

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.

Town of Bladensburg, Inc.

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Management and Leadership

Environmental Policy Statement

It is the proposed policy of the Town of Bladensburg to protect human health and environmental well-being. It is the intent of the town government, whenever economically feasible and as markets allow, to include "environmentally preferable purchasing" in the daily operations of the town. It is of paramount importance to the town that children and young people be given the opportunity to choose and create lifestyles which are community based, self-sufficient, economically resilient and ecologically sustainable. The town's vision is aimed at improving the capacity of all people to live purposeful, satisfying lives and at providing the opportunity to develop communities that are peaceful, just and ecologically sustainable. Town policies aim to minimize air pollution and other pollution at source, rather than focus on dilution and dispersion technique. The town will ensure all policy decisions to the extent they can be are consistent with principles of ecological sustainability, to ensure that adequate resources and a healthy environment are available to future generations.

The Town of Bladensburg fully embraces our responsibility as an environmental steward and believes in developing sustainable practices as a leader in the State of Maryland, consistent with the Maryland Smart, Green and Growing initiative: <u>www.green.maryland.gov/</u>. The town is thoroughly committed to reducing its environmental impact by actively participating in standards that are in harmony with the earth's natural resources and direction through "environmentally preferable purchasing," use of ENERGY STAR ratings, meet or exceed current EPA standards located on their web site: <u>www.epa.gov</u>, and other green initiatives.

Environmental Team

The Town Manager, Public Works Director, Code Enforcement Director, Treasurer, Town Clerk, and Grant Manager meet weekly to ensure compliance with our stated policy. The Management Staff then meets monthly with the Mayor and Town Council in open session to ensure transparency, compliance with RFP conditions and requirements, public opinion and/or support, and compliance with the stated policy.

Annual Environmental Goals

- 1. Installation of the 20 kW Photovoltaic solar panel system, reducing CO2 impacts by 9,717 lbs since October 2010 (realized) and
- 2. Installation of three (3) EnergyStar HVAC units, See results under Energy Efficiency section below.

Environmentally Preferable Purchasing

The Town of Bladensburg has an ordinance addressing recyclable/biodegradable materials and "green" energy systems/technology to promote environmentally preferable purchasing. The Town also has a proposed policy asking mmanufacturers, vendors, or other non-governmental entities contracting with the Town to certify in writing, when required, that any environmental attribute claims they make concerning their products and services are true and accurate and consistent with the Federal Trade Commission's Guidelines for the Use of Environmental Marketing Terms: http://www.ftc.gov/bcp/grnrule/guides980427.htm

Examples:

- 1. 20.2 kW Photovoltaic SHARP solar panel system (DOE, PGCo, EECBG Grant)
- 2. Three (3) EnergyStar HVAC Units (MEA Grant)
- 3. Cleaning materials used by contract with cleaning company:
 - Comet Disinfecting Bathroom Cleaner Citric acid active ingredient system, cleaning agents are biodegradable, meets California VOC requirements, contains no phosphates, packaging is recyclable and made with 35% post consumer recycled plastic.
 - Spic and Span All Purpose Spray and Glass Cleaner Cleaning agents are biodegradable, meets California VOC requirements, contains no phosphates, and packaging is recyclable.
 - *Mr. Clean Finished Floor Finish No phosphates, organic ingredients are biodegradable, and packaging is recyclable.*
 - *P&G Pro Line Disinfectant Floor Cleaner Contains no phosphates, organic ingredients are biodegradable, and packaging is recyclable.*

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All computer printer and copy machine paper currently being purchased by the town is recycled paper.

Environmental Restoration or Community Environmental Projects

The Town of Bladensburg has initiated and hosts a "Community Clean-up Day" throughout the Town on each third Saturday of the month. These activities include trash pick-up on drainage and storm water runoff drainage areas leading directly to the Anacostia Basin. Community Service hours are also earned and certified for participation.

The Collaboration of Municipalities Energy Grant Project is a unique and thoughtful project in that for the first time a significant group of nine municipal governments agreed on a single method of impacting greenhouse gases while demonstrating a reinvestment to Prince George's County's most densely populated and historically valued communities. This project headed by the Town of Bladensburg was a "shovel ready" project that encouraged energy conservation in several municipalities to specifically include The Towns of Brentwood, North Brentwood, Bladensburg, Colmar Manor, Cottage City, Forest Heights as well as the cities of Glenarden, Mt. Rainier, and Seat Pleasant as a collaborative participating group. Monies brought about by the energy savings will be reinvested within the stated communities by creating an energy assistance fund for seniors as well a portion of the funding going to "seed-the-future" in that funding would be set aside for educational scholarships in the area of environmental jobs, specifically at the level of Prince George's Community College and Colleges contained within the University of Maryland System, but primarily based in Prince George's County.

Current analysis details that the Municipal Collaboration's proposal saved a staggering **344,693.90 lbs CO2 lbs; 2,451.87 lbs SO2 lbs; and 26,490 lbs NO2 per year.** We hope other communities will see the potential for energy reduction offered by this model and considering similar projects.

<u>Waste</u>

Solid Waste Reduction and Reuse

The Town's proposed policy encourages employees to consider alternatives to printing and strive for a paperless office by saving documents to the computer, adding webpages as favorites, saving emails that can be searched later, signing up for paperless billing in the office and at home, using e-fax capabilities that go to specific employees' e-mail accounts, using e-mail and voice mail instead of memos, and making reports and other documents available online.

Recycling

Aluminum and paper products are being recycled.

Energy

Energy Efficiency

The Town of Bladensburg removed three older HVAC systems replacing them with the newer and more energy efficient EnergyStar HVAC units funded by MEA under the EECBG grant funding program which also included energy audits by Khepra Energy Group. The benefits, as prepared by Maryland Energy Administration:

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a.	Electricity Annual Demand Reduction (kW)	4.7
b.	Annual Reduction in Electricity Consumption (kWh)	14,960
	{From estimated cost and savings table line a.}	
	Annual reduction in Natural Gas Consumption (Therm)	1,334
	Annual reduction in Fuel Oil consumption (Gal)	0
	Annual reduction in Propane consumption (Gal)	0
c.	Lifetime energy savings from source (Million Btu)	3,962
Εc		
d.	Installed Cost (\$)	\$ 43,280
e.	Annual Cost Savings (\$) {From estimated cost and	\$ 3,363
	savings table line g.}	
f.	Simple Payback (years) { d+e}	12.87
g.	Lifetime Cost per Million Btu (\$){ d÷c}	\$10.93
Eı		
h.	Annual carbon dioxide emission reductions (kg)	15,186
i.	Lifetime carbon dioxide emission reductions (Metric To	213
j.	Lifetime Cost per Metric Ton of carbon reduced (\$){	\$203.57
	1.0	

Table	4:	Estimated	Energy.	Envir	onmental.	and	Economic	Benefits
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Renewable Energy

In July of 2010, a 20.2 kW photovoltaic system was installed on the rooftop of the Bladensburg town municipal building. The system was subsequently registered with the Maryland Department of Energy and began full operation in October 2010. The system is monitored by PEPCO and as of August 1, 2011 has generated 8,345 kWh at a savings of \$1,251 in electrical costs and 8.3 RECs. On an annual basis, the system should produce an estimated 12,237 kWh/yr saving approximately \$1834.

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Transportation

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Employee Commute

Employees of the Town of Bladensburg are always encouraged to utilize the mass transit system to commute to and from work when appropriate. A bus stop is located at the municipal center.

Efficient Business Travel

Town employees are encouraged to pair up during training travel time specifically police department officers who attend mandated training and instruction at locations about 40 miles, each way, from headquarters. As a result, the town has saved about 360 miles of vehicle use, resulting in a reduction of about 24 gallons of gasoline, equaling about \$72.00 in savings two (2) times a year.

Fleet Vehicles

The Town of Bladensburg's procurement policy requires the town to purchase Flex Fuel Vehicles and/or E85 compliant vehicles when available. Since 2005 the Town has purchased 6-cylinder equipped, FFV/ E85 compliant, police vehicles and diesel motor trucks for the town maintenance/public works section. It is unclear at the present time what the gallons and/or cost savings have been, however, we're confident that we have reduced our consumption of gasoline over the years and have procurement policies in place to ensure continued compliance.

In addition, the proposed policy of the Town of Bladensburg includes the "Idle Free Initiative." "Reduce idling time of Police and other service vehicle(s). Emergency vehicle(s) and first responder vehicle(s) necessarily require emergency equipment activation (flashing lights, etc.) during duty performance. Non response activities where the emergency vehicle or first responder is not in motion, parked, and engine idling, should require the engine to be turned off. Town fleet vehicles will not be parked with the engine operating for more than 5 minutes unless it is essential for performance of work. Exceptions are during an initial engine warm-up period in weather below 35 degrees. When engines must be left operating, for any reason, the operator will remain with the unit.

<u>Water</u>

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Water Conservation

The Town of Bladensburg has begun installing water saver devices in the rest room facilities. In addition, the running cold water fountain has been disabled and contracting is being reviewed for a portable water delivery system to replace the out of service system.

Stormwater Management and Site Design

Bladensburg Municipal Center - Pave Drain, permeable articulating concrete block/mat, was installed at the Bladensburg Municipal Center after removing the asphalt parking lot.

The Pave Drain System is a new unique permeable storm water management alternative that supports Low Impact Development "LID" allowing for infiltration of storm water runoff into a stone filled reservoir below the surface created by the Pave Drain technology. Pave Drain temporarily stores storm water runoff and allows for direct infiltration into the soil below the pavement cleansing storm water and recharging local groundwater resources. The patented arch reservoir maximizes onsite storm water capacity particularly during extreme storm events improving environmental performance and potentially reducing storm water management infrastructure costs.

Bostwick Mansion - The Bostwick Mansion (House) is an Historical Property located in Bladensburg, Maryland, and is one of the many focal points identified in the upcoming War of 1812 remembrance events. The Town of Bladensburg recently had the asphalt driveway removed which contributed to storm water runoff pollutants in the Anacostia Basin. Installed was 11,160 square feet of Grasspave2 porous paving. Grasspave2 porous paving allows you to park, drive, walk, ride, or lounge on a beautiful grass surface. It performs the functions of asphalt or concrete pavement, but with the aesthetics of a lawn-all while enhancing the environment. Grasspave2 is a structure which provides incredible load bearing strength while protecting vegetation root systems from deadly compaction. High void spaces within the entire cross-section enable excellent root development, and storage capacity for rainfall during storm events. For example, a 13-inch cross-section (one inch Grasspave2 with sand and a 12-inch base course) can store 2.6 inches of water—13 inches 3 approx. 20% void space. Stormwater is slowed in movement through and across Grasspave2 surfaces, which deposits suspended sediment and increases time to discharge. Suspended pollutants and moderate amounts of engine oils are consumed by active soil bacteria, which are aided by the system's excellent oxygen exchange capacity.

It is made from 100% recycled plastic, offers urban heat island mitigation, air-conditioning effect (transpiration), encourages tree growth and preservation, reduces erosion and soil migration, airborne dust capture and retention.

<u>Other</u>

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Bladensburg Green Street project – Former Governor Martin O'Malley and the State of Maryland has supported the efforts of the Town of Bladensburg's Green Street Initiative. "Green Street" is a "shovel ready" project that encompasses .6 mile community revitalization effort along the Route 450 corridor that includes the Peace Cross area that addresses the need for road and sidewalk revitalization and light synchronization in the immediate area due to the coming centennial commemoration for the War of 1812 as well as stormwater management issues related to the proximity of the roadway to the Anacostia Watershed. The project incorporates significant cutting-edge green infrastructure concepts such as the use permeable surfaces, energy efficient LED lighting, alternative energy usage, and efficient bioretention facilities for advanced stormwater management. The project will also provide green jobs for State of Maryland residents as well as a potential connectivity to the local public school vocational educational system, as well as those transitioning back into society, to provide alternative job opportunities. At this time, \$4 million dollars has been awarded to the implementation of this effort as well as 1.2 million in support and in kind services.

James Foster, Executive Director, Anacostia Watershed Society stated to the Gazette on May 20, 2010: "Everything that happens on the land ends up in the water," "Things like oil, exhaust, rubber and trash all flow into the river via stormwater runoff." "The Bladensburg project could be a model of how to address pedestrian safety and environmental issues." "It's not going to turn water into wine as far cleaning up the river, but it's a great example of how through proper planning we can solve many problems at once,"

The Environmental Protection Agency (EPA) funded and sponsored a Design Charrette in October, 2010, specially targeted at providing the Town and its partner organizations the latest cutting edge information and techniques to "green" the street. The event was a very successful and energizing event with over 80 attendees, including Congresswoman Edwards and a number of other luminaries and representatives participating and attending. The workshops and activities, which specifically included local members of the War of 1812 Task Force, were abuzz with ideas and concepts of how to not only make the street green and come to life, but also connect with the rest of our community to ensure and ongoing continuum of economic progress, sustainable jobs, and a vibrant future for the Town of Bladensburg.



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