

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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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

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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 2023 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 2022.
- 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.
- Communicate MDE's green office practices to employees through The Heron employee newsletter and through videos for new and existing employees.

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, <u>EPEAT</u> computer equipment and the State of Maryland has been designated Silver Level in the <u>State Electronics Challenge</u>.

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 <u>State Electronics Challenge</u>.

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 77% or 14,783 reams of paper from FY '09 - FY '22. Over the previous year, FY '21 to FY '22, MDE increased paper procurement just slightly by 13%. Increased use of electronic communications, teleworking, reduced fax machines, on-line meetings 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 has essentially phased 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

To simplify and communicate with employees on recycling practices, the EMS Team at MDE developed this <u>video</u>. In 2021, MDE achieved a 35.6 % recycling rate at all five of its locations. At our headquarters at Montgomery Park, we achieved a 46.1 % recycling rate by recycling 20.3 tons of waste including 8.7 tons of paper, 11.2 tons of cardboard, and 0.35 tons of food scraps. This amounted to a cost savings of \$1,462 of avoided disposal costs. MDE also recycles Tyvek envelopes and printer cartridges.

From 2011 to 2018, MDE collected more than 3,200 pairs of shoes which were distributed to the <u>Nike ReUse-a-Shoe</u> program where they are ground down

and reused in athletic surfaces and other products, <u>Soles4Souls</u>, 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 MTCO2e. 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.

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.

In FY 2021, we achieved a 15.23% reduction (352,844 kWh) in electrical usage at Montgomery Park from an FY 2018 baseline and a 24.61% reduction (13,154 therms) in natural gas usage.

Compared to FY 20, we had a 14.59% decrease in electrical usage and a 6.11% increase in natural gas usage.

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 <u>Daylight Hour</u> 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.

We also turn off all lighting and setback heating and cooling temperatures on all state holidays, communicate to employees on computer and office equipment settings, are eliminating all fax machines, have turned off the condensers on water coolers, removed vending machines, and have moved our servers to a cloud-based system thereby reducing the need to power and cool our server room.

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. In October 2022, MDE held a Plug Load Awareness Month and encouraged staff to check for equipment that could be eliminated, unplugged or put in sleep mode.

Transportation

Employee Commute

In 2023, MDE became the first state agency to be named a <u>Commuter</u> <u>Choice Maryland Employer Partner</u> and was recognized for the size and commitment of the department's Alternative Transportation Group (ATG). ATG members meet regularly and volunteer their time and energy to help make transportation options easier,

safer, more enjoyable, and sustainable. MDE's headquarters at the Montgomery Park Business Center is accessible by foot and by bike, adjacent to the Gwynns Falls and Carroll Park bike paths, near two MARC train stations, and directly served by two BaltimoreLink local bus routes and the Montgomery Park private shuttle.

State employees receive free transportation on MTA routes including local and express buses, the Baltimore Metro Subway, Light Rail, and the seven longdistance Commuter Bus routes that serve downtown Baltimore. MDE uses state policies to promote and manage teleworking and compressed work week schedules. Since the start of the COVID pandemic in 2020, the State of Maryland has expanded telework for state employees. The State recognizes the benefits of teleworking, including decreased traffic congestion and vehicle air pollution emissions, and the State has streamlined the process for teleworkers and their supervisors to encourage more participation.

Montgomery Park management provides a shuttle between Montgomery Park and the Baltimore Convention Center and light rail/MARC commuter rail stations during the morning and evening commutes. The property also has twelve electric vehicle charging stations. Staff use these stations for personal and state vehicles.

MDE's ATG continues to work to increase MDE staff's use of transit, carpooling, biking, and walking, in place of driving alone. MDE's ATG also provides information to support telecommuters. Below are ATG accomplishments for 2021:

• **Bicycling:** The ATG continued to organize and motivate the MDE cycling team through the Love To Ride app and the Baltimore Metropolitan Council. MDE received a runner up award for its team's riding frequency and distances during Bike Month, May 2021. In total in 2021, 19 MDE staff bicycled 6,447 miles,

which included 679 commute miles, 148 commute trips, and the offsetting of 719 pounds of carbon dioxide emissions.¹ The ATG also led a monthly bike ride from Montgomery Park to the local B&O Railroad Museum farmer's market from May through October (2 miles round-trip), and the ATG led two bicycle rides from Montgomery Park to local restaurants for lunch (2 miles round-trip).

- Walking: For MDOT's second annual "Walktober" October walking month, the ATG promoted educational webinars on walking and led a virtual and in-person walk on Walk Maryland Day, Wednesday, October 6, with at least 8 staff walking. The ATG continued to lead the Walk Maryland Wednesday walk every Wednesday throughout October and into November 2021, in addition to leading a walk every Thursday at lunchtime throughout 2021, to promote walking and a healthy workplace.
- **Transit:** The ATG continued to encourage the use of transit by increasing access to transit information. This included working with the Maryland Department of Budget and Management to revise their Web page to show more detail on the state employee benefit for free use of Baltimore area transit with a state ID. The ATG also worked with MDE staff and Montgomery Park management to correct problems with the Montgomery Park Shuttle schedule when the shuttle was restarted in June.
- **Carpooling:** The ATG successfully negotiated with Montgomery Park management for favorably located designated parking spots for carpoolers to encourage more staff members to carpool. Currently, the Montgomery Park property has eleven designated parking spots onsite.
- All transportation modes: The ATG continued to maintain four email group lists (carpooling, transit, bicycling and walking) to educate and inform staff interested in using alternative transportation for commuting or other transportation trips. The ATG continued to maintain its site on the MDE Intranet site with numerous resources for staff trying to carpool, take transit, bike, walk, or telework. In addition, the ATG continued to negotiate with the Baltimore City Department of Transportation in the ongoing effort to make the intersection near Montgomery Park safer for walkers, transit riders, cyclists, and drivers.

MDE's ATG's core group meets monthly at lunchtime to manage its programs and to plan new projects.

¹ See the Love To Ride calculation methodology at <u>https://www.lovetoride.net/centralmd/pages/calculations?locale=en-US</u>, accessed November 22, 2021.

Efficient Business Travel

Employees use conference calls and webinars to reduce travel.

Fleet Vehicles

Of MDE's 214 fleet vehicles, 104, or 48%, are either hybrid vehicles or run on alternative fuels. These include:

Bi fuel (CNG and Gas)	1
Diesel	9
Ethanol and gas	81
Hybrid	7
Plug in Hybrid	5
Electric	7

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.

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 2stroke 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.

<u>Water</u>

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

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Montgomery Park has 30,000 square feet of green roof as well as bioretention areas in the front parking lot area which filter stormwater runoff. **Green Building**

> Montgomery Park was developed on a Brownfield site as an adaptive reuse 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 <u>Interface</u> and is <u>Green Circle</u> certified.
- A 66 KW solar array was installed on the north building of Montgomery Park in 2024.

Environmental Certification Programs, Awards and Other Activities

MDE's headquarters 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>U.S. Climate Alliance</u>, <u>Under2 Coalition</u>, <u>State Electronics Challenge</u>, <u>Regional Greenhouse Gas Initiative</u>, <u>Zero Emission</u> <u>Vehicle Task Force</u> and other multi-state groups working toward common environmental goals.



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



Learn more at green.maryland.gov