



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.

City of Gaithersburg

31 S. Summit Ave.

Gaithersburg, MD 20877

www.gaithersburgmd.gov

Local Government

Member since August 2011

Management and Leadership



Environmental Restoration or Community Environmental Projects

[Team Up to Green Up](#) is a City-wide program where volunteers can partner with the City to adopt parks and streams to clean up and improve our environment. This program integrates various activities including trash and invasive plant removal and stream rehabilitation. Partners receive supplies and support from the City, and their efforts are recognized with a sign posted in their adopted area. Team Up to Green Up is an ideal way for individuals, schools, businesses, and community organizations to become involved in the beautification of our neighborhoods.

[Volunteer stream monitoring](#) offers first-hand knowledge of the quality of local water bodies, screens for potential problems, and helps monitor streams in between official stream assessments. The City has benthic and water quality testing kits that are available to student and citizen volunteers.

Each year during [Green Month](#) (held each April), the Mayor and City Council and the Environmental Affairs Committee recognize individuals and groups for their commitment to the environment based on nominations from citizens. This program is sponsored by Gaithersburg's [Environmental Affairs Committee](#) and is comprised of local residents.

Community tree plantings as part of a \$71,628 grant from the Governor's Stream Restoration Challenge awarded to the City of Gaithersburg and the Audubon Naturalist Society took place on October 18, 2013 and November 1, 2013.

Participating groups included the Gaithersburg High School ESOL Student Service Learning Club, City of Gaithersburg High School Student Union, Identity,

Audubon Naturalist Society, Muddy Branch Alliance, Kentlands Go Green Group and Asbury's Beloved Community. The grant was used to plant five acres of trees along Muddy Branch to improve water quality on this important stream, which flows through Gaithersburg into the Potomac River. The trees and their root systems prevent erosion by stabilizing the stream bank and their shade improves the stream for wildlife. This project was made possible by Maryland's Stream Restoration Challenge, a competitive grant program open to local governments and non-government organizations to establish 1,000 acres of stream-side forests by 2015. For this challenge, the State and its partners made available \$6 million to plant forested stream buffers with the goals of improving Chesapeake Bay water quality and providing opportunities for middle and high school students to engage in service learning and environmental literacy activities.

Waste

Recycling

The City recycles paper, cardboard, cans, and bottles at City facilities.

Energy

Energy Efficiency

Through the American Recovery and Reinvestment Act of 2009, the City of Gaithersburg received an Energy Efficiency and Conservation Block Grant in the amount of \$578,000. The money has been earmarked for energy audits and efficiency upgrades to City facilities. In the first stage of the project, the City of Gaithersburg spent \$37,258 to conduct energy audits in twelve City facilities. The energy audit was completed in February, 2010. The remaining funds are being used to develop a long-term energy plan and to implement retrofits where the energy savings and reductions in CO2 and other greenhouse gases will be most significant. Three recently completed energy initiatives include HVAC upgrades at three City facilities. The following are being provided as a result of the energy conservation measures at these three facilities:

- *3,450 therms (101,109 kWh) are being conserved annually (natural gas)*
- *177,400 therms (5,199,081 kWh) are being conserved annually (electricity)*
- *Annual cost savings of \$31,890*

It is anticipated that the implementation of energy conservation strategies for the nine remaining City facilities will occur in three phases over the next six years.

Renewable Energy

The United States Environmental Protection Agency (EPA) has welcomed Gaithersburg into the Green Power Partnership program. Partners help reduce the risks associated with climate change by supporting technologies that are more sustainable for businesses and communities. Gaithersburg earned partnership status through its commitment to purchase Renewable Energy Certificates (RECs) generated from wind power to offset 30% of the City's municipal energy usage. The City currently purchases 30% wind energy credits through a joint procurement contract with Montgomery County (see below for additional wind energy purchasing at the Olde Towne Youth Center).

Both the Olde Towne Youth Center and the Robertson Park Youth Center use geothermal energy for heating and cooling. During design, a life-cycle costs analysis was performed for three HVAC options. The geothermal heat pump had the lowest energy costs and lowest annual maintenance costs. The annual operating costs (energy + maintenance) comparison is below:

*Water Sourced Heat Pump - \$17,034
4-Pipe CHW/HHW System - \$13,430
Geothermal System – \$8,911*

The City is saving (on an annual basis) approximately \$8100 by using a geothermal system over a water sourced heat pump and \$4519 over a 4-Pipe CHW/HHW System.

The Olde Towne Youth Center utilizes solar photovoltaic panels to help offset the electrical load. The system was designed to produce about 5 kWh per hour or 5,989 kWh annually. Without the system, an additional 8,577 pounds of Carbon Dioxide emissions would be generated by the Youth Center. The cost savings equate to about \$300 per year. The City additionally purchases 36% wind energy for the Olde Towne Youth Center in accordance with the requirements of the LEED Platinum Certification.

Transportation

Fleet Vehicles

- *The City of Gaithersburg is now using B5 biodiesel for its municipal fleet, which is 5% vegetable oil and 95% regular diesel fuel. In this region, the vegetable oil comes primarily from soy beans. Over time we will reduce the percentage of regular diesel, eventually using a biodiesel grade that is 20% vegetable oil.*

The City's diesel fleet consists of 98 vehicles, including trucks, buses and other heavy equipment. Those vehicles consumed just over 50,000 gallons of diesel fuel last year. Gaithersburg will be using biodiesel in about half of these vehicles, and under this initiative the consumption of regular diesel will be reduced by 5,000 gallons.

Water

Stormwater Management and Site Design

In order to improve stormwater runoff conditions, the City began offering the [Rainscapes Reward](#) program in 2009, a rain barrel and conservation landscaping rebate program. These rebates are designed to slow rainwater runoff and reduce the amount of stormwater entering local streams, increase groundwater supply, and reduce chemical and nutrient pollutants entering waterways. Other environmental benefits of these projects include reduced energy consumption and air pollution from lawn mowers, reduced water use for irrigations during droughts, and increased biodiversity in the suburban landscape.

The City has storm drain stenciling kits that are available to students and citizen volunteers to stencil "Chesapeake Bay Drainage- Don't Dump" on City storm drain inlets. Instructions on stenciling are provided in the kits and volunteers are asked to mark their progress on City maps.

The City has constructed green street retrofit projects in several locations. The projects combine stormwater facilities with streetscape enhancements within the existing road right-of-way. Green streets techniques utilize surface vegetated facilities (such as planters and swales) to slow, treat and infiltrate stormwater at the source, thus reducing negative impacts to our streams.

Green Building

LEED Certified

The [Gaithersburg Youth Center at Robertson Park](#) is Gaithersburg's first green building. Designed to achieve the U.S. Green Building Council's LEED certification status, the building's green features include a geothermal heating and cooling system that saves energy and reduces air pollution; cabinets made from rapidly-renewable wheatboard; floors made from recycled tires and rubber; ENERGY STAR windows; light sensors to control lighting and save energy; forest certified wood to promote sustainable forestry techniques; and insulation made from recycled blue jeans. The building also features an educational signage

program to highlight the building's environmentally friendly features and provide tips on how everyone can include green features in their homes.

Not only is the building green, but staff has incorporated environmental principles into the Center's regular programming. Recently the center hosted a youth community service project where members created a Youth Garden that includes a variety of native flowers selected to provide wildlife benefits.

LEED Platinum

Additionally, the [Youth Center in Olde Towne](#), Gaithersburg's newest facility which serves middle and high school students, attained LEED Platinum certification in June of 2010, making it the first youth center in the country and the fourth building in Maryland to achieve this certification, the highest level possible.

The Youth Center opened on October 8, 2009, and is Gaithersburg's second green municipal building. [The Robertson Park Youth Center](#), which opened in 2005, attained the basic level of LEED certification (see above for information). The most up-to-date technologies and earth friendly building techniques were used in the Olde Towne Youth Center's construction, including a vegetated roof, solar photovoltaic panels to help offset the electrical load, a geothermal heating and cooling system, insulation made of soybeans, floors made of recycled tires, and cabinetry made of wheatboard.

The 6,500 square foot, \$3.75 million facility provides after school activities for middle and high school students. It features a state-of-the-art studio where both middle and high school students can learn audio and video production using the latest equipment. Other activities include a computer lab, volunteer service projects, arts and crafts, video games, exercise and nutrition programs, homework help, and an outdoor basketball court.

Other

- The Maryland Chapter of the U.S. Green Building Council (USGBC) awarded Gaithersburg's [Youth Center in Olde Towne](#) an award in the Sustainable Buildings New Construction category at the organization's annual Wintergreen Awards Celebration on January 27, 2011 in Baltimore, Maryland.*

In 2009, the City of Gaithersburg was awarded the Building Healthy Communities for Active Aging Commitment Award by the Environmental Protection Agency (EPA).

The City of Gaithersburg achieved certification through the Sustainable Maryland Certified program in March 2013. In order to become Sustainable Maryland Certified, Gaithersburg had to complete two mandatory actions related to the establishment of a local Green Team and two of six priority actions. In addition, The City had to accumulate at least 150 points by completing actions chosen from nine categories spanning a variety of resource management and economic development activities. Gaithersburg obtained 260 points towards certification, well in excess of the 150 points required. Among the innovative demonstration projects included in the application were:

- *Rigorous green building requirements;*
- *A Green Streets retrofit pilot program and prioritization project; and*
- *An Environmental Awards recognition program.*

Sustainable Maryland Certified is a program of the University of Maryland Environmental Finance Center (EFC), one of ten university-based centers across the country whose mission is to help communities identify sustainable strategies for financing their resource protection goals. Through this voluntary program, Maryland municipalities earn points towards sustainability certification by completing actions that incorporate best practices in areas relating to water and air quality, waste management, energy efficiency, local economies, planning and land use, and health and wellness.

The City of Gaithersburg has been a Tree City USA community for the past 25 years.

Profile Updated March 2015



Help build a greener, more sustainable Maryland through voluntary practices that reduce environmental impacts and save money.

Learn more at www.green.maryland.gov/registry

