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.*

# The Universities at Shady Grove

9636 Gudelsky Drive
Rockville, Maryland 20850
www.shadygrove.umd.edu/sustainability
Higher Education
*Member since September 2009*

## Management and Leadership

☑ **Environmental Team**

*The Administration and Facilities Management departments keep sustainability in the forefront in regards to daily operations, new initiatives, monitoring performance, and campus awareness.*

*The Green Committee is comprised of faculty, students and staff. It meets monthly, organizes lecture series, events and tours, and produces a weekly newsletter.*

☑ **Environmental Restoration or Community Environmental Projects**

*As educators, we have a responsibility to inform our students and the surrounding community about the benefits of a sustainable environment. We do this through tours of our LEED® Gold building for government, businesses, and school groups. We also have educational displays throughout the building, such as a "Green Spot" kiosk that features ecofriendly tips, sustainability articles, and green building features.*

*In 2017, The Universities of Shady Grove (USG) built a boardwalk over our campus's protected wetlands in order to reduce our environmental impact and preserve its natural habitat and resources.*

*We have initiated a project on campus called the Sidewalk Superintendent. This series of educational banners runs along the construction fencing surrounding the $160 million Biomedical Science and Engineering*

*Building, set to open in Spring 2019, to educate and inform our community about the building's LEED® criteria and sustainability initiatives.*

*On Earth Day, we have committed to hosting a community clean-up day where our students, staff, partners and neighbor facilities gather to clean up our campus grounds, environmentally sensitive wetlands and the grounds surrounding the regional storm water pond.*

*USG reaches the public through various forms of communication including our website, third-party websites, signage and displays, tours and open houses, lectures and presentations. We will continue to use these practices, and will incorporate fresh ideas to disseminate information about our new sustainability efforts on campus. A large LED screen has been embedded into the Shady Grove Garage for community outreach and marketing. The USG Green Committee is committed to sending out the weekly Friday Fun Facts to share sustainable facts and fun events to the greater community.*

## Waste

☑ **Recycling**

*USG has an efficient and well-maintained recycling program on campus to encourage all building inhabitants and visitors to dispose of waste appropriately. USG contracts with Waste Management, Inc. to remove waste and recyclables from the campus. USG recently transitioned to single stream recycling to increase participation in the campus recycling program. USG now collects all recyclables together in compliance with federal, state, and local recycling laws. Trash and recycling receptacles are located in all classroom wing corridors and employee areas. In areas where food waste is generated, such as the café and large conference areas, compost collection units are also available. Additionally, our Office of Information Technology (OIT) collects empty printer cartridges, toner cartridges, batteries, cell phones, and cell phone chargers.*

*In 2016, we recycled 190 tons of recycled material including glass, metals, paper, plastic and other materials such as print cartridges and electronics. Additionally, we recycled 31 tons of construction and demolition debris. Our overall facility recycling rate is 72.4%. We report our recycling efforts annually to both the Maryland State and Montgomery County Recycling Reports.*

*The Biomedical Sciences and Engineering Building (BSE) is striving to recycle 75% of construction waste, use 20% recycled materials and use 20% locally sourced materials.*

☑ **Composting**

*We have implemented a composting program which began August 1, 2009. In 2016, we composted 31.7 tons of food waste. We collect compostables in our dining areas and two kitchens.*

☑ **Hazardous Waste/Toxic Use Reduction**

*Ozone-depleting CFC-based refrigerants are not used on campus. Our HCFC-free and halon-free refrigeration and fire suppression equipment prevent ozone depletion.*

*We have a memorandum of understanding with University of Maryland College Park for hazardous universal waste pickup. We voluntarily recycle batteries.*

*In 2016, we recycled 63 pounds of batteries, 2,647 pounds of electronic waste (computers, printers, monitors, cords, disks, etc.), 410 pounds of lights (fluorescent tubes, bulbs, ballasts, LED lights), 2,950 pounds of oil (cooking, grease), and 600 pounds of toners and print cartridges.*

## Energy

☑ **Energy Efficiency**

**Buildings I & II:** *Buildings I and II are our oldest buildings on campus. USG continues to perform facilities renewable projects in regards to energy efficiency; including LED retrofits, adding VFDs, changing pneumatic controls to DDC, recommissioning and other miscellaneous upgrades to improve energy performance. Building I is undergoing LEED® EB certification and expects the energy performance period to be complete in 2018.*

**Camille Kendall Academic Center:** *The 1920,000-square foot Camille Kendall Academic Center has achieved LEED® Gold Certification for New Construction. The current building system has contributed to a 30% reduction in energy costs; performance is measured and verified through the building's management system. Strategies incorporated include passive and active systems including solar shading, solar orientation, exterior wall construction and high efficiency heating and cooling systems.*

**Biomedical Science & Engineering Building (BSE):** *The BSE anticipates reduced energy consumption by 22%. Energy efficiency strategies include:*

- *Renewable energy resources (photovoltaics)*
- *Passive measures such as daylight access, shading, facade performance and natural ventilation.*
- *High performance systems, including dedicated outside air and radiant heating and cooling, minimized ventilation rates and high performance heat recovery.*
- *Physical and digital interaction displays allowing feedback from users and real-time changes.*
- *Smart zoning including air cascade and climate zoning.*

**Traville Gateway & Shady Grove Garage:** *The two parking garages on campus have LED lighting with daylight sensors throughout the entire garage, providing 30% energy savings over the high-pressure sodium lights and reducing power requirements and light pollution. Solar shading at windows and white concrete on the garage top deck decrease heat island effect. Additionally, both garages have energy efficient machine roomless elevators.*

## Transportation

☑ **Employee Commute**

*The USG administration works with the Campus Transportation Advisory Committee (CTAC) to establish the USG Transportation and Parking Services Parking Regulations. The CTAC is made up of faculty, staff and student representatives.*

**Green Vehicle Program:** *Individuals with a parking permit and qualifying vehicle are eligible for a green vehicle discount of 20% off the cost of their permit. Vehicles must be certified EPA SmartWay Elite to qualify for the Green Vehicle Program.*

**Carpool Program:** *Individuals with a parking permit are eligible for a carpool discount of 50% off the cost of their permit.*

**Electric Vehicle Charging:** *A parking space where electric vehicles can park to re-charge their batteries is located at the east end of Lot #5 and is marked with a sign. Electric vehicles may use the space for the time necessary to re-charge their batteries.*

**Bicycle Parking:** *Bicycles must be parked at provided bicycle racks. Secure bicycle racks are provided at all buildings. A Capital Bikeshare station is located on Traville Gateway Drive.*

## Water

☑ **Water Conservation**

**Buildings I & II:** *Buildings I & II have all undergone water upgrades featuring water efficient plumbing including low-flow faucets, ultra-low flow urinals, and dual flush valve water closets.*

**Camille Kendall Academic Center:** *The Camille Kendall Academic Center was constructed with ultra-low flow urinals and faucets and dual flush valves for water closets. A high efficiency irrigation technology was designed and installed to reduce the consumption of potable water by 50%. Landscape design used native and drought resistant plants to reduce potable water usage. The building uses 41.58% less water than baseline performance requirements.*

**Biomedical Science & Engineering Building:** *The BSE anticipates to reduced water usage by 42% through the use of: dual flush valve water closets, low flow urinals, aerators in sinks, water efficient laboratory equipment, high efficiency mechanical systems, balanced water distribution system, and the use of graywater. We have limited the use of potable water for landscape irrigation by irrigating with captured rainwater, using native and drought resistant landscaping, and introducing raingardens. By using graywater, we have reduced potable water use by collecting 100% of air conditioning condensate, roof harvesting rainwater, and collecting and using groundwater.*

**Traville Gateway Garage:** *A rainwater collection system was incorporated into the new parking garage and is used to irrigate the planting beds surrounding the garage.*

☑ **Stormwater Management and Site Design**

*The Universities at Shady Grove use best management practices in regards to treating stormwater management runoff. Through a memorandum of understanding with Montgomery County the regional stormwater pond is monitored and maintained by both parties. USG aspires to be a leader in protecting the environment through the use of rain harvesting, water infiltration and protection of our natural environments such as our wetlands and forestation areas.*

*Pervious pavers and bioswales at the Shady Grove Garage have been implemented to permeate the soil and allow for stormwater drainage and to manage excessive runoff.*

*The BSE is implementing a stormwater management strategy in order to ensure that there is less stormwater runoff after construction is complete than before construction began. The BSE calculates runoff will be reduced by 28%. The BSE landscape will naturally filter water through vegetative architecture and allow it to infiltrate the adjacent soils prior to being introduced to the watershed. A series of bioswales have been implemented on our campus to help slow and filter stormwater from our impervious areas.*

## Green Building

☑ **LEED Gold**

**Building I:** *Our 54,000-square foot building, Building I, is undergoing LEED® EB certification and expects the energy performance period to be complete in 2018.*

**Camille Kendall Academic Center:** *Our 192,000-square foot building, the Camille Kendall Academic Center, achieved LEED® Gold Certification for New Construction in 2007.*

**Biomedical Science & Engineering Building:** *The BSE, our 220,000-square foot building under construction, is striving to achieve a minimum LEED® Gold Certification. The building is scheduled to open in 2019.*

**Shady Grove Garage:** *Our 700-parking space Shady Grove Garage was awarded the Parksmart Bronze certification from GBCI in the summer of 2017.*

## Environmental Certification Programs, Awards, and Other Activities

☑ **Camille Kendall Academic Center Awards**

- *Best Green Building of the Year, Maryland/DC Chapter of the National Association of Industrial and Office Properties, 2008*
- *Best Sustainable Project, Associated General Contractors, 2008*
- *Innovation in Public Service State Agency Award, from the Maryland Chapter of the American Society of Public Administration (ASAP)*

***Profile Updated October 2017***