

Western State Colorado University Environmentally Preferable Purchasing (EPP) Policy

Background

Western State Colorado University is committed to the stewardship of the environment and to reducing the University's dependence on nonrenewable energy. This Environmentally Preferable Purchasing Policy (EPP) fortifies the University's commitment to sustainability.

The goal of this policy is to reduce the unfavorable environmental and social impacts of our purchasing decisions by buying goods and services from manufacturers and vendors who share our commitment to the environment. Environmentally preferable 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 decisions¹.

The products purchased by Western State should embody the following principles:

- High Content from Post-Consumer Recycled Materials
- Low Embodied Energy (consumed to extract, manufacture, distribute and dispose)
- Recyclable, Compostable and Biodegradable
- Non-toxic
- Energy Efficient
- Durable and/or Repairable
- Produced in a Manner that Demonstrates Environmental, Social, and Ethical Values²
- Minimal Packaging (packaging should also abide by the above principles)
- Afterlife Reuse/Regeneration Potential through the Company (carpeting, furniture, etc.)

Policy

1. Energy

- All desktop computers, notebooks and monitors purchased must meet the highest Energy Star rating and/or minimum standard of EPEAT Bronze, Silver, or gold, as published in the IEEE 1680 standard, clause 1.4, for the Environmental Assessment of Personal Computer Products.
- Copiers and printers purchased shall be compatible with the use of recycled content and remanufactured products, in conjunction with double-sided printing capabilities.
- Remanufactured toner cartridges should be used in all copiers and printers whenever feasible.
- All energy using products purchased by WSC shall meet the [U.S. EPA Energy Star*](#) certification when available and practicable. When Energy Star labels are not available, all purchasing units shall choose energy products that are in the upper 25% of energy efficiency as designated by the [Federal Energy Management Program](#).

- 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 WSC.
- Where applicable, energy-efficient equipment shall be purchased with the most up-to-date energy efficiency functions. This includes, but is not limited to, high efficiency space heating systems and high efficiency space cooling equipment.
- When replacing vehicles, WSC shall consider less-polluting alternatives to diesel such as compressed natural gas, bio-based fuels, hybrids, electric batteries, and fuel cells, as available.
- WSC shall replace inefficient interior lighting with energy efficient equipment and motion-sensor systems.
- WSC shall replace inefficient exterior lighting with energy-efficient equipment. Exterior lighting shall be minimized where possible to avoid unnecessary lighting of architectural and landscape features while providing adequate illumination for safety and accessibility.

2. Water

- 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

- Cleaning solvents should be biodegradable, phosphate free and citrus-based where their use will not compromise quality of service.
- Industrial and institutional cleaning products that meet [Green Seal](#) certification standards or environmental preferability and performance shall be purchased and/or be required to be supplied by janitorial contractors.
- All surfactants and detergents used shall be readily biodegradable and shall not contain phosphates.
- Vacuum cleaners that meet the requirements of the Carpet and Rug Institute “[Green Label](#)” Testing Program – Vacuum Cleaner Criteria, are capable of capturing 96% of particulates 0.3 microns in size, and operate with a sound level less than 70dBA shall be used by in-house staff and required for janitorial contractors.
- 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 vendors with established lead and mercury recovery programs.
- When maintaining buildings and landscapes, WSC shall manage pest problems through prevention and the use of environmentally friendly products.

4. Bio-based Products

- Bio-based plastic products that are biodegradable and compostable, such as bags, film, food and beverage containers, and cutlery, are encouraged whenever practicable.
- 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.

- Vehicle fuels made from non-wood, plant-based contents such as vegetable oils are encouraged whenever practicable.
- Paper, paper products and construction products made from non-wood, plant based contents such as agricultural crops and residues are always encouraged.

5. Forest Conservation

- Ensure that all wood and wood contained within the products that WSC 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.
- Purchase or use of previously used or salvaged wood and wood products are always encouraged.

6. Recycling

- 100% post-consumer waste recycled paper is the standard for all applications where economic use of paper and quality of service is not compromised or the health and safety of employees prejudiced.
- All recyclable materials are to be recycled through the WSC recycling program. This includes, but is not limited to: paper, newspaper, cardboard, aluminum cans, plastic bottles and steel.
- When specifying asphalt concrete, aggregate base or Portland cement concrete for road construction projects, recycled, reusable or reground materials shall be used when practicable.
- The use of reclaimed stone and brick and the use of secondary or recycled aggregates will be specified whenever practicable.
- Products that are durable, long lasting, reusable or refillable are preferred.
- All documents (by WSC and Suppliers) shall always be printed and copied on both sides to reduce the use and purchase of paper.
- All surplus desktop computers, notebooks and monitors shall be disposed of through our electronics recycling program.

7. Packaging

- Packaging that is reusable, recyclable or compostable is preferred. Packaging should be eliminated or use the minimum amount necessary for product protection.

8. Green Building

- 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.

- 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.
- 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.
- 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

- 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.
- 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.
- 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 purchased¹.

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.