

UNIVERSITY OF MARY WASHINGTON

SUSTAINABILITY POLICIES AND PRACTICES

Sustainability Mission:

The University of Mary Washington strives for sustainable practices in all its endeavors. We recognize that every decision we make concerning the mission and management of UMW impacts our future every bit as much as our present. Our management of resources, planning for growth, and development of local, regional, national, and international relationships should be conducted in a manner that meets present social, economic, and environmental needs without compromising our ability to meet the future needs of the University, the Commonwealth of Virginia, and the earth itself. We emphasize the importance of education and communication in increasing awareness of our students, faculty, staff, and administration in the roles they play in making UMW a sustainable institution. With regard to resource use, this means awareness of material and energy flows at UMW, awareness of individual behaviors that influence those flows, and informed decision-making about contractual agreements that impact those flows. As an institution of higher learning, it is UMW's responsibility to serve as a leading example to the surrounding community of an entity that models its decisions based on environmentally and socially responsible principles.

-Adopted as a component of the University of Mary Washington Strategic Plan, November 2009

Guiding Principles:

- The University of Mary Washington will comply with all applicable environmental laws and regulations, including Virginia's Executive Order 82, Greening of State Government (for full report, read [Executive Order 82](#)).
- The University of Mary Washington will identify and implement practices that emphasize the environmental management hierarchy of pollution prevention (source reduction, reuse, recycling, energy use, water use, waste reduction, treatment and safe disposal and travel); specific efforts in this area are identified below.
- The University of Mary Washington will continue to improve its practices and procedures in order to achieve improved sustainability.
- The University of Mary Washington will openly communicate to all employees and the public its identified environmental impacts, objectives and the programs to achieve them as well as the results of these efforts.
- The University of Mary Washington will devote resources to the management and achievement of its sustainability objectives.
- The University of Mary Washington will encourage all employees to implement, maintain and uphold these policies.

- The University of Mary Washington will encourage sustainability stewardship and foster collaboration by exchanging information and encouraging open communication with state, local and federal agencies, regulated and non-regulated communities, the general public and the university community.
- To support these goals and objectives, the University of Mary Washington has incorporated sustainability into the University's strategic plan.
- Every University department and individual community member has a personal responsibility for implementing these policies and principals.

Policies and Practices

Solid Waste Reduction and Recycling

I. Policy

The University of Mary Washington is committed to good stewardship of the environment. A key element of that stewardship is the reduction of the amount of solid waste shifted from all campuses and properties into landfills. Solid waste landfills have negative long-range environmental impacts, drain community resources, and have limited capacity to accept the large quantities of waste generated by our society today. The University will make every effort to reduce the solid waste generated on campuses/properties. Four methods will be used to implement this policy: source reduction, reuse of materials, recycling, and purchase of recycled materials.

In addition Executive Order 82 requires:

1. All reports published by the university shall be published in electronic form only, unless permission to print the report has been granted by the Governor's Chief of Staff. If printing is necessary, agencies should maximize their use of post-consumer recycled paper and environmentally-friendly inks.
2. Executive branch agencies and institutions shall strive to increase opportunities for citizens and businesses to engage in electronic transactions with the Commonwealth rather than having to travel to state offices.
3. In conducting meetings, agencies and institutions shall minimize the use of paper.
4. When meals are served, disposable materials should be avoided to the greatest extent possible. Disposable materials that are used should be biodegradable or recyclable.

II. Methods to Achieve Solid Waste Reduction

A. Source Reduction: All members of the University community are responsible for implementing operational practices that prevent waste from being produced, reduce the use of non-recyclable materials and products, and promote the use of durable and reusable products. Waste reduction practices shall include but are not limited to the following recommendations:

1. Faculty, staff, students, and administrators should make all reasonable efforts to reduce the number of paper copies being produced in printed publications or reducing pages in such publications.
2. All departments should continue to look at third party certifications for sustainable printing recommendations to be utilized on printing projects. The Forest Stewardship Council (www.fsc.org) certification is one example; such certification means that an independent third party has established a chain of custody to verify that the paper originates in an FSC-certified sustainable, well-managed forest.
3. Defaults for University printers and copiers shall be set to print or copy in double-sided formats.
4. The Copy Center will use a double-sided default on all printing jobs, and will offer double-sided formats to users requesting single-sided formats.
5. All forms used on university properties shall be available electronically, and whenever possible completed and processed electronically, except for those requiring a signature. When electronic signatures are appropriate and acceptable, departments are encouraged to utilize such software. All forms should include only the necessary information and number of copies. Instruction sheets, if necessary, shall be printed on the back of the last page of each form.
6. All university and departmental newsletters shall be distributed electronically.
7. Faculty, staff, and administrations shall review mailing lists annually and delete out-of-date subscribers.
8. Faculty, staff, students, and administrators are encouraged to use smaller, more space-efficient fonts (proportionally spaced Times New Roman, Calibri, or Century Gothic are examples of such fonts).
9. Personnel are encouraged to use smaller margins and less white space in documents for documents to be printed. Margins of ½ inch are recommended.
10. Faculty, staff, students and administrators are encouraged to share files electronically, review and edit drafts onscreen, and scan and email documents instead of printing them.
11. Faculty shall use Blackboard file-sharing options rather than copied materials whenever practicable.
12. Faculty, staff, students, and administrators shall obtain reference manuals on CD rather than in book form.
13. Use of the Internet is recommended to distribute reports and catalogs.
14. Mail is to be distributed in inter-office envelopes or in reusable mail pouches.
15. Faculty, staff, students, and administrators are encouraged to reuse file folders and other offices supplies.
16. Items requiring the least amount of packaging should be purchased when available. Every effort should be made to prevent excess or unneeded materials from being purchased.

B. Large Documents:

1. The university requires all proposals and reports received from outside vendors and consultants to be printed on both sides using post-consumer recycled content paper. Furthermore, the documents shall be clearly marked to indicate that they are printed on recycled content paper.
2. No metal or plastic bindings or covers, materials may be bound by reusable notebooks or metal clips or staples. Letters, reports and documents produced by campus administrative and academic departments shall be printed on both sides using post-consumer content recycled paper. To the extent possible, students shall also be encouraged to meet these standards.
3. Academic Catalogs shall be available in electronic formats each year, with several “desk” copies printed for Admissions and other offices by request.

C. Correspondence: Whenever feasible, electronic correspondence shall replace written correspondence.

D. Reuse of Materials: All members of the University community are responsible for reusing products whenever possible, for example, obtaining office furniture and other items from UMW Surplus.

E. Recycling: All University departments and members of the University community are responsible for separating identified recyclable materials and placing them in appropriate recycling containers. The Recycling at UMW web site (www.umw.edu/recycle) gives detailed information on recycling opportunities. Requests for recycling containers and other recycling supplies may be done through the Facilities Services Work Management System.

Academic, administrative, and residence hall recycling collection includes glass, aluminum and plastic, cardboard, mixed paper, and newsprint. Information on other recycling opportunities including toner cartridges, compact florescent bulbs (CFLs), clothing, computers, batteries, confidential documents, and event recycling are addressed on the recycling web site (www.umw.edu/recycle). Facilities Services recycling includes construction/demolition debris, fluorescent light bulbs, motor oil, oil filters, paint, pallets, refrigerants, scrap metal, solvents, tires, paint and additional items as implemented. Facilities Services composts yard waste produced through Landscape and Grounds operations.

The Facilities Services Department including Capital Outlay, Contract Services, and other divisions, along with architectural firms, engineers, and others contracted for construction and renovation shall ensure that all new construction and renovation projects are designed to facilitate recycling in both interior and exterior locations. Further, whenever possible and economically feasible, the University and its contractors shall reuse or recycle materials resulting from the demolition or remodeling of campus facilities.

F. Purchase of Recycled Content Material: All University departments are responsible for making efforts to purchase and use products manufactured from or containing recycled materials.

Purchasing

I. Policy

Recognizing our impact as a major purchaser of goods and services and in keeping with Executive Order 82, the University of Mary Washington will encourage utilization of commodities and services that will: (i) reduce or eliminate the health and environmental risks from the use or release of toxic substances; (ii) minimize risks of the discharge of pollutants into the environment; (iii) minimize the volume and toxicity of packaging; (iv) maximize the use of recycled content and materials composed of sustainably managed renewable resources; (v) maximize the use of equipment that is durable, and therefore, can be used for a long time without having to be replaced; and (vi) maximize the use of remanufactured components. Defining purchasing policies aimed at encouraging the procurement of recycled products, UMW shall continue to improve its efforts toward recycling and waste reduction goals.

For purposes of setting goals and evaluating the performance of the University's green purchasing program, vendors may be requested to report the environmental attributes of their products. Procure goods and services that are environmentally friendly without compromising cost or quality. All purchasing activity shall comply with all local, state, and federal laws that govern our procurement activity.

In addition Executive Order 82 requires:

1. No agency or individual shall procure water in individual serving-sized containers made of plastic except for use in emergencies or for safety and health reasons. The restriction on bottled water requires that bottled

water should not be purchased using the Small Purchase Credit Card and no reimbursements will be issued for the purchase of bottled water unless that water was purchased to address a matter of safety and health. Each department should analyze the situation at hand and determine if a valid safety and health concern exists to support the need for bottled water prior to making such a purchase. That determination should be noted on the SPCC Log Sheet or Reimbursement Request Form. Individuals may be asked to provide additional information regarding the circumstances for which the water was necessary.

2. Agencies and institutions shall purchase or lease Energy Star-rated appliances for all classifications for which an Energy Star designation is available.
3. All new copiers, faxes, printers, and other such office equipment purchased or leased by agencies and institutions that use paper shall be recycled paper-compatible.
4. Agencies and institutions shall purchase only recycled paper except where equipment limitations or the nature of the document preclude the use of recycled paper.
5. Agencies and institutions other than public safety agencies shall procure only diesel fuel containing, at a minimum, two percent, by volume, biodiesel fuel or green diesel fuel, as defined in §45.1-394 of the *Code of Virginia*. This requirement shall only apply to procurements of diesel fuel for use in on-road internal combustion engines and #2 fuel burned in a boiler, furnace, or stove for heating, and shall not apply if the cost of such procurement exceeds the cost of unblended diesel fuel by 5 percent or more.
6. In selecting sites for conferences and other meetings that are to be held at places other than state facilities, agencies and institutions shall, after complying with procurement statutes and regulations, observe the following guidelines. For meetings attended by fewer than 50 people, agencies and institutions shall strive to use "Virginia Green" certified facilities. For meetings attended by 50 or more people, only "Virginia Green" certified facilities shall be used unless permission to select a different site has been granted by the Governor's Chief of Staff. <http://www.deq.state.va.us/p2/viriniagreen/>

II. Methods to Achieve Efficiency through Purchasing

1. Departments are encouraged to choose products based on efficient use of energy, natural resources, and potential for safe, non-hazardous disposal. The EPA has a database of Environmentally Preferable Purchasing (<http://www.epa.gov/opptintr/epp>) to help purchasers make informed decisions for greener buildings, carpets, cleaners, conferences, copiers, electronics and food service-ware.
2. Purchase re-manufactured products such as laser toner cartridges, tires, furniture, equipment and automotive parts whenever practicable, but without reducing safety, quality or effectiveness.
3. Consider short-term and long-term costs in comparing product alternatives. Include evaluation of total costs expected during the time a product is owned, including, but not limited to, acquisition, extended warranties, operation, supplies, maintenance, disposal costs and expected lifetime compared to other alternatives.
4. Purchase products that are durable, long lasting, reusable or refillable.
5. Request that vendors eliminate packaging or use the minimum amount necessary for product protection to the greatest extent practicable.
6. Request packaging that is reusable, recyclable or compostable when suitable uses and programs exist.
7. Reuse pallets and packaging materials.
8. Require that all equipment bought after the adoption of this Policy, when practicable, be compatible with products and services that provide source reduction benefits.
9. Procure products with the lowest amount of volatile organic compounds (VOCs), highest recycled content, and low or no formaldehyde in materials such as paint, carpeting, adhesives, furniture and casework.

Energy Conservation

I. Policy

The purpose of this policy is to guide the operations of the university in order to achieve the highest standards in energy usage with consideration of the impact on environmental quality and economic performance. To accomplish this goal, the university shall establish procedures to consider energy use in the design and operation of university facilities in the most economical and environmentally friendly manner possible, educate the university community on the use of energy and consider energy use in purchasing decisions and transportation. The benefits gained include, but are not limited to, protection of ecosystems, improvement of air and water quality, reduction of waste, and conservation of resources.

II. Methods to Achieve Energy Conservation

A. Building Temperature The University is committed to efficient management in the use of energy for heating and cooling systems while providing a quality indoor environment that enables the University community to achieve its mission.

The following indoor temperature ranges for occupied spaces shall be maintained on campus:

Season	Temperature Range
Air conditioning	74 - 76 degrees
Heating	68 - 72 degrees

These ranges fall within ASHRAE standard 55-2004 “Thermal Environmental Conditions for Human Occupancy.”

Certain specialized areas – laboratories, library collections, the Data Center, galleries, gymnasiums and event areas for example – may have deviations from these guidelines but will be expected to be maintained within recognized efficient ranges for their type of use. Individuals or departments seeking ongoing deviations in building temperature must seek prior approval from the provost or the vice president of administration.

Appropriate nighttime, weekend and holiday setbacks will be implemented outside of established hours of operation.

B. Hours of Operation

The standard operating hours for the university are 7 a.m. to 7 p.m. Monday through Friday. Classrooms operating hours are 8 a.m. to 10 p.m. Monday through Friday, with additional Saturday hours on the Stafford campus; weekend operating hours are on request on the Fredericksburg campus. Laboratory and associated office operating hours will be established on a one on one basis, with the intent of maximizing energy savings without disrupting research.

Operating hours within certain facilities may vary, and reasonable requests for temporary deviations will be accommodated. Individuals or departments seeking significant ongoing deviations in operating hours must seek prior approval from the provost or the vice president of administration.

C. Policy Implementation

Occupied spaces in new or significantly renovated facilities are expected to be designed to operate and perform within these ranges.

Some building HVAC – heating, ventilation and air conditioning -- systems may not be capable to achieve the intended temperature and humidity ranges for all of the occupied spaces that they serve. In such cases, UMW will use whatever methods available to try to reduce energy usage while still maintaining space temperatures.

D. Construction

The University facilities shall, to the extent possible, be designed, constructed, renovated, operated and maintained in accordance with the latest energy/water efficiency standards and in a manner consistent with the US Green Building Council's LEED™ Building Rating Systems. Specifically the university shall:

1. Comply with Executive Order 48 (2007) "Energy Efficiency in State Government"
2. Make decisions concerning investments for renovations or new construction of all facilities at the University based on total cost of ownership or life cycle cost analysis.
3. Identify and strive to implement those strategies identified as being available and least costly.
4. Evaluate and compare alternative energy sources for short and long-term costs while considering future projections for availability and price escalation of all energy sources.
5. Explore teaching and research opportunities to assist in evaluating energy and water usage and recommending potential conservation measures.

E. Energy Efficiency and Conservation

1. Identify, evaluate and implement, when practical, cost effective strategies to reduce energy/water demand.
2. Develop and implement strategies to encourage full participation of building occupants in energy/water efficiency and conservation programs. Include strategies such as information dissemination and incentive programs.
3. Develop and promote energy/water efficiency and conservation strategies whenever possible and practical.

F. Energy Management

The University has implemented a building energy management system. The Facilities Services Control and Energy department constantly monitors energy consumption for most campus buildings, including fume hood usage, in real-time and making adjustments as necessary to conserve energy while ensuring occupant comfort. This includes but is not limited to, ice storage production and usage, demand shedding, and peak shaving.

G. Individual Energy Conservation

Students are encouraged to:

1. Follow IT's energy saving guidelines for computers: configure monitors to turn off after 20 minutes of inactivity, hard drive to turn off after 30 minutes of inactivity, and desktop computer or laptop to go into a

standby or sleep mode after 90 minutes of inactivity. (In the event the computer does not have a standby or sleep mode, simply turn off the monitor when it is not in use).

2. Avoid the use of screensavers because they continue to use the monitor at full power and do not conserve energy.
3. Turn off the lights when leaving residences/classrooms.
4. Avoid halogen floor lamps.
5. Keep the door to residences closed.
6. Buy energy-efficient electronics with the Energy Star label, such as computers, printers, and refrigerators. For more information, go to <http://www.energystar.gov>
7. Avoid the use of space heaters or opening windows while heat is on.
8. Report over-cooling, over-heating, unnecessary lighting, or other energy waste, contact Facilities Services via the work request system, accessed through UMW Eagle Net.

Faculty and Staff are encouraged to:

1. Turn off lights in conference rooms, offices and classrooms when those spaces are not in use.
2. Avoid halogen floor lamps.
3. Purchase energy-efficient office equipment, including computers, fax machines, and copiers. Look for the "Energy Star" label, which identifies equipment that meets government energy efficiency standards. Please note that there is a misconception that computers and monitors purchased with the Energy Star logo are already energy efficient. In reality, they have built-in energy conservation features, but your computer cannot take full advantage of these built-in energy saving mechanisms until the power management features are enabled and configured.
4. Keep windows and exterior doors closed.
5. Turn off all departmental office equipment at the end of the day, such as copiers and printers.
6. Use the stairs instead of the elevator.
7. Use a winter setting of 70 degrees when heating is required and a summer setting of 76 degrees when cooling is required. Modification of dress, within University policy, to promote individual comfort is encouraged.
8. Report over-cooling, over-heating, unnecessary lighting or other energy waste. Contact Facilities Services via the Work Management System, accessed through UMW Eagle Net. Avoid the use of space heaters or opening windows while heat or air conditioning is in operation.
9. Follow IT's energy saving guidelines for computers: configure monitors to turn off after 20 minutes of inactivity, hard drive to turn off after 30 minutes of inactivity, and desktop computer or laptop to go into a standby or sleep mode after 90 minutes of inactivity. (In the event the computer does not have a standby or sleep mode, simply turn off the monitor when it is not in use).
10. Shut down the monitor and printer or place them in a standby mode when away from the office for more than a few hours.
11. Avoid the use of screensavers because they continue to use the monitor at full power and do not conserve energy.
12. Properly perform orderly shutdown of computers, monitors, and printers when leaving the office for the day.
13. Turn on printers, speakers, and other accessories only when needed.

Water Conservation

I. Policy

The purpose of this policy is to guide the operations of the university in order to achieve the highest standards in

water usage with consideration of the impact on environmental quality and economic performance. To accomplish this goal, the university shall establish procedures to consider water use in the design and operation of university facilities in the most economical and environmentally friendly manner possible, educate the university community on the use of water, and consider water use in purchasing decisions and transportation. The benefits gained include, but are not limited to, protection of ecosystems, improvement of air and water quality, reduction of waste, and conservation of resources.

The University is committed to water conservation that will lower costs and reduce the impact of excessive use throughout campuses and properties. UMW purchases 90% of its water from the City of Fredericksburg and 10% from Stafford County.

II. Methods to Achieve Water Conservation Efficiency

1. Ensure all water fixtures are equipped with low flow appliances under a campus wide performance contract. (Early efforts related to these changes resulted in UMW's water usage being reduced by half.
2. Continue to strive for new technologies and install them in all renovated and new construction.
3. Repair building leaks on an emergency request.
4. Monitor water bills for unseen problems with over-usage.
5. Faculty, staff, and students are required to report any plumbing leaks that are observed to Facilities Services through the Facilities Services Work Management System.
6. Facilities Services will conduct regular reviews of plumbing systems to ensure any leaks are repaired quickly.
7. Facilities Services will utilize the most efficient use and timing of irrigation when watering campus vegetation and landscaping.
8. Facilities Services will use Water Sense fixtures as required by the Bureau of Capital Outlay Management.

Telework

I. Policy

The Commonwealth of Virginia's Department of Human Resources Management Policy 1.61 is designed to promote general work efficiencies by permitting agencies to designate employees to work at alternate work locations for all or part of their workweek as required by § 2.2-2817.1 of the Code of Virginia.

The purpose of this policy is to set forth the Commonwealth's philosophy and administrative guidelines for telework programs in state agencies. Its intent is to promote telework as a means of achieving administrative efficiencies (e.g., reducing office and parking space), reducing traffic congestion and transportation costs, supporting Continuity of Operations Plans, and sustaining the hiring and retention of a highly qualified workforce by enhancing work/life balance.

In keeping with this Commonwealth of Virginia policy, UMW considers teleworking to be a viable alternative work arrangement in cases where the job requirements are best suited to such an arrangement. UMW may designate employees to work at alternate work locations for all or part of their workweek in order to promote general work efficiencies and meet operational needs. UMW may also designate vacant positions as "teleworking required" upon recruitment.

All teleworking arrangements, including short term for projects and medical accommodations, require the completion of a telework agreement. The Telework Agreement is a written agreement between the employee and supervisor requiring them to adhere to applicable guidelines and policies. The telework agreement is not an employment contract and may not be construed as such. Under state policy, telework agreements may be terminated at the discretion of UMW. Advance notice to the employee is encouraged, but not required.

II. Methods to Achieve an Effective Telework Program

Work performed in alternate work locations is considered official state business; therefore, UMW will establish specific conditions that apply to employees working in alternate locations.

UMW will also:

1. Identify positions that are appropriate for telework;
2. Require work agreements between the agency and employees;
3. Require compliance with local zoning regulations;
4. Identify ineligible positions, with justification for such determination;

A. Work Agreements

1. UMW and designated employees must agree to the terms of telework arrangements before an employee may work at an alternate work location.
2. UMW has identified specific conditions listed below in work agreements:
 - the duration of the agreement;
 - the work schedule and how it can be changed;
 - how leave is to be requested and approved by the supervisors;
 - status of employees during emergencies or weather-related closings affecting the central or alternate workplace under Policy 1.35, Emergency Closings;
 - how routine communication between the employee, supervisor, co-employees, and customers will be handled;
 - employee's performance plan/expectations;
 - the equipment and/or supplies that will be used, and who is responsible for providing and maintaining them;
 - UMW-provided equipment/supplies are to be used for business purposes only, and to notify agency immediately when equipment malfunctions;
 - any applicable data security procedures;
 - expectation of compliance with all state and agency rules, policies, practices and instructions;
 - immediate notification to supervisors of any situations which interfere with their ability to perform their jobs;
 - confirm that the work location is free from hazards;
 - notify their supervisors immediately of any injury incurring while working; and
 - assume responsibility for the security of information, documents, and records in their possession or used while teleworking and not take restricted-access material home without the written consent of their supervisors.

B. Termination of Telework Agreements UMW may terminate the telework agreement at its discretion, with advance notice to employees.

Travel

I. Policy

University of Mary Washington strives to improve transportation energy efficiency on all campuses through sustainable management and practices pertaining to parking, fleet transportation, alternative transportation and individual behaviors.

II. Methods to Achieve an Effective Travel Energy Efficiency Program

A. Individual Behavior

Individuals are encouraged to consider alternative practices to reduce energy expenditures, to include: carpooling to meetings, use of video conferencing and conference calls in lieu of in-person meetings, and purchasing of alternative fuels where available.

B. Alternative Transportation

1. Alternative Transportation promotes and encourages alternative modes of transportation (bicycling, walking, vanpooling, carpooling, riding transit, etc.) to get to, from, and around campus instead of a single occupancy vehicle (SOV). This will result in fewer cars on campus and on the roads, reduced demand for parking spaces, less traffic congestion, fewer vehicle/pedestrian conflicts, and less air pollution. Specific programs and initiatives include:
2. The FREDericksburg Regional Transit (FRED) buses are FREE to University faculty, staff and students with presentation of their UMW ID card. For more information call 540/372-1222 or visit the web site at www.ridefred.com
3. Information on AMTRAK, Virginia Railway Express, Metrorail and Greyhound Bus Lines is available at www.umw.edu/sustainability

C. Vanpooling

Reduction of single occupancy vehicle use is encouraged through the use of University vans. Student clubs and organizations as well as faculty and staff are encouraged to reserve University vans for transportation. Information on transportation services is available at www.umw.edu/facilities/transportation_services

D. Bicycle Power!

Biking is encouraged for getting around campus and the surrounding neighborhoods, including downtown Fredericksburg, which is considered bike-friendly due to its wide one-way streets. Bike racks are available throughout campus and are provided in all new construction and renovation.