



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

[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.

The City is also proud to offer a Winter Salt Watch Program via a partnership with the Izaak Walton League of America. The goal of the program is to promote mindful salting for keeping roads safe and water clean. The City recognizes that salt is a powerful tool, but it's easy to over-apply. Mindful salting is using just the right amount of salt to melt ice. A good visual is that a 12-ounce coffee mug full of salt is enough to treat a 20-foot driveway or 10 sidewalk squares. The City's Department of Public Works encourages all members of the Gaithersburg community to practice mindful salting.

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. Activities also include an Environmental Movie Night, Arbor Day Celebration, and Green Up Day.

The City has begun to include a tree planting as part of the Green Up Day as well as other tree plantings throughout the year when local groups have shown interest and have a space within a forest conservation easement in which to plant.

Environmental Team

The City of Gaithersburg has two separate environmental teams that meet to advance our work in Sustainability. The Environmental Affairs Committee is made of volunteer residents appointed by the Mayor. The committee accompanied by a Staff Liaison and Council Liaison meet once a month.

Waste

Recycling

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

Composting

The City has food waste drop locations at the Public Works Facility and the Casey Community Center. The food waste drop off locations are open to residents and employees alike. The Casey Community Center offers compost collection during tot time classes and to those who rent space in the building. The City collects and averages of over 3 tons of food waste for compost each month.

Energy

Energy Efficiency

As part of its strategic plan to enhance environmental sustainability and improve public safety, the City of Gaithersburg has developed a five year (FY21-FY25) project to convert all City-owned street lights from the current high-pressure sodium (HPS) fixtures to the more energy efficient light emitting diode or (LED) fixtures.

Street lighting is the highest consumer of electricity in the City. Once all of the lights have been converted, the City anticipates a 60% reduction in greenhouse gas emissions associated with powering the streetlights, eliminating approximately 615 metric tons of emissions annually.

LEDs require less maintenance and are more energy efficient, which contributes to a significant reduction in greenhouse gas emission associated with their use. Streetlights are important to the safety of our City, and in addition to being more efficient, LEDs also create a more even spread of light, minimizing bright and dark spots. The light appears brighter and whiter, making it easier than traditional yellow looking HPS lights to identify what's illuminated below. All the fixtures have a color temperature of no more than 3000k. This reduces the

sharpness of the light and is deemed best practice by both the International Dark Sky Association and the American Medical Association.

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) 100% wind energy renewable energy credits

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 is preparing to transition some of its fleet to all electric. Three level 2 electric vehicle charging stations at the Public Works fleet management facility. The City is currently on the waitlist for an EV and is ready to begin transitioning pool 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 soybeans. 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.

The watershed plans continue to help inform decisions regarding the incorporation of stormwater best management practices within the Gaithersburg community. In 2017, the plans aided in the prioritization of allocated funding for critical capital improvement projects such as stream restorations and stormwater retrofits. In 2018, a comprehensive examination of the watershed plans advised the master plan of Gaithersburg Parks and Receptions department for the future integration of water quality projects within city parks.

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.

Environmental Certification Programs, Awards, and Other Activities

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.*

Since the City's initial certification in 2013, the City was recertified in 2016, 2019 and is working toward certification again in 2022.

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 32 years.

Profile Updated March 2022



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

Learn more at green.maryland.gov

