Maryland Green Registry MEMBER

The Maryland Green Registry promotes and recognizes sustainable practices at organizations of all types and sizes. Members agree to share at least five environmental practices and one measurable result while striving to continually improve their environmental performance.

University of Maryland, College Park

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Higher Education
Member since August 2009

Management and Leadership

☑ **Environmental Team**

A 16-member University Sustainability Council comprised of senior administrators, faculty, and students advises the President, the Office of Sustainability, and the campus community about issues related to the integration of sustainability into the operations; the cost benefit of carbon reducing expenditures for effectiveness in meeting the Presidents Climate Commitment; and policy activities of the University of Maryland. The Council meets monthly during the fall and spring semesters. The university also has a dedicated Department of Environmental Safety responsible for managing environmental compliance and risk; an Office of Sustainability responsible for managing the campus sustainability programs; a Department of Engineering and Energy responsible for energy efficiency and renewable energy projects; an Office of Recycling and Solid Waste responsible for maximizing the university's landfill diversion rate; a Sustainability and Wellness group within Dining Services responsible for reducing environmental impacts associated with food services; and a Sustainability Committee oversees sustainability activities across the Division of Student Affairs.

☑ **Environmental Policy Statement**

From the University Strategic Plan:

"We will be a campus that is a model for the sustainability of its environment, and we will be a university that seeks solutions to the world's most challenging and vexing problems."

"The University of Maryland will be widely recognized as a national model for a Green University. In ten years' time the University will have made substantial progress towards addressing energy issues. It will have slashed energy use, expanded green spaces, dramatically reduced its carbon footprint, and built and retrofitted buildings to strict environmental standards. The University will complement these concrete actions with its teaching, research, and development efforts in energy science and policy, smart growth, environmental mapping, sustainable agriculture, and other fields. As the third largest "city" in the State, the University will have a significant impact as a leader and showcase for environmental sustainability." (Page 36)

2001-2020 Facilities Master Plan established four principles to guide future development:

1. Plan the built and natural environment in a way that preserves the beauty of the campus and protects the environment;
2. Reduce the number of automobiles on campus and eliminate vehicular congestion to the extent possible while promoting unimpeded pedestrian movement across the campus;
3. Reinforce the campus' role as a good neighbor in the larger community by the careful development of sites on the campus periphery or in outlying areas that link to the community; and
4. Preserve the architectural heritage of the campus and enhance it through open spaces, gathering places, vistas of green lawn and trees, and groupings of buildings that promote a sense of community.

☑ **Annual Goals**

The University of Maryland strives to achieve annual progress toward each of the following goals:

Carbon Neutrality

The university will reduce its energy consumption, design energy efficient buildings, institute conservation efforts, measure building energy performance, and increase its use of renewable energy to reduce greenhouse gas emissions 50% by 2020 and achieve carbon neutrality by 2050.

Education for Sustainability

The university will continuously seek ways to provide students with educational opportunities that will advance their knowledge, skills and awareness of environmental stewardship and sustainability. Opportunities will include degree programs, internships, research experiences, volunteer and

employment positions, and participation in campus committees and student organizations. Sustainable behaviors will be modelled in residence halls, dining operations, student activity locations, and as part of campus events.

Local and Global Impact

The university will continue to create partnerships and other opportunities that further sustainability and smart growth principles and policies with state and local communities, businesses and suppliers, agencies and organizations. In particular, the university will work collaboratively to further research, stewardship and investment in local food and agricultural systems, renewable energy and environmental technologies, natural resources, resilient communities, and healthy living throughout the State of Maryland and beyond.

Smart Growth

The university will carry out campus development, new construction and major renovations in a manner that minimizes environmental impacts, embraces the concepts of smart growth and sustainable design, and supports connectivity.

Sustainable Water Use

The university will reduce its purchases of potable water, seek opportunities and expand its harvesting and reuse of water, and responsibly manage stormwater to protect the Chesapeake Bay and its tributaries.

Waste Minimization

The university will divert a minimum of 75% of its total solid waste from landfills and seek opportunities to further reduce waste generation.

☑ **Environmentally Preferable Procurement**

The campus has developed an Environmentally Preferable Procurement Policy to guide procurement decisions. The policy notes: "The University of Maryland, College Park will procure all supplies, services, maintenance, construction and architect-engineer services in a manner consistent with the promotion of environmental sustainability and, in particular, promoting the reduction of carbon emissions as envisioned by the University's endorsement of the American College and University Presidents Climate Commitment. Consideration of the environmental impact of products and services must be an integral part of the procurement process and should be weighed along with price and other factors when making procurement decisions."

☑ **Environmental Restoration or Community Environmental Projects**

The University Sustainability Fund has provided nearly one million dollars to various environmental restoration and sustainable development projects on campus and in communities surrounding campus and around the State. These projects include the Restoration of Campus Creek, Partnership for Action Learning in Sustainability, and Terp Farm, among many others. For the full list of projects that have received grants from the University Sustainability Fund, see www.sustainabilityfund.umd.edu.

Waste

☑ **Recycling**

The waste diversion rate for 2014 was 89 percent. For Maryland Recycling Act (MRA) Materials, this amounted to:

Fluorescent Light Tubes – 16.5 tons
Grass, Leaves, Brush, Branches and Mixed Yard Trimmings - 716.9 tons
Wooden Pallets – 50.7 tons
Single Stream – 2227.8 tons
Laser Toner Cartridges – 3.1 tons
Lead Acid (Auto) Batteries – 9.3 tons
Tires – 39.4 tons
Electronics/Computer Equipment – 68.8 tons
Food Composting – 709.6 tons

Total MRA materials recycled - 4719.6 tons
Total non-MRA materials recycled - 25540.3 tons
Total Solid Waste Landfilled - 3769.8 tons
Total Solid Waste Generated - 34029.7 tons

☑ **Hazardous Waste/Toxic Use Reduction**

Through a variety of outreach programs, the Department of Environmental Safety has successfully helped faculty and staff across campus reduce hazardous waste and create safer laboratories. Laboratory personnel have helped in the effort by using innovative strategies and technologies such as microscale chemistry, digital x-rays, green chemicals, and by exchanging mercury thermometers for non-mercury products.

UMD maintains 72 fuel storage tanks and approximately 250 pieces of equipment containing various petroleum products, having a total combined

storage capacity of approximately 720,000 gallons. Since 1997, EA managed the removal of over 60 underground fuel storage tanks (USTs) from the campus and removed the last two USTs in the spring of 2013.

Energy

☑ **Energy Efficiency**

The campus has undertaken a number of energy efficiency efforts:

- A Combined Heat and Power Plant was completed in 2003 and was awarded an DOE/EPA Energy Star Award in 2005. The system requires approximately 16 percent less fuel than typical purchased electricity, resulting in a reduction of nitrous oxide, sulfur dioxide, and roughly 53,000 tons of carbon dioxide annually.

- Lighting retrofits made by the Department of Campus Recreation Services are saving 91,500 kWh and $9,900 annually.

- A hallway lighting retrofit is saving approximately 6,600 Megawatt hours annually or $792,000.

- An Energy Service Performance Contract was initiated in 2009 in nine energy intensive buildings. The $20 million project will include an array of energy and water conservation improvements that will result in $30 million in energy savings, nearly 5 million killowatt hours, 2.5 million gallons of water and mitigate 50,000 tons of greenhouse gases over the contract period.

- In 2007, The University adopted LEED Silver as a minimum design standard for new construction and major renovations which was subsequently supported by State legislation. Designing to LEED standards results in greater energy efficiencies in newly constructed buildings and spaces.

Transportation

☑ **Employee Commute**

The Department of Transportation Services (DOTS) operates Shuttle-UM, a fleet of more than 60 vehicles that provides on-campus, near-campus, and longer haul commuter service (i.e., "Park and Rides"). Utilization of these services by the campus community has seen triple digit growth in the past few years to more than 3.5 million rides in FY 2013. Approximately 20% of faculty and staff commute to campus by walking, biking, carpooling, or taking public transportation.

Water

☑ **Water Conservation**

The campus is committed to saving water. A number of buildings have incorporated water saving flush and flow fixtures. In 2008, bathroom faucets in the Stamp Student Union were replaced with sensor-driven units to save water, electricity, maintenance costs, and to make bathrooms more hygienic. The 100 new faucets save 1.2 million gallons per year.

Residential Facilities has undertaken a program to retrofit dormitory restroom fixtures with more water efficient equipment. The project included water conserving 1.5 gallons per minute (GPM) shower heads, 0.5 GPM restroom faucet aerators, and 1.6 gallons per flush (GPF) toilets with dual flush valves.

☑ **Stormwater Management and Site Design**

At the College Park campus, the University installed its first large scale stormwater cistern as part of its renovation of the Washington Quad in 2008. This project included a 10,000 gallon cistern that collects precipitation from 5 dormitory roofs. The water is distributed to nearby planted areas under a computer controlled system. A second stormwater cistern used for irrigation is installed in Knight Hall, the new home for the University's Journalism program. Both projects reduce the need for potable water and reduce stormwater runoff.

The University has researched and installed impervious pavers in selected projects. The pavers are designed to allow for the infiltration of stormwater as compared to traditional paver installation. Additional projects using these materials are currently in design.

In 2007, The University converted a large surface parking lot into a new green space adjacent to the business school. The project involved the removal of an approximately 1 acre lot and the design and construction of a new open space for use by the campus community. This sustainable project both reduced stormwater runoff and created a new open space for the campus community.

The University Golf Course has undertaken several steps to reduce its water use including the use of drought tolerant grasses resulting in reduced watering schedules. The Golf Course is a certified Audubon International Certified Wildlife Sanctuary. The certification has resulted in changes to fertilization, irrigation and insect management practices, thereby reducing the use of chemicals and improved water quality.

A Sustainable Water Use and Watershed Report evaluates the university's existing goals, standards, and practices relative to water management and makes recommendations for improved performance. See http://www.sustainability.umd.edu/documents/Reports/UMDwaterReport2014web-%20FINAL.pdf

Furthermore, the Maryland Cooperative Extension, part of the University's College of Agriculture and Natural Resources, has long provided consultation and support to farmers and land owners across the State about reducing stormwater runoff and improving water quality (http://extension.umd.edu/environment/index.cfm). The Extension service also conducts applied research and provides educational programs in this area.

Green Building

☑ **LEED Silver and Gold**

The university owns and operates several LEED Gold and LEED Silver buildings. See http://www.sustainability.umd.edu/content/campus/green_buildings.php

Other

☑ *The University of Maryland produces progress reports and other publications annually to keep the community informed about various sustainability initiatives. Please see all of our publications at http://www.sustainability.umd.edu/content/resources/resources_reports.php*

Profile Updated March 2015