LEHIGH UNIVERSITY

Green Purchasing Guidelines

LEHIGH
University Business Services

Contents

Purpose

President Alice P. Gast signed the Lehigh Climate Commitment in 2008. Action item four says that says the University will, "Adopt an energy-efficient purchasing policy that will minimize or reduce greenhouse gases (GHGs) through the purchase of products that will save energy in their operation, transportation, and/or production."

University Business Services (UBS)

University Business Services is a Finance and Administration (F&A) department and a central office for business services for the Bookstore, Transportation and Parking, Printing and Mailing, Purchasing, Stabler Arena, and Trademarks and Licensing. UBS also works with other F&A departments, including Facilities Services and Campus Planning and Student Auxiliary Services. UBS launched ECOg, which stands for the Environmental Choices and Opportunities Group. The group's main function is to advance its theme to preserve by assessing the environmental consequences of proposed actions and making intentional investments in people, planning, design, and technology, herein improving processes, limiting consumption, lowering costs, and using resources wisely - preserving what we have for future generations. In accordance with this theme, UBS created Green Purchasing Guidelines.

Green Procurement

Green procurement is the purchase of environmentally preferable products and services. Environmentally preferable choices have fewer environmental effects on human health and the environment when compared to alternatives that serve the same purpose, according to the U.S. Environmental Protection Agency. According to the National Association of Education Procurement, in 2009, 24 percent of higher education institutions have a green procurement policy, and by 2010, another 48 percent will adopt one, as well. Users of our e-procurement website will have access to green suppliers. These guidelines intend to improve e-procurement, as well as general purchasing, of green preferred products and suppliers by providing expectations for current and future opportunities in selected areas: Dining, Facilities and Campus Planning, Library and Technology, Printing and Mailing, Purchasing, and Transportation Services. The goal of the green guidelines is to minimize or reduce greenhouse gas (GHG) emissions and advance environmental stewardship by conservation and efficient use of resources.

Definitions

Lehigh-specific Terms

LEAG—Lehigh Environmental Advisory Group was formed by President Alice P. Gast in Fall 2007 to identify ways in which the university can improve its impact on the environment, while also studying the complex issue on a national and global scale. LEAG consists of staff, faculty, and students, and meets monthly.

F&A—Finance and Administration (F&A) is responsible for financial planning, services and systems, budgeting, human resources, internal audit, facilities management and planning, research administration and auxiliary services of the university. Business Services is one of the major areas of F&A, and departments within the area of Business Services include the Bookstore, Transportation and Parking, Printing and Mailing, Purchasing, Stabler Arena, and Trademarks and Licensing.

ECOg—Environmental Choices and Opportunities Group aims to advance its theme to preserve by assessing the environmental consequences of proposed actions and making intentional investments in people, planning, design, and technology, herein improving processes, limiting consumption, lowering costs, and using resources wisely - preserving what we have for future generations.

Green Product Certifications and Definitions[1]

Terms Referenced in the Guidelines

Chlorofluorocarbons (CFCs)—CFCs are chemical substances that can deplete the earth's protective ozone layer in the upper atmosphere. In 1978, CFCs were banned for use as propellants in nearly all consumer aerosol products. They are gradually being phased out in all products and manufacturing processes.

Composting—The act of breaking down organic materials, such as food waste and yard trimmings, in the proper ratio in piles, vessels, or rows. The product, which is called compost or humus, can be used to provide minerals and nutrients for plants. Using compost can reduce the need for chemical fertilizers in landscaping and improve soil, water and air quality.

Energy Star—U.S. DOE and EPA's program to save money and protect the environment through energy efficient products and practices.

EPEAT—Electronic Product Environmental Assessment Tool was developed with an EPA grant and is managed by the Green Electronics Council (GEC). EPEAT uses 23 required and 28 optional criteria to evaluate desktops and laptops, thin clients, workstations, and computer monitors. EPEAT Bonze meets the 23 criteria; EPEAT Silver meets the 23 criteria and at least 50% of the optional criteria; and EPEAT Gold meets the 23 criteria and at least 75% of the optional criteria. The criteria by which products are rated are: the reduction of environmentally-

[1] Several certification names were provided by Eugene Lisa (11/14/2009). Sources of definitions are the certifiers' websites and/or U.S. government websites.

sensitive materials, materials selection, design for end-of-life, product longevity, energy conservation, end-of-life management, corporate performance, and packaging.

Forest Stewardship Council (FSC)—The term "independently certified forest products" refers to those products originating in a forest that an independent third party has certified as well-managed and sustainable. Forest certification validates on-the-ground operations employing the best management practices at a specific forest to ensure the long-term health of the total forest ecosystem. A forestry operation that meets FSC standards protects forest ecosystems, water quality, wildlife habitats and local communities. To ensure the integrity of the certification, the wood and fiber from certified forests are tracked through the commercial chain from logging sites to retailers and to the end user.

U.S. Green Building Council (USGBC)—501(c)(3) composed of leaders from every sector of the building industry working to promote buildings and communities that are environmentally responsible, profitable and healthy places to live and work. USGBC developed the LEED building rating system. The USGBC Logo is governed by strict legal guidelines.

Green Guard—Green Guard has three product certifications: 1) Green Guard Indoor Air Quality product certification for low emitting interior building materials, furnishings, and finish systems, 2) Green Guard Children & Schools, which a similar certification, but with more stringent emissions requirements according to CA 01350, and 3) Green Guard Building Construction to prevent mold in the design, construction, and ongoing operations.

Green Seal—Works with manufacturers, industry sectors, purchasing groups, and governments at all levels to "green" the production and purchasing chain. The non-profit utilizes a life-cycle approach, which means it evaluates a product or service beginning with material extraction, continuing with manufacturing and use, and ending with recycling and disposal.

LEED (Leadership in Energy and Environmental Design)—A third-party certification program and the nationally accepted benchmark for the design, construction and operation of high performance green buildings developed by USGBC.

Organic—The National Organic Program (NOP) develops, implements, and administers national production, handling, and labeling standards for organic agricultural products. The NOP also accredits the certifying agents (foreign and domestic) who inspect organic production and handling operations to certify that they meet U.S. Department of Agriculture (USDA) standards.

Practical—Concerned with voluntary decisions related to Lehigh’s physical and financial capacity to use the product or service.

Recyclable—Relates to products made with materials that can be recycled, or the product can be broken down so individual parts can be recycled. Buyer beware that products with co-injected plastics, which are materials made of two types of plastic or a plastic and a fiber, make recycling difficult.

Recycled content—Materials recycled from previous end-users for use in new products. Recycled content can be pre-consumer or post-consumer recycled content.

Reusable—Products that can be used more than once for repeated use or for alternative purposes.

Sustainable Forestry Initiative (SFI)—The Sustainable Forestry Initiative® (SFI®) label is a sign you are buying wood and paper products from well-managed forests, backed by a rigorous, third-

party certification audit. Based on several reviews, FSC-certification is more rigorous and effective than SFI certification.

Terms Commonly Used in the Industry

Carpet& Rug Institutional Green Label—Program to test carpet, cushions and adhesives to help specifiers identify products with very low emissions of volatile organic compounds (VOCs).

Cradle2Cradle—Third-party company that certifies products based on five criteria: environmentally safe and healthy materials; design for material reutilization, such as recycling or composting; the use of renewable energy and energy efficiency; efficient use of water and maximum water quality associated with production; and instituting strategies for social responsibility.

Environmental Choice/EcoLogo™ Program—EcoLogo™ was originally founded by the Government of Canada in 1988. It is classified as a Type I eco-label, as defined by the International Organization for Standardization (ISO). This means that the Program compares products and services with others in the same category, develops rigorous and scientifically relevant criteria that reflect the entire lifecycle of the product, and awards the EcoLogo™ to those that are verified by an independent third party as complying with the criteria.

ISO 14001—Management tool enabling an organization of any size or type to: identify and control the environmental impact of its activities, products or services; improve its environmental performance continually; and to implement a systematic approach to setting environmental objectives and targets, achieve the goals, and demonstrate that they have been achieved.

Life Cycle Assessment (LCA)—EPA-endorsed technique to assess a product, process, or service's relevant energy and material inputs and environmental releases and the potential environmental impacts associated with the identified inputs and releases.

SMART© Sustainable Textile Standard 2.0—Provides a market-based definition for Sustainable Textile, establish performance requirements for public health and environment, and address the triple bottom line, economic-environmental-social, throughout the supply chain.

Scientific Certification Systems—Provides third-party environmental, sustainability, and food quality certification, auditing, testing, and standards development. SCS has developed internationally recognized standards and certification programs.

Buyer Beware

Are you confused about what makes a product green?

The Federal Trade Commission (FTC) and U. S. Environmental Protection Agency (EPA) have several recommendations. If a product is labeled recycled, check how what percent is recycled. Products with claims, such as "environmentally friendly," "environmentally safe," "environmentally preferable," or "eco-safe," are not helpful without more information or a recognizable seal. Biodegradable products break down in nature; however, if they end up in today's landfills, they will most likely take decades to degrade. Many cleaning products labeled "biodegradable" always degraded in water before with no harm to the environment. Unlike the food industry, manufacturers of cleaning products are not required to identify ingredients. In sum, be sure to check labels and certifications when purchasing green products and services.

Current Practice

University Objectives

- Educate students, faculty, and staff to inform suppliers on Lehigh's preference for environmentally responsible products and services with the goal of:
    - Conserving and practicing efficient use of natural resources, including water, forests, wildlife, and fossil fuels
    - Protecting water and air quality
    - Producing less waste by reducing and reusing products, recycling at products' end of life, and composting food and yard waste
    - Reducing the release of toxins into the environment
    - Providing healthy and safe working and living environments
    - Reducing greenhouse gas (GHG) emissions produced created by institutional practices, as well as product production and transportation
    - Acting as a model of responsible purchasing for the Lehigh and surrounding communities to follow
    - Educating ourselves, our vendors, and our end-users
    - Fulfilling Lehigh's Climate Commitment
- Contact Lehigh Purchasing Services to update the guidelines as departments set new practices and goals. Phone: 610-758-3840 / Email: inpur@lehigh.edu
- Recycle all acceptable items in single stream recycling containers.
- Avoid additional, unnecessary electronics to office or dorm rooms.
- Select electronic forms of communication over paper when practical, and promote double-sided printing as the University standard.
- Follow University surplus disposal guidelines for surplus property and specific procedures for disposal of obsolete computer equipment.

Long-term Opportunities

- Phase in the implementation of performance tracking in departments on environmental attributes of products and services, and develop metrics to measure success.
- Consider creating an incentive structure for departments to overcome higher costs that are often associated with environmentally preferable options.

Department-Specific Objectives

Purchasing Services:

- Evaluate suppliers' environmental practices and product performance as a component in determining contract awards when considering a potential supplier's qualifications in the standard competitive bid/Request for Proposal (RFP) process.
- Request that suppliers aim to achieve the minimal amount of packaging necessary for the shipment of products, and aim to reuse or return product packaging.
- Favor local products for environmental benefits, while also supporting local businesses.
- Promote environmentally preferable products and services on e-procurement website.
- Continue student partnership to assist in green purchasing initiatives.
- Continually maintain, update, and communicate the Green Purchasing Guidelines by partnering with departments.

Dining Services:

Reducing Waste

- Strive for measurable improvement in reducing food waste each year by composting and tray-less dining.
- Promote and participate in the University's single stream recycling program.
- Provide program incentives for waste reduction, such as mug refills and reusable takeout containers to eliminate the production and disposal of Styrofoam.
- Reduce disposal of waste oil by donating 100 percent of fryer grease to become recycled vegetable oil, which is a replacement for diesel fuel.

Sustainability

- Aim to purchase paper products with high recycled content and Green Seal certification, and dish detergent that uses less energy than a conventional detergent, requires 98% less packaging, and produces wastewater with fewer harmful chemicals.
- Lehigh University Dining Services under Sodexo Food Services spreads awareness of local/organic food in dining locations and purchases foods that are:
    - Organically grown without the use of synthetic pesticides and fertilizers.
    - Humanely raised in ways that protect the health and well being of livestock and minimize the use of antibiotics and other chemicals.
    - Sustainably caught from properly managed wild fisheries and aquaculture facilities operated to protect natural fish populations and the surrounding environment.
    - Fairly traded and contribute to an improved quality of life in agricultural regions.
    - Sustainably grown using agricultural practices that protect natural habitat, conserve energy, restore soil health, and protect water quality.

Long-term Opportunities

- Continue adhering to its mission to reduce waste, offer more local and organic food, and make more sustainable choices.
- Continue partnering with LEAG, Green Action, and other environmental groups on campus in an ongoing effort to improve sustainability programs and practices.

Facilities Services and Planning:

Current Objectives

- Purchase ENERGY STAR products in all areas where such ratings exist, whenever financially possible.
- Choose energy-efficient and low-mercury lighting where such options exist for current lighting fixtures, and properly recycle bulbs at the products' end-of-life.
- Install occupancy-dependent variable frequency drives on pumps and motors and variable air volume to lower energy demand of the HVAC system whenever possible.
- Purchase high efficiency boilers.
- Utilize Green Seal-certified cleaning products where their use does not compromise quality of service.
- Utilize only certified cleaning products and course paper compliant with LEED standards in all LEED certified buildings.

- Avoid the purchase of bleached course paper products and aim for high recycled content. Suppliers whose products meet the criteria established by the Sustainable Forestry Initiative (SFI) are preferred.
- Use organic fertilizers and the limit use of pesticides to areas only where natural products and processes are not effective.
- Support the acceptance of food waste compost from Dining Services to mix with yard waste for landscaping mulch.
- Purchase furniture and floor coverings with high recycled content, sustainable materials, and/or the ability to recycle materials at the products' end-of-life where practical.
- Purchase furniture and furnishings with Green Guard certification whenever possible or low-emitting materials to improve building indoor air quality, as well as outdoor air and water quality where practical, including low-urea formaldehyde-containing materials.
- Limit the use of non-sustainable, tropical hardwoods wherever possible.
- Consider the most environmentally and socially responsible method of disposing construction materials and products at the end of their use.
- Continue the free surplus furniture program.

Long-term Opportunities

- Increase occupancy sensors for lighting throughout campus where practical.
- Launch drop-off service for students, faculty, and staff for mercury-containing compact fluorescent (CFL) bulbs.
- Work towards setting practical, specific goals for energy, water, and waste reduction that will show measurable results in the future.

Library & Technology Services (LTS):

Technology Purchasing

- Purchase EnergyStar in all areas where such ratings exist where the extra cost of the product is less than or equal to the energy savings.
- Purchase computers that receive ratings of Bronze or higher under Electronic Product Environmental Assessment Tool (EPEAT), when possible.
- Include EnergyStar and/or EPEAT ratings in recommended packages for computer purchasing.

Recycling

- Properly recycle all toner cartridges.
- Encourage donating old (working) cell phones to charity for reuse, and recycling old cell phones to keep plastics and heavy metals out of landfills.

Printing

- Purchase paper with the highest recycled content, where financially feasible and where recycled content does not compromise functionality of the printers.
- Promote paper and toner reduction by educating the Lehigh community on the effects of paper consumption.
- Continually aim to improve paper recycling at all public printing locations.

Long-term Opportunities

- Continuously improve the green computing web page.

- Move towards setting quotas for individual users to limit paper use.
- Continuously investigate power-saving technologies for computer labs.
- Support ongoing technology training for faculty and staff to reduce printing demands.

Printing and Mailing Services:

Products

- Purchase paper made from post-consumer recycled content whenever it is available.
- Print all letterhead, business cards, stationary, and envelopes on Green Seal- and FSC-certified 100 percent post-consumer recycled paper.
- Choose only paper suppliers certified by the Forest Stewardship Council (FSC).
- Use soy-based ink for all products that can accept the ink, which accounts for approximately 95 percent of operations. Soy-based inks are natural and can biodegrade in the environment, unlike their petroleum-based counterpart.
- Purchase water-soluble ink cleaners and solvents.

Operations

- Assist customers in reducing wasteful paper consumption by offering personalized printing for targeted marketing. Personalized printing (print-on-demand) saves paper and emissions from mass mailing by reducing the number of recipients to only those who may be interested in the information, rather than to large quantities of random recipients.
- Commit to recycling all waste paper, trimmings, and cardboard, whenever reuse is not possible, and facilitate the recycling of toner and printer cartridges.
- Ensure proper disposal of waste chemicals and inks to prevent their occurrence in the environment.
- Purchase machines with self-contained, safe exhaust to protect both indoor and outdoor air quality.

Long-term Opportunities

- Move towards all Mylar printing.
- Utilize digital processes, which are completely dry processes that eliminate the use of harsh chemicals in printing, and work towards all digital printing in the near future.

Transportation and Parking Services:

Operations

- Utilize bio-based fuels for University fleet with diesel engines and Flex fuel for non-diesel fleet, when available.
- Purchase equipment and vehicles that utilize alternative fuel and/or alternative environmentally responsible energy methods in an effort to save money, reduce oil dependence costs, reduce the effects of climate change, and increase energy sustainability (fueleconomy.gov).
- Ensure that vehicles with the best fuel efficiency for the likely operating conditions are sought.
- Recycle all items required by law and accepted by the University recycling stream. This includes used motor oil, antifreeze, and other petroleum based products, as well as plastics, cardboard, and other packing materials.

Long-term Opportunities

- Continue to benchmark peer institutions to remain current with industry standards for all commodities and services, including vehicles and motor oil, tires, and fuels.
- Continue to assist the University to examine new sources of alternative fuel that can be produced at Lehigh utilizing Lehigh waste.
- Consider offering public transportation subsidies for students, faculty, and staff.
- Launch a car sharing transportation option to deter students, faculty, and staff from bringing cars to campus.