



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.

Maryland Department of the Environment



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State Government
Member since July 2009

Management and Leadership



Environmental Policy Statement

The following policy was first established in 2008 and has been re-approved each year by the Secretary of the Maryland Department of the Environment:

The mission of the Maryland Department of the Environment is to protect and restore the environment for the health and well-being of all Marylanders. MDE is committed to conducting agency operations in a manner that protects the environment and demonstrates good stewardship of the world's natural resources. The Department will do so by adhering to the following principles at all levels and functions of our organization and at all locations:

- 1. Complying with all environmental regulatory requirements and state Executive Orders;*
- 2. Pursuing environmental protection and pollution prevention practices through our environmental objectives and operation procedures;*
- 3. Providing appropriate environmental training and educating employees to encourage environmental responsibility at work and at home; and*
- 4. Ensuring continual improvement of the Department's environmental management system through annual reviews and audits.*

The Department will achieve this high level of performance by integrating these objectives into an Environmental Management System that will guide and provide the necessary structure.

Environmental Team

MDE's Environmental Management System Team is comprised of representatives from the following Administrations: Air and Radiation Administration, Budget and Financing, Emergency Preparedness and Response, Information Management and Technology, Land and Materials Administration, Operational Services, Water and Science Administration, the Attorney General's Office, and the Office of the Secretary. The team meets quarterly and is responsible for the following:

- *Identifying and reviewing annually all federal, state and local environmental regulatory requirements applicable to the Department, including Executive Orders.*
- *Identifying annually environmental aspects over and above regulatory requirements that the Department should address in its Environmental Management System.*
- *Identifying and recommending to the Secretary for approval environmental performance goals and measures for MDE, and*
- *Implementing training and awareness programs to educate key employees about their responsibilities in managing activities consistent with the MDE Environmental Policy.*

Annual Goals

MDE's annual goals for 2018 include the following:

- *Implement the agency's annual energy plan to continue progress in reducing electrical energy usage from a 2010 baseline by FY 2020 (see Energy Efficiency section);*
- *Increase MDE's recycling rate by maintaining proper signage, optimal placement of recycling containers and expansion of recycled materials;*
- *Implement at least one new paper use reduction project (see Solid Waste Reduction section); and*
- *Strengthen MDE's environmentally preferable procurement commitments through improved training.*

Environmentally Preferable Products and Services

MDE has expanded its online permitting and invoicing services to improve customer service and reduce paper use. We also make our publications, including department newsletters, available online.

Environmentally Preferable Purchasing

The Maryland Department of General Services has specified five areas of environmentally preferable products (EPP) under the Green Maryland Act of 2010: janitorial supplies, disposable food service products, paper and office supplies, paint, and electronic and IT products. Additional product or service categories may be added in future years and MDE has requested that WaterSense specifications be included. MDE submits an annual report to DGS on its EPP spending.

MDE purchases computers that conform to EPEAT, ENERGY STAR and the IEEE standards and office equipment that meets ENERGY STAR standards. MDE purchases paper with 50% recycled content paper and our fleet vehicles include hybrid, plug-in hybrid and flex fuel fleet vehicles. See section on Fleet Vehicles for more information.

Environmental Restoration or Community Environmental Projects

MDE distributes environmental information at fairs and festivals throughout the state and sponsors numerous events such as the Clean Water Business Expo, Tawes Awards for a Clean Environment and the Environmental Science Student Internship and Award. MDE staff have also made presentations to school groups on recycling, stormwater control, and other environmental topics.

In MDE's local community, staff have participated in cleanup events at the Gwynns Falls Trailway and at local West Baltimore elementary schools. MDE staff have also worked with the non-profit, Real Food Farm, to assist with their fall harvest. MDE staff donate gently used clothing, household items and toys to the local charity organization, Paul's Place. MDE staff has also conducted numerous tours highlighting the green features of the Montgomery Park building.

Independently-Audited Environmental Management System

MDE has implemented an EMS since 2008, but it has not yet been audited by a third party.

Waste

Solid Waste Reduction and Reuse

MDE has reduced its paper procurement 57% from FY '09 - FY '17, an annual reduction of 10,973 reams of paper. The reduction was largely due to

increased use of electronic communications and forms, and double-sided printing and copying. The biggest gain came when our IT department made a software change to set all networked printers to automatic duplex printing.

The EMS Team has been very active in promoting paper reduction projects. In March 2015, it sent a department-wide survey asking about current and potential paper reduction practices. The survey results provided over 80 practical ideas. The EMS team has implemented 12 of these to date and undertakes a number of new initiatives each year while also monitoring efforts among individual departments. Some of these practices include the following:

- MDE has also moved to electronic timekeeping, eliminating a number of forms including timesheets, leave request and timekeeping change forms.*
- MDE encourages employees to reduce printing and faxing by viewing documents online and requesting information (bid, proposals, data, etc.) in electronic format. MDE also encourages employees to use Fortis, a document management system that has been in use at MDE since 1998. Fortis has a proven track record of success in streamlining administrative processes and reducing paper use and more programs at MDE are adopting this system.*
- The mail room at MDE's headquarters collects more than 520 pounds of unwanted mail each year including mail to former employees. One of MDE's summer interns worked through several bins of this mail to remove MDE addresses from mailing lists. MDE employees have also been encouraged to remove their names from mailings that they are no longer interested in receiving by calling directly or through dmachoice.org or the app PaperKarma.*
- Each of MDE's fax machines receives up to 150 pages of junk faxes per year. With about 35 fax machines at Montgomery Park alone, that's nearly 10 reams of paper. Our summer intern made phone calls to remove MDE fax extensions from a number of unwanted fax lists and MDE employees were encouraged to do the same. MDE is also actively exploring how to phase out fax machines.*
- The Attorney General's office at MDE uses the electronic filing option provided by county courts and provides electronic records to opposing council to reduce paper use.*
- MDE contributed used CDs to Maryland high school art departments for their use in MDE's annual Recycled Sculpture Contest.*
- MDE successfully initiated a rule change to Maryland Rule 7-202 to allow state agencies to give electronic notice to interested parties of the filing for a petition for judicial review, if the person has consented to electronic notice. The prior rule required notice by first class mail. The rule was signed on December 13, 2016 and will have a significant impact on paper usage.*

In addition, for all company-wide meetings and social events, reusable plates, cups and utensils are used. Unwanted office supplies are redistributed through the Department's Swap Area and unwanted office equipment is sent to a government surplus site for reuse. Three-ring binders are collected and donated throughout the year and hundreds have been sent to schools, Habitat Re-Stores, and the Teacher Supply Swap. MDE also holds regular freecycle events that allow employees to give away and exchange items from home.

Recycling

In 2016, MDE achieved a 37.17% recycling rate at all five of its locations. At our headquarters at Montgomery Park, we achieved a 43.42% recycling rate by recycling 30 tons of waste including 15.5 tons cardboard, 8.9 tons mixed paper, and 2.82 tons of commingled containers. This amounted to a cost savings of \$1,740 of avoided disposal costs. Using EPA's WARM model (www.epa.gov/warm) the recycling of these materials reduces greenhouse gases by 31 metric tons of carbon equivalent (MTCE).

In 2011, MDE's Recycling Team initiated an athletic shoe recycling drive with a goal of 500 pairs of shoes. As of December 2017, 3,200 pairs of shoes have been collected and sent to 1) the [Nike ReUse-a-Shoe](#) program where they are ground down and reused in athletic surfaces and other products, 2) [Soles4Souls](#), and 3) local shelters including The Helping Up Mission and Paul's Place.

MDE also recycles Tyvek envelopes, toner bottles, drums and printer cartridges.

Composting

In 2010, MDE initiated a composting pilot project which collected over 4,000 lbs of food waste and coffee grounds from the break rooms which were composted in containers and at community gardens to create rich organic matter for office plants and gardens. Following the success of this pilot, food waste (an estimated 5,850 lbs annually) is now collected twice a week from containers lined with biodegradable bags in all 8 of our break rooms and in our lobby conference rooms. The waste is then hauled away and composted by Veteran Compost. The composting of this waste amounts to an annual greenhouse gas reduction of 3 MTCO_{2e}. MDE is also working with Montgomery Park management to expand food waste collection to all tenants. The Maryland Lottery and Gaming Control Agency began food waste collection in 2016.

Hazardous Waste/Toxic Use Reduction

MDE conducted a chemical clean out of its labs in June 2009 and uses EMS Team representatives to review future procurement of hazardous materials. Reviews are now conducted annually to determine when there is a need to remove hazardous waste from the site.

Energy

Energy Efficiency

*MDE headquarters is located at Montgomery Park, an energy efficient building, which maximizes use of daylight and has an ice storage tank HVAC system that makes use of lower electrical rates during nighttime. In addition, MDE has an agency energy plan that is updated annually. It has enabled the agency to meet and exceed the EmPOWER Maryland initiative goals as well as our current energy plan goal, which is a 10% by FY2020 from a 2010 baseline. **MDE has surpassed this goal with a 35.8% reduction in electrical usage in FY 2017 over FY 2010.** This has been accomplished through a number of initiatives, but most importantly, a complete lighting retrofit accomplished in 2015 at the Montgomery Park headquarters and the Annapolis Field Office.*

The lighting retrofit was made possible through the utility rebate program. Altogether, over 2,700 light fixtures were replaced and over 100 occupancy sensors were installed. Total utility rebates from BGE amounted to over \$188,000, which allowed both projects to be paid for through savings in just one year. These savings amount to 581,458 kWh and \$65,210 annually.

MDE employees also do their part by shutting down all office equipment when not in use and turning off lights when not needed. In addition, MDE has purchased Energy Star office equipment, switched to more energy efficient flat screen computer monitors, and developed a policy in 2012 to ensure maximum use of networked printers over personal desktop printers. This policy reduces energy use as well as the waste and costs associated with printer cartridges and in late 2017, all networked printers were upgraded to more energy efficient models. In January 2010, MDE removed eight vending machines for energy saving purposes and has also removed the motorized projection screens in our conference rooms.

At the Annapolis Field office, dual-pane windows, energy efficient garage doors and and new HVAC equipment was installed as part of a lease renegotiation in 2012.

In June 2017, MDE participated in [Daylight Hour](#) by turning out all lights during the noon hour at our Montgomery Park headquarters. Employees made maximum use of daylight and joined their colleagues for lunch outside as part of an employee picnic with food trucks vendors. We estimate a 700 kW savings.

MDE's reduced electrical usage (prior to the lighting retrofit) amounts to a greenhouse gas reduction of 39 MTCO_{2e} (metric tons carbon dioxide equivalent).

Transportation



Employee Commute

Permanent state employees receive free transportation on MTA routes including local and express buses, the Baltimore Metro Subway, and Light Rail. MDE headquarters is located at Montgomery Park, which is located on two bus lines. Montgomery Park provides a shuttle to both the Baltimore Convention Center and the Camden Yards light rail/MARC commuter rail station during the morning and evening commutes. MDE uses state policies to promote and manage teleworking and compressed work week schedules.

Montgomery Park has five designated parking spots onsite close to the building entrance for those that carpool. The property also has twelve electric vehicle charging stations located in the front and back parking lots. Employees use these stations for personal as well as state vehicles.

Expanding on these efforts is the MDE Alternative Transportation Group (ATG). The ATG works to increase MDE staff's use of transit, carpooling, biking and walking, in place of driving alone. The ATG also provides information to encourage telecommuting. The ATG organizes diverse activities to encourage use of alternative transportation. Below is a sampling of ATG's accomplishments in 2017:

- *ATG conducted outreach to an estimated 25 people visiting the ATG Geographic Information Systems (GIS) Day tables on November 20, 2017 including providing public transit and carpool information.*
- *ATG's core group maintains four email group lists (carpooling, transit, bicycling and walking) for staff interested in alternative transportation. ATG distributes to these employees information on topics such as Car-Free Day September 22; the introduction of a Baltimore City ordinance to require multi-modal transportation planning; the status of protected bicycle lanes in Baltimore City; "Baltimore Transit is Changing" MDE*

Brown Bag Lunch; and proposed changes to bus routes, schedules, and bus stops; and incentives for carpooling.

- *The ATG held an “MTA Presents on BaltimoreLink” Brown Bag on June 22, 2017*
- *For Bike to Work Day 2017, the ATG conducted outreach to MDE and other Montgomery Park businesses’ staff via email and posters around the MDE office and building. Twelve MDE and Montgomery Park staff participated in the ATG’s Bike to Work Day convoys to Montgomery Park on May 19, 2017 and additional staff bicycled to work alone.*
- *ATG maintains a display of transit schedules on the 5th floor at MDE and has updated them to reflect the new BaltimoreLink system as well as transit and walking route maps.*
- *ATG maintains an Intranet site for MDE staff. The site includes a tool to find a carpool match, updates such as on changes to public transit, and information such as commuting by different modes of transportation, teleworking, learning to ride a bicycle, and Thursday walks.*

Efficient Business Travel

Employees use conference calls and webinars to reduce travel.

Fleet Vehicles

Of MDE’s 230 fleet vehicles, 148, or 64%, are either hybrid vehicles or run on alternative fuels. These include:

<i>Bi fuel (CNG and Gas)</i>	<i>3</i>
<i>Diesel</i>	<i>9</i>
<i>Ethanol and gas</i>	<i>119</i>
<i>Hybrid</i>	<i>12</i>
<i>Plug in Hybrid</i>	<i>5</i>

Montgomery Park has 12 electric vehicle charging stations.

MDE has also addressed the environmental impacts of its fleet of 12 boats and research vessels. In 2002, the Annapolis Field Services Program began the conversion of all outboard motors to 2-stroke direct injected Evinrude E-TEC or Yamaha 4-stroke engine, meeting EPA emission standards as well as the California Air Resources Board three-star rating for ultra-low emissions. The 2-stroke direct injected and 4-stroke engines burn 35% to 50% less gasoline, use up to 50% less lubricating oil, reduce air emissions by 75%, reduce water pollution by

preventing the release of gasoline into the surface waters, reduce smoke and fumes and are significantly quieter.

Water

Water Conservation

Montgomery Park has a rainwater collection system that uses the rainwater to flush toilets. The building also has waterless urinals. The site is landscaped with native species plants that require no irrigation. The Annapolis Field Office has dual flush toilets.

Water aerators have been installed on faucets in all MDE restrooms to reduce water use from 2.2 to 0.5 gallons per minute.

Stormwater Management and Site Design

Montgomery Park has 30,000 square feet of green roof as well as bio-retention areas in the front parking lot area which filter stormwater runoff.

Environmental Certification Programs, Awards and Other Activities

MDE's main office is located at Montgomery Park, which received the Environmental Protection Agency's Phoenix Award in 2003 as the preeminent property nationwide among green building development projects that have returned environmentally compromised properties to productive use.

Maryland is a member of the U.S. Climate Alliance, State Electronics Challenge, Regional Greenhouse Gas Initiative, Zero Emission Vehicle Task Force and other multi-state groups working toward common environmental goals.



View our video

Profile Updated January 2018



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

Learn more at green.maryland.gov

