

Green Buying Guidelines

Environmentally preferable purchasing puts long-term implications into perspective.

By Kirsten Ritchie

Today's facility managers are in an unusually powerful position to drive environmental change through the design and implementation of effective environmental purchasing policies. Once propelled by the "buy recycled" movement and landfill reduction efforts, green purchasing is now driven by worker safety and broader environmental impacts. A single procurement decision can not only influence the health and well-being of employees, it can influence global climate change as well.

This new philosophy, known as environmentally preferable purchasing (EPP), is based on the premise that every acquisition affects human health and the environment in some way. For the facility manager, this means considering the environmental performance of products and services alongside standard performance and price considerations.

Early green purchasing policies focused on single attributes; EPP emphasizes multiple environmental attributes related to the full life-cycle of the product. In other words, this philosophy looks at how the creation of the product has an environmental impact during raw material extraction, manufacture, use, and disposal.

The benefits of EPP are indisputable, with many success stories across industries and in both the private and public sectors. With an abundance of examples, no facility manager has a reason not to create a policy or specify green products.

Getting Started

Whether tasked with designing a brand new policy, making adjustments to a current one, or getting more rigorous with implementation, facility managers can turn to many existing purchasing policies available to the public for use and review. [For more specifics on suggested guidelines,



see "Lessons Learned" at the end of this article.]

In March 2004, the Commission for Environmental Cooperation (CEC) published Environmental Purchasing Policies 101: An Overview of Current Environmentally Preferable Purchasing Policies, which reviews 80 EPP policies and provides examples. The Center for a New American Dream Web site contains links to each of the EPP policies reviewed in the CEC report. [See end of article for relevant Web addresses.]

A typical EPP policy includes these sections:

- Policy Statement captures the vision of the green procurement policy.
- Purpose states why the policy is being adopted.
- Attributes highlight the environmental features that will be addressed through the purchasing policy (low emissions, forest conservation, recyclable, water conservation, energy savings, source reduction, etc.).
- Priorities describe the drivers which will govern the transition to green purchasing. This section may also examine how the organization will address competing considerations of performance, cost, and availability.
- Modifications explain how current contracts will be reviewed and revised to reflect a new EPP policy.
- Implementation outlines who is responsible for owning and implementing the policy, bidder responsibilities, and matters of compliance.
- Labels and Standards describe existing labels and standards, and may state a preference for products with claims that have been independently verified by a third party organization.
- Evaluation describes how—and how frequently—the policy will be evaluated and against what measurement criteria.
- Glossary defines terms that are referenced throughout the policy, including EPP.
- Dates state when the policy goes into effect and when it will be reviewed.

In addition to existing policies, facility managers can avail themselves of a variety of well developed tools that address environmental issues and describe the standards against which products and services can be measured to achieve the

best mix of price, performance, and positive environmental impact.

Selection Tools

As most facility managers are aware, the U.S. Green Building Council (USGBC) developed the Leadership in Energy and Environmental Design (LEED) Green Building Rating System[®], a national standard for developing high performance sustainable buildings. Because LEED sets out to provide a framework for evaluating the environmental performance of a building, it gives facility managers a way to look at the attributes and considerations that are important when selecting products and services related to energy, materials and resources, and indoor air quality (IAQ).

Another useful tool is the draft Federal Green Guide for Green Construction Specifications developed by the U.S. Environmental Protection Agency (EPA). The guide provides detailed EPP recommendations for a broad range of building materials and is available from the Whole Building Design Guide Web site.

The EPA also has an online database of environmentally preferable goods and services, as well as green procurement resources and specific environmental standards to consider when implementing EPP. These recommendations can be found online as well.

The GreenSpec[™] product directory is an online subscription service offered by BuildingGreen Suite, a subscription based online resource for environmentally sensitive design and construction. The database contains detailed listings of more than 1,800 environmentally preferable building products and can be browsed by numerous topics, including LEED credits, green attributes, and U.S. EPA recycled content recommendations.

Finally, neutral organizations, such as Scientific Certification Systems (SCS) and Green Seal, provide listings of certified products on their Web sites.

Aligning With Values

EPP policies may also be part of an organization's broader effort to re-articulate

core values or redefine a brand. Assembling a cross-functional and laterally integrated team to guide the development of any EPP policy increases the likelihood that the new policy will stand in alignment with organizational values and existing environmental and social responsibility policies.

Next generation green purchasing policies will look beyond EPP to sustainability. For instance, these purchasing policies will not only be ecologically intelligent and performance-driven, but they'll also be socially beneficial.

With a combined purchasing power of \$81 billion in North America alone, facility managers must prioritize the allocation of resources when implementing EPP. Criteria may include immediate procurement demands, cost savings targets, employee and management requests or perceptions, potential environmental impacts, and relative availability.

The T.E.A.M. approach (Toss the Toxicity, Economize on Energy, Appreciate the Atmosphere, and Master Your Materials) offers facility managers a framework for determining when to purchase green and what to consider, based on environmental impacts.

Toss the toxicity. Poor IAQ is a leading health risk and a contributor to such illnesses as asthma, dizziness, and headaches. According to the EPA, the average performance loss per worker per year is one to two weeks. While poor IAQ can be caused by inadequate ventilation, a major contributing factor is excessive emissions of volatile organic compounds (VOCs).

Toxicity concerns are particularly important when purchasing and using cabinetry, cleaners, finishes, caulks and adhesives, pest control, and insulation. By respecifying these products, facility managers can find comparable or better performing products with less environmental impact. For example, a green procurement policy might require the purchase of low emitting furniture and flooring such as those products offered

under the Indoor Advantage™, FloorScore, Green Label Plus, and GreenGuard certification programs.

While not all facility managers are involved in food service selection, the cafeteria offers an often overlooked opportunity for eliminating chemicals from the workplace. Food that is certified organic or pesticide residue free provides employees with a healthy lunch option while reducing agricultural toxins.

Economize on energy. There are numerous opportunities throughout a building to minimize energy consumption through green procurement decisions related to appliances (refrigerators, freezers, microwaves, printers, etc.); heating and cooling systems (air conditioners, water heaters, insulation, and windows); and lighting (daylighting, load shedding, new lamp technology).

Two considerations when purchasing appliances are whether the unit is the right size for the required application and whether or not the unit is actually energy efficient. A widely used specification for economizing on energy is the EPA's Energy Star program. A wealth of information on how to enhance energy performance in buildings is available at the Office of Energy Efficiency and Renewable Energy Web site.

Lighting alone can account for up to 50% of a building's energy costs; replacing a traditional lightbulb with a compact fluorescent bulb not only draws less electricity for the same amount of delivered lumens, but will last up to 10 times longer and keep a half ton of CO₂ out of the atmosphere over the life of the bulb.

When comparing options, the facility manager must determine if the new product is practicable (the product must perform efficiently and be available at a reasonable price). The original product and its proposed alternative should be compared over their respective life cycles, including replacement costs. Finally, energy use can be reduced by optimizing natural daylight, when appropriate.

Large companies soon may consider requesting Environmental Performance

Rating information from their regional power suppliers. These ratings, which will be determined in accordance with a new ASTM standard, will help the facility manager determine the full range of environmental benefits achieved through various energy efficiency strategies, will enable facility managers to assess the best electricity sourcing options, and may potentially facilitate carbon trading.

Appreciate the atmosphere. The two areas in which most facility managers can have the greatest positive effect on air pollution are the electricity used to run the building and the mode of transport by which people commute to work. Facility managers can work closely with human resources to develop transportation incentives that reduce reliance on single vehicle occupancy.

In addition, facility managers can reduce a building's impact on the atmosphere by properly disposing of refrigerators and fire suppression equipment that emit CFC/HCFCs, planting vegetation to support carbon sequestration, and working with electricity suppliers to secure greener energy.

Master your materials. Knowledge of material attributes is particularly important when buying and using cabinetry, flooring, insulation, and furniture. Materials that are salvaged, organic, or contain recycled content tend to have a lower environmental impact. In addition, facility managers can look for locally sourced products as well as materials that are managed sustainably. For example, the Forest Stewardship Council (FSC) logo ensures that wood products come from certified well-managed forests.

In the coming years, facility managers may see a move beyond EPP toward sustainability, thanks to new international and national standards. For instance, many carpet manufacturers are already documenting conformance to the soon-to-be-published Sustainable Carpet Assessment Standard (BSR/NSF 140-2005).

All Those Labels

Eco-labels can make it easier for facility managers to identify products that meet certain claims and specifications. But with so many competing specifications, it is important to peel back the label and make sure the claim is credible.

Self-declared or first party environmental claims are made by manufacturers, distributors, or retailers without verification by an independent body. Facility managers can authenticate first party claims by requesting proof; if rebuffed, however, the claim should be treated as spurious.

Second party certifications are initiated by an interested party such as a trade association and generally come into being with industry input to meet market demands or preclude regulatory oversights. The Green Label Plus program for emission of VOCs by the Carpet and Rug Institute is one such example.

While second party certifications have catalyzed progress in environmental protection, third party certifications are the most independent. Built on scientific predetermined criteria and procedures, third party certifications are transparent and publicly available. Scientific Certification Systems, the Forest Stewardship Council, Green Seal, and TerraChoice are four such examples.

With a growing number of EPPs on the market, some facility managers are establishing green procurement policies with a stated preference for products that are third party certified. In any case, sustainably sensitive purchasing practices are becoming more transparent, available, and accessible to facility managers who take the time and effort to read the fine print before buying.

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Before establishing a new procurement procedure, facility managers should follow this advice.

1. Focus on energy: Facility managers who want to make a major environmental difference should focus on energy sourcing and energy conservation.
2. Assemble a "green team": Working across organizational functions builds buy-in for seamlessly greening a building from the copy room to the heating system and employee transportation. Working in concert with workers and contractors ensures that no one will make a last minute decision that compromises the integrity of a project.
3. Ensure practicability: Any product selection decisions should meet performance standards at an acceptable price, factoring in both replacement and life cycle costs.
4. Strive for performance: Start by identifying performance needs, then find products that have those performance attributes and are also green.
5. Avoid assumptions: Just because a product is green does not mean it is cheaper—or more expensive.
6. Hold the vision: Implementing an EPP policy is an opportunity to forward the triple bottom line—economic, environmental, and social performance.
7. Build incrementally: Build and implement a policy that's realistic and achievable; this may well mean staged implementation.
8. Promote successes: As with any new or improved policy, efforts and successes must be publicized to gain widespread buy-in. Work with

human resources and internal communications to promote activities and achievements.

Web Resources:

- Commission for Environmental Cooperation (www.cec.org/programs_projects/trade_enviroecon/nagpi/docs.cfm?varlan=english)
 - Environmental Protection Agency (<http://yosemite1.epa.gov/oppt/epstand2.nsf>)
 - Energy Star (www.energystar.gov)
 - Forest Stewardship Council (www.fscus.org)
 - FloorScore Program (www.RFCI.com or www.scscertified.com)
 - GreenGuard (www.greenguard.org)
 - Green Label Plus (www.carpet-rug.com)
 - Green Seal (www.greenseal.org)
 - GreenSpec™ (www.buildinggreen.com)
 - Indoor Advantage™ & Indoor Advantage™ Gold (www.SCScertified.com)
 - The Center for a New American Dream (www.newdream.org/procure/start/develop.php)
 - Scientific Certification Systems (www.SCScertified.com)
 - Terra Choice (www.terrachoice.ca)
 - The Office of Energy Efficiency & Renewable Energy (www.eere.energy.gov)
 - United States Green Building Council (www.usgbc.org)
 - Whole Building Design Guide (www.wbdg.org/design/greenspec.php)
- For a listing of green product and service providers, visit www.todaysfacilitymanager.com/quick.php