Bard

Sustainable and Green
Purchasing Policy & Guide
2020

BOS Bard Office of Sustainability

Contents

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Sustainable and Green Purchasing Policy & Guide

As a signatory of the Carbon Commitment and a participant in the Sustainability Tracking & Rating System (STARS) Program, Bard College is committed to becoming a carbon-neutral and sustainably-oriented institute, and has elected to adopt a policy for procuring products and services that reflect these goals.

This guide was created to outline Bard's procurement goals, and to serve as a reference document for Bard staff, faculty, and students to help navigate the wide market of available products and services to select those that are the most ecologically friendly and conforming to sustainability principles.

Policy Goals

- **Maintain High Social Justice and Sustainability Standards:** Procure products and services that meet the highest and most credible ethical, social and environmental standards without compromising quality, effectiveness, cost, or convenience.
- **Conserving Resources and Energy:** Procure products and services that meet the highest and most credible standards for conservation of energy, water, and natural resources without compromising quality, effectiveness, cost, or convenience
- **Waste & Greenhouse Gas Reduction:** Develop and maintain a supply chain and purchasing process through which waste and greenhouse gas emissions are first avoided or minimized, and where remaining waste can serve as feedstock/inputs for new product development.
- **Strengthen the Local Economy:** Support the local and regional economy by purchasing products and services from local vendors.
- **Lead by Example**: As an institution of higher learning, Bard as an obligation to lead by example with our sustainable choices and share findings with the community

What are "sustainable and green" products or services?

In general, "green" products are those that comparatively have the least harmful impact on the environment and human health throughout the product's lifetime, from materials sourcing and manufacturing, to consumer use and disposal. Some instead use "sustainability" such that products and services should do 'the most good.'

Ideally, products have:

- **Material Content** made from recycled, rapidly renewable, salvaged, re-purposed, and/or nontoxic content.
- **Material Sourcing and Manufacturing Methods** that require minimal energy, water, and material inputs, and that use processes to reduce harmful environmental impacts (including waste and energy recovery, as well as local/regional sourcing to reduce transport)
- **High-Efficiency Ratings** such that operation or use consumes less energy and water inputs.
- **Minimal or No Waste Bi-products** from operation, reducing environmental and health impacts (e.g. uses renewable components and/or has non-toxic or non-harmful outputs).
- **Life Cycles** that allow for durability and longevity of use, and when disposed of, for material reuse, recycling, or biodegradation. Look to "circular production systems" where possible – moving from one-way products that end as waste and towards 'ingredients' that can be re-used
- **Socio-economic Impacts** from sourcing, manufacturing, use, and disposal that are minimized through commitments by firms to uphold fair trade and social and environmental justice.

Addressing Barriers to Sustainable Purchasing

There are barriers between the policy intent to buy sustainably and the purchases actually made, both at the institutional level and for personal choices by our students and community members. For certain consumer choices, it is Bard's intention to continue implementing community based social marketing activities and program that can help overcome these barriers including the use of social influence, shaping good habits, leveraging the domino effect, deciding whether to talk to the heart or the brain, and favoring experiences over ownership.*

*White, Katherine, David J. Hardisty and Rishad Habib, "The Elusive Green Consumer", *Harvard Business Review*, July–August 2019 Issue

Preferred Product Certifications & Labeling

Purchasing decisions through Bard should give preference to products that have earned one or more of the 3rd-party certifications described below, and new standards as they are created. To earn a certification and the right to display its logo on product labeling, a company has demonstrated through reporting and 3rd-party review that their product has attributes (e.g. energy-efficient, non-toxic, biodegradable) and meets more rigorous environmental standards (e.g. forest management, fair trade, end-of-use take-back program) that make it more sustainably-oriented than comparable products on the market.

More information on these certifications, and lists of certified products, can be found by visiting the web-links provided below.

Appliances & Electronics

Name	Logo	Attributes	Summary
Energy Star		*Energy Efficiency*	A joint program of the *U.S. Environmental Protection Agency* and *Department of Energy*. Energy Star products are more energy efficient than comparable models. **More info:** **www.energystar.gov** **Find Products:** **www.energystar.gov/index.cfm?c=products.pr_find_es_products**
Water Sense		*Water Conservation*	Products bearing the "WaterSense" label are generally *20% more water-efficient than similar products* and are *independently tested* to qualify for label. **More info:** **www.epa.gov/watersense** **Find Products:** **www.epa.gov/watersense/product_search.html**

Computers, Displays, & Tablets

Name	Logo	Attributes	Summary
EPEAT		*Energy Efficiency* *Waste Reduction* *Life-cycle*	EPEAT-registered electronic products must meet environmental criteria based on ANSI-approved public standards, which provide technical details for every criterion and specify how a manufacturer must demonstrate compliance. Bard is committed to the GOLD standard. **More info:** **www.epeat.net/** **Find Products:** **ww2.epeat.net/publicsearch.aspx**

Cleaning Products & Supplies, Flooring, Carpeting, & Tile
Indoor Furnishings, Paint & Coatings, Paper & Wood Products

Name	Logo	Attributes	Summary
Green Seal		*Indoor Air Quality & Reduced Chemical Exposure*	A non-profit organization founded in 1988 and ANSI-accredited, Green Seal promotes life cycle-based sustainability standards for products, services and companies and offer 3rd-party certification for those that meet the criteria in the standard **More info:** **www.greenseal.org** **Find Products:** **www.greenseal.org/FindGreenSealProductsAndServices.aspx**
SCS			Scientific Certification Systems (SCS), founded in 1984 with the mission to encourage more environmentally sustainable policy planning, product design, management systems and production operations by instituting a series of internationally recognized evaluation, certification and labeling programs. **More info:** **www.scsglobalservices.com/** **Find Products:** **www.scscertified.com/products/**

Ecologo			Originally founded 1988 by the Canadian government, but now recognized world-wide, EcoLogo products and services meet stringent standards of environmental leadership. **More info:** **www.ecologo.org** **Find Products:** **https://spot.ulprospector.com/en/na/BuiltEnvironment**
FSC		*Forest Management & Conservation*	An independent non-profit organization, the Forest Stewardship Council promotes the sustainable management of forests for timber products. **More info:** **https://us.fsc.org/en-us** **Find Products:** **https://us.fsc.org/en-us/market/find-products**

Food Purchasing & Services

Name	Logo	Attributes	Summary
Bard EATS		*Sustainable Food & Best Practices*	Guiding Bard's sustainable food initiatives is Bard EATS (Education Advocacy Transparency Sustainability), a collaborative partnership among Bard students, dining services, faculty, and staff committed to increasing food purchasing transparency, reducing waste, decreasing the college's carbon footprint, promoting food access, and supporting local farms and sustainable products. The Bard Community is encouraged to contact the Bard EATS council for guidance on any food-related products or services. **More info:** **http://www.bard.edu/bardeats/**
Real Food Challenge /Standards			In 2008, a group of students and advisors developed the Real Food Standards, a set of criteria and certifications that define Real Food with goals to be achieved by 2020. The term Real Food Standards refers to the entire framework that qualifies Real Food. The purpose of these standards is to incentivize purchasing from food producers who reflect the values of Real Food and who are most disadvantaged in the market. The Standards can be referenced for making food-related purchases. **More info:** **http://calculator.realfoodchallenge.org/help/resources**

Vehicles & Transportation

Name	Attributes	Summary
Carbon-free Modes	*Energy Efficiency* *Emissions Reduction* *Life-cycle*	The Bard Community is encouraged to use non-fuel and carbon-free modes of transportation. This includes walking, bicycling, skateboarding, unicycling, and other forms of transportation driven by human muscle/energy.
Electric & Low-emission Vehicles		When purchasing vehicles, Bard departments should investigate the feasibility of using 100% electric and low-emission vehicles, including fuel-electric hybrids or alternative low-carbon fuels.
High-Efficiency & Alternative Fuels		When a Bard department must purchase a gasoline or diesel vehicles, they are encouraged to purchase makes/models with the highest fuel mileage rating, and/or to consider using lower-emission alternative fuels such as biodiesel.

Refrigerants (draft)

Fast action to reduce emissions of short-lived climate pollutants, including fluorinated greenhouse gases, or "F-gases" such as hydrofluorocarbons (HFCs), can avoid over half a degree of warming by 2050 and significantly reduce the likelihood of reaching dangerous climate tipping points. Bard can lead on implementing policies. programs and practices that reduce emissions, both from leakage and at end of life.

Bard agents should refer to Procurement Recommendations for Climate Friendly Refrigerants, published September 2020. The toolkit "is designed to help select affordable, energy-efficient heating and cooling equipment1 that uses next-generation refrigerants that are more climate friendly. While this toolkit focuses on avoiding climate change impacts of HFCs, it also takes into consideration refrigerant flammability, toxicity, and atmospheric fate of the replacement refrigerants. This document focuses on small heating, cooling, and refrigeration equipment where climate friendly alternatives are more readily available, cost effective, and compliant with US environmental and safety standards.

Name	Attributes	Summary
Non-refillable/Disposable Refrigerant Cylinders	*Emissions Reduction* *Life-cycle*	Non-refillable cylinders can be a significant source of unnecessary emissions and impair effective enforcement against illegal trade in banned F-gases. Recommendation: Ban purchase
Products with F-gases		Attempt to use gases with global warming potential (GWP) lower than 150. Products include air conditioning units, refrigators, chillers, vending machines, insulation and more. Ban purchase of virgin high-GWP refrigerants for servicing with an exception for reclaimed refrigerants. Resource: https://cooltechnologies.org/ Domestic A/C: https://cooltechnologies.org/sector/domestic-air-conditioning/ Commercial A/C: https://cooltechnologies.org/sector/commercial-air-conditioning/

List of Preferred Attributes

When none of the certifications/labels above are available for a specific product, or if choosing between similarly certified products, looking at product labeling and specification sheets (such as a Material Safety Data Sheet, or MSDS) for the following preferable attributes can help you in your selection process.

(****Italicized bold*** terms are defined in the Glossary section)

Accessible Design	***Renewable materials***
Barrier-free	***Persistent, bioaccumulative toxin (PBT)-*** free
Biodegradable	Pre-owned
Carcinogen-free	***Post-consumer***
Chlorine-free	Preservation and enhancement of local economy
Chlorofluorocarbon (CFC)- free	Recyclable
Compostable	Recycled post-consumer content
Durable	Reduced ***greenhouse gas emissions***
Energy efficient	Reduced packaging
Ergonomic	Refurbished
Fair Trade Certified	Resource efficiency
Fragrance-free	Reusable
Gender-Neutral	Sweatshop-free
Genetically modified organism (GMO)-free	Third party sustainability certification (i.e. "Green Seal", "Fair Labor Association", "FSC" & "BPI")
Heavy metal-free (no mercury, lead, cadmium)	Union made
Less hazardous	***Universal Design***
Locally grown or manufactured	Upgradeable
Low or no ***volatile organic compounds (VOC)***	Used
Low toxicity	***Water efficient***
Lower embodied energy	Women's Business Enterprise
Minority Business Enterprise	
Non-toxic	
Organic	

Glossary

Accessible Design – see "Universal Design" below

Barrier-Free – see "Universal Design" below

Biodegradable – The ability of a substance to decompose in the natural environment into harmless raw materials. To be truly biodegradable, a substance or material should break down into carbon dioxide (a nutrient for plants), water, and naturally occurring minerals that also do not cause harm to the ecosystem. In terms of environmental benefits, a product should take months or years, and not centuries, to biodegrade.

Chlorofluorocarbons (CFCs) – Any of a group of compounds that contain carbon, chlorine, fluorine, and sometimes hydrogen and have been used as refrigerants, cleaning solvents, aerosol propellants and in the manufacture of plastic foams. CFCs are being phased out because they destroy the planet's stratospheric ozone protection layer.

Compostable – A product that can be placed into a composition of decaying biodegradable materials and eventually turn into a nutrient-rich material. It is synonymous with "biodegradable," except it is limited to solid materials, and does not refer to liquids.

Durable – A product that remains useful and usable for a long time without noticeable deterioration in performance.

Energy-efficient – A product that is in the upper 25 percent of energy efficiency for all similar products or that is at least 10 percent more efficient than the minimum level meeting US federal government standards.

Ergonomic – designing the job, equipment, and workplace to fit the worker. Proper ergonomic design is necessary to prevent repetitive strain injuries, which can develop over time and can lead to long-term disability.

F-gases **-** Fluorinated gases - are man-made gases that can stay in the atmosphere for centuries and contribute to a global greenhouse effect. There are four types: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6) and nitrogen trifluoride (NF3).

Fairtrade Labeling Organization – www.fairtrade.net.

Fair Labor Association – www.fairlabor.org

Fair Trade Certified – is a product certification system designed to allow people to identify products that meet agreed environmental, labor and developmental standards. Overseen by a standard-setting body, FLO International, and a certification body, FLO-CERT, the system involves independent auditing of producers to ensure the agreed standards are met. Companies offering products that meet the Fairtrade standards may apply for licences to use the Fairtrade Certification Mark (or, in North America, the applicable Fair Trade Certified Mark) for those products.

FloorScore – is a program for testing and certifying hard floor services compliance with California's indoor air quality emission requirements laid out in the California Section 01350 program. Scientific Certification Systems developed the program with the Resilient Floor Covering Institute (RFCI). US Green Building Council approved FloorScore Certification as an indicator for LEED Credit in November 2006. Website: http://www.scscertified.com/iaq/floorscore.html

Forest Stewardship Council (FSC) – FSC creates the standards for SmartWood and Scientific Certification Systems (SCS) (third-party certifying organizations) to certify forests and chain of custody forest products. Website: www.fsc.org

Greenhouse gases – Any of several dozen heat-trapping trace gases in the earth's atmosphere that absorb infrared radiation. The two major greenhouse gases are water vapor and carbon dioxide; lesser greenhouse gases include methane, ozone (O3), CFCs, and nitrogen oxides.

LEED rating system – A self-assessment system developed by the US Green Building Council for rating the environmental preferability of new and existing commercial, institutional, and high-rise residential buildings. Website: www.usgbc.org

Life cycle cost – The amortized annual cost of a product or service, including capital costs, installation costs, operating costs, maintenance costs, and disposal costs discounted over the lifetime of the product or service. (Compare with Product Life cycle.)

Locally grown or manufactured – Manufactured or grown within 100 miles of Bard College.

Material Safety Data Sheet (MSDS) – Written or printed material about a product that includes information on the product's physical and chemical characteristics; physical and health hazards; exposure limits; whether the product contains carcinogenic ingredients above a certain threshold; precautions for safe handling and use; control measures; emergency and first aid procedures; the date of preparation of the MSDS or the last change to it; and the name, address, and telephone number of the manufacturer.

Minority Business Enterprise (MBE) – is a term used in the United States which is defined as a business that is at least 51% owned, operated and controlled on a daily basis by one or more (in combination) American citizens of the following ethnic minority classifications: African American, Asian, Hispanic American, Native American (including Alaskan Natives). MBE's can be self-identified, but are typically certified by a city, state or federal agency. The predominant certifier for minority businesses is the National Minority Supplier Development Council with its 35-40 regional affiliates.

Persistent, bioaccumulative, toxic compounds (PBTs) – Toxic chemicals that persist in the environment and increase in concentration through food chains as larger animals consume PBT-laden smaller animals. They transfer rather easily among air, water, and land, and span boundaries of programs, geography, and generations. As a result, PBTs pose risks to human health and ecosystems. They are associated with a range of adverse human health effects, including effects on the nervous system, reproductive and developmental problems, cancer, and genetic impact. They include heavy metals and chemicals such as mercury, dioxins, and PCBs (polychlorinated biphenyls).

Post-consumer recycled content – Percentage of a product made from materials and by-products recovered or diverted from the solid waste stream after having completed their usefulness as consumer items and used in place of raw or virgin material.

Product life cycle – The totality of environmental impacts for a product, including raw material acquisition, manufacturing, distribution, use, maintenance, and ultimate disposal of the product. (Compare with Life cycle Cost.)

Recyclable product – A product that after its intended end use can be diverted from the solid waste stream for use as a raw material in the manufacture of another product.

Recovered materials – Waste materials and by-products that have been recovered or diverted from the solid waste stream.

Recycled materials – Material and byproducts that have been recovered or diverted from solid waste and have been utilized in place of raw or virgin material in manufacturing a product. It is derived from post-consumer recycled materials, manufacturing waste, industrial scrap, agricultural waste, and other waste material, but does not include material or byproducts generated from, and commonly reused within, an original manufacturing process.

Refurbished product – A product that has been completely disassembled and restored to its original working order while maximizing the reuse of its original materials.

Renewable materials – Materials made from plant-based feedstock capable of regenerating in less than 200 years such as trees and agricultural products. Rapidly renewable resources, such as grain-based feedstocks, regenerate in less than two years.

Sustainable – An action is said to be sustainable if it satisfies present needs without compromising the ability of future generations to meet their needs.

Universal Design – Universal design is a relatively new paradigm that emerged from "barrier-free" or "accessible design" and "assistive technology." Universal design strives to be a broad-spectrum solution that produces buildings, products and environments that are usable and effective for everyone, not just people with disabilities. For example, while built-up handles are a way to make utensils more usable for people with gripping limitations, some companies introduced larger, easy to grip and attractive handles as feature of mass-produced utensils, appealing to a wide range of consumers. As life expectancy rises and modern medicine has increased the survival rate of those with significant injuries, illnesses and birth defects, there is a growing interest in universal design. Additional examples include cabinets with pullout shelves, kitchen counters at several heights to accommodate different tasks and postures and low-floor buses that kneel and are equipped with ramps rather than lifts.

Upgradeable product – The ability to increase a product's performance or features without replacing the product.

Virgin material – Any material occurring in its natural form. Virgin material is used in the form of raw material in the manufacture of new products.

Volatile organic compounds (VOCs) – Chemicals that readily evaporate and contribute to the formation of air pollution when released into the atmosphere. Many VOCs are classified as toxic and carcinogenic.

Water efficient – A product that is in the upper 25 percent of water efficiency for all similar products or that is at least 10 percent more efficient than the minimum level meeting US federal government standards