

GREEN PURCHASING

Purpose: To establish a policy for the procurement socially and of environmentally preferred products and services.

Source: University policy

Applicability: All university agency/orgs

Background: Western State Colorado University is committed to the stewardship of the environment and to **Reduce, Reuse, and Recycle** the university's dependence on nonrenewable energy. These "Green Purchasing" policies and procedures support the university's commitment to sustainability.

Western has a growing history of socially and environmentally responsible concerns and practices. In 2005, the Board of Trustees, stewarded by President Helman, approved the Environmental Charter, which provided the foundation for the Blueprint for Sustainability in 2016 ([Blueprint for Sustainability and Environmental Charter](#)). It also laid the foundation for President Helman signing onto the American Colleges and Universities President's Climate Commitment, which set for the bold goal, with several hundred other institutions, to evolve operations to carbon neutrality by 2050 ([American Colleges and Universities Presidents' Climate Commitment and Action Plan](#)). To conduct an audit and provide a baseline for future endeavors, Western engaged in the Sustainability Tracking and Rating System, which prompts inquiry into social, environmental, and economic university practices; Western achieved a bronze rating and is striving for silver ([Sustainability Tracking and Rating System \(STaRS\) bronze rating](#)). Prompted by student interest and momentum, in spring 2017, President Salisbury's press release described an audacious goal of striving for zero waste by 2020 ([President Salisbury's endorsement of Western's Goal of Zero Waste by 2020](#)).

According to the Grass Roots Recycling Network (GRRN), zero waste is a philosophy and a design principle for the 21st Century. Zero Waste maximizes recycling, minimizes waste, reduces consumption and ensures that products are made to be reused, repaired or recycled back into nature or the marketplace. Typically 85%-90% of an institution's waste stream needs to be diverted (waste diversion rate, WDR), with benchmarks of 50% & 70% along the way to be considered "zero waste". (Source: www.grrn.org/page/what-zero-waste) However, given diverse infrastructure and regional limitations, Western's zero waste may only be a 75% WDR. Western's current diversion rate is estimated to be 24%, while we have the infrastructure (e.g., composting, recycling bins, eWaste) for 71%; however, people comprising our campus community are not disposing of their waste appropriately.

Extra: [Gov. Hickenlooper signs Executive Order to "green" state government](#)

The goal of this policy is to reduce, the adverse environmental impact of our purchasing decisions by buying goods and services from manufacturers and suppliers who share our commitment to the environment. Green purchasing is the method whereby environmental and social considerations are given equal weight to the price, availability, and performance criteria that colleges and universities use

to make purchasing decisions. Green purchasing is also known as “environmentally preferred purchasing (EPP), green procurement, affirmative procurement, eco-procurement, and environmentally responsible purchasing,” particularly within US federal government agencies. Green purchasing minimizes negative environmental and social effects through the use of environmentally friendly products.

The aim of this environmental purchasing strategy is to develop policies consistent with these principles:

1. minimize the consumption of nonreplaceable natural resources by reviewing current and proposed future usage and evaluating the pros and cons of alternatives
2. seek alternatives to products and processes that are detrimental to the environment by using more “environmentally friendly” products and processes
3. minimize waste, including: any packaging, waste produced by the product (or service) in questions, and waste generated by the eventual disposal of the product
4. maximize the reuse and recycling of materials and
5. stimulate demand for “environmentally friendly” products by letting manufacturers and suppliers know the environmental performance we expect in products.

Policy

1. Energy

- a. All desktop computers, notebooks/laptops, monitors/displays, and imaging equipment purchased must meet all Electronic Product Environmental Assessment Tool (EPEAT) environmental criteria designated as “gold” as contained in the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products. All televisions purchased must meet the highest EPEAT rating available at the time of purchase.
- b. Copiers and printers purchased shall be compatible with the use of recycled content and remanufactured products.
- c. Copiers will have double-sided printing capability.
- d. All electrical products purchased by WSCU shall meet the US EPA Energy Star certification when available and practicable. When products with Energy Star labels are not available, products that are in the upper 25 per cent of energy efficiency as designated by the federal Energy Management Program shall be used.
- e. Suppliers of electronic equipment, including but not limited to computers, monitors, printers, and copiers, shall be required to take back equipment for reuse or environmentally safe recycling when deemed appropriate by WSCU.
- f. When acquiring vehicles, the university shall purchase/lease less polluting alternatives to diesel, such as compressed natural gas, biobased fuels, hybrids, electric batteries, and fuel cells, as available and suitable for the use intended.
- g. When acquiring or replacing inefficient interior or exterior lighting, energy efficient equipment shall be purchased.

2. Water

- a. Purchase only the most water efficient appliances available. This includes, but is not limited to, high performance fixtures like toilets, low-flow faucets and aerators, and upgraded irrigation systems.

3. Toxins and Pollutants

- a. Cleaning solvents should be biodegradable, phosphate free, and citrus-based, and/or vinegar when their use will not compromise quality of service.
- b. Industrial and institutional cleaning products that meet Green Seal certification standards or environmental preferability and performance shall be purchased or required to be used by janitorial contractors.
- c. All surfactants and detergents used shall be readily biodegradable and shall not contain phosphates.
- d. Vacuum cleaners that meet the requirements of the Carpet and Rug Institute’s “Green Label Testing Program—Vacuum Cleaner Criteria” (capable of capturing 96 per cent of particulates measuring 0.3 microns and operating with a sound level less than 70dBA) shall be used by in-house staff and required for janitorial contractors.
- e. Whenever possible, products and equipment should not contain lead or mercury. For products that contain lead or mercury, preference should be given to those products with lower quantities of these metals and to suppliers with established lead and mercury recovery programs.
- f. Pest control shall be managed through prevention—physical and mechanical—and through the purchase of environmentally friendly products. As a last resort, use of the least toxic pest control substance is required.

4. Biobased Products

- a. Biobased plastic products that are biodegradable and compostable, such as bags, film, food and beverage containers, and cutlery, shall be acquired by the university and/or used by our contracted suppliers are encouraged.
- b. Compostable plastic products purchased shall meet American Society for Testing and Materials (ASTM) standards as found in ASTM D6400-04. Biodegradable plastics used as coatings on paper and other compostable substrates shall meet ASTM D6868-03 standards are encouraged.
- c. Vehicle fuels made from nonwood, plant-based contents such as vegetable oils are encouraged.
- d. Paper, paper products, and construction products made from nonwood, plant-based contents such as agricultural crops and residues are encouraged.

5. Forest Conservation

- a. Ensure that all wood and wood contained within the products that WSCU purchases is certified to be sustainably harvested by a comprehensive, performance-based certification system. The certification system shall include independent third-party audits, with standards equivalent to, or stricter than, those of the Forest Stewardship Council certification.
- b. Purchase or use of previously used or salvaged wood and wood products are encouraged.

6. Recycling

- a. Thirty per cent postconsumer waste recycled paper for all applications shall be the standard when quality of service is not compromised nor the health and safety of employees prejudiced.
- b. When specifying asphalt concrete, aggregate base or cement concrete for road construction projects, recycled, reusable, or reground materials shall be used when practicable.
- c. When specifying asphalt concrete, aggregate base or cement concrete for road construction projects, recycled, reusable, or reground materials shall be used when practicable.
- d. The use of reclaimed stone and brick and the use of secondary or recycled aggregates shall be specified.
- e. Transportation products, including signs, cones, parking stops, delineators, channelizers, and barricades shall contain the highest postconsumer content practicable.
- f. Products that are durable, long lasting, reusable, or refillable are preferred whenever feasible.

7. Packaging

- a. Packaging that is reusable, recyclable, or compostable is preferred, when suitable uses and programs exist, as is eliminating packaging or using the minimum amount necessary for product protection to the greatest extent practicable. The supplier is expected to pick up packaging and either reuse it or recycle it.

8. Green Building

1. Green purchasing concepts shall be integrated into architectural designs, final construction documents, and the final construction of all university buildings and renovations of property or facilities owned by the university. All buildings and renovations undertaken by the university shall follow green building practices for design, construction, and operations, where appropriate, as described in the LEED Rating System.
2. When maintaining buildings, products such as paint, carpeting, adhesives, furniture and casework with the lowest amount of volatile organic compounds (VOCs), highest recycled content, and low or no formaldehyde shall be used when practicable.
3. All carpet distributors and/or manufacturers of carpet installed at the university shall have a carpet recycling plan that is approved by Purchasing and Business Services.
4. The use of chlorofluorocarbon and halon-containing refrigerants, solvents, and other products shall be phased out, and new purchases of heating/ventilating/air conditioning, refrigeration, insulation, and fire suppression systems shall not contain them.

9. Landscaping

- a. All landscape renovations, construction, and maintenance performed by internal staff members or contractors providing landscaping services shall employ sustainable landscape management techniques for design, construction, and maintenance whenever possible. This includes, but is not limited to, integrated pest management, drip irrigation, composting, and use of mulch and compost that give preference to those produced from regionally generated plant debris and/or food waste programs.
- b. Landscape structures constructed of recycled content materials are encouraged. The amount of impervious surfaces in the landscape shall be limited, whenever practicable. Permeable substitutes, such as permeable asphalt or pavers, are encouraged for walkways, patios, and driveways.
- c. Plants should be selected to minimize waste by choosing species that are appropriate to the microclimate. Native and drought-tolerant plants that require no or minimal watering once established should be purchased.

10. Exceptions

These policies are designed to do the most good for the resources expended. When the cost of following the policies outweighs their benefits, a variance/wavier can be obtained through Purchasing and Business Services.

The Executive Vice President has the authority to waive any requirement of this policy.

References:

<http://www.c2ccertified.org/products/registry>

<https://us.fsc.org/en-us/market/paper-printing>

<http://www.bcorporation.net/>

<http://www.sustainabilityblueprint.com/green-map/>

Glossary of Terms

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.

Buyer – Anyone authorized to purchase on behalf of the organization or its subdivisions.

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. The uses of 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. (Liquid products are not considered compostable.)

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

Energy efficient product – 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.

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 manufactured or grown – Manufactured or grown within 100 miles of Gunnison, CO.

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.

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 byproducts 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 culmination 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.

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 standards³.

¹Policy taken from: *Purchasing and Business Services Manual: Green Purchasing*. Arizona State University, Dec. 1, 2007. Web. 2 Feb. 2011.

²Product principles taken from: Arndt, Steven, and Michael Lizotte. *Campus Sustainability Plan 2008-2012*. The University of Wisconsin Oshkosh, Feb. 2008. Web. 31 Jan. 2011.

³Glossary taken from: *Green Purchasing Policy*. Oberlin College, Nov. 2006. Web. 14 March. 2011.