



MARYLAND GREEN PURCHASING

2023 | Annual Report of the Maryland Green Purchasing Committee

Contents

A MESSAGE FROM THE SECRETARY	3
INTRODUCTION	5
MARYLAND’S FY 2023 GREEN SPEND	6
GREEN SPEND ON STATEWIDE COMMODITY CONTRACTS	6
GREEN SPEND ON AGENCY COMMODITY CONTRACTS.....	8
RENEWABLE ENERGY	9
ELECTRIC VEHICLES AND CHARGING STATIONS	9
PROGRAM ACTIVITIES	12
<i>Goal 1: Establish a robust library of specifications</i>	<i>12</i>
<i>Goal 2: Communicate the benefits of green purchasing</i>	<i>13</i>
<i>Goal 3: Continue to provide training and learning opportunities</i>	<i>13</i>
<i>Goal 4: Recognize agencies for their green purchasing successes</i>	<i>15</i>
<i>Goal 5: Simplify the green purchasing process for procurement staff & purchasers</i>	<i>15</i>
<i>Goal 6: Promote the development of recycled content markets</i>	<i>16</i>
<i>Goal 7: Continue to engage and support vendors to increase awareness and compliance</i>	<i>18</i>
PROMOTING RE-USE	18
STATE SURPLUS PROPERTY PROGRAM	18
FEDERAL SURPLUS PROPERTY PROGRAM	18
MEASURING SUCCESS	20
LOOKING AHEAD.....	22
APPENDICES	23
A. REPORTING METHODOLOGY.....	23
B. GREEN PURCHASING COMMITTEE MEMBERSHIP.....	25
C. AGENCY GREEN SPEND REPORT.....	27

A Message from the Secretary



Dear Members of the Legislature:

I am honored to present the FY 2023 Annual Report for the Maryland Green Purchasing Committee. As the Chair of the Green Purchasing Committee, the Department of General Services (DGS) staffs the Committee and leads environmentally preferable purchasing activities for the state.

The Moore/Miller Administration is committed to meeting the state's climate goals, including reaching net-zero emissions by 2045, improving water quality, and making Maryland the greenest state in the country.

Our statewide green purchasing program leverages the purchasing power of Maryland's state government to minimize our impact on the environment, public health and the climate.

This year, the program continued to demonstrate the benefits of green procurement for all Marylanders. I am happy to report that, as a result of our efforts, the Committee documented:

- \$57,766,400 in environmentally preferable purchases by state agencies
- 155,531 tons of greenhouse gas reductions (CO₂e)
- \$5,114,246 in cost savings

The Green Purchasing Committee remains committed to our work to make our communities greener and cleaner for all. Thank you for reading.

A handwritten signature in black ink that reads "Atif Chaudhry". The signature is fluid and cursive.

Atif Chaudhry
Secretary

FY 2023 Impact Report

In FY 2023 the State of Maryland procured \$57,766,400 in environmentally preferable products and services, avoiding harmful impacts of conventional purchases. Those procurements translate into tangible benefits to the citizens of Maryland.

Impacts:

\$5,114,245 Saved

155,531 tons of CO₂e
Avoided

58.2 GWh of Electricity
Saved

14,667 tons of Material
Conserved

15,463,438 gallons of Water
Conserved

798 tons of Waste Avoided

221 tons of Pollution
Reduced

Equivalencies:



31,424 Cars Removed
from the Road

4,899 Homes'
Annual Energy Use



367 Tractor
Trailers' Weight

23 Olympic
Swimming Pools



411 Homes'
Annual Waste





Introduction

Environmentally preferable purchasing, also called “Green Purchasing,” is the procurement or acquisition of goods and/or services that have a lesser or reduced effect on human health and the environment when compared with competing goods or services that serve the same purpose.

The Green Maryland Act of 2010 established Maryland’s Green Purchasing Program as well as the Maryland Green Purchasing Committee to administer the program. The Committee is composed of 12 statutory agency members and is chaired and staffed by the Maryland Department of General Services.

The Committee holds regular quarterly meetings which are open to the public in accordance with the Maryland Open Meetings Act, as well as several working meetings throughout the year. A list of all Committee designees and participants is included in Appendix B.

The Maryland Green Purchasing Committee advances environmentally preferable (or green) purchasing through training, outreach, and coordination with other state entities, and by developing and publishing environmentally preferable specifications for agencies to use in their procurements.

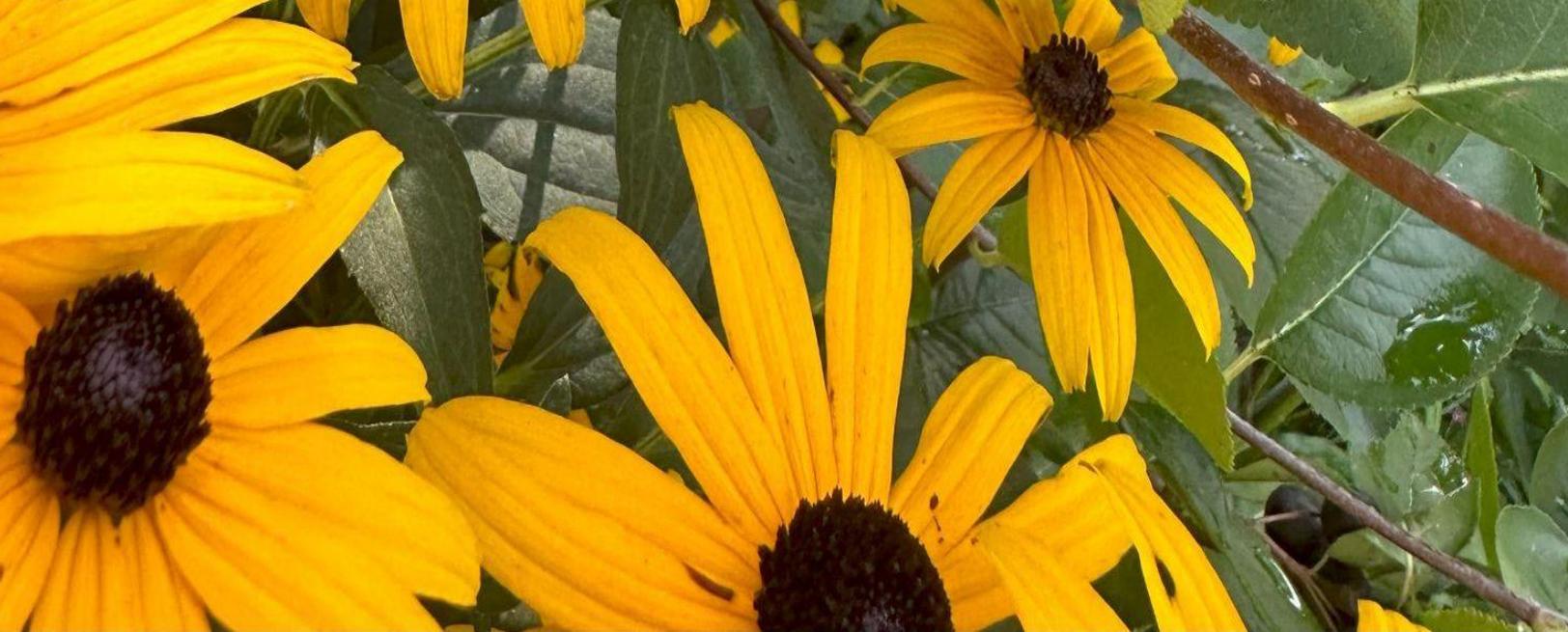
Maryland’s program is strengthened by statutory requirements for the state to buy green:

All procurement agencies shall purchase environmentally preferable products and services unless purchasing environmentally preferable products and services would limit or supersede any requirements under any provision of law or result in the purchase of products and services that:

- (1) Do not perform adequately for the intended use;*
- (2) Exclude adequate competition; or*
- (3) Are not available at a reasonable price in a reasonable period of time.¹*

The Committee is required to report annually to the Maryland General Assembly. This report allows us to document the progress of Maryland’s Green Purchasing Program.

¹ State Finance & Procurement Article § 14-410(f) of the Annotated Code of Maryland
Maryland Green Purchasing Annual Report 2023



Maryland's FY 2023 Green Spend

In FY 2023, Maryland spent \$57.8 million on environmentally preferable products and services. These purchases include green spending on statewide contracts, state agency independent green purchases, renewable energy, electric vehicles (EVs) and EV charging infrastructure. The Green Purchasing Committee (GPC) tracks spending data submitted by vendor reports for key statewide contracts as well as data submitted by agencies.

Spend Type	Amount
Statewide Contracts	\$25,710,716
Agency Green Spend	\$11,880,523
Renewable Energy	\$19,049,678
Electric Vehicles (EVs)	\$374,078
EV Charging Infrastructure	\$751,405
Total	\$57,766,400

Green Spend on Statewide Commodity Contracts

The Green Purchasing Program tracks spending data on statewide contracts in key high impact categories. These contracts are managed by the DGS Office of State Procurement (OSP) and open for all state purchasing entities to utilize. Purchases made through statewide contracts make up a significant portion of Maryland's green spending. In FY 2023, the State of Maryland spent \$25.7 million on green products and services offered on statewide contracts utilized by state agencies, higher education institutions, and local governments across Maryland.

Statewide Contract Spend

Vendor	Product Category						Green Spend	Total Spend	Percent Green
									
Acme			X				\$85,270	\$2,546,370	3.35%
AJ Stationers			X	X		X	\$230,928	\$1,066,309	21.66%
ATS		X					\$5,162,169	\$11,086,176	46.56%
Blind Industries (BISM)				X		X	\$7,441,364	\$9,611,592	77.42%
Canon		X					\$2,155,810	\$2,231,375	96.61%
Cartridge Plus						X	\$51,751	\$81,523	63.48%
CDW-G		X					\$81,484	\$516,177	15.79%
Daly		X					\$362,610	\$1,171,913	30.94%
ELDSI		X					\$414,282	\$621,573	66.65%
Fastenal	X			X			\$95,685	\$109,601	87.30%
FPC Holdings			X				\$578,382	\$3,576,238	16.17%
Grainger	X	X		X	X	X	\$2,760,130	\$23,274,061	11.86%
Graybar					X		\$2,108,488	\$2,908,444	72.50%
MCE	<i>Did Not Provide Data</i>								
RGH Enterprises Inc		X	X	X		X	\$936,206	\$3,076,998	30.43%
Ricoh		X					\$292,682	\$346,537	84.46%
Rudolph's Office and Computer	X	X	X	X	X	X	\$2,080,413	\$6,655,540	31.26%
Sharp		X					\$592,137	\$690,993	85.69%
Toshiba		X					\$219,034	\$248,252	88.23%
Xerox		X					\$61,892	\$61,892	100.00%
TOTAL							\$25,710,716	\$69,881,565	36.79%

Maryland utilizes preferred providers including Blind Industries and Services of Maryland (BISM) for items such as office supplies and janitorial supplies and utilizes Maryland Correctional Enterprises (MCE) for furniture, signage, and more. While MCE sold green products, including furniture to state agencies, that data is not represented in this report as MCE was unable to provide data to the GPC for FY 2023.

Green Spend on Agency Commodity Contracts

While most agencies use statewide contracts to purchase commodities, which are tracked by the Green Purchasing Committee, agencies may choose to enter into their own agreements with vendors. These agreements, reported here as agency contracts, offer the buying agency greater flexibility in their purchases. For instance, specialized agencies like the Maryland Department of Health, need to procure medical goods that other agencies do not require. Agencies may also choose to use their purchase cards (i.e., credit cards) for small purchases made outside of contracts altogether; this may occur if a product is needed urgently and there is not enough time to create and execute a new procurement contract.

Agency Level Contract Spend

Agency	Product Category							Green Spend
							Other	
Education		X						\$ 837,703
Environment		X						\$ 27,988
Housing & Community Development		X						\$ 3,684,825
Military		X						\$ 13,878
Motor Vehicle Administration	X						X	\$ 338,471
Port Authority		X						\$ 448
Stadium Authority		X						\$ 25,154
State Board of Elections		X						\$ 14,139
Towson University	X	X						\$ 1,152,366
University of Baltimore		X	X	X	X	X		\$ 19,350
University of Maryland, Baltimore		X			X			\$ 754,417
University of Maryland, College Park		X		X		X		\$ 4,985,309
University of Maryland Global Campus		X		X	X		X	\$ 26,476
TOTAL								\$ 11,880,523

To better understand these types of purchases and their environmental impact, the Green Purchasing Committee requests that agencies submit green purchasing reports on any environmentally preferable purchases made on agency contracts or through their purchase cards. In FY 2023, 13 state agencies provided detailed green purchasing reports identifying a total state agency green spend of \$11.9 million.

For all state agency green spending, please see page 27.

Renewable Energy

The State purchases renewable power from two utility scale wind installations and one solar installation, utilizing three, 20-year Power Purchase Agreements (PPAs): Mount St. Mary’s Solar; Pinnacle Wind; and Roth Rock Wind. In FY 2023, the State of Maryland spent \$19,049,678 on 224,041 MWh of renewable energy, which accounted for approximately 15% of the electricity utilized for state operations.

Project	Total Generation (kWh)	Total Cost (\$)
Mount St. Mary's - Solar	19,613,201	\$4,365,228
Pinnacle - Wind	181,207,704	\$12,350,979
Roth Rock - Wind	23,219,997	\$2,333,472
Totals	224,040,902	\$19,049,679

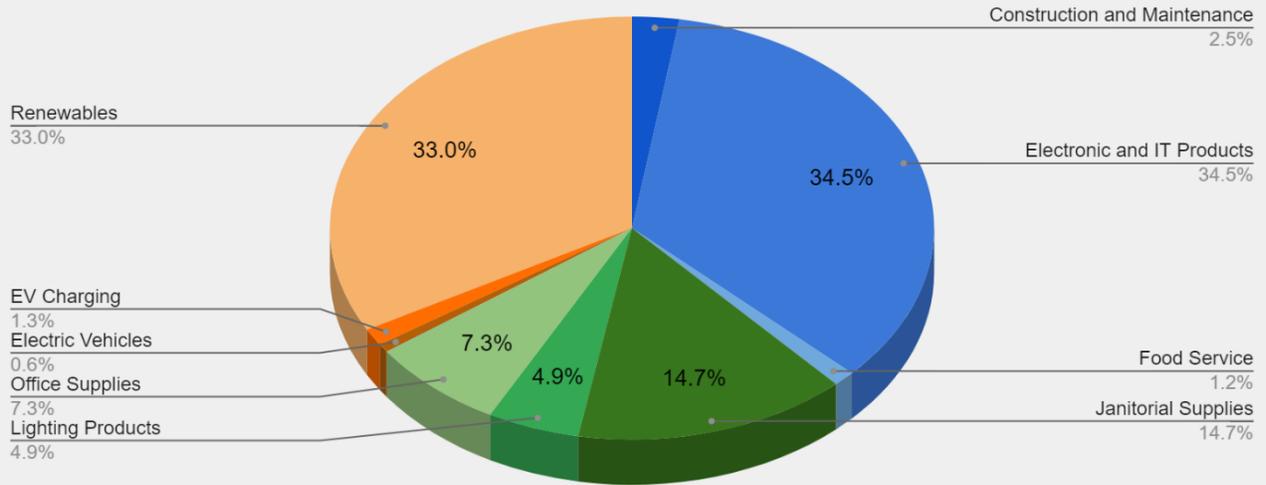
Section 7-704.4 of Senate Bill 781 (POWER Act), (2023 Legislative Session for the Maryland General Assembly), requires DGS to issue a competitive sealed procurement solicitation to enter into a minimum twenty-year PPA to procure up to five million megawatt-hours of offshore wind energy and associated renewable energy credits. Excess energy shall be sold into PJM (the independent system operator for the regional transmission grid) or to creditworthy counterparties. DGS is working with a consultant to draft the language in the request for proposals (RFP) and to find “creditworthy counterparties” to partner with the state in this procurement. The RFP is scheduled to be issued by July 2024.

Electric Vehicles and Charging Stations

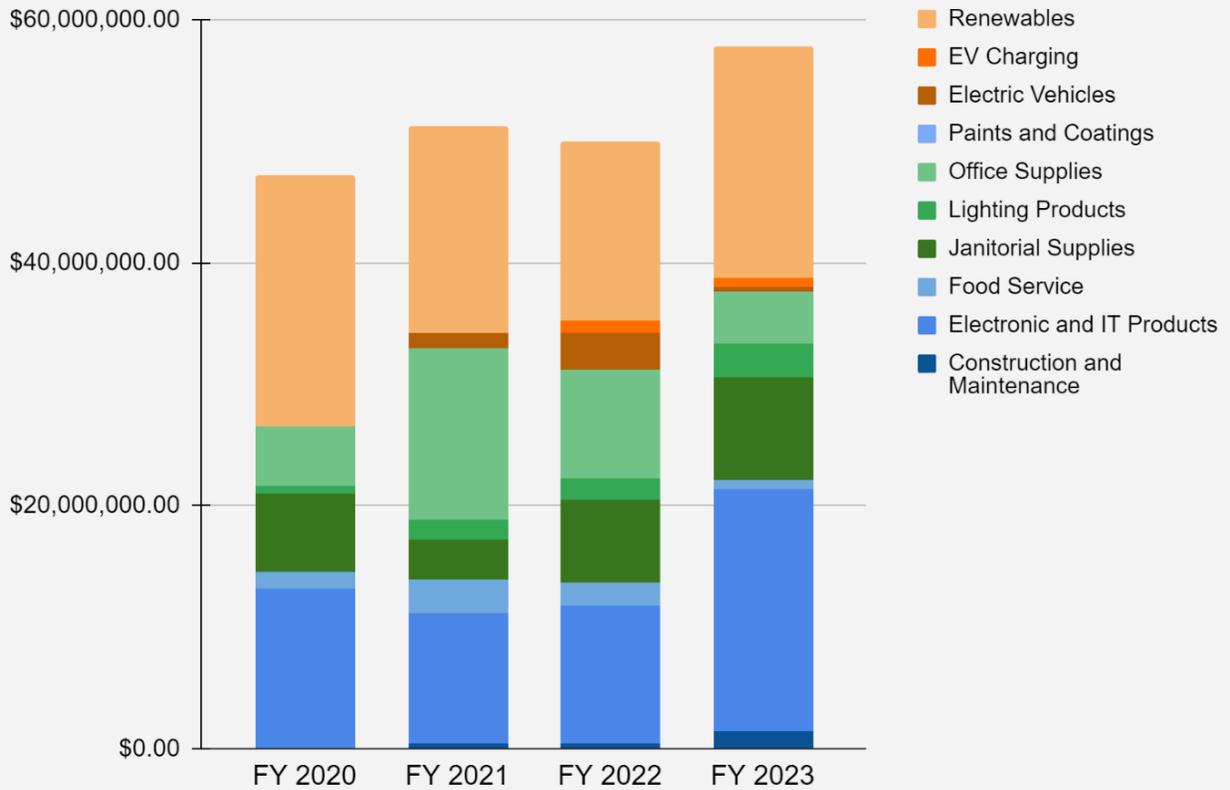
In FY 2023, the state replaced 10 internal combustion engine vehicles with battery electric vehicles that have no tailpipe emissions. These additions bring the state’s total electric fleet vehicle total to 142 battery electric vehicles and 52 plug-in hybrids. Supply chain and labor shortages were some of the factors impacting the state’s ability to procure additional electric vehicles. It is anticipated that the number of EVs purchased by the state will increase in FY 2024 and FY 2025 to meet the requirements of Climate Solutions Now Act.

DGS, responsible for installing EV charging to support the state’s electric fleet, encumbered \$751,405 for development of the charging infrastructure. EV charging encumbrances are expected to grow to \$2 million in FY 2024. Vehicle and charging station procurements are supported by Strategic Energy Investment Funds (SEIF), provided through the Maryland Energy Administration.

FY 2023 Green Spend by Commodity



Green Spend Over Time



Benefit Calculations for FY 2023 Green Spend

Green Purchasing activities provide benefits for the health and wellbeing of the planet and all living things. Below is a snapshot of health, environmental, and cost benefits of the state’s FY 2023 green spend.

	Emissions Avoided / Resources Savings	Pollutants & Toxic Materials Avoidance	Cost Savings
Electric Vehicles	500 tons of CO2e	.01 tons of SO2 .32 tons of NOX .28 tons of VOCs .02 tons of PM2.5	Cost Savings Expected in the Future
Green Electronics & IT	36 GWh of Electricity 7,518 tons of CO2e 10,681 tons of Material 5,600,518 gallons of Water	3 tons of Toxic Substances 89,728 lbs. of Hazardous Waste	\$3,140,592
High Yield & Remanufactured Ink Cartridges	53 tons of CO2e 120 tons of Material	Unable to be estimated at this time	\$221,354
LED Lighting	15 GWh of Electricity 11,200 tons of CO2e	6 tons of SO2 5 tons of NOX .7 tons of PM2.5	\$1,752,300
Recycled Paper	3 GWh of Electricity 5,442 tons of CO2e 9,862,920 gallons of Water	1.19 tons of SO2 10.14 tons of PM2.5 .52 ton of HAPs	
Recycled Products (Non-Paper)	4 GWh of Electricity 438 tons of CO2e 334 tons of Material	Unable to be estimated at this time	
Renewable Energy	130,380 tons of CO2e	70 tons of SO2 56 tons of NOX 2 tons of VOCs 8 tons of PM2.5	

Program Activities

The Green Purchasing Committee identified seven goals for FY 2023 and carried out numerous activities in support of those goals, as described below.

Goal 1: Establish a robust library of specifications

In FY 2023, the GPC approved and published 7 specifications, covering 63 product types.

- [Electronics & IT](#) (updated)
- [EV Charging Equipment](#) (updated)
- [Flooring & Adhesives](#) (updated)
- [Landscaping Plants](#) (updated)
- [Landscaping Services](#)
- [Landscaping Supplies](#)
- [Office Supplies](#)

The Office Supplies specification was developed through a collaborative process with the Sustainable Purchasing Leadership Council's Action Team on Green Office Supplies. The team created both "Green" and "Greener" specifications with feedback from industry and manufacturers. The GPC then combined and adopted as one specification, which covers office paper products, non-paper office supplies, office electronics, and furniture.

The GPC developed the Landscaping Supplies specification to promote the sustainable purchasing of equipment and materials for landscaping projects at state-owned facilities. It covers various landscaping products, including mulch, compost, fertilizer, pesticides, herbicides, outdoor furniture and more. The Landscaping Services specification was developed to promote sustainable practices for groundskeeping maintenance, integrated pest management, plant installation, fertilizer application, and landscaping design for new projects.

In FY 2023, the GPC also adopted the use of an additional IT ecolabel, TCO Certified.² TCO Certified products meet the criteria for social and environmental sustainability including: hazardous substances,

² Learn more about the TCO ecolabel at <https://tcocertified.com/tco-certified/>
Maryland Green Purchasing Annual Report 2023

circularity, socially responsible manufacturing, environmentally responsible manufacturing, and more. TCO joins EPEAT Silver & Gold³ as an accepted certification for green IT.

Goal 2: Communicate the benefits of green purchasing

The GPC expanded the green purchasing benefits calculations to include pollution reductions due to EV purchases, capturing both the health and environmental benefits of fleet electrification.

Additionally, a new benefits category was added to capture and track the benefits of purchases of non-

paper recycled content products. This helps the GPC communicate the benefits of products manufactured using mixed plastics and metals. Those recovered materials are used to manufacture recycled binders, floor mats, mouse pads, and remanufactured toner cartridges.



For the fourth year in a row, the State of Maryland was recognized with an EPEAT Purchaser Award from the Global Electronics Council. The award recognizes Maryland's procurement of IT products with the EPEAT ecolabel, which addresses sustainability across the electronics life cycle, from materials extraction to end-of-life: climate change, chemicals

of concern, circularity and sustainable use of resources, and responsible sourcing. The Global Electronics Council is a non-profit organization dedicated to the design, manufacture, and procurement of sustainable IT products.

Goal 3: Continue to provide training and learning opportunities

The Green Purchasing Committee held numerous training and learning events for state employees in FY 2023. Green Purchasing staff continue to serve as instructors for Green Purchasing foundations training, which is a mandatory component of the **Certified Maryland Procurement Officer (CMPO)** program offered through Maryland Procurement Academy within the DGS Office of State Procurement. In FY 2023, 99 state procurement professionals received green purchasing training through the CMPO program. This training covers the fundamentals of green purchasing, including green purchasing requirements in Maryland and GPC issued specifications.

The **Maryland Green Purchasing Specialist** program was offered for a second year in a row, offering state procurement officers across state agencies the opportunity to become certified green purchasing subject matter experts. In July 2023, 21 procurement officers received their Green Purchasing Specialist certification, joining the 19 who earned their certification in October 2022. To earn the certification, procurement staff had to have already earned their CMPO designation, as well as complete 10 hours of live training and pass an exam. Topics included climate literacy, ecolabels and certifications, lifecycle considerations, and practicing how to green sample contracts.

In September 2022, Baltimore County hosted the Green Purchasing Committee for a **Materials Recovery Facility (MRF) tour**. GPC members were able to observe the facility's recycling operations, which included 86 conveyor belts, 6 sorting screens, 3 optical sorters and 2 balers.

DGS and the Green Purchasing Committee hosted an educational recycle awareness event in honor of **America Recycles Day**. The event engaged state employees and individuals interested in learning about the importance and benefits of recycling and recycling services provided in Maryland. Vendors and state

³ Learn more about EPEAT ecolabel at <https://globalelectronicscouncil.org/>

agencies participated in the event, including Grainger, Republic Services, Securis, Techno Rescue, Waste Strategies, and the Maryland Department of Environment (MDE).



Images: Green Purchasing Committee members and participants at America Recycles Day (top three images) and Bioenergy Devco tour (bottom image).

DGS and the Maryland EV Ambassadors hosted a Maryland Drives Electric event for **National Drive Electric Week**. The event included an opportunity for individuals to learn about Maryland's state fleet transition to electric vehicles and the installation of EV charging stations across the state. Participants had the opportunity to view a BGE charging station demonstration, test drive an EV, talk to EV owners about their experiences, and see over 8 different EV models, including the first Maryland Capitol Police electric patrol vehicle.

DGS and the Green Purchasing Committee celebrated **Earth Day** with a DGS employee event. The event included an EV charging station demonstration, vendor booths featuring green products and organizations, EV trivia and games, and several of the state's EV fleet. Attendees were able to test drive passenger EVs as well as try out micro-mobility solutions such as e-bikes and scooters. [Check out the video here.](#)

Additional training and speaking engagements included:

- Doing Green Business with Maryland presentation at the **Maryland Business Opportunities Summit**
- A Lunch and Learn workshop on green purchasing for construction projects given to DGS construction Project Managers
- A green purchasing update presentation for Maryland's Senior Procurement Advisory Group (SPAG)
- Presentations on Maryland's green purchasing program for the DC Council of Governments, Sustainable Purchasing Leadership Council Public Learning Circle, and Maryland Association of School Business Officials

Goal 4: Recognize agencies for their green purchasing successes

Recognizing state agencies for their success helps to reward high performers, incentivize further achievements, and promote agencies as models and resources for others to learn from.

In order to recognize the green purchasing efforts of state agencies, the GPC highlighted agencies in the February Green Purchasing quarterly meeting for data compliance and for their green spend percentages. Agencies were also recognized via the GPC's quarterly e-newsletter.

In August 2022, the GPC invited the University of Maryland Global Campus (UMGC) to present on their sustainability efforts in recognition of their achievements in recycling and green purchasing. UMGc shared best practices with the GPC on setting up a Green Team and integrating sustainability into campus operations.

All CMPO Green Purchasing Specialists are now publicly listed on DGS' website. These efforts bring attention to their important achievement as well as communicates the subject matter experts that can be a resource to other agency staff.

Goal 5: Simplify the green purchasing process for procurement staff & purchasers

The best way to ensure that green procurement becomes the default procurement activity is to simplify and automate the process whenever possible. The GPC worked with the Office of State Procurement to ensure that green purchasing was represented in their online resources for procurement officers, including guidelines for the e-procurement system, eMaryland Marketplace Advantage or eMMA. An [eMMA Quick Reference Guide for green purchasing](#) includes a list which cross-references green purchasing

specifications with the United Nations Standard Products and Services (UNSPSC) codes to ensure procurement staff can find relevant specifications across categories covered.

The GPC continues to improve the way that specifications are published to be easily identified by agency procurement staff. The Maryland [Green Purchasing Specification Index](#), which lists all product categories covered by each specification document, is now published online in a Microsoft excel format for ease of searching and sorting.

In order to address the impacts of state agency events and marketing activities, the GPC issued guidance to Maryland state agencies on purchasing [Environmentally Preferable Giveaways and Promotional Materials](#).

Green Purchasing staff provides support to procurement officers by attending pre-bid conferences upon request to explain or answer questions related to green purchasing specifications and requirements.

Goal 6: Promote the development of recycled content markets

In FY 2023, Maryland prioritized the purchase of products containing recycled material to support recycling markets. Recycled content products play an important role in the diversion of waste from landfills and help conserve our natural resources. By choosing recycled content over virgin material, Maryland can ensure that its demand for new products is aligned with the state's vision for a sustainable and healthy future for all.

The GPC developed and published specifications which include minimum recycled content requirements for commodities:

- Office Supplies: Recycled content requirements for paper and non-paper products, including but not limited to copy paper, writing pads, writing instruments, binders, and toner cartridges.
- Landscaping supplies: Recycled content requirements for landscaping timbers, fencing and decking, water hoses, and park benches.

The GPC also published guidance on the purchasing of promotional materials and giveaways, including guidance for recycled content in paper marketing materials, water bottles, and reusable tote bags.

DGS, in its role as GPC Chair, served as a member on MDE's Task Force for the Development of Recycling Markets in accordance with the 2021 House Bill 164 and is working closely with MDE on opportunities to promote recycled content markets.

DGS also continues to manage the state's electronic waste (e-waste) through responsible recycling. It is vital to a successful circular economy to recover materials that can be remanufactured or recycled into new products, reducing the need for virgin material. Because electronics are manufactured with materials that are both valuable and potentially hazardous to the environment, their proper disposal is critical.

When electronic waste (e-waste) is improperly managed, there can be consequences for the local environment and the public health of those managing the e-waste, especially if proper safety protocols are not followed. To address these concerns, Maryland requires that e-waste be processed by certified e-Stewards or R2 recycler. In FY 2023, IT products valued at **over \$1 million** were responsibly recycled through the electronics recycling program.



Images: Green Purchasing Specialist graduation (top and middle right), Maryland Business Opportunity Summit (middle left), tour of Baltimore County MRF (bottom).

Goal 7: Continue to engage and support vendors to increase awareness and compliance

A strong collaborative partnership between the GPC and the vendors who serve state agencies is critical to advancing green purchasing in Maryland. Green Purchasing staff regularly meets with vendors to provide one-on-one coaching on green purchasing requirements and opportunities for vendors to “green” their practices.

In FY 2023, the GPC worked with the following vendors:

- Cintas
- Fastenal
- Asphalt Plus
- AJ Stationers
- Grainger

Two vendors with statewide contracts, RGH and Grainger, provided presentations to the GPC on how to identify and purchase green products on their vendor portals. RGH developed a specific green list, with green products identified with a green checkmark. Grainger added a green “M” icon to their platform, which denotes the products that meet the Maryland Green Purchasing requirements.

Promoting Re-Use

DGS manages the acquisition and utilization of surplus property through two statewide programs: the State Surplus Property Program and the Federal Surplus Property Program. These programs are excellent examples of the circular economy in action and support Maryland’s role as a responsible steward of both taxpayer dollars and our natural environment.

When Maryland reduces the number of new items purchased, by keeping items in use or extending their life and responsibly managing the end life of the products consumed, waste is minimized, and our environmental footprint shrinks. Extending the useful life of products not only eases unnecessary burdens on the state budget, but also diverts waste from Maryland’s landfills. By avoiding both the cost of a purchase as well as the cost of the disposal, Maryland can shift those dollars to serve other purposes.

State Surplus Property Program

The DGS State Surplus Property Program is responsible for the management of excess and unneeded State-owned property. The DGS Inventory Standards and Support Services Division determines the appropriate disposition method and ensures useful items are reused whenever possible.

In FY 2023, **over \$2 million** worth of property was reassigned to other state agencies and \$13 million was donated to local jurisdictions and non-profit organizations who could give the items a second life. Most items were disposed of through online auction, thereby lengthening the lifespan of the product, while also bringing funds back to the state. The division sold over \$68 million worth of property through online auctions, including 660 state vehicles and pieces of equipment.

Federal Surplus Property Program

The Federal Surplus Property Program, administered by DGS, ensures that federal property can be re-utilized by state, local, and non-profit organizations. Through this program, the state acquires furniture, electronics, vehicles, as well as tools, machinery, and equipment no longer needed by the Federal

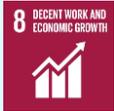
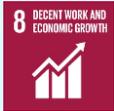
Government. This property is then distributed to state agencies, local governments, and other organizations within Maryland.

In FY 2023, the program managed the distribution of property valued at \$33.3 million, which resulted in savings by reducing the need to buy new products while at the same time, keeping these products out of the Maryland landfills.

FY 23 FEDERAL SURPLUS PROPERTY DONATIONS (JULY 2022-JUNE 2023)		
Organization Type	Items Donated	Donation Value
Small Business (8a)	Desktops, Cold Weather Jackets, Equipment, Vehicle	\$377,222.99
Schools	Equipment, Electronics, Furniture, Aircraft, Stationery, Cleaning Supplies, Computers	\$4,763,189.49
Museums	Helicopter, Furniture, Aircraft, Computers	\$5,186,706.95
MD DGS	Furniture, Baby Items, Equipment, Men's shoes	\$484,296.43
MD State Agencies	Furniture, Baby Food, Stationery, Equipment	\$92,168.00
Nonprofit Organizations	Medical & Surgical Supplies, Equipment, Furniture, Food, Baby Supplies, Bedding, Computers, Tablets, Printers, Phones, Van, Men's Shoes, Truck, Trailer, Forklift, Passenger Motors, Cleaning Supplies, RV, Stationery, Storage Container, Utensils	\$21,952,682.33
Volunteer Fire Departments	Furniture	\$18,889.16
Veteran-Owned Small Business (VOSB)	Printers, Pelican Cases, Equipment, Laptop Cases, Computers, Phones, Stationery, Passenger vehicle	\$391,158.80
Total		\$33,266,314.15

Measuring Success

The GPC uses Key Performance Indicators (KPIs) based on the [United Nation's Sustainable Development Goals](#) (UN SDGs) to evaluate the success of our program.

	FY 2023	FY 2022	UN SDGs
Program Focused			
<i>Contract Integration</i>			
Specifications Approved and Published (No.)	7	7	  
Contract Solicitations Greened (No.)	11	8	
<i>Training</i>			
Vendor Outreach and Training (Hours)	10	17.25	  
Agency Outreach and Training (Hours)	32	19	
Procurement Officers Trained (No.)	114	154	
<i>Communication & Outreach</i>			
GPC Website Visits (No.)	2,041	7,437	
Newsletter Engagement Rate	53%	59%	
Newsletter Subscriptions (New FY-to-Date)	140	245	
<i>Leadership & Recognition</i>			
Awards Received (No.)	1	4	  
Partnerships Developed (No.)	1	2	
Product Focused			
<i>Financial</i>			
Cost savings (USD)	\$5,114,246	\$3,008,973	 
Total Green Spend (USD)	\$57,766,400	\$49,983,826	
<i>Energy</i>			
Electricity Savings (MWh)	58,202	41,000	 
Renewable Energy Purchased (MWh)	224,041	157,946	

	FY 2023	FY 2022	UN SDGs
Product Focused			
<i>Emissions</i>			
GHG Emissions Reductions (<i>Tons</i>)	155,531	170,197	 
EV Projects Completed (<i>No. of Ports</i>)	116	146	  
Electric vehicles Purchased (<i>No.</i>)	10	90	
<i>Water</i>			
Water Saved (<i>Gallons</i>)	15,463,438	30,656,142	
<i>Natural Resources</i>			
Material Conservation (<i>Tons</i>)	14,667	15,303	  
State Surplus Property Program (<i>USD</i>)	~\$2,000,000	\$1,224,676	
<i>Pollution</i>			
Hazardous Air Pollutant Reduction (<i>Tons</i>)	0.52	1.5	 
Other Air Pollutants (<i>Tons</i>)	221	235	
<i>Waste</i>			
Municipal Solid Waste Reduction (<i>Tons</i>)	798	606	
Hazardous Solid Waste Reduction (<i>Tons</i>)	45	27	  
E-Waste Recycled Responsibly (<i>USD</i>)	~\$1,000,000	\$1,648,511	



Looking Ahead

The Maryland Green Purchasing Program looks forward to future growth while continuing to pursue established goals:

1. Continue building out a robust library of specifications
2. Communicate the benefits of green purchasing
3. Expand training and learning opportunities
4. Recognize agencies for their green purchasing successes
5. Simplify the green purchasing process for procurement staff and purchasers
6. Promote the development of recycled content markets
7. Continue to engage and support vendors to increase awareness and compliance

Appendices

A. Reporting Methodology

Standards for Environmentally Preferable Products

The Maryland Green Purchasing Committee utilizes standardized vendor reporting templates, created for Maryland by RPN, to collect data quarterly from targeted vendors with statewide contracts. For the purposes of reporting, the Maryland Green Purchasing Committee uses a [strict set of criteria](#) for products to be counted as green and included in green spend figures.

All tonnage values in this report are in U.S. Short Tons. All values are rounded to the nearest whole number.

Benefits Calculation Methodology

1. Benefits Equivalencies

Equivalency calculations for energy savings and greenhouse gas reductions were made using the [EPA's Greenhouse Gas Equivalencies Calculator](#). Additional assumptions for equivalencies are based off of EPEAT benefit calculators and are as follows:

- Annual Municipal Solid Waste estimate is 4,100 lbs. per household per year.⁴
- Olympic Sized Swimming Pool holds 660,430 gallons of water.⁵
- 18-wheeler (tractor trailer) weighs 80,000 lbs.⁶

2. LED Lighting

By choosing LEDs instead of incandescent, halogen, fluorescent, and high-intensity discharge (HID) lighting products, the state substantially lowered its electricity bills, reduced its greenhouse gas (GHG) emissions, and protected the health of its workers and the environment by preventing exposure to toxic mercury.

Environmental and cost benefits for LED lighting have been estimated by determining lamp wattage, wattage of CFL being replaced (if unable to be identified, 50% energy savings is assumed), and the associated wattage savings. The value for total wattage saved was then multiplied by the state's cost of electricity per kWh to determine total cost savings. Additional benefits from the purchase of LED luminaires are anticipated (e.g., reduction in mercury exposure) but were unable to be quantified at this time. Benefits were calculated for 7 years. However, since LEDs typically last 5-10 years, the benefits provided may only represent a fraction of total energy and cost savings.

3. Renewable Energy

⁴ EPA, *Advancing Sustainable Materials Management: 2014 Tables and Figures*.

https://www.epa.gov/sites/production/files/2016-11/documents/2014_smm_tablesfigures_508.pdf

U.S. Census Bureau, *America's Families and Living Arrangement: 2016: Average Number of People per Household Table AVG1*. <https://www.census.gov/data/tables/2016/demo/families/cps-2016.html>

⁵ Patagonia Alliance, *How Much Water Does an Olympic Sized Swimming Pool Hold?*

<http://www.patagoniaalliance.org/wp-content/uploads/2014/08/How-much-water-does-an-Olympic-sized-swimming-pool-hold.pdf>

⁶ U.S. Department of Transportation, *Compilation of Existing State Truck Size and Weight Limit Laws Report to Congress*.

https://ops.fhwa.dot.gov/freight/policy/rpt_congress/truck_sw_laws/index.htm

By purchasing renewable energy, the State of Maryland was able to lower its CO2 emissions and other pollutants. Benefit calculations were made using EPA's [Avoided Emissions and Generation Tool \(AVERT\)](#).

4. Zero Emission Vehicles (ZEVs)

The procurement of ZEVs lowers the state's carbon footprint by reducing tailpipe emissions. Benefit calculations were made using Maryland Department of the Environment's benefit analysis.

5. High Yield + Remanufactured Cartridges

High yield and remanufactured ink and toner cartridges provide the dual benefit of greenhouse gas (GHG) reductions and the conservation of primary resources. Estimates for GHG reduction and resource conservation were sourced from the Centre for Remanufacturing and Reuse's study *The Carbon Footprint of Remanufactured versus New Mono-Toner Cartridges*⁷ and a Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT study⁸ on the reuse of toner cartridges.

High yield cartridges manufactured by HP typically provide a page yield between 1.8 – 2.5x a conventional cartridge; HP is the primary manufacturer of high yield cartridges purchased by the State of Maryland. For these benefit calculations, a value of 2x was used when comparing high yield and conventional cartridges. By doing so, we can assume that the purchase of a single high yield cartridge provided a GHG and resource savings of one standard yield cartridge. The benefits of purchasing a remanufactured high yield cartridge were calculated by summing the benefits provided by purchasing a standard yield remanufactured cartridge and a high yield cartridge. Cost savings were estimated at a conservative rate of 15% for high yield products, 30% for remanufactured products, and 45% for remanufactured high yield products.

6. Electronics & IT

The State of Maryland considers IT to be green if servers are certified EPEAT Bronze and if computers and displays, imaging equipment, televisions, and mobile phones are EPEAT certified Silver or Gold. A lifecycle approach is used to estimate the benefits of purchasing and using EPEAT products compared to non-EPEAT products. The analysis captures environmental impacts associated with raw material extraction, components, and product manufacturing and energy consumed during product use. These benefit calculations were made using the [Global Electronic Council's EPEAT Benefits Calculators](#) for imaging equipment, servers, and computers and displays.

7. Recycled Paper Products

Maryland was able to successfully calculate the benefits associated with buying recycled paper in different subcategories: coated freesheet, corrugated container, linerboard, paperboard (coated unbleached kraft and solid bleached sulfate), tissue, uncoated freesheet. Products categorized as uncoated freesheets include copy paper, paper post-its, paper notebooks, envelopes, and paper desk pads. Benefits were calculated using the [Environmental Paper Network calculator](#).

8. Recycled Non-Paper Products

Maryland was able to successfully calculate the benefits associated with buying recycled non-paper products including plastic, metal, and mixed material content. Benefits of recycled non-paper products were calculated by using the [EPA Recycled Content \(ReCon\) Tool \(version 5\)](#).

⁷ <https://docplayer.net/11672387-The-carbon-footprint-of-remanufactured-versus-new-mono-toner-printer-cartridges.html>

⁸ Study: Reuse of Toner Cartridges Reduces Emissions, <https://www.umsicht.fraunhofer.de/en/press-media/press-releases/2019/interseroh-toner-cartridges.html>

B. Green Purchasing Committee Membership

Department	Members/Designees & Participating Staff	
<p>Department of General Services (Chair)</p>	<p>Atif Chaudhry Secretary</p> <p>Emily Soontornsaratool, PMP, CC-P (Designee) Chief, Sustainability Emily.Soontornsaratool@maryland.gov</p> <p>Sam Linton, CMPA (Staff) Green Purchasing Data Coordinator Sam.Linton@maryland.gov</p>	<p>Rod Johnson, CMPO Strategic Sourcing Manager Rod.Johnson@Maryland.gov</p> <p>Ellen Robertson Legislative Liaison Ellen.Robertson@maryland.gov</p> <p>Matthew Smith, CMPO + GPS Procurement Officer Matthew.Smith2@maryland.gov</p>
<p>Department of Budget and Management</p>	<p>Joseph Consoli (Designee) Fleet & Travel Administrator Joseph.Consoli@maryland.gov</p>	
<p>Department of Commerce</p>	<p>Rachel Cruse (Designee) Procurement Supervisor Rachel.Cruse1@maryland.gov</p>	
<p>Department of Education</p>	<p>Frank Conoway (Designee) Business Services Partner, Office of Procurement and Contract Management Frank.Conaway1@maryland.gov</p>	
<p>Department of Environment</p>	<p>Dinesh Gandhi (Designee) Procurement Officer dinesh.gandhi@maryland.gov</p> <p>Amanda Hutchison (Designee) Business Liaison amanda.hutchison@maryland.gov</p> <p>Christy Bujnovszky Recycling Unit Christy.Bujnovszky@maryland.gov</p>	<p>Timothy Kerr Natural Resources Planner timothy.kerr2@maryland.gov</p> <p>Shannon McDonald Natural Resource Planner, Waste Diversion Shannon.McDonald@maryland.gov</p> <p>Cindy Osorto Policy Analyst cindy.osorto1@maryland.gov</p>
<p>Department of Health</p>	<p>Dionne Washington, CMPO + GPS (Designee) Deputy Director, Office of Contract Management & Procurement Dionne.Washington@maryland.gov</p>	
<p>Department of Information Technology</p>	<p>Carla Thompson (Designee) Senior Program Manager II Carla.Thompson2@maryland.gov</p>	

Department of Natural Resources	Blessing Gunden (Designee) Manager, Budget and Procurement Blessinga.Gunden1@maryland.gov	
Department of Public Safety and Correctional Services	Joseph Sedtal (Designee) Director of Procurement Joseph.Sedtal@maryland.gov	Joana Y. Pei Associate Director, Office of Procurement Services Joana.Pei@maryland.gov
State Treasurer	Cissy Blasi (Designee) Deputy Treasurer for Operations cblasi@treasurer.state.md.us	
Department of Transportation	Eddie Lukemire (Designee) Program Manager ELukemire@mdot.maryland.gov	
University System of Maryland	Thomas P. Hickey (Designee) Director of Procurement and Real Property Initiatives THickey@usmd.edu	Patricia Watson Director of Sustainability Towson University pwatson@towson.edu

C. Agency Green Spend Report

The below table shows agency level green purchasing expenditures. When agencies are procuring green products or services outside of statewide contracts, that amount is included in the “Agency Green Spend” column.

Agency	Agency Green Spend	Statewide Green Spend	Total Green Spend	Total Commodity Spend	% Green
Baltimore City Community College		\$3,871.81	\$3,871.81	\$5,564,191.00	0.07%
Board of Contract Appeals		\$820.12	\$820.12	\$1,586.00	51.71%
Board of Nursing		\$12,964.91	\$12,964.91	\$58,176.00	22.29%
Board of Public Works		\$3,933.66	\$3,933.66	\$15,339.00	25.64%
Bowie State University		\$127,362.30	\$127,362.30	\$14,751,279.00	0.86%
Comptroller of Maryland		\$125,471.37	\$125,471.37	\$5,700,362.00	2.20%
Coppin State University		\$20,810.50	\$20,810.50	\$3,025,007.00	0.69%
Department of Aging				\$58,726.00	0.00%
Department of Agriculture		\$32,163.34	\$32,163.34	\$1,898,066.00	1.69%
Department of Budget and Management		\$30,573.71	\$30,573.71	\$483,400.00	6.32%
Department of Commerce		\$12,925.78	\$12,925.78	\$188,468.00	6.86%
Department of Disabilities		\$35,409.19	\$35,409.19	\$57,982.00	61.07%
Department of Environment	\$ 27,988	\$254,915.73	\$282,903.34	\$1,751,395.00	16.15%
Department of General Services		\$888,886.68	\$888,886.68	\$2,629,926.00	33.80%
Department of Health		\$1,606,266.27	\$1,606,266.27	\$100,202,992.00	1.60%

Department of Housing and Community Development	\$ 3,684,825	\$49,784.71	\$3,734,609.71	\$7,006,527.00	53.30%
Department of Human Services		\$889,405.45	\$889,405.45	\$14,998,786.00	5.93%
Department of Information Technology		\$6,989.31	\$6,989.31	\$13,483,965.00	0.05%
Department of Juvenile Services		\$808,085.78	\$808,085.78	\$10,142,268.00	7.97%
Department of Natural Resources		\$364,173.00	\$364,173.00	\$16,969,970.00	2.15%
Department of Planning		\$7,520.86	\$7,520.86	\$418,145.00	1.80%
Department of Public Safety and Correctional Services		\$4,716,013.69	\$4,716,013.69	\$83,605,771.00	5.64%
Department of State Police		\$465,213.91	\$465,213.91	\$16,559,473.00	2.81%
Department of Transportation		\$160,429.91	\$160,429.91	\$77,730,539.00	0.21%
Department of Veterans Affairs		\$23,117.16	\$23,117.16	\$1,010,263.00	2.29%
Executive Department - Governor		\$5,531.44	\$5,531.44	\$408,294.00	1.35%
Frostburg State University				\$8,401,366.00	0.00%
Governor's Office of Crime Prevention, Youth, and Victim Services		\$3,313.86	\$3,313.86	\$18,622.00	17.80%
Judiciary		\$906,594.75	\$906,594.75	\$18,845,520.00	4.81%
General Assembly		\$114,407.66	\$114,407.66	\$3,492,947.00	3.28%
Maryland 529		\$223.60	\$223.60	\$20,250.00	1.10%
Maryland Aviation Administration		\$1,814,099.09	\$1,814,099.09	\$7,502,711.00	24.18%
Maryland Commission on Civil Rights		\$3,024.59	\$3,024.59	\$16,500.00	18.33%
Maryland Department of Emergency Management		\$3,556.73	\$3,556.73	\$112,319.00	3.17%
Maryland Department of Labor		\$77,388.89	\$77,388.89	\$4,132,070.00	1.87%

Maryland Energy Administration		\$83,858.36	\$83,858.36	\$89,676.00	93.51%
Maryland Environmental Service		\$163,228.63	\$163,228.63	\$12,213,318.00	1.34%
Maryland Food Center Authority		\$1,950.61	\$1,950.61	\$119,450.00	1.63%
Maryland Higher Education Commission		\$35,864.10	\$35,864.10	\$39,433.00	90.95%
Maryland Institute for Emergency Medical Services Systems		\$10,056.89	\$10,056.89	\$565,441.00	1.78%
Maryland Insurance Administration		\$31,718.09	\$31,718.09	\$393,161.00	8.07%
Maryland Lottery and Gaming Control Agency		\$11,757.51	\$11,757.51	\$567,485.00	2.07%
Maryland Port Administration	\$ 448	\$598,744.45	\$599,192.45	\$3,860,017.00	15.52%
Maryland Public Broadcasting Commission		\$12,212.56	\$12,212.56	\$1,586,760.00	0.77%
Maryland School for the Deaf		\$72,322.50	\$72,322.50	\$2,134,296.00	3.39%
Maryland Stadium Authority	\$ 25,154	\$130,098.38	\$155,252.03	\$2,228,593.00	6.97%
Maryland State Library		\$3,161.25	\$3,161.25	\$114,322.00	2.77%
Maryland State Retirement and Pension Systems		\$50,791.56	\$50,791.56	\$367,326.00	13.83%
Maryland Transit Administration		\$542,048.17	\$542,048.17	\$7,429,160.00	7.30%
Maryland Transportation Authority		\$441,143.62	\$441,143.62	\$14,850,516.00	2.97%
Military Department	\$ 13,878	\$181,094.61	\$194,972.51	\$1,795,939.00	10.86%
Motor Vehicle Administration	\$ 338,471	\$407,400.58	\$745,871.34	\$7,059,880.00	10.56%
Office of Administrative Hearings		\$50,416.49	\$50,416.49	\$396,369.00	12.72%
Office of People's Counsel		\$4,180.73	\$4,180.73	\$131,608	3.18%
Office of the Attorney General		\$9,925.84	\$9,925.84	\$724,273.00	1.37%

Office of the Public Defender		\$108,110.59	\$108,110.59	\$1,769,150.00	6.11%
Office of the Register of Wills		\$106,970.33	\$106,970.33		
Property Tax Assessment Appeals Boards				\$5,685.00	0.00%
Public Service Commission		\$16,160.06	\$16,160.06	\$167,660.00	9.64%
Salisbury University		\$108,056.53	\$108,056.53	\$10,205,632.00	1.06%
Secretary of State		\$430.93	\$430.93	\$60,252.00	0.72%
State Archives		\$2,236.00	\$2,236.00	\$705,940.00	0.32%
State Board of Elections	\$ 14,139	\$1,622.68	\$15,762.14	\$13,420,811.00	0.12%
State Department of Assessments and Taxation		\$198,631.88	\$198,631.88	\$435,920.00	45.57%
State Department of Education	\$ 837,703	\$262,846.16	\$1,100,549.09	\$2,267,112.00	48.54%
State Ethics Commission		\$8,637.78	\$8,637.78	\$37,207.00	23.22%
State Highway Administration		\$1,246,417.54	\$1,246,417.54	\$30,313,978.00	4.11%
State Treasurer's Office		\$28,668.17	\$28,668.17	\$789,132.00	3.63%
The Secretary's Office (MDOT TSO)				\$6,714,277.00	0.00%
Towson University	\$ 1,152,366	\$120,134.21	\$1,272,500.06	\$38,522,995.00	3.30%
University of Baltimore	\$ 19,350	\$130,177.36	\$149,527.16	\$7,939,137.00	1.88%
University of Maryland Baltimore County		\$44,830.00	\$44,830.00	\$23,801,861.00	0.19%
University of Maryland Center for Environmental Science		\$8,077.35	\$8,077.35	\$1,578,991.00	0.51%
University of Maryland Eastern Shore		\$27,354.31	\$27,354.31	\$19,674,269.00	0.14%
University of Maryland Global Campus	\$ 26,476	\$327.96	\$26,804.43	\$4,132,242.00	0.65%

University of Maryland, Baltimore	\$ 754,417	\$493,083.31	\$1,247,500.24	\$66,770,425.00	1.87%
University of Maryland, College Park	\$ 4,985,309	\$554,011.54	\$5,539,320.60	\$104,300,011.00	5.31%
University System of Maryland		\$63,955.09	\$63,955.09	\$306,638,743.00	0.02%
Unknown Agency		\$130,733.44	\$130,733.44		
Workers' Compensation Commission		\$27,537.85	\$27,537.85	\$157,752.00	17.46%



Maryland Green Purchasing Committee

Web: <https://dgs.maryland.gov/Pages/GreenPurchasing/index.aspx>

Email: DGS.BuyGreen@maryland.gov

