

Using Green Purchasing to Meet Federal EMS Goals

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USEPA, Environmentally Preferable
Purchasing Program



What is an Environmental Management System (EMS)?

- An EMS is "the part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy."

The International Organization for Standardization (ISO)14001 Standard (1996)



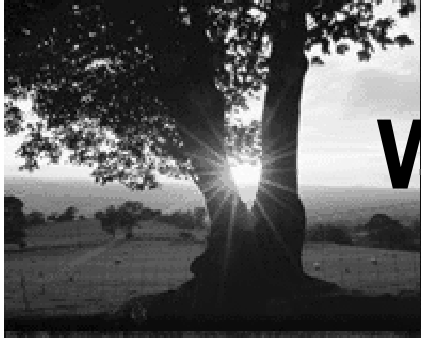
Why are Federal Facilities Building EMSs?

- Executive Order 13148, Greening the Government through Leadership in Environmental Management requires in Section 401 (b) that all appropriate facilities must have EMSs in place by December 31, 2005.



EMS Implementation

- Each appropriate federal facility will:
 - identify its unique environmental impacts,
 - establish objectives and targets to reduce or eliminate those impacts, and
 - organize a process for achieving those goals.



What is Green Purchasing?

- Buying products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose



Federal Green Procurement Preference Programs

Product Category	Legal Requirements
Recycled Content	Section 6002 of the <i>Resource Conservation and Recovery Act (RCRA)</i> ; EO 13101, <i>Greening the Government through Waste Prevention, Recycling and Federal Acquisition, FAR Part 23</i>
Environmentally Preferable	EO 13101, <i>Greening the Government through Waste Prevention, Recycling and Federal Acquisition</i>
Energy efficient	EO 13123, <i>Greening the Government through Efficient Energy Management</i> ; EO 13221, <i>Energy Efficient Standby Power Devices, FAR Part 23</i>
Bio-based	Section 9002 of the <i>2002 Farm Security and Rural Investment Act</i> ; EO 13101, <i>Greening the Government through Waste Prevention, Recycling and Federal Acquisition, FAR Part 23</i>
Alternative fuels Fuel efficiency	Section 303 of <i>The Energy Policy Act of 1992 (EPAct)</i> ; Executive Order 13149, <i>Greening the Government through Federal Fleet and Transportation Efficiency</i>
Non-ozone depleting	Section 613 of the <i>Clean Air Act</i>



Key Things to Remember in Buying Green

- Include environmental considerations as part of the normal purchasing process.
- Emphasize pollution prevention as part of the purchasing process.
- Examine multiple environmental attributes throughout the product or service's life cycle.
- Compare environmental impacts when selecting products and services.
- Collect accurate and meaningful information about the environmental performance of products and services.



Why Put Green Purchasing into Federal EMSs?

Activity	Aspect	Impact
Driving a Car	Emissions from tailpipe	Impact of those emissions on environment (climate change, ground level ozone)
Turning on a light/computer	Energy Use	Climate change



Positive Results of Including Green Procurement in an EMS

- Greening what comes in helps green what goes out - we are what we eat
- Raises awareness of procurement as an environmental impact reduction tool throughout the organization
- Increases purchases of green products
- Provides metrics to meet reporting requirements



Guidance on Integrating Green Purchasing into Federal EMSs

- Formed core group to advise guidance development
- Selected contractor, solicited case studies, interviewed over 30 federal facilities
- Drafts reviewed by core group and larger group of EMS developers, green purchasing program managers
- Target completion: Spring 2005
- Will be posted on www.epa.gov/epp/ems.htm



EMS Elements and Green Procurement

- Policy
- Legal Requirements
- Aspects
- Objectives and targets
- Environmental Management Programs
- Operational Controls
- Training
- Monitoring and Measurement



Green Procurement in the Environmental Policy

- Include a specific commitment to Green Procurement in the Environmental Policy.
- *[Agency] will consider environmental factors in all purchasing decisions and will give preference to those products and services designated in federal green procurement programs, as well as those products and services that have a lesser or reduced effect on human health and the environment when compared to other products and services that serve the same purpose.*



Green Procurement and Legal Requirements

- Identify applicable green procurement requirements, such as agency requirements, the FAR, Executive Orders, Agency EPP Strategic Plan, and any state or local purchasing or contracting mandates.
- Include green procurement requirements in the facility-specific register or list of legal and other requirements
- Other requirements include the Federal Electronics Challenge



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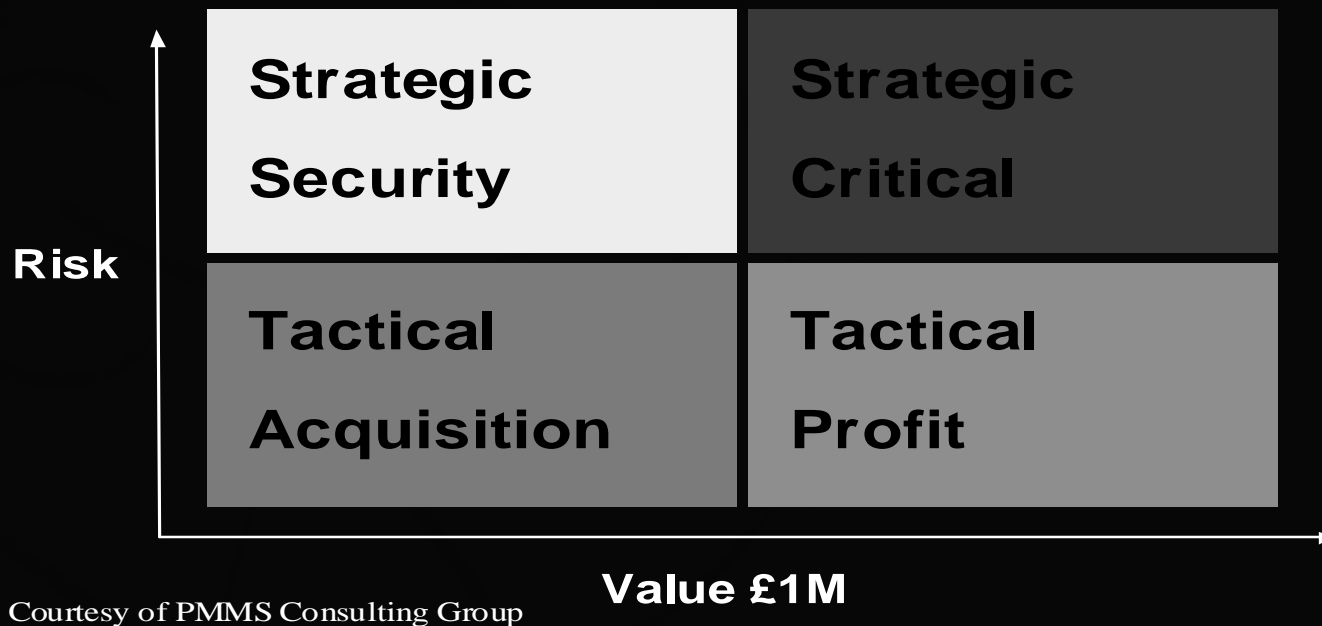
Green Procurement and Environmental Aspects and Impacts

- Some facilities treating procurement as an aspect
- UK Environment Agency approach
 - conduct risk assessment of any new contract over \$38,000
 - green all purchases deemed to have large environmental and social impacts where the EA has some leverage
 - do detailed environmental audits on top 25 suppliers
 - do telephone environmental questionnaires of top 500 suppliers

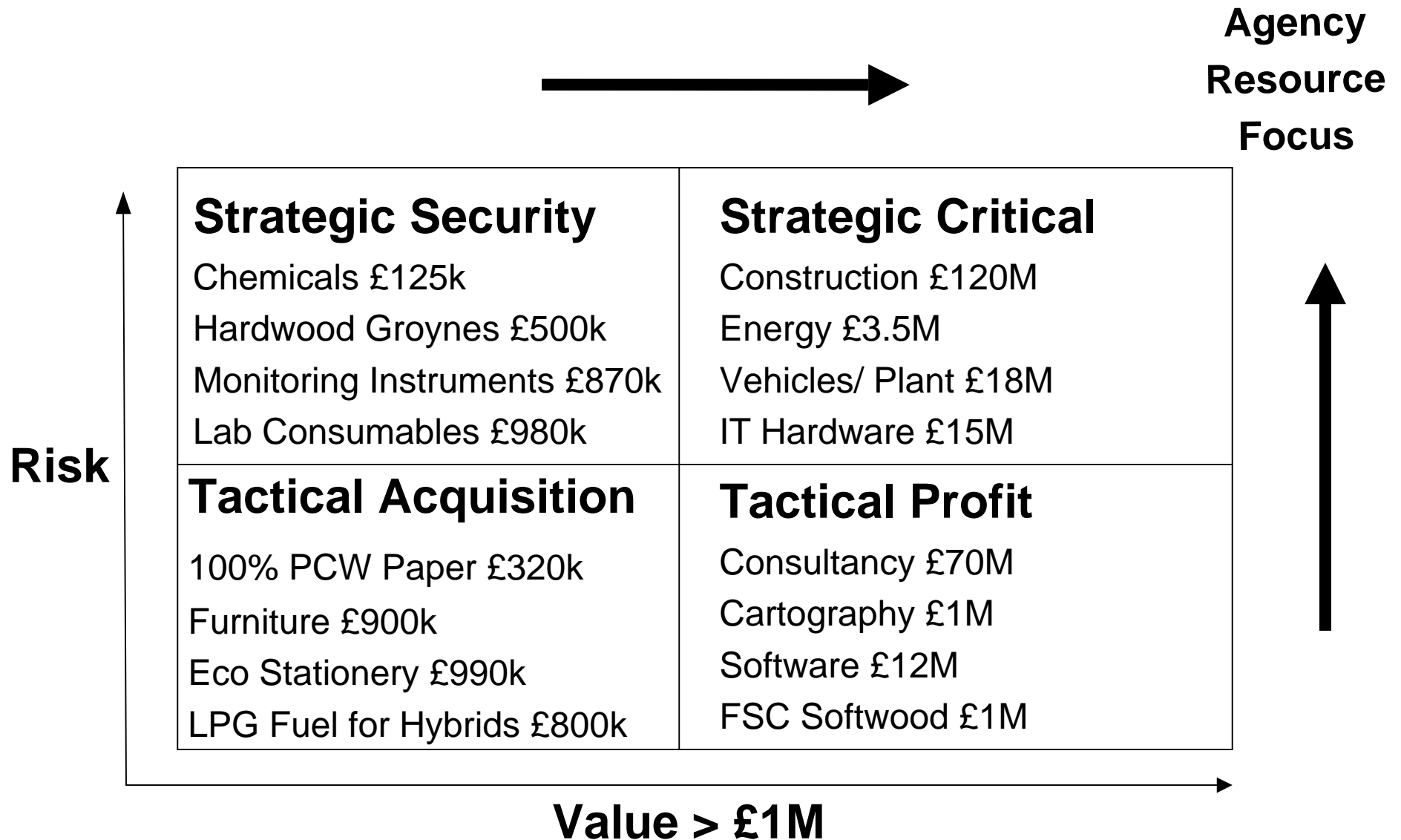


UK Environment Agency Approach

Risk mapping - Boston Matrix



Sample Results of UK Environment Agency Assessments





Green Procurement Objectives and Targets

- Others setting product/service specific objectives and targets and using green purchasing to meet.
- Army's Fort Lewis - Objective: Reduce installation traffic congestion and traffic air emissions by 85% by 2025.
 - Target: purchase 25 Neighborhood Electric Vehicles (NEV) for post use by 2007.
 - Target: 50% of GSA fleet will be alternate fuel vehicles (CNG, Bio-Diesel, E-85) by 2007.



Green Procurement Operational Controls

- Others creating operational procedures to ensure that green purchasing is undertaken at their facility, environmental considerations included in selection criteria, RFPs, etc.
- EPA Fort Meade Example
 - EPA already had set Green Purchasing Goals(<http://www.epa.gov/greeningepa/practices/eppgoals.htm>)
 - Put operational procedure in place to meet these goals



EPA Fort Meade Example

- To create operational procedures, they developed:
 - a list of products and services they buy
 - how they buy them,
 - operational controls in place to green these purchases, and
 - barriers to greening these purchases



Green Procurement Training and Awareness

- Provide training in Green Procurement to:
 - staff who make product selection decisions in each activity or operation.
 - the procurement and contracting staff who support those decisions.
 - all Purchase Card holders
- Training Resources:
 - OPM green procurement training module- “What is Green Purchasing Anyway?”
www.golearn.gov
 - Encourage them to join EPPnet - www.nerc.org,
listserves



Monitor and Measure Green Procurement

- Monitor your green purchases (including recycled content, biobased and energy efficient products, Ozone Depleting Substances, less-toxic products and services, and alternative fuel, alternative fueled vehicles, and fuel-efficient vehicles).
- Measure reductions in solid waste, hazardous waste, and air emissions.
- Measure reductions in energy and water use.



Monitor and Measure Green Procurement

- Measurement Tools:
 - Blanket Purchase Agreements
 - RCRA Report - Electronic Data Collection Tools
 - DOE
 - NASA
 - Environmental Results Tools
 - Paper Calculator -
<http://www.ofee.gov/recycled/cal-index.htm>
 - Climate Tool -
<http://yosemite.epa.gov/oar/globalwarming.nsf/content/ActionsWasteTools.html>
 - EPEAT environmental benefits calculator



Ideal Approach #1 For Facilities New to Green Purchasing and/or EMSs

- **Put green purchasing into your policy and legal requirements sections**
- **Set objective: Enhance green procurement program**
- **Set targets:**
 - Create green purchasing team including procurement staff by X date
 - Review all green procurement strategic plans
 - Create baseline of what you buy and how you buy it
 - Set objectives and targets for products /services with largest environmental impacts
 - Create control procedures to meet these targets



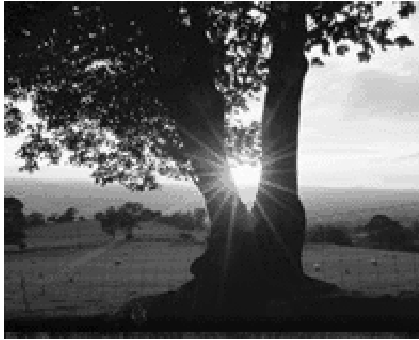
How the FEC can fit into an EMS



Electronics Stewardship One Byte @ A Time

EMS Significant Aspect

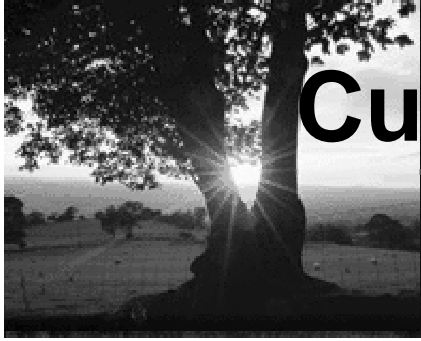
		Consumption of toxic and hazardous chemicals	Excess property management	Solid and hazardous waste generation	Energy Use
F E C G O A L	Purchase environmentally preferable electronic equipment and services	Purchase electronics with reduced hazardous content	Use a recycling contractor that does not send un-processed non-reusable equipment overseas	Require reduced product packaging in purchasing specifications	Ensure that at least 50% of all monitors purchased are Energy Star compliant
	Reduce impacts of electronic products during use.	Demonstrate that 25% of electronic equipment is reused or refurbished within or outside your agency	Establish and maintain a system for property accountability of electronics from desktop to disposition	Store all surplus equipment properly prior to transfer an properly package equipment to minimize breakage during transfer	Establish a policy to power off PCs when agency employees leave
	Manage obsolete electronics in an environmentally safe way	Require that manufacturers take back equipment	Reduce the number of electronics retired by 30% by establishing a policy to test equipment for software upgrades versus replacement before hardware is retired	Require vendors providing recycling and reuse services minimize land disposal and incineration to the greatest extent possible.	Develop and maintain a system to monitor the property under your control to ensure maximum use



A bit of History...

- **MOU Signed on Nov 15, 2004**
- **Eleven Federal Agencies and EOP -- all FEC partners**
- **Approx. 80% of the annual IT Federal budget**
- **Potential to influence marketplace towards more environmentally-sound electronic products & services**
- **Foundation to improve quality, performance, and environmental management of Federal electronic assets throughout their life cycle**





Current Agency Partners

- Executive Office of the President
- Department of Agriculture
- Department of Defense
- Department of Energy
- Department of Health and Human Services
- Department of Homeland Security
- Department of Interior
- Department of Justice
- Department of Transportation
- Department of Veterans Affairs
- Environmental Protection Agency
- General Services Administration
- + 35 facilities from across the country



Conclusions: EMS and Green Procurement

- Green procurement can be a vital tool to help set and meet EMS objectives and targets.



Resources for Buying Green

- www.epa.gov/epp/database.htm - compilation of green contract specs and green criteria for over 600 products and services
- www.ofee.gov/greenpurchasing - find out who is working on green purchasing in your Agency/Department
- www.federalelectronicschallenge.net - writing module on how to integrate FEC into your EMS
- www.epeat.net - tool to green your electronics procurement



For Further Information

- Holly Elwood
- USEPA's Environmentally Preferable Purchasing Program
- 202-564-8854
- elwood.holly@epa.gov
- www.epa.gov/epp
- Integrating Green Purchasing into Federal EMSs Report: www.epa.gov/epp/ems.htm