principles on all *new* building
    projects & leased space (Y)

# Actions Taken Since July 1, 2007

- Revising DOE Order 430.2B,
   *Departmental Energy, Utilities, and Transportation Management*, to
   include requirement that new
   construction, major renovations,
   and 15 percent of existing capital
   asset building inventory incorporate
   High Performance Sustainable
   Building principles, as specified in
   EO 13423. New construction
   projects are expected to obtain
   Leadership in Energy and
   Environmental Design (LEED) Gold
   Certification.
- Draft Order is in the formal departmental review and comment process.
- Draft DOE Guide 413.3-6, High Performance Sustainable Building (HPSB) has been developed. The Guide focuses on incorporating HPSB principals in program and project management of capital assets involving new construction and major renovation of facilities, pursuant to the HPSB requirements of DOE Order 413.3A, and EO 13423.
- Secretary of Energy announced the Transformational Action Energy Management (TEAM) Initiative in August 2007, to include a commitment that DOE new construction, major renovations, and 15 percent of existing capital

- Assistant Secretary for Energy Efficiency and Renewable Energy, DOE's Senior Energy Official under EO 13123, signed the Memorandum of Understanding for Federal Leadership in High Performance and Sustainable Buildings on January 24, 2006.
- 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. The Order provides strategies for achieving the goals, including a "green building" strategy that specifies the application of sustainable building design criteria when planning and constructing new facilities or modifying existing facilities to optimize life-cycle costs, reduce pollution, minimize energy consumption, conserve water, and enhance indoor air quality, worker safety and productivity.
- 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

- asset building inventory incorporate the HPSB principles, and obtain LEED Gold Certification.
- Chartered a High Performance Sustainable Buildings Work Group (HPSBWG), with representatives from each of the Department's real property owning programs, to advise DOE on meeting the HPSB goals of EO 13423, and the TEAM Initiative
- Draft Secretarial memorandum. currently under Departmental review, re-affirms DOE commitment to meeting or exceeding EO 13423 HPSB requirements, including having all capital asset new construction and major renovation projects at Critical Decision One implement the HPSB principles, as specified in EO 13423 and be certified to the LEED Gold Standard, and instructing all real property owning and leasing programs to develop and implement plans to ensure that 15% of their enduring buildings are compliant with the EO HPSB requirements.
- HPSBWG tabulated current inventory of high performing buildings within DOE, including those projects registering with the U.S. Green Building Council as intending to achieve LEED certification, for the Interagency

- Performance Sustainable Building (HPSB) principals in the planning, programming, budgeting, and acquisition of capital assets. The Order stipulates that contractors responsible for program and project management of Department-owned facilities must apply HPSB principals to the siting, design, construction, and commissioning of new facilities and major renovations of existing facilities. [http://homer.ornl.gov/oepa/guidance/ems/o413\_postcard.pdf]
- Training on sustainable design principles and the Leadership in Energy and Environmental Design (LEED) rating system was provided at the DOE 2006 Pollution Prevention Workshop.
- DOE's sustainable buildings, including those with LEED certification, are listed in the Interagency Sustainable (Building) Working Group (ISBWG) High Performance Federal Building Database.
- DOE's Three Year Rolling
   Timeline for the Real Property
   Asset Management Plan has been
   modified to include a section on
   HPSB expectations, performance
   measures, and milestones.
- DOE's National Renewable

Sustainable (Building) Working Group (ISBWG) on-line High Performance Federal Building Database.

 Reported, as a success story on the ISBWG on-line High Performance Federal Building Database, a description of the National Renewable Energy Laboratory's Science and Technology Facility, which is the first Federal facility to obtain a LEED platinum rating.

## Planned actions for next six months

- Submit draft DOE Guide 431.3-6, High Performance Sustainable Building to the formal departmental review and comment process.
- Finalize and issue DOE Order 430.2B, Departmental Energy, Utilities, and Transportation Management to implement the HPSB requirements of EO 13423 and the Team initiative at DOE sites.
- HPSBWG will develop a plan for determining a DOE real property HPSB baseline for use in achieving the EO 13423 HPSB 15% of existing building inventory by 2015 goal.
- Continue participation in the Interagency Sustainability (Building) Working Group.

Energy Laboratory's 71,000-sq. ft., \$22.7-million, state-of-the-art Science & Technology Facility received a Leadership in Energy and Environmental Design (LEED) platinum-rating by the U.S. Green Building Council (03/07). This facility in Golden, CO, is the first Federal building to receive a platinum designation; only 28 other buildings in the world have achieved this highest-level LEED designation.

http://www.nrel.gov/news/press/20 07/507.html

- LEED registration of the Brookhaven National Laboratory National Synchrotron Light Source Il construction project with the U.S. Green Building Council completed in 2007.
- Application for Leadership in Energy and Environmental Design (LEED) gold-rating certification submitted (06/07) to the U.S. Green Building Council for the Brookhaven National Laboratory's new 65,000 square foot Research Support Building.
- DOE' received a 2007 White House Closing-the-Circle Award for "High Performance Buildings through Innovative Policy" in a special "Sowing the Seeds" category that recognizes Federal leadership in setting future vision.

	Complete application for Leadership in Energy and Environmental Design (LEED) silver-rating certification and submit to the U.S. Green Building Council for the Brookhaven National Laboratory's new Center for Functional Nanomaterials.
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Six Month Progress Report (July–December, 2007)

- Electronic stewardship (ES):
  \_√\_Acquires ≥ 95% EPEATregistered electronics; enables
  Energy Star features; extends life
  & uses sound disposition
  practices (G)
- \_\_\_Has ES plan & on track to implement goal by 2010 (Y)

# Actions taken since July 1, 2007:

- Conducted annual Pollution
   Prevention Tracking and Reporting
   System data call covering
   Department-wide purchases of
   EPEAT-registered electronics, and
   recycling of end-of-life electronics
   in FY 2007. Data reported from
   DOE sites will be used in preparing
   the EO 13423 annual progress
   report on environmentally
   preferable purchasing, and solid
   waste diversion (recycling) at DOE.
  - Twenty-two sites reported purchases of personal desktop computers, laptops, and monitors in FY 2007; 95% of the electronics acquired were EPEAT-registered.
- Revising DOE Order 450.1, Environmental Protection Program to integrate EO 13423 electronic stewardship sustainable practices and goals into EMSs at DOE sites.
  - Draft Order is in the formal departmental review and comment process.
- Continued outreach and education program on the integration of electronics stewardship into DOE sites Environmental Management Systems, conducting regular conference calls with the DOE information technology, acquisition, and property management community, and promoting Department-wide participation in

- Assistant Secretary for Environment, Safety and Health, DOE's Agency Environmental Executive (AEE) under EOs 13101 and 13148, signed the Memorandum of Understanding (MOU) Promoting Stainable Environmental Stewardship of Federal Electronic Assets (11/15/04). As a signatory of the MOU, DOE Headquarters became a Federal Electronics Challenge "Partner."
- DOE's AEE and Chief Information Officer (CIO) issued a joint memorandum entitled Federal Electronics Challenge (FEC) to DOE sites on the Department's commitment to improving life-cycle management of electronic assets, and encouraging all sites to participate as FEC "Partners (06/20/05).
- DOE Order 450.1 Chg 2
   Environmental Protection Program (12/07/05) establishes Pollution Prevention and Sustainable Environmental Stewardship goals to be achieved Department-wide. The Order requires incorporation of the goals into Environmental Management Systems and specifies electronics stewardship strategies for achieving the goals, including procurement of environmentally preferable

the 2008 Electronics Reuse and Recycling Campaign.

 DOE continued to provide Federal agency leadership serving on the Federal Electronic Stewardship Working Group (FESWG), and providing electronics stewardship presentations at the 2007 Green Computing Summit sponsored by the E-Gov Institute, and related radio interview to the Federal News Service.

# Planned actions for next six months

- Prepare FY 2007 annual progress report for activities related to EO 13423 sustainable acquisition practices and goals, highlighting DOE purchases of recycled-content products, expansion of biobasedcontent product purchasing, EPEAT-registered electronics purchasing, and solid waste diversion including recycling of endof-life electronics.
- Finalize and issue revised DOE Order 450.1A, Environmental Protection Program implementing new EMS requirements, and electronic stewardship sustainable practices and goals at DOE sites.
- Continue Federal agency leadership in the FEC, serving on the Federal Electronic Stewardship Working Group (FESWG), and cochairing the electronics stewardship

- electronics, enabling electronics power management capabilities, reusing surplus electronics, and recycling of end-of-life electronics.
- DOE Headquarters is an active member of the Federal Electronics Stewardship Work Group (FESWG) participating in all monthly meetings since its 2005 inception.
- DOE Electronics Stewardship Implementation Plan issued in 2006, identifying departmental actions for implementing the commitments set forth in the Memorandum of Understanding (MOU) Promoting Stainable Environmental Stewardship of Federal Electronic Assets.
  - Updated in 2007 to reflect ownership under the newly established Office of Health, Safety, and Security (HSS), and the electronic stewardship requirements of EO 13423.
- Expanded outreach and education program on the integration of electronics stewardship into DOE sites Environmental Management Systems (EMSs), conducting multiple day, on-site workshops at Brookhaven and Idaho National Laboratories in 2006, and in 2007, providing electronics stewardship presentations at the CIO Cybersecurity National

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		• Confiprogramment of the process of

planning committee for the 2008 Federal Environmental Symposiums.

- Participate in the nomination process for obtaining recognition of DOE electronics stewardship achievement in the 2008 FEC awards, ERRC awards, and White House Closing-the-Circle competition.
- Continue outreach and education program on electronics stewardship for DOE pollution prevention, information technology, procurement, and property management personnel.
- Utilize the Environmental Management System Assistance Network (EMSAN) to provide awareness training and technical assistance to DOE sites on implementing the electronics stewardship requirements of EO 13423 and the Implementing Instructions.
- Showcase Electronics
   Stewardship at the DOE CIO
   Information Technology
   Conference in 2008.

Conference, the Federal Electronics Challenge (FEC) Conference, the Federal Environmental Symposium, and the DOE Annual Pollution Prevention/EMS Workshop that followed the 2007 Federal Environmental Symposium.

- Department-wide notification made of the Electronic Product Assessment Tool (EPEAT) network becoming operational in 2006.]
- DOE representatives on the FESWG have held multiple educational meetings on the FEC and DOE's commitments under the MOU with the Department's CIO representatives, procurement specialists, and property management personnel.
- In 2006, DOE's Offices of the CIO and Federal Energy Management Program implemented best management practices to reduce energy consumption at Headquarters, including:
  - After-hours shut down of noncritical electronics and electrical equipment in coordination with network security.
  - ENERGY STAR® power management features set as network default.
  - Employee instructional material provided on energy

	conservation.
	DOE Office of the Chief Information Officer (CIO) established EPEAT registration (environmentally preferable electronics) as a procurement requirement in its FY 2007 acquisition of Headquarters electronics (desktop computers, notebooks, and monitors).
	DOE Information Bulletin on Implementing Electronics     Stewardship at DOE Facilities published in March 2007. This web-based reference tool communicates the Department's commitment to life-cycle environmental management of electronic assets to DOE sites, and provides a compendium of relevant policies, implementation strategies, and case studies on electronics stewardship and EMS integration.
	DOE Acquisition Letter, Environmentally Preferable Purchasing Through the Use of the Electronic Product Environmental Assessment Tool (EPEAT) (AL-2007-08) issued on DOE contractor purchasing of environmentally preferable electronics, and specification of EPEAT-registered products in DOE acquisition contracts (04/27/07).

Six Month Progress Report (July-December, 2007)

- Compliance Management Plan:
  - $\underline{\sqrt{}}$ Implemented operational recommendations (G)
  - \_\_\_\_Developed implementation plans and strategies (Y)

## Actions taken since July 1, 2007:

- Revising DOE Order 450.1, Environmental Protection Program to integrate environmental compliance management improvement requirements of EO 13423 and the Implementing Instructions into EMSs at DOE sites.
  - Draft Order is in the formal departmental review and comment process, and is scheduled for issuance in March/April 2008.
- Updated inventory of NOVs, permit exceedances and "Significant Noncomplier" designations at DOE sites to pursue compilation of root cause analysis conducted by DOE sites.
- Continued to develop the Environmental Management System Assistance Network (EMSAN) to provide technical assistance to DOE sites on implementing the environmental compliance requirements of EO 13423 and the implementing Instructions.

Planned actions for next six months: Finalize and issue revised DOE Order 450.1A, Environmental Protection Program to integrate environmental compliance management requirements of the EO

- In 2005, an Intradepartmental Compliance Improvement Work Group convened to collect data and develop guidance for improving compliance processes throughout the DOE complex. As a direct result of the Work Group:
  - DOE's Chief Financial Officer issues Field Budget Guidance directing DOE sites to ensure funding and resources needed to implement Environmental Management Systems and corresponding environmental compliance and pollution prevention programs are included in the annual budgetary process.
  - Senior managers at DOE sites issued ES&H and/or EMS policy statements affirming (or re-affirming) their commitment to environmental compliance in the conduct of site operations.
- Secretary of Energy memorandum to all DOE employees on December 8, 2006, enumerated and emphasized the Operating Principles spelled out in the Department's new Strategic Plan. The Department's first Operating Principle is to "Ensure safe, secure, and environmentally responsible operations."

	<ul> <li>and its Implementing Instructions into EMSs at DOE sites.</li> <li>Conduct a DOE EMS Training Workshop, including integration of environmental compliance management requirements, following the Western Federal Environmental Symposium in Montana in June.</li> <li>Continue to support and expand EMSAN to provide technical assistance to DOE sites on implementing the environmental compliance management requirements of EO and its implementing Instructions.</li> <li>Update inventory of NOVs, permit exceedances and "Significant Non-complier" designations at DOE sites to assess environmental compliance assistance needs.</li> <li>Support sites with correction of errors in EPA's Enforcement and Compliance History Online (ECHO) database regarding purported environmental noncompliance.</li> </ul>	In 2007, DOE requested correction of errors in EPA's Enforcement and Compliance History Online (ECHO) database regarding purported environmental noncompliance at four DOE sites.
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