



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 2021 include the following:

- *Energy Reduction. Meet or exceed a 10% energy reduction goal by FY 2029 from a FY 2018 baseline through measures identified in the Agency Energy Plan. MDE will develop and submit a new annual plan to DGS in August 2021.*
- *Emphasize waste reduction and continue to exceed the state agency recycling goal of at least 30% through continued coordination with Montgomery Park management and fellow tenants.*
- *Communication with MDE's EMS and associated green office practices through The Heron employee newsletter and new employee orientation meetings.*

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 Green Maryland Act of 2010 established a requirement that state agencies report annually on their environmentally preferable purchasing (EPP) to the Maryland Department of General Services (DGS). DGS also staffs a Maryland Green Purchasing Committee, which includes MDE staff. MDE's annual report contains information on the following environmentally preferable products:

Lighting: We purchase energy efficient T-8s and LED fixtures

Electronics and Other Equipment: We purchase ENERGY STAR products, [EPEAT](#) computer equipment and the State of Maryland has been designated Silver Level in the [State Electronics Challenge](#).

Paper/Office Supplies: We purchase paper that is 30% post-consumer recycled content (PCRC) or at least 50% total recycled content.

Organics Recycling: See Composting section on our food waste collection.

Transportation and Related Maintenance: See Transportation section on our vehicle fleet.

Appliances and Heating and Cooling Equipment: The central heating and cooling system is managed by our building owner at headquarters, but we are seeking to purchase energy efficient equipment for our Westport field office.

Electronic Product Disposal: The State of Maryland meets the end-of-life disposal requirements of the [State Electronics Challenge](#).

Environmental Restoration or Community Environmental Projects

MDE distributes environmental information at fairs and festivals throughout the state and MDE staff make presentations to school groups on recycling, waste-free lunches, stormwater control, and other environmental topics.

In MDE's local community, staff have participated in cleanup events at the Gwynns Falls Trailway, Masonville Cove and Pigtown. 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 works with Baltimore City Recreation and Parks and their City Farms Coordinator to support the Community Garden that neighbors MDE's property

called "Carroll Park City Farm." We do this by promoting the Community Garden to our employees (we currently have 13 employees gardening in this space) and by participating in voluntary clean up events with the Friends of Carroll Park. MDE employees also tend to pots of flowers and herbs within our property fence line at Montgomery Park.

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 71% from FY '09 - FY '20, an annual reduction of 9,978 reams of paper. Over the previous year, FY '19 to FY '20, MDE reduced paper procurement by 36%. Increased use of electronic communications and forms and setting networked printers to automatic duplex printing have contributed to these savings.

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 requests 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.

- *MDE is actively phasing out fax machines which has eliminated junk faxes (each of MDE's fax machines formerly received up to 150 pages of junk faxes per year) and the printing of documents which can now be viewed and managed electronically.*
- *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 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.*
- *The Radiological Health Program has moved from mailings to e-mail notices of violations saving up to 2,400 letters, envelopes, postage and staff time annually.*
- *Sharing Public Clearinghouse records to a shared drive is saving 44,000 printed pages \$303.60 annually plus staff time.*
- *A Public Information Act database allows all requests and communications to occur via e-mail saving \$4,691 in paper, envelopes and postage annually plus staff time.*

In addition, for all company-wide meetings and social events, reusable plates, cups and utensils are used and employee giveaways have included reusable shopping bags. 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 2019, MDE achieved a 30.23 % recycling rate at all four of its locations. At our headquarters at Montgomery Park, we achieved a 31.37 % recycling rate by recycling 33.32 tons of waste including 20.5 tons of single stream recycling, 4.8 tons of shredded paper, 3.4 tons of food scraps, and 4.5 tons of electronics. This amounted to a cost savings of \$1,933 of avoided disposal costs. Using EPA's WARM model (www.epa.gov/warm) the recycling of these materials reduces greenhouse gases by 123 MTCO₂e (32 MTCE). MDE also recycles plastic bags (10,285 bags in 2019), Tyvek envelopes, and printer cartridges.

From 2011 to 2018, MDE collected more than 3,200 pairs of shoes which were distributed to the [Nike ReUse-a-Shoe](#) program where they are ground down and reused in athletic surfaces and other products, [Soles4Souls](#), and local shelters including The Helping Up Mission and Paul's Place. Employees are now encouraged to donate their used shoes directly to these programs.

Composting

Food waste is collected twice a week from containers lined with biodegradable bags in all eight 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 (6,658 lbs. in 2019) amounts to an annual greenhouse gas reduction of 2.15 MTCO_{2e}. MDE also works with Montgomery Park management to expand food waste collection to other tenants.

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.

MDE also maintains an agency energy plan that is updated annually and has enabled the agency to meet and exceed state energy use reductions goals. This has been accomplished through a number of initiatives, but the most impactful has been a complete lighting retrofit completed in 2015 at Montgomery Park. The lighting retrofit was made possible through the EmPower 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 more than \$188,000, which allowed the project to be paid for through savings in less than two years. MDE also used EmPower rebates in lighting upgrades at our Annapolis Field Office and Westport storage facility.

In FY 19, MDE reduced annual electrical usage at Montgomery Park by 1,128,877 kWh or a 36.4% reduction compared to FY 10. Although the biggest reduction was due to the lighting upgraded in 2015, MDE has continued to reduce its energy use each year through additional efficiency measures. Between FY 2016 (the first full year with new lighting) and FY 2019, MDE has reduced annual energy usage by 210,973 kWh or 9.7 %.

An Executive Order signed by Governor Hogan in 2019 and later codified in 2020, established an energy reduction goal of 10 percent from an FY 2018 baseline by 2029 in state-owned buildings. While the 10% reduction goal applies to the portfolio of state-owned buildings in aggregate rather than for a single facility and does not apply to MDE in its leased space, the goal has been incorporated into our Agency Energy Plan as a useful benchmark for MDE's energy use reduction efforts and as a show of the agency's commitment to continual improvement as stated in our EMS Policy Statement. At Montgomery Park, MDE achieved a 1.7% reduction (17,372 kWh) in electrical usage in FY 2020 from an FY 2018 baseline and a 26.2% reduction (15,474 therms) in natural gas usage for a total combined energy use reduction of 1,606.63 MMBTu.

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. MDE also removed eight vending machines for energy saving purposes and motorized projection screens in conference rooms and then removed all the remaining vending machines in 2020.

MDE has participated in [Daylight Hour](#) annually since 2017 by turning out all lights during the noon hour on the business day closest to the summer solstice. In 2019, we added a Daylight Hour to mark the fall equinox. We estimate a 700 kW savings from these one-hour events, but more importantly, it reminds employees to maximize the use of daylight by not turning on lights in light-filled offices and conference rooms. In 2020, we participated in the Daylight Hour: Home Edition, by encouraging employees to turn off lights at home and posted photos on social media.

On June 25, 2019, Governor Larry Hogan issued an Executive Order establishing an energy reduction goal of 10 percent from an FY 2018 baseline by 2029 in state-owned buildings. MDE headquarters and field offices are leased, rather than located in state-owned space, but the agency will continue to update its annual energy plan and incorporate energy components in all leases.

At the Annapolis Field Office, dual-pane windows, energy efficient garage doors and new HVAC equipment was installed as part of a lease renegotiations at the Annapolis Field Office and similar upgrades have been part of leases at the Cambridge and Frostburg Field Offices. In 2019, the Frostburg Field Office had an energy audit by FirstEnergy, which resulted in new HVAC units, programmable thermostats, LED lighting and sensors.

Transportation

Employee Commute

State employees receive free transportation on MTA routes including local and express buses, the Baltimore Metro Subway, and Light Rail. Now, with the implementation of legislation passed in the Maryland General Assembly (effective July 2019), state employees in the Baltimore region can also ride select long-distance, express Commuter Bus routes for free. MDE headquarters is located at Montgomery Park, which is located on two local bus lines. Montgomery Park provides a shuttle between Montgomery Park and the Baltimore Convention Center and light rail/MARC commuter rail stations during the morning and evening commutes. MDE uses state policies to promote and manage teleworking and compressed work week schedules.

Montgomery Park has eleven designated parking spots onsite close to the building entrances for those that carpool, with six spaces added in 2018 thanks to the ATG's efforts. The property also has twelve electric vehicle charging stations. Staff use these stations for personal and state vehicles.

MDE's Alternative Transportation Group (ATG) continues to work to increase MDE staff's use of transit, carpooling, biking and walking, in place of driving alone. The ATG also provides information to support telecommuters, particularly now during the COVID pandemic, since the Governor issued a "work from home" order to state employees in March. MDE's ATG's core group meets monthly at lunchtime to manage its programs and to plan new projects. Below are ATG accomplishments for 2020:

- *The ATG built an MDE virtual cycling team through Love To Ride and the Baltimore Metropolitan Council, for Cycle September and Bike to Work Week, September 21-27. The ATG created marketing materials and conducted outreach such as via all-MDE emails, to encourage staff participation. A total of 15 MDE staff joined the MDE team, and from June to November, five of the staff*

prevented 544 pounds (0.27 tons) of CO₂ emissions by bicycling for transportation instead of driving.¹

- *For MDOT’s first annual “Walktober” October walking month, the ATG promoted educational webinars on walking and led a virtual and in-person, socially distanced walk on Walk Maryland Day, October 7, with at least 9 staff walking.*
- *Every Thursday at lunchtime, MDE’s ATG leads a half hour walk at Montgomery Park, Carroll Park, and/or virtually with staff walking at home, to promote walking and a healthy workplace.*
- *The ATG continued to work with MDE and Montgomery Park management to implement the carpool parking program and to register MDE carpoolers for carpool parking permits, particularly before the COVID pandemic lockdown sent staff home.*
- *The ATG conducted three surveys of staff on the ATG’s group lists (see below), to help identify staff’s needs for improvements to alternative transportation: (1) to collect information on transportation methods being used by staff during the COVID lockdown (2) to evaluate the need for resumption of the Montgomery Park shuttle’s service; (3) to evaluate staff’s experience with using public transit during COVID.*
- *The ATG continued to maintain four email group lists (carpooling, transit, bicycling and walking) for staff interested in alternative transportation. Emails distributed in 2020 included, for example, updates to transit schedules, bike to work information, surveys, and Thursday lunchtime walk invitations.*
- *Maintained an Intranet site with numerous resources for MDE staff, for example, public transit help, a tool for finding a carpool match, information on obtaining a carpool parking permit, signups for MDE Thursday walks, lessons on how to repair a bike, and safety tips.*

Efficient Business Travel

Employees use conference calls and webinars to reduce travel.

Fleet Vehicles

Of MDE’s 224 fleet vehicles, 113, or 51%, are either hybrid vehicles or run on alternative fuels. These include:

¹ See the Love To Ride calculation methodology at <https://www.lovetoride.net/centralmd/pages/calculations?locale=en-US>, accessed November 23, 2020.

<i>Bi fuel (CNG and Gas)</i>	2
<i>Diesel</i>	9
<i>Ethanol and gas</i>	85
<i>Hybrid</i>	11
<i>Plug in Hybrid</i>	5
<i>Electric</i>	1

EV charging stations at Montgomery Park: 12

The State of Maryland has a goal of transitioning 25% of the state fleet to electric vehicles (EVs) by 2025. Electric-based vehicles include those that are fully electric, plug-in hybrid and hybrid vehicles. Initial projections indicate that MDE would reduce its fleet carbon dioxide equivalent emissions by 11.4% if the 2025 goal is met.

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, saving approximately 45,000 gallons of water per year per fixture. 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.

Green Building



Montgomery Park was developed on a Brownfield site as an adaptive re-use of the former Montgomery Ward Building. The office space includes a number of green building features:

- *All of the glass panes that were removed were recycled into “glassphalt” and used to pave the entranceway.*
- *The pavers near the building entrance were reused from a factory in Baltimore.*
- *MDE’s workstations consist of Homasote walls made from 100% recycled post-consumer newsprint, and a recycled wheat board work surface.*
- *The carpeting is made by [Interface](#) and is [Green Circle](#) certified.*

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 2021



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

Learn more at green.maryland.gov

