



# ANNUAL REPORT 2020

## Maryland Green Purchasing Committee

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[dgs.maryland.gov/Pages/GreenPurchasing/index.aspx](https://dgs.maryland.gov/Pages/GreenPurchasing/index.aspx)



# CONTENTS

MESSAGE FROM THE SECRETARY _____	3
EXECUTIVE SUMMARY _____	4
INTRODUCTION _____	5
GREEN PURCHASING REPORT _____	7
Environmentally Preferable Purchasing (EPP) _____	7
Reporting Methodology _____	7
FY 2020 Green Purchasing Summary _____	10
Green Purchasing using Statewide Contracts _____	11
Renewable Energy _____	12
QUANTIFYING THE BENEFITS OF GREEN PURCHASING _____	13
Electronic & IT Products _____	13
Lighting Products _____	14
Recycled Copy Paper _____	15
Renewable Energy _____	16
Total Environmental Benefits _____	17
ACTIVITIES REPORT _____	18
FY 2020 Green Purchasing Goal Progress _____	18
Program Development _____	18
Green Purchasing Resources _____	20
Embedding Sustainability into the Procurement Process _____	21
Greened Contracts _____	23
Events & Outreach _____	24
Awards & Recognition _____	26
Collaborations & Memberships _____	27
State Agency Reports _____	28
Federal Surplus Property _____	29
e-Waste Recycling _____	30
COVID-19 Impacts _____	31
LOOKING AHEAD _____	32
Priorities _____	32
Goals _____	32
Projects & Initiatives _____	33
ACKNOWLEDGEMENTS _____	34
APPENDICES _____	35
A. Committee Membership _____	35
B. Green Purchasing Laws & Regulations _____	36
C. Updated Specifications _____	43
D. Green Purchasing Checklist _____	59
E. Definitions _____	62

## *Think Before You Print*



The Maryland Green Purchasing Committee encourages readers to be mindful when printing this report. Please view and share this report digitally when possible.

# MESSAGE FROM THE SECRETARY

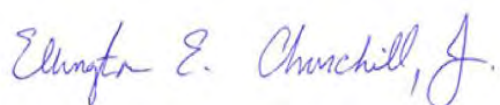
Dear Members of the Legislature:

It is my honor to present this report documenting the achievements of the Maryland Green Purchasing Committee in FY 2020. This year marks the 10th anniversary of the Committee, which was created by the Green Maryland Act of 2010 and is chaired and staffed by the Department of General Services. Over the past decade, the Committee has published environmentally preferable specifications, published a *Best Practices Manual*, conducted training and outreach, and hosted events. This past year represents a productive conclusion to a decade of work.

During FY 2020, the Green Purchasing Committee published updated resources that can help agencies buy green, including updated specifications and an expanded web presence. The Committee has also built a strong programmatic foundation that includes ongoing goal setting, action planning, and continual improvement. As a result of the Committee's work, Maryland has earned national recognition and is emerging as a leader in the arena of sustainable procurement.

I am continuously impressed and inspired by the collaborative spirit of the Committee's agency members, and I believe Maryland is unique in demonstrating this type of inter-agency cooperation. I am proud to submit this work documenting the Green Purchasing Committee's achievements, and I look forward to another productive year.

Respectfully submitted,



Ellington E. Churchill, Jr.

Secretary, Department of General Services



# EXECUTIVE SUMMARY

The Maryland Green Purchasing Committee continued to make great progress in FY 2020.<sup>1</sup> Over the course of the year, the Committee improved inter-agency collaboration, updated resources, strengthened relationships with vendors, and worked to make green purchasing the default activity in Maryland by embedding sustainability into every procurement.

## *Key accomplishments in FY 2020:*

- \$47,183,597 in environmentally preferable purchasing, resulting in
  - Cost Savings of \$821,179
  - Greenhouse gas reduction of 158,159 Metric Tons of CO<sub>2</sub>e
- Two awards for Maryland's procurement of sustainable Information Technology
- Participation in two national forums to present on Maryland's green purchasing successes
- The launch of a revitalized web presence and updated resources
- The approval and publication of two updated specifications
- The inclusion of environmentally preferable purchasing requirements in three statewide contracts (Bagged deicers, Office supplies and equipment, Trash removal and recycling services)
- Implementation of a Green Purchasing Checklist to ensure every solicitation is reviewed for green purchasing opportunities and compliance with environmentally preferable purchasing requirements
- The creation of a Green Purchasing Training Module that will ensure all procurement officers have a foundational knowledge of sustainability and its applications in purchasing

\$47.1

MILLION

in Environmentally  
Preferable Purchasing

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<sup>1</sup> Maryland's Fiscal Year (FY) 2020 covers the period of July 2019 through June 2020.

# INTRODUCTION



1 The Maryland Green Purchasing Committee meets for its Quarterly Meeting in February 2020.

The Maryland Green Purchasing Committee was established by the Green Maryland Act of 2010. The Committee is composed of 10 statutory members and is both chaired and staffed by the Department of General Services. The Committee provides state agencies with the tools and resources they need to implement sustainable procurement, which strengthens markets for healthy and environmentally friendly products and services.

To reduce Maryland state government's carbon footprint; protect our natural resources; prevent air, water, and soil pollution; and support public health, the Committee encourages the purchase of products that:

- Mitigate the effects of climate change by reducing energy consumption and using renewable energy sources;
- Protect our oceans by eliminating the purchase of single-use plastics;
- Protect workers by avoiding the use of products that contain toxic chemicals;
- Save money by purchasing products that reduce electricity, fuel, and water consumption; and
- Support businesses that offer environmentally preferable goods and services.

*“The integration of environmental standards is essential for an effective procurement strategy. It is the right thing to do, for the right reasons. Resources are finite, so our procurement mission must include preserving and protecting these resources for our children and our future.”*

-Robert E. Gleason,  
Chief Procurement Officer

Several statutes and regulations guide the State’s Green Purchasing approach.<sup>2</sup> The two most important policies are the Green Maryland Act of 2010 (Senate Bill 693, Ch. 593 Laws of 2010) and the Environmentally Preferable Procurement - Maryland Green Purchasing Committee Act of 2014. Additionally, Regulation 21.11.07.09 establishes the requirement that Maryland buy environmentally preferable products and services, stating:

*“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.”*

The Committee meets on a quarterly basis, and meetings are open to the public. Subcommittee meetings and working meetings are held more frequently and are open to Committee members and other agency collaborators. The following agencies are statutory members of the Maryland Green Purchasing Committee:<sup>3</sup>

- General Services (Chair)
- Budget & Management
- Environment
- Health
- Information Technology
- Natural Resources
- Public Safety & Correctional Services
- State Treasurer



- Transportation
- University System of Maryland

<sup>2</sup> A full list of Maryland’s statutes and regulations that are relevant to green purchasing are included in Appendix B.

<sup>3</sup> A list of all Members, Designees and Participants is included in Appendix A.

# GREEN PURCHASING REPORT

## Environmentally Preferable Purchasing (EPP)

Environmentally Preferable Purchasing, or EPP, is defined in Maryland State Finance & Procurement Article § 14-410 as *“The procurement or acquisition of goods and 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.”*

This includes considerations based on: raw materials; manufacturing; packaging and distribution; use; operation and maintenance; and refuse and disposal. Environmentally preferable products contain recycled content, conserve energy or water, reduce greenhouse gas emissions, minimize waste, avoid negative impacts to human health, or are less toxic than conventional products.

## Reporting Methodology

The Green Purchasing Committee utilized standardized vendor reporting templates, created for Maryland by the Responsible Purchasing Network, to collect data quarterly from targeted vendors with statewide contracts in FY 2020. The templates collected data for selected product categories that have green purchasing opportunities: Construction and Maintenance, Electronic & IT Products, Food Service Ware, Janitorial Supplies, Lighting Products, Office Supplies, and Paints & Coatings. Data on statewide contract green spend was compiled with green spend data from other sources, including renewable energy data from the DGS Office of Energy & Sustainability.






Construction & Maint.	Electronic & IT Products	Food Service Ware	Janitorial Supplies	Lighting Products	Office Supplies	Paints & Coatings
						
-HVAC Systems -Plumbing -Power Tools -Snow & Ice Control	-Computers and Laptops -Imaging Equipment -Monitors & Displays -Servers	-Dishware -Storage Ware -Towels & Napkins -Utensils	-Cleaners -Disinfectants -Pads, Towels -Tissues -Soap	-Bulbs & Tubes -Lighted Signage	-Furniture -Batteries -Cartridges and Toners -Paper Supplies -Writing Tools	-Adhesives -Brushes & Rollers -Seals

Table 1: EPP Categories with examples of products in each category.

### Standards for Environmentally Preferable Products

For the purposes of reporting, the Maryland Green Purchasing Committee uses the below criteria for products to be counted as green and included in green spend figures.

Products must possess one or more of the ecolabels found in Table 3 for their respective categories, or meet one of the following standards:

<b>Construction &amp; Maintenance</b>	<ul style="list-style-type: none"> <li>• Meet or exceed the applicable U.S. Environmental Protection Agency's Comprehensive Procurement Guideline (EPA CPG).</li> <li>• Where an EPA CPG does not exist for a product category, that product must contain a minimum of 30% post-consumer recycled content or 50% total recycled content.</li> </ul>
<b>Energy</b>	<ul style="list-style-type: none"> <li>• Energy derived from renewable sources such as solar and wind.</li> </ul>
<b>Food Service Ware</b>	<ul style="list-style-type: none"> <li>• Where an EPA CPG does not exist for a product category, that product must contain a minimum of 30% post-consumer recycled content or 50% total recycled content.</li> </ul>
<b>Janitorial Supplies</b>	<ul style="list-style-type: none"> <li>• Where an EPA CPG does not exist for a product category, that product must contain a minimum of 30% post-consumer recycled content or 50% total recycled content.</li> </ul>
<b>Lighting Products</b>	<ul style="list-style-type: none"> <li>• Must be Light-Emitting Diodes (LEDs).</li> </ul>
<b>Office Supplies</b>	<ul style="list-style-type: none"> <li>• Toner and Ink Cartridges labeled as Remanufactured or High Yield.</li> <li>• Rechargeable Batteries.</li> <li>• Where an EPA CPG does not exist for a product category, that product must contain a minimum of 30% post-consumer recycled content or 50% total recycled content.</li> <li>• Powered by Renewable Energy (e.g. solar powered calculators).</li> </ul>

Table 2: EPP standards for products by category, for products with no approved Ecolabels



























































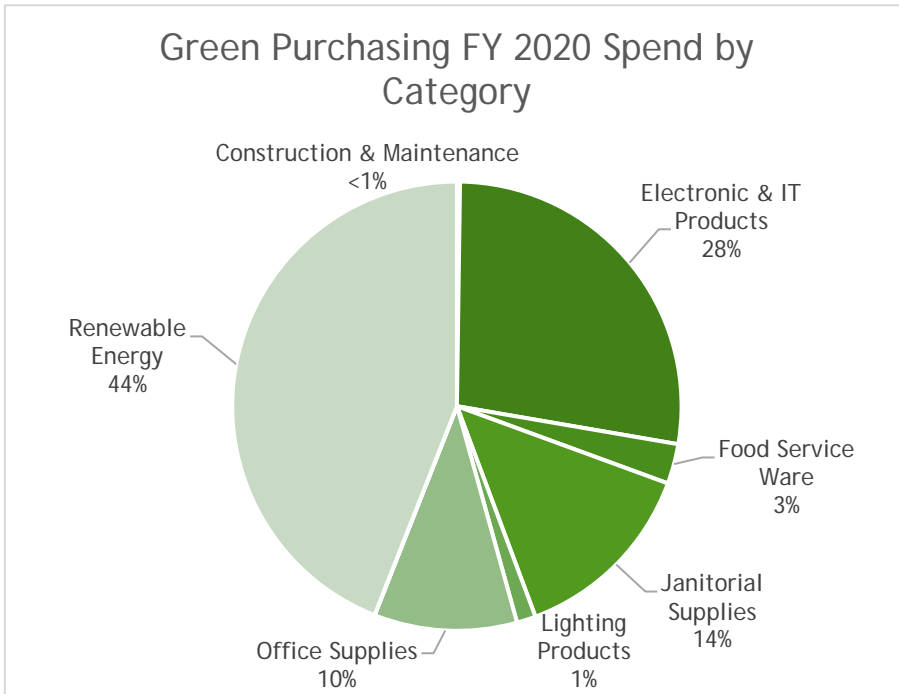
	Construction & Maintenance	Electronic & IT Products	Food Service Ware	Janitorial Supplies	Lighting Products	Office Supplies	Paints & Coatings
Biodegradable Products Institute							
Business and Industry Furniture Manufacturers Association Level							
Carpet and Rug Institute (CRI) Green Label Plus							
Clear Roads Qualified Product List							
Compost Manufacturers Alliance							
Cradle to Cradle (Silver or Higher)							
DesignLights Consortium							
ENERGY STAR							
EPEAT (Silver and Gold)							
EPA CPG							
Fair Trade Certified							
Forest Stewardship Council							
Green Seal							
Greenwise or Greenwise Gold							
MPI Green Performance Standards (e.g., Extreme Green, GPS-1, GPS-2)							
Rainforest Alliance							
Safer Choice							
Scientific Certification Systems Indoor (SCS) Advantage Gold or FloorScore							
UL ECOLOGO							
UL GREENGUARD							
UL GREENGUARD Gold							
WaterSense Certified							

Table 3: EPP Accepted Ecolabels

## FY 2020 Green Purchasing Summary

In FY 2020, Maryland spent \$47,183,597 on renewable energy and environmentally preferable products in the following categories: construction and maintenance, electronic and IT products, food service ware, janitorial supplies, lighting products, office supplies, and paints and coatings. FY 2020 showed an increase in green purchasing of \$14.8 Million from FY 2019.



Renewable energy made up most of the State’s green spend at 44%, followed by Electronic & IT products which made up 28%.

A drastic improvement in the collection of green spend data on statewide IT contracts resulted in a step increase in green purchasing spend in this category for FY 2020. Food Service Ware and Office Supplies saw modest increases in green spend.

Table 4: EPP Spend by category in FY 2020

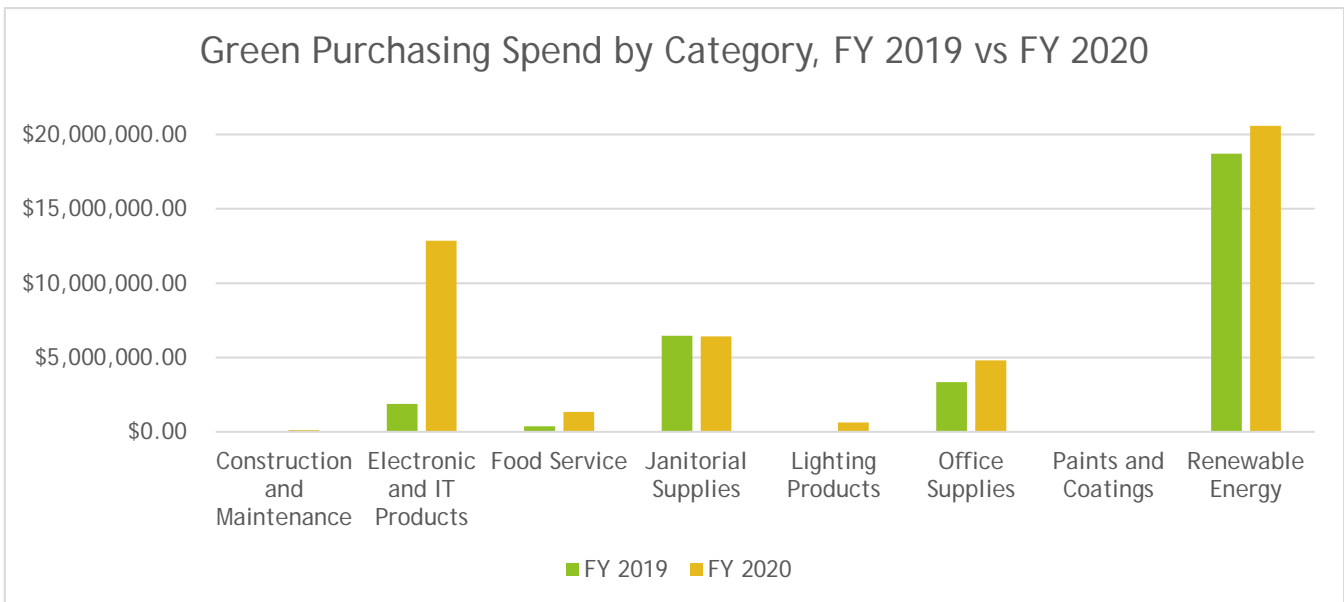


Table 5: EPP Spend by category in FY 2019 and FY 2020

## Green Purchasing using Statewide Contracts

In FY 2020, the State of Maryland purchased \$26.2 Million in environmentally preferable products on Statewide contracts administered by the Department of General Services. Below is a table indicating total contractual spend and total green spend by vendor.

Vendor	Product Category	Total Spend	Total Green Spend	% Green Spend
AJ Stationers	Office Supplies	\$975,049.90	\$181,136.18	18.58%
ATS	Electronic & IT Products	\$13,362,722.44	\$11,827,860.89	88.51%
Blind Industries of Maryland (BISM)	Food Service Janitorial Supplies Office Supplies	\$11,052,695.82	\$6,862,699.41	62.09%
Cartridge Plus	Electronic & IT Products	\$153,792.38	\$23,523.79	15.30%
Fastenal	Construction & Maintenance Janitorial Supplies Lighting Products Office Supplies Paints & Coatings	\$2,677,331.71	\$26,992.57	1.01%
FPC Holdings	Food Service Ware	\$2,614,385.84	\$1,344,694.91	51.43%
Graybar	Lighting Products Office Supplies	\$1,535,998.32	\$450,487.41	29.33%
Maryland Correctional Enterprises (MCE)	Office Supplies	\$53,487,779.24	\$1,807,290.58	3.38%
RGH Enterprises Inc	Electronic & IT Products Janitorial Supplies Office Supplies	\$4,027,039.08	\$1,185,787.93	29.45%
Ricoh	Electronic & IT Products	\$1,070,422.56	\$1,028,113.04	96.05%
Rudolph's Office and Computer	Construction & Maintenance Electronic & IT Products Food Service Ware Janitorial Supplies Office Supplies	\$6,344,633.57	\$1,273,771.11	20.08%
Sharp	Electronic & IT Products	\$271,781.72	\$206,643.09	76.03%
Toshiba	Electronic & IT Products	\$5,027.50	\$472.26	9.39%
W. W. Grainger Inc	Construction & Maintenance Electronic & IT Products Janitorial Supplies Lighting Products Office Supplies Paints and Coatings	\$19,852,762.66	\$376,457.25	1.90%
<b>Sum</b>		<b>\$117,431,422.74</b>	<b>\$26,595,930.42</b>	<b>22.65%</b>

Table 6 Green Spend on Statewide contracts by vendor

## Renewable Energy



2 Left: Mount Saint Mary's 13MW Solar Farm located in Emmitsburg, MD at Mount Saint Mary's College. Right: Pinnacle Wind Farm located in Keyser, WV with an operating capacity of 55.2MW.

Maryland procures its energy commodities through a unique inter-agency collaboration, managed by DGS and the University System of Maryland. Through this initiative, the State purchases renewable power from two large wind installations and a solar installation, utilizing three 20-year Power Purchase Agreements (PPAs): Mount St. Mary's Solar; Pinnacle Wind; and Roth Rock Wind.

In FY 2020, the State of Maryland spent ~\$20.6 million on renewable electricity. Renewable energy accounted for 15.3% of the electricity for State operations in FY 2020. These purchases helped the State meet its Renewable Portfolio Standard (RPS) obligation; however, it is anticipated that additional purchases will be required to meet new, higher RPS requirements in the future.

PPA	Total Generation (MWH)	Total Expenditure (\$)
Mount St. Mary's (Solar)	20,118	\$ 4,334,639
Pinnacle (Wind)	173,208	\$ 13,908,698
Roth Rock (Wind)	25,344	\$ 2,344,330
Totals	218,670	\$ 20,587,667

3 FY 2020 Generating Clean Horizons - Renewable Energy generation and expenditures

# QUANTIFYING THE BENEFITS OF GREEN PURCHASING

The procurement of environmentally preferable purchasing translates to a cleaner, healthier, and more sustainable future for Maryland’s citizens. From reductions in air and water pollution to the protection of local ecosystems, there are clear benefits associated with green purchasing. However, these high-level benefits may be difficult to conceptualize. For this reason, quantitative metrics and equivalencies for targeted activities are provided in this section to illustrate the tremendous environmental benefits of Maryland’s green purchasing program.

## Electronic & IT Products<sup>4</sup>

In FY2020, the State purchased 12,664 IT products that were rated EPEAT Silver or Gold by the Green Electronics Council. Items purchased included imaging equipment, computers, laptops, monitors, and servers. Because these items are more energy-efficient, their use reduces the State’s energy consumption and saves on utility costs. Lower energy usage also results in greenhouse gas reductions.







Benefits of Buying Green Electronic and IT Products					
GHG Emission Reductions: 2,612 metric tons of CO <sub>2</sub> e			Reduction in Non-Hazardous Solid Waste Generated	Toxics Reduction	Material Usage Reduction
<i>Equivalent To:</i>			<i>Equivalent To:</i>		
					
Removing <b>564</b> cars from the road for <b>1</b> year.	Carbon sequestered by <b>3,411</b> acres of US forests in <b>1</b> year.	Electricity usage of <b>442</b> Homes for <b>1</b> year.	Eliminating <b>112</b> US Households’ waste per year	<b>444</b> Fewer Bricks of Hazardous Waste	Saving <b>37</b> 18-Wheelers worth of material

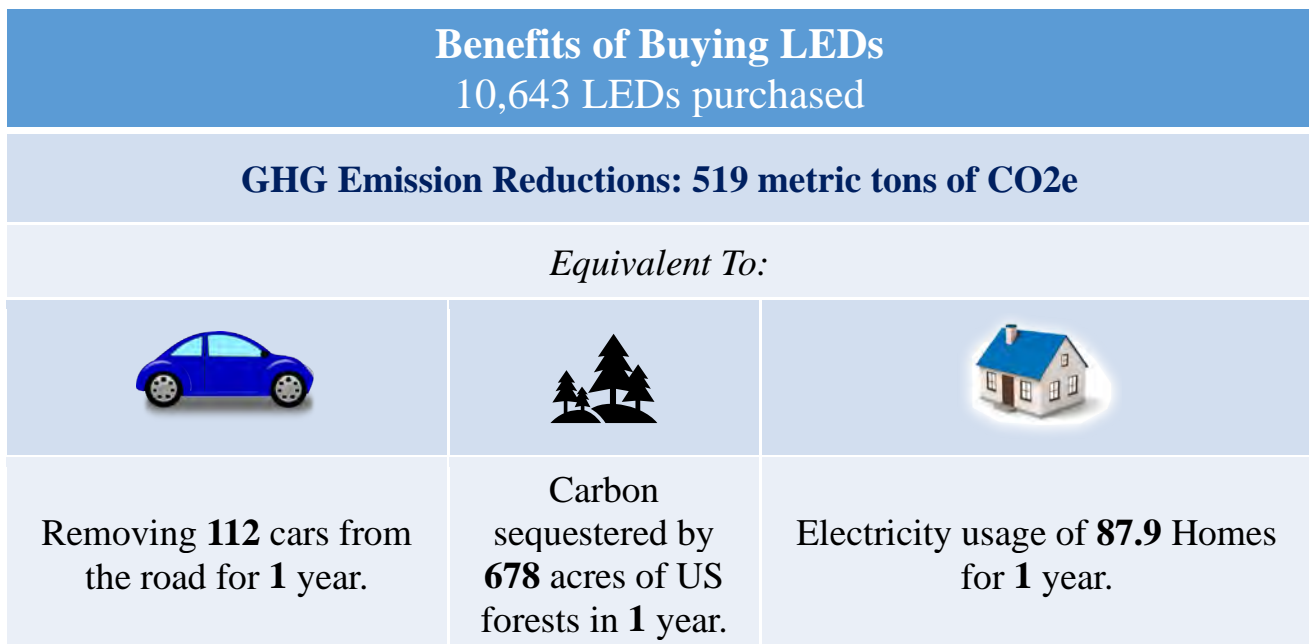
Table 7: Environmental benefits from Maryland’s purchase of green electronics and IT products in FY 2020.

<sup>4</sup> Greenhouse gas reduction benefits were calculated using the EPA’s GHG Equivalencies calculator, available at <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>. Additional reduction benefits were calculated for servers, computers and displays were calculated using Green Electronics EPEAT benefits calculator <https://greenelectronicscouncil.org/epeat-benefits-calculator/>; for imaging equipment using <http://app2.erg.com/EEBC-Imagingv1/eebcCalculator.do>.

EPEAT items are also more responsibly sourced, reducing the need to dispose of toxics and other materials. Another benefit of the State’s procurement of sustainable IT is decreased generation of waste due to reduced usage of material in products.

### Lighting Products<sup>5</sup>










The light-emitting diode (LED) light represents a major advance in lighting technology that offers increased comfort, health and safety. They also provide energy savings compared to incandescent and Compact Fluorescent Lightbulbs (CFLs). LED lamps last about 25-35 times longer than incandescent lamps and require less maintenance. LED lamps are also mercury-free, unlike CFLs, meaning a reduction in the need for hazardous waste disposal. The following benefits have been quantified for LEDs over a period of 1 year. As the lifespan of LEDs average 5-10 years, the benefits provided below represent only a fraction of the energy and cost savings provided by an LED over its lifespan.



<sup>5</sup> Benefits calculated assuming that LED lights replaced CFLs. Benefits quantified using ENERGY STAR’s calculator found here: <https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/save-energy/purchase-energy-saving-products>.

## Paper Office Supplies<sup>6</sup>

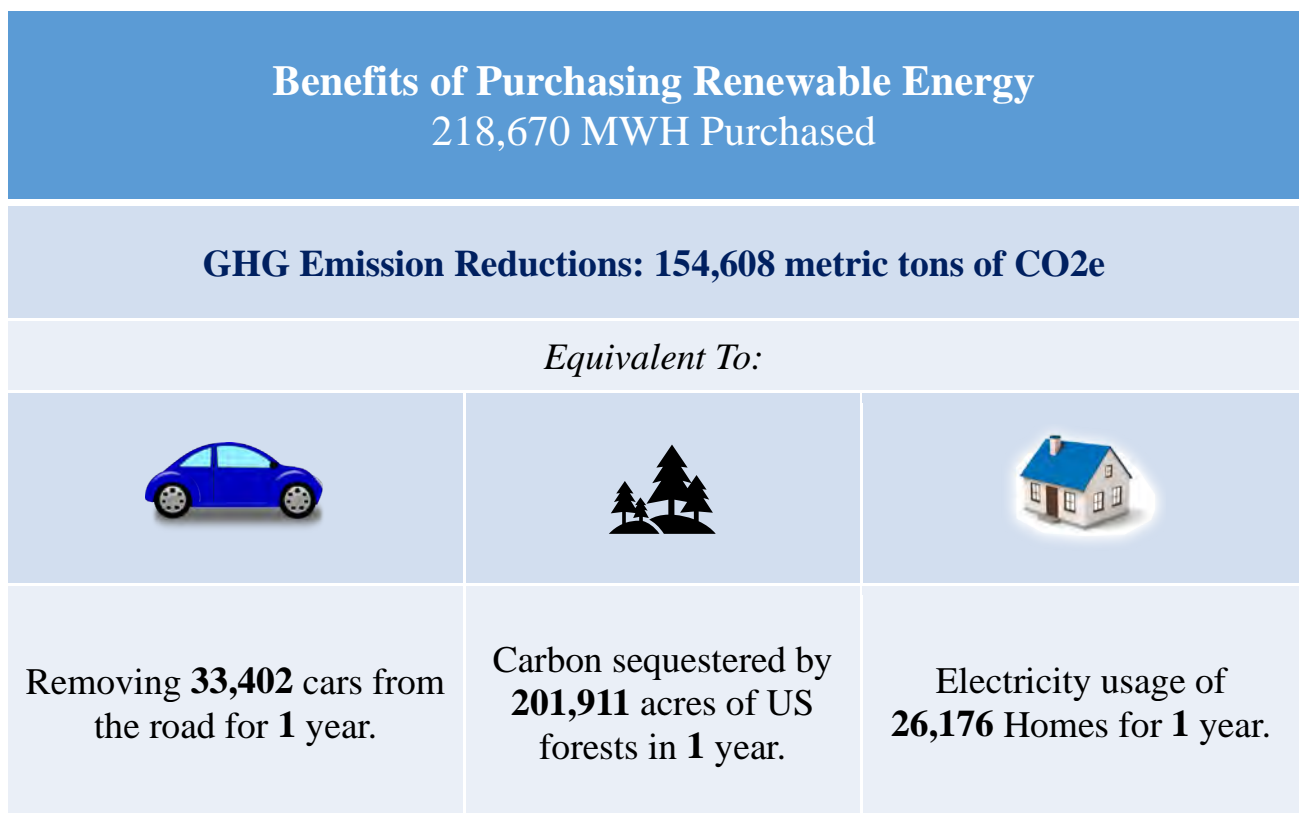
The purchase of recycled paper is a particularly important consideration for the office environment due to its high volume of use. Recycled paper reduces the demand for new lumber and thereby aids in the conservation of resources. The production of recycled paper also emits less pollution and diverts waste from landfills.

Benefits of Buying Recycled Copy Paper			
<b>GHG Emission Reductions: 420 metric tons of CO<sub>2</sub>e</b>			
<i>Equivalent To:</i>			
			
Removing <b>90</b> cars from the road for <b>1</b> year.	Carbon sequestered by <b>548</b> acres of US forests in <b>1</b> year.	Electricity usage of <b>71</b> Homes for <b>1</b> year.	
<b>Additional Reductions In:</b>			
			
<b>889.1 million BTUs.</b> of Energy	<b>168,880 gallons</b> of Water	<b>19 lbs.</b> of Hazardous Air Pollutants	<b>6,937 lbs.</b> of Solid Waste
<b>Conservation of:</b>			
			
<b>32 acres</b> of forest ecosystems		<b>321 metric tons</b> of wood	

<sup>6</sup> Benefits were quantified by using the Environmental Paper Network Calculator, available at: <https://c.environmentalpaper.org/>

## Renewable Energy<sup>7</sup>

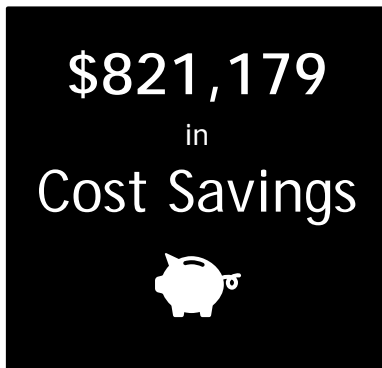
An important step in reducing the State’s reliance on fossil fuels, is pivoting from conventional electricity sources to renewable energy sources such as solar and wind power. In FY 2020, Maryland prevented approximately **154,608** Metric Tons of carbon dioxide equivalent (CO<sub>2</sub>e) from entering the atmosphere. Maryland will continue to see rising benefits from renewable energy each year as the State procures more renewable energy to comply with Maryland’s Renewable Portfolio Standard which requires 50% of its electricity to come from renewable sources by 2030.



<sup>7</sup> Calculated using EPA’s Greenhouse Gas Equivalencies calculator, available at <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>



## Total Environmental Benefits



Maryland's purchases of environmentally preferable products in FY 2020 translate to significant environmental benefits. In all, these activities have prevented 158,159 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) from entering the atmosphere, the equivalent of taking 34,168 passenger vehicles off the road for one year. They have also resulted in cost savings to State of \$821,179.30. As the Committee expands its data collection efforts, and specifications are integrated into procurements, we can expect the associated environmental benefits to increase.




Total Environmental Benefits						
Product Category	Environmental Attribute	CO <sub>2</sub> e Emissions Reductions (Metric Tons)	Equivalent To:			Cost Savings
			Removing Cars Off the Road 	Carbon Sequestered by US Forests in Acres 	Electricity Usage of Homes 	
Electronic and IT Products	EPEAT Silver and Gold	2,612	564	3,411	442	\$759,494
Lighting	Energy Efficiency	519	112	678	87.9	\$61,685.30 <sup>8</sup>
Copy Paper	Recycled Content	420	90.7	548	71.1	NA
Solar and Wind Energy	Renewable Resource	154,608	33,402	201,911	26,176	NA
<b>Total</b>		<b>158,159</b>	<b>34,168.7</b>	<b>206,548</b>	<b>26,777</b>	<b>\$ 821,179.30</b>













Table 8: Total environmental benefits from Maryland's purchase of green electronics and IT, lighting, paper office supplies, and renewable energy in FY 2020.

<sup>8</sup> Estimated cost savings for 1 year of use.

# ACTIVITIES REPORT

## FY 2020 Green Purchasing Goal Progress

The Committee is proud to announce that it has achieved nearly all the goals identified in last year’s Annual Report. Further information is included on each of these initiatives in subsequent sections of this document.

	FY 2020 Goal	Status
	Revised Web Presence	
	Green Purchasing Action Plan	
	Prioritized Contracts	
	Specifications	
	Electric Vehicles	
	Data Collection & Reporting	

## Program Development

The Committee made improvements to the State’s Green Purchasing Program by increasing agency and vendor engagement, hiring dedicated staff, collaborating with a technical consultant (the Responsible Purchasing Network), and forming subcommittees to tackle topic-specific work. The Committee also developed a rigorous approach to action planning, goal setting, and continuous improvement.

Per State Finance and Procurement Article § 14-410, DGS is required to both chair and staff the Maryland Green Purchasing Committee. In September 2019, DGS hired a full-time contractual Sustainability Coordinator to staff the Green Purchasing Committee and provide technical and administrative support. With the addition of this position, the Committee has been able to make significant progress over the past year.

Three Committee Subcommittees met and undertook high-priority projects in FY 2020:

- Communications & Outreach
- Food Service Ware
- Electric Vehicles

The **Communications & Outreach Subcommittee** focused on revitalizing the Committee's online presence, which is discussed further below. Participating Agency members included: Department of General Services, Department of Environment, and State Treasurer's Office.



*4 Members of the Communications & Outreach Subcommittee*

The **Food Service Ware Subcommittee** was formed to ensure that the State of Maryland would comply with the [Statewide Expanded Polystyrene Ban](#), a statewide law that went into effect on July

1, 2020.<sup>9</sup> The Subcommittee identified environmentally preferable alternatives to expanded polystyrene products, the latter which would be removed from State contracts in compliance with the ban. The Subcommittee also updated the State's environmentally preferable Food Service Ware specification, which sets minimum requirements and additional recommendations for food service ware products procured by the State. This specification was approved by the Green Purchasing

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<sup>9</sup> Per a Public Notice issued by the Maryland Department of the Environment, "...food service businesses and schools may continue to use existing inventories of EPS food service products until October 1, 2020, but will not be able to purchase additional EPS food service products after July 1, 2020." <https://mde.maryland.gov/programs/LAND/RecyclingandOperationsprogram/Documents/Expanded%20Polystyrene%20Deadline%20NOTICE%20FINAL.pdf>

Committee and published on the [Committee's website](#). Participating Agency members included: Department of General Services, Department of Aging, Department of Environment, Department of Health, Department of Public Safety and Correctional Services, and University System of Maryland.

The Department of General Services leads an interagency team with dual goals to develop a plan to transition the State Fleet to **Zero Emission Vehicles** and, in conjunction, develop a statewide Zero Emission Electric Vehicles (EVs) infrastructure strategy. EVs not only support the State's climate change goals by avoiding greenhouse gas emissions, but they also support cleaner air for our public and have the added benefits of lower fuel and maintenance costs. Participating Agency members include Department of General Services, Department of Budget and Management, Department of Environment, and Department of Transportation. This subcommittee also coordinates closely with Maryland Energy Administration and the Zero Emission Electric Vehicle Infrastructure Council.

## Green Purchasing Resources

### Specifications

In FY 2020, the Committee approved two updated specifications: Lighting and Food Service Ware, which are included in this report in Appendix C. These specifications were prioritized for the following reasons:

- The purchase of LED lighting equipment can help the State reduce its energy consumption and save money because LEDs last significantly longer than less-efficient incandescent and fluorescent lighting equipment; and
- The purchase of compostable and recyclable food service ware can not only reduce waste but will also bring the State into compliance with the recently enacted statewide expanded polystyrene ban.



The original Lighting Specification was approved and published by the Committee in 2014. Since that time, lighting equipment technology has advanced considerably; consequently, the specification became outdated. The updated Lighting Specification includes a list of prohibited products that have a relatively low energy efficiency and high mercury content. Examples of prohibited products include mercury vapor lamps as well as general purpose incandescent and halogen lamps that can be replaced by LEDs, which use significantly less energy and last 25-35 times longer.<sup>10</sup> The updated Lighting Specification also includes minimum requirements for specific

<sup>10</sup> More information about LEDs is available at <https://www.energy.gov/energysaver/save-electricity-and-fuel/lighting-choices-save-you-money/led-lighting>

types of lighting equipment. For example, all LED luminaires must be certified by either ENERGY STAR or the DesignLights Consortium. It also includes guidelines for end-of-life management.

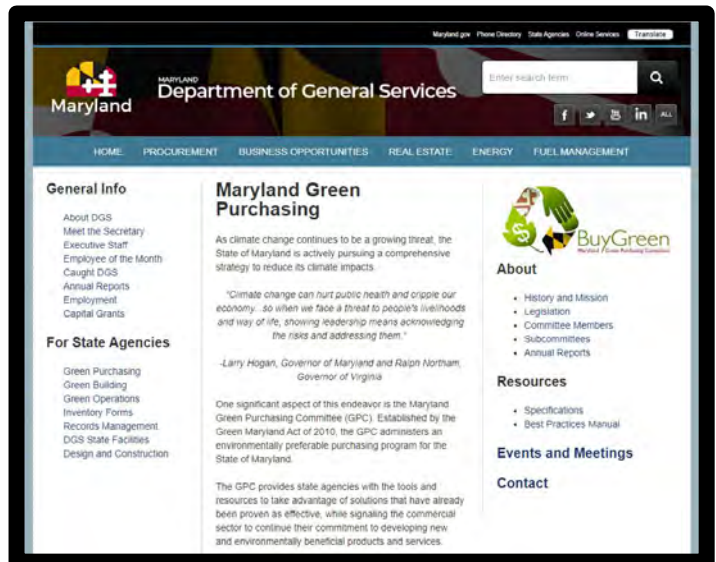
### Updated Web Presence

In February 2020, the Green Purchasing Committee's revitalized [web presence](#) went live. The web pages, hosted on DGS' website, feature 15 updated pages of information.

Upgrades include:

- Revised product and service information in eight categories;
- A comprehensive list of green purchasing related statutes and regulations;
- Green Purchasing Committee history; and
- A full list of Committee members with contact information.

The Committee worked to ensure that the Maryland Green Purchasing web pages on DGS' website are also clearly and prominently linked from the Office of State Procurement's website. From its launch in February through the end of June 2020, the revised Green Purchasing Committee homepage received 2,053 visits.



## Embedding Sustainability into the Procurement Process

One of the gaps identified by the Committee last year was a general lack of awareness around environmentally preferable purchasing and the requirement to use Committee-approved specifications in procurements. The Committee has undertaken several actions that will begin to close the gap between policy and implementation with the goal of ensuring that green purchasing considerations become an embedded part of the overall procurement process.

## Green Purchasing Checklist



The Committee's first step towards closing this gap was to create a Green Purchasing Checklist, published in May 2020. The Checklist helps guide purchasers step-by-step on how to incorporate environmental specifications into their bid solicitation. If a Committee-approved specification exists for a certain product or service category, procurement officers can simply include it into their solicitation. If no Committee-approved specification exists, the procurement officer is directed to work with the DGS Sustainability Coordinator to develop one or provide justification for not including an environmental specification in their bid solicitation. Once completed, the Checklist must be submitted to the DGS Office of State Procurement and the Green Purchasing Committee for final approval. This tool was created in collaboration with the Responsible Purchasing Network using funds from the NASPO Green Purchasing Technical Assistance Grant.

In addition to the Checklist, the Committee worked in collaboration with the Office of State Procurement to update the Maryland Procurement Manual and began the process to incorporate boiler plate language on EPP requirements and vendor data reporting requirements into the statewide RFP and IFB templates.



## Green Purchasing Training

Training is a core responsibility of the Maryland Green Purchasing Committee, and another important way that the Committee is working with procurement officers to embed sustainability into procurement.

In the Spring of 2020, the Maryland Green Purchasing Committee, supported by the Responsible Purchasing Network, designed a training module on green purchasing. Collaborating closely with the Office of State Procurement's Chief Learning Officer, the Committee developed an introductory course consisting of a 2-hour live training, pre-assignments, and a post-training assessment. The module is now included in *Maryland Procurement Academy*, Maryland's statewide procurement certification program that launched in summer 2020. The Green Purchasing Training module held its first pilot class on July 31st. The deployment of this module ensures that procurement officers are aware of the Committee's initiatives as well as resources that can be integrated into their procurement processes, and thus further closes the gap between sustainability and procurement.

## Greened Contracts

Three contracts in FY 2020 included new green purchasing language: Deicers, Office Supplies, and Trash and Recycling. All three contracts also included green purchasing reporting requirements for the vendors.

### Statewide Bagged Deicers



The Bagged Deicer contract included green alternatives to traditional road salt products. These alternatives were chosen off of EPA's Safer Choice Program list or Clear Roads Qualified Products List (QPL).

Awarded Vendors and Blanket Purchase Order (BPO) #s:

- Government MLO Supplies (001B1600124)
- Eddie Mercer Agri-Services, Inc. (001B1600125)
- Salvo Limited Partnership (001B1600126)
- Commodities USA, Inc. (001B1600127)

### Office Supplies & Equipment



The Intergovernmental Cooperative Purchasing Agreement (ICPA) for Office Supplies included requirements that all Electronic and IT products must be on the Electronic Products Environmental Assessment Tool (EPEAT) Registry at the Silver or Gold level, as required by law (State Finance and Procurement Article §14-414).

Awarded Vendor and Blanket Purchase Order (BPO) #:

- RGH Enterprises, Inc. (001B1600132)

### Statewide Trash Removal & Recycling Services



The Statewide Trash Removal and Recycling contract included updated language on recycling and a preference for vendors to use Electric Vehicle (EV) trucks. Awarded Vendors and Blanket Purchase Order (BPO) #:

- Arnold Brothers' Equipment Corp. (001B1600068)
- Burgmeier's Hauling, Inc. (001B1600069)
- F&L Construction, Inc. (001B1600070)
- The Goode Companies, Inc. (001B1600071)
- Jerome L. Taylor Trucking, Inc. (001B1600072)
- BFI Waste Services, LLC dba Republic Services (001B1600073)
- Waste Management of Maryland (001B1600074)

## Events & Outreach

### Vendor Information Session

The Green Purchasing Committee has been working to improve vendor relationships and obtain green spend data from the State's vendors on an ongoing basis. In February 2020, the Committee held a Green Purchasing Information Session for vendors, which was attended by 15 vendors. The presentation covered an overview of Maryland's Green Purchasing Program, the Green Purchasing Committee, relevant laws and regulations, and vendor reporting requirements and procedures. The Committee unveiled its initial plan for working with vendors to obtain data using vendor reporting templates on a quarterly schedule. The session also allowed vendors to voice their feedback and identify ways that reporting could be easier for them. Ultimately, the outreach and communication with vendors has proven successful as 14 of 16 vendors have supplied quarterly data throughout FY 2020.

### Blind Industries and Services of Maryland Tour



On February 24, 2020, the Green Purchasing Committee was hosted by the Blind Industries and Services of Maryland (BISM), a preferred provider, at their Baltimore location. Committee Members toured BISM's manufacturing facilities. Participating agencies included the Department of General Services, Department of Commerce, and Department of Budget and Management.

BISM provides a variety of environmentally preferred products to the State. These products include Green Seal-certified cleaning chemicals and janitorial paper products as well as copy paper with recycled content.





5 The Maryland Green Purchasing Committee toured BISM's Baltimore operations in February 2020.

## Presentations

DGS' Designee to the Committee presented both locally and nationally on Maryland's Green Purchasing Program in FY 2020.

In February 2020, Maryland participated in a NASPO webinar to share the activities and results of the Green Purchasing projects it implemented with the support of Responsible Purchasing Network utilizing a NASPO Green Purchasing Technical Assistance Grant.

In May 2020, Maryland's Green Purchasing program was featured in a session at the Sustainable Purchasing Leadership Council (SPLC)'s annual conference—a virtual summit attended by purchasing professionals, sustainability professionals, suppliers, and NGOs both nationally and across the



world. Emily Soontornsaratool presented as part of a virtual session titled *Success Stories from Public Sector Sustainability Leaders*, where she shared Maryland Green Purchasing Committee's recent green purchasing program development activities and achievements, including its Action Planning process and the achievements of the Committee.

Working collaboratively with the Office of State Procurement, the Committee was invited to be a recurring participant in the meetings of the Senior Procurement Advisory Group (SPAG). The Senior Procurement Advisory Group (SPAG) meets monthly to discuss current procurement issues and provide training, best practices, and guidance to the senior procurement officers across the State, so they may disseminate necessary information to procurement staff. Subject Matter Experts provide training on program requirements, including changes to contracting language and other procurement-related procedures and goals. In May 2020, Emily Soontornsaratool presented to SPAG an overview of the Green Purchasing Committee and introduced the new Green Purchasing Checklist to over 200 SPAG virtual meeting attendees.

## Awards & Recognition

The Maryland Green Purchasing Committee earned two awards in 2020 in recognition of Maryland's leadership in the procurement of sustainable electronics and Information Technology (IT). Sustainable IT provides the dual benefits of saving the State money through reduced utility costs associated with energy efficiency gains and protecting the environment through natural resource management.

### State Electronics Council

In March 2020, the State of Maryland received Silver level recognition in the State Electronics Challenge for its procurement of sustainable IT and responsible end-of-life management in 2019. The State Electronics Challenge is hosted by the Northeast Recycling Council, Inc. with funding from the U.S. Environmental Protection Agency.



## Green Electronics Council



On July 29, 2020, the Department of General Services accepted the honor of an EPEAT (Electronic Product Environmental Assessment Tool) Purchaser Award, on behalf of the State of Maryland. The award was given by the Green Electronics Council, recognizing Maryland's leadership and excellence in purchasing sustainable electronics and IT in 2019. The Green Electronics Council is a non-profit organization dedicated to the design, manufacture, and procurement of sustainable IT products. EPEAT-registered products must meet environmental performance criteria that address materials selection, design for product longevity, reuse and recycling, energy conservation, end-of-life management, and corporate performance.

## Collaborations & Memberships

### Responsible Purchasing Network (RPN)

Maryland has continued to partner with the Responsible Purchasing Network (RPN), which is a network of public agencies and institutions dedicated to developing tools and other resources to make sustainable purchasing easier. In 2019, RPN completed several deliverables for a Sustainable Purchasing Roadmap Project funded through a NASPO Green Purchasing Technical Assistance Funds grant.



Under that project, RPN collaborated with Maryland to develop:

- A Green Purchasing Benchmarking Assessment comparing Maryland's Green purchasing program design and practices to the best practices of other states;
- Program design Recommendations relating to Maryland's green purchasing program design and procedures (e.g., staffing, prioritization, specification development, tracking and reporting, etc.) and a benchmarking assessment;
- Practical green purchasing tools including environmentally preferable purchasing (EPP) boilerplate language, a green purchasing checklist, and vendor reporting data templates used to collect green spend data; and
- An Action Plan for the State of Maryland's Green Purchasing Program.

DGS joined Responsible Purchasing Network as a member in February 2020 and has benefitted from its technical expertise, which has been focused largely on support related to Committee specifications updates and the development of training and educational materials and resources.

### Sustainable Purchasing Leadership Council (SPLC)



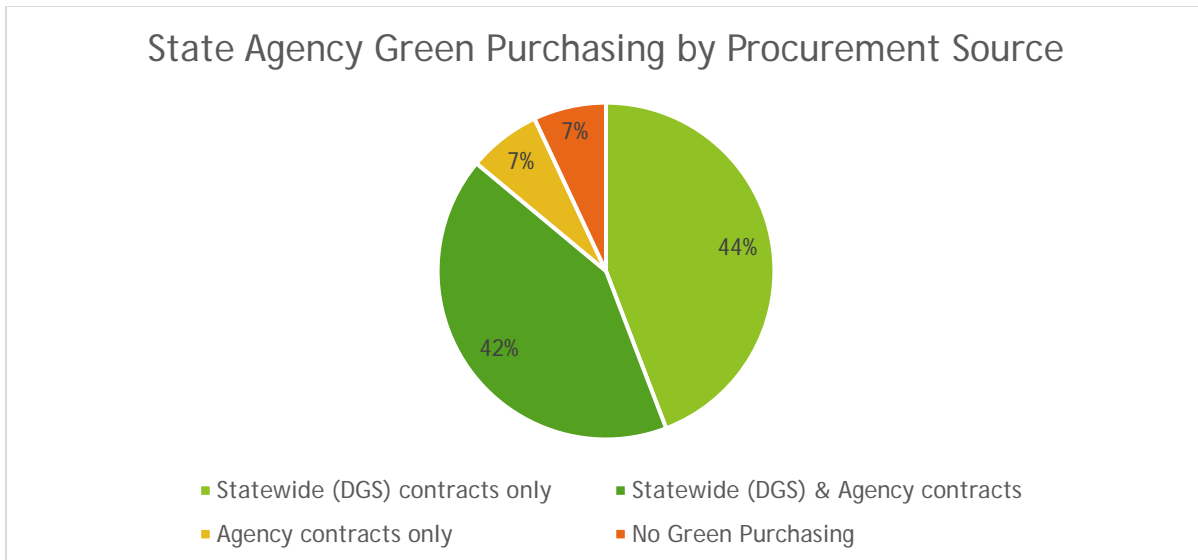
The Maryland Department of General Services also became a member of the Sustainable Purchasing Leadership Council (SPLC) in 2019. SPLC is a non-profit organization whose mission is to support and recognize purchasing leadership that accelerates the transition to a prosperous and sustainable future.

The Committee Staff is an active member of SPLC’s “Climate Friendly Refrigerants Action Team,” which is tasked with creating guidance on the purchase of equipment that avoids hydrofluorocarbon refrigerants (HFCs) with a high global warming potential (GWP). Because of their high GWPs, HFCs contribute disproportionately to climate change.

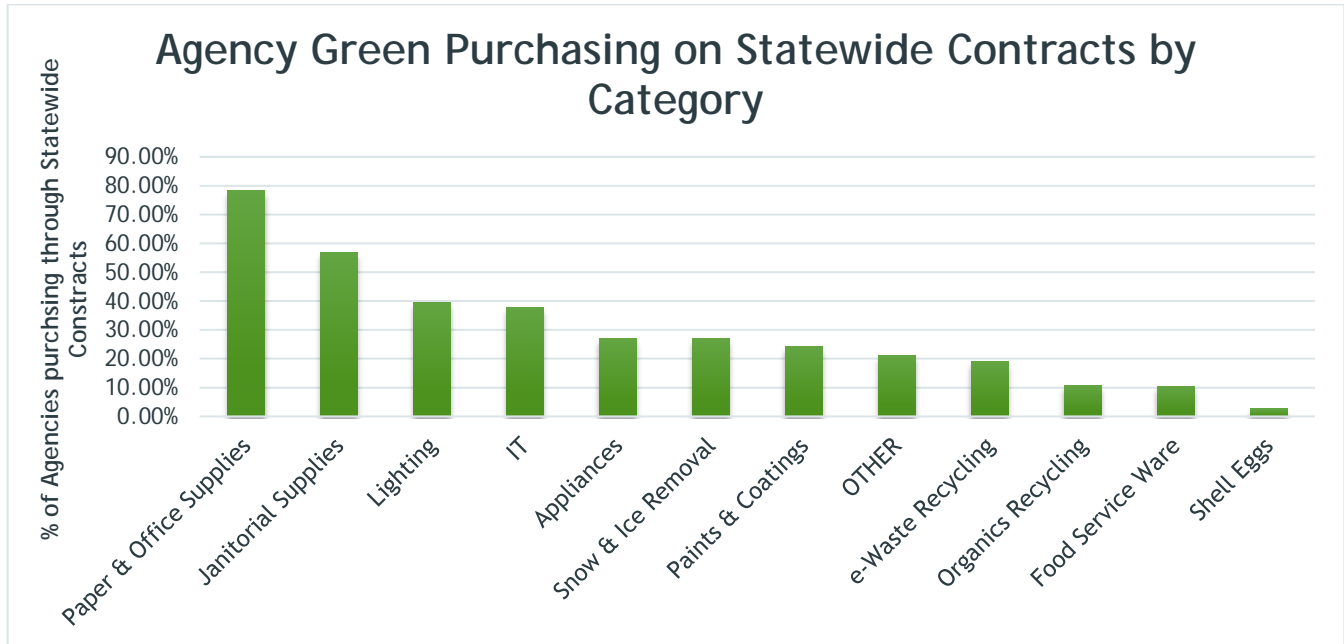
### State Agency Reports

In August 2020, DGS distributed a survey to all state procurement units asking them to report on their green purchasing and sustainability initiatives in FY 2020. DGS received completed reports from 42 of 65 agencies. The completed reports enabled DGS and the Committee to better understand how State agencies are procuring environmentally preferable products and services.

Of the agencies responding, the vast majority (85.7%) indicated that they procure environmentally preferable products and services through statewide contracts issued by the Department of General Services alone or in combination with their agency’s own contracts. Only 7.1% of agencies rely solely on their own agency procurements to purchase green products and services.



Of the agencies purchasing green products and services through Statewide contracts, the most popular categories were Paper and Office Supplies, followed by Janitorial Supplies. The following chart shows the percentage of agencies that reported buying green items or services using Statewide contracts in targeted categories.



Agencies also shared information on their sustainability programs and initiatives. Over 52% of responding Maryland state agencies indicated that they had a sustainability program or a team working on agency-wide green initiatives. The sustainability initiatives they implemented included recycling, paper reduction, and energy efficiency upgrades in addition to green purchasing.

### Federal Surplus Property

Through the Federal Surplus Property Program, managed by the Department of General Services, the State acquired surplus furniture, electronics, vehicles, and other tools, machinery, and equipment no longer needed by the Federal Government and distributed it to state agencies and local governments and organizations in Maryland.

By acquiring and utilizing surplus property, the State of Maryland participates in a circular economy, where items are put to use by public and nonprofit entities that need them, rather than being thrown away and piling up in landfills. Maryland’s surplus distribution program ensures that items are received by State agencies and local governments and organizations that can benefit and put the items to use. The benefits of this program are manifold. It reduces waste, extends the lifespan of items, and saves State agencies and municipalities significant amounts of money by

acquiring donated second-hand items no longer needed by the federal government rather than purchasing them new.

In FY 2020, the DGS Surplus Property Program received donations and managed the distribution of property valued at **\$1.2 Million**. All items were free of charge to state agencies and local governments and organizations and resulted in comparable savings by reducing the need to buy new products. One innovative use of the program amid the COVID-19 pandemic involved the distribution of two 55-gallon drums of ethanol to Anne Arundel County, which used it to make hand sanitizer.



Organization	Federal Surplus Item(s) Donated	Donation Value
DGS	Various Furniture, Walk-Through Detector	\$272,554
Maryland Military Department	3 Riding Lawn Mowers	\$23,194
Anne Arundel County	2 55-gallon drums of 99% ethanol alcohol - for hand sanitizer	\$847
Local Organizations	IT equipment including computer workstations, desktop computers, laptops, monitors, tablets; Food items; Hygiene kits; Medical supplies	\$921,011
<b>TOTAL</b>		<b>\$1,218,160</b>

## e-Waste Recycling

The improper management of e-waste has become a global issue due to its impacts on local ecosystems and the health of developing countries who are on the receiving of the e-waste. Recognizing this, the State of Maryland has established by statute a requirement for all electronics and IT products to be responsibly recycled. The Department of General Services, through the Inventory Standards & Support Services Division (ISSSD), oversees this program.

The State's vendor for e-waste recycling (Securis, a R2 certified environmentally responsible recycler) documented the recycling of 7,694 units in addition to 622 lbs. of e-waste in the calendar year 2019. The State of Maryland's responsible end-of-life management of e-waste contributed to Silver Level recognition in the State Electronics Challenge (SEC).






<b>Benefits of Responsible E-Waste Recycling:</b>				
<b>GHG Emission Reductions: 6,400 metric tons of CO<sub>2</sub>e</b>			<b>Additional Reductions In:</b>	
<i>Equivalent To:</i>				
				
<b>Removing 1417 cars from the road for 1 year.</b>	<b>Carbon sequestered by 8,567 acres of US forests in 1 year.</b>	<b>Electricity usage of 1,111 Homes for 1 year.</b>	<b>221,322 lbs. of Municipal Solid Waste</b>	<b>6,776 lbs. of Hazardous Waste</b>

Table 9: Benefits of Responsible e-Waste Recycling by the State of Maryland in Calendar Year 2019. Numbers provided by the Green Electronics Council.

### COVID-19 Impacts

The COVID-19 global pandemic presented several unanticipated challenges for the latter part of FY 2020. A planned Earth Day Vendor Fair and Electric Vehicle Car Show that was scheduled for April 2020 had to be canceled to ensure the health and safety of participants. The Committee quickly adapted to telework and shifted quarterly meetings and working meetings to be held virtually using the State’s Google Meet platform.

Additionally, spending on green products and services declined in the last quarter of FY 2020, as the State Procurement Staff worked tirelessly to ensure that PPE and other supplies were procured expediently. It is likely that COVID-19 will continue to affect the State’s procurement landscape including the types of green products and services it buys and the need to be adaptable and reprioritize as needed. The Green Purchasing Committee’s FY 2021 priorities and goals reflect COVID-19 impacts and considerations.

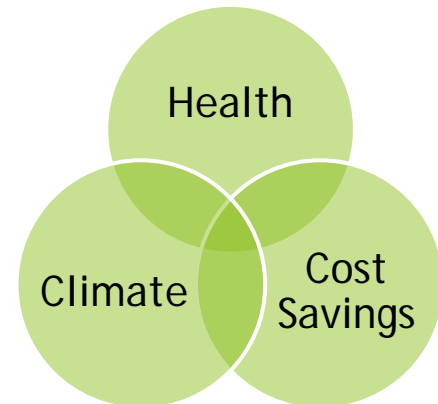
# LOOKING AHEAD

## Priorities

As the State of Maryland continues to operate under a State of Emergency due to the COVID-19 pandemic, the Green Purchasing Committee understands that there will continue to be unique procurement challenges. The Committee worked together to identify priorities that are timely, relevant and practical, while reflecting our values.

The Green Purchasing Committee has identified three main priorities for FY 2021:

- Promoting public health
- Mitigating climate change
- Saving money



Now more than ever, the Green Purchasing Committee recognizes that health is—and needs to be—a top priority. The very definition of Environmentally Preferable Purchasing indicates “a lesser or reduced effect on human health.”<sup>11</sup> The Committee remains committed to promoting green products and services that are safe for Maryland workers.

The Green Purchasing Committee also recognizes that while we are mired in a global health crisis, the looming climate crisis must not be forgotten. Therefore, our second priority is to protect the environment by saving energy and reducing greenhouse gas emissions.

Finally, the economic impacts of the COVID-19 pandemic have strained the State’s budget and many agencies across the State are facing difficult budget cuts and constraints. Therefore, the Green Purchasing Committee will also prioritize green purchasing initiatives that result in cost savings for the State.

## FY 2021 Goals

In FY 2021, the Green Purchasing Committee will ensure that:

- Projects reflect the Committee’s three priorities of Health, Climate, and Cost Savings;

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<sup>11</sup> Maryland State Finance & Procurement Article § 14-410



- Published resources are current and accurate by updating all previously published specifications;
- Relevant parties are made aware of these resources and how best to use them;
- Specifications are being used to the maximum extent practicable; and
- All Statutory members are active on the Committee.

## FY 2021 Projects & Initiatives

The Committee identified several projects in FY 2021. Several projects were started in FY 2020 and will be completed in FY 2021, and others are new projects identified through Committee action planning meetings and meetings with our consultant at the Responsible Purchasing Network. The Committee understands that it can be difficult to identify all projects that may be undertaken, and that additional work may arise that needs to take precedence over those listed below.

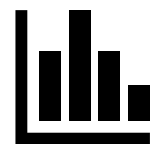
### Training: Maryland Procurement Academy “Intro to Green Purchasing” Course



In July 2020, the Office of State Procurement (OSP) launched Maryland Procurement Academy, a professional development track for state procurement professionals. The Maryland Green Purchasing Committee developed an online course “Introduction to Green Purchasing” that will offer Maryland procurement officers a foundational knowledge of the State’s green purchasing program and laws and give step-by-step training on green purchasing processes and best practices. The pilot course launched virtually in early June with a live training module on July 31, 2020. The Committee will continue to work with the Office of State Procurement to regularly present this module as an ongoing part of Maryland Procurement Academy.

### Improved Agency Reporting

Maryland state agencies are required to report their green purchasing activities to DGS for inclusion in the Green Purchasing Committee’s Annual Report. The Committee will work with state agencies to ensure that their green spend data is accurately captured and reported.



### Support Statewide Electric Vehicles (EV) Goals



DGS will continue to take the lead, with Committee input, on developing a statewide EV infrastructure strategy for state government. The strategy will consider current and incoming EV and plug-in hybrid electric vehicles (PHEV) fleet vehicles, non-EV fleet vehicle locations and timeframes for being candidates for replacement, existing EV infrastructure, state building sites, and workplace charging needs. The

Committee will identify methods to track green spend associated with EVs, PHEVs, and EV charging infrastructure in FY 2021.

### Update Specifications

The Committee will continue to update its EPP specifications to ensure they are accurate, relevant, and useful resources for State procurement staff. In early FY 2021, the Committee approved two updated specifications: (1) Snow & Ice Control and (2) Electronic and IT Products. Specifications for Janitorial Supplies, Janitorial Services, and HVAC equipment will be updated and put forward for Committee approval in FY 2021.



### Energy & Cost Savings Guidance for Agencies



Together with DGS's Office of Energy & Sustainability, the Committee will issue guidance to agencies on how to reduce their energy usage, which will result in utility bill savings. The Responsible Purchasing Network will work with the Committee to produce a "Guide to Cost-Saving EPP" for the State of Maryland to use. This list will help the Committee to promote green products and services that save the State money—a critical consideration in the time of COVID-19 and budget cuts.

### Additional Website Improvements

The Committee will launch Phase II of its website expansion, which will include additional tools and resources for the State's procurement professionals and vendors.



## ACKNOWLEDGEMENTS

This Annual Report was compiled and edited by Emily Soontornsaratool and Kshirajaa Ramesh with significant contributions from Alicia Culver of the Responsible Purchasing Network. Thank you to all Green Purchasing Committee members for contributions and review. Special thanks to the following individuals for their efforts: Ellen Robertson, Brandon Ward, Rose Odametey, Calvin Gladden, Matthew Smith, and Joanna Kille.

# APPENDICES

## A. Committee Membership

Department	Members/Designees & Participating Staff	
General Services (Chair)	Ellington Churchill, Jr. Secretary	Allegra Daye Procurement Officer, Lead Allegra.Daye1@maryland.gov
	Emily Soontornsaratool (Designee) Chief, Energy Data Management & Sustainability Initiatives Emily.Soontornsaratool@maryland.gov	Calvin Gladden, II Program Manager Calvin.Gladden@maryland.gov
	Kshirajaa Ramesh (Staff) Sustainability Coordinator Kshirajaa.Ramesh@maryland.gov	Matthew Smith Procurement Officer Matthew.Smith2@maryland.gov
	Ellen Robertson Legislative Liaison Ellen.Robertson@maryland.gov	
Budget & Management	Joseph Consoli (Designee) Fleet & Travel Administrator Joseph.Consoli@maryland.gov	
Environment	Dinesh Gandhi (Designee) Procurement Officer Dinesh.Gandhi@maryland.gov	Shareda Holifield Procurement Officer Shareda.Holifield@maryland.gov
	Christy Bujnovszky Recycling Unit Christy.Bujnovszky@maryland.gov	Jane Noble Procurement Officer Jane.Noble@maryland.gov
Health	VACANT (Designee)  Kelli Francis, Director of Procurement Clifton T. Perkins Hospital Center Kelli.Francis@maryland.gov	Heather Mohney, Procurement Officer Clifton T. Perkins Hospital Center Heather.Mohney@maryland.gov
Information Technology	VACANT (Designee)	
Natural Resources	Mary Huffman (Designee) Procurement Specialist II Mary.Huffman@maryland.gov	
Public Safety and Correctional Services	Daniel Coleman (Designee) Deputy Director of Procurement Daniel.Coleman1@maryland.gov	Nicole Copeland Maryland Correctional Enterprises Nicole.Copeland@maryland.gov
State Treasurer	Joanna Kille (Designee) Board of Public Works Liaison JKille@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 THickey@usmd.edu	

## B. Green Purchasing Laws & Regulations

Bill No.	Year	Affected Statutes	Bill Name
<a href="#">SB 103</a>	2007	Environment Article <a href="#">§2-1101: §2-1106</a>  Transportation Article <a href="#">13-110</a> , <a href="#">13-406</a> , <a href="#">23-202</a> , <a href="#">23-206.4</a>	Maryland Clean Cars Act of 2007 Chapter 111 (2007 Senate Bill 103)
<a href="#">SB 693</a>	2010	Environment Article <a href="#">§ 9-1722</a>  State Finance and Procurement Article <a href="#">§ 14-402</a> , <a href="#">§ 14-405</a> , <a href="#">§ 14-409</a> , <a href="#">§ 14-410</a>	Green Maryland Act of 2010 Chapter 593 (2010 Senate Bill 693)
<a href="#">HB 448</a>	2012	State Finance and Procurement Article <a href="#">§ 14-413</a> , <a href="#">§ 14-414</a>	Procurement - Preferences - Purchasing and Recycling Electronic Products Chapter 372 (2012 House Bill 448)
<a href="#">HB 629</a>	2014	State Finance and Procurement Article <a href="#">§ 14-405</a> , <a href="#">§ 14-410</a>	Environmentally Preferable Procurement - Maryland Green Purchasing Committee Chapter 604 (2014 House Bill 629)
<a href="#">SB 285</a>	2019	Environment Article <a href="#">§9-2201:§9-2207</a>	Environment – Expanded Polystyrene Food Service Products – Prohibitions Chapter 580 (2019 Senate Bill 285)
<a href="#">HB 662</a>	2020	State Finance and Procurement Article <a href="#">§12-301</a> , <a href="#">§12-302</a> , <a href="#">§4-803</a> , <a href="#">§4-806</a>	Department of General Services – Energy Consumption Goals and Energy Performance Contracts Chapter 289 (2020 House Bill 662)

Regulation	Title
<a href="#">01.01.1991.20</a>	<p><b>Conservation of Paper by Units of State Government</b></p> <p>“To the greatest extent practicable, within State agencies, photocopied and printed reproductions of original multi-page documents should be made utilizing both sides of a sheet of paper. Whenever economically practical, the Secretary of General Services shall insure that procurement officials specify photocopy machines which have the capability to perform two-sided photocopying.”</p>
<a href="#">01.01.1993.20</a>	<p><b>Alternative Fueled Vehicles</b></p> <p>“The Department of General Services and the University of Maryland System shall procure, for State agencies and the University of Maryland System and its constituent institutions, respectively, approved alternative fueled vehicles and shall ensure that refueling capacity for alternative fuels is available to State agency fleets and the University of Maryland System.”</p>

<a href="#">01.01.2001.02</a>	<p><b>Sustaining Maryland's Future with Clean Power, Green Buildings and Energy Efficiency</b>          “The State shall purchase Energy Star products when purchasing energy-using products, including computers, printers, copiers and other office equipment, or shall purchase products in the top 25% in energy efficiency for products where labels are not available.”</p>
<a href="#">01.01.2001.06</a>	<p><b>Water Conservation by State Agencies</b>          Each State Agency shall develop a water conservation plan that addresses “The purchase of water-efficient plumbing fixtures, appliances and other products when new or replacement products are needed; and ...”Identify and select specific water conservation measures that need to be employed to improve water management and water use efficiency to achieve the water conservation goal of this Executive Order.”</p>
<a href="#">01.01.2003.49</a>	<p><b>Pesticide Advisory Committee</b>          “The Advisory Committee shall have the following duties and responsibilities:          (1) Make recommendations to the Secretary for changes in law or regulation to improve pesticide management in the State;          (2) Provide advice to the Secretary on issues concerning the registration, sales, use, storage and disposal of pesticides, the certification and training of pesticide applicators, the licensing of pest control businesses and the protection of farmworkers, endangered species and water resources;          (3) After having consulted with the Secretary, provide advice to other State agencies and local governments concerning their responsibilities in pesticide management and protection human health, natural resources and the environment; and          (4) Generally serve in an advisory capacity to the Secretary, Department Officials, and other State agencies on pesticide related matters.”</p>
<a href="#">01.01.2019.08</a>	<p><b>Energy Savings Goals for State Government</b>          “All units of State government shall, in support of their core missions, implement projects and initiatives to conserve energy and reduce consumption,” recognizing that “[r]educing energy use in State government produces positive environmental, fiscal and health benefits for all Marylanders, and aids compliance with the state Greenhouse Gas Reduction Act of 2016.</p>
<a href="#">21.04.01.02</a>	<p><b>[Procurement] General Purpose</b>          “When applicable, specifications shall include statements concerning:          (1) Low noise levels ...;          (2) Energy efficiency;          (3) Coal in heating systems ...;          (4) Preference for mercury-free products and equipment ...”</p>
<a href="#">21.05.08.07</a>	<p><b>Bid/Proposal Affidavit</b>          “Each solicitation shall provide notice that the affidavit in §B of this regulation shall be completed and submitted to the procurement agency with the vendor's bid or offer.”          Vendors “must further affirm that Any claims of environmental attributes made relating to a product or service included in the bid or proposal are consistent with the Federal Trade Commission’s Guides for the Use of Environmental Marketing Claims as provided in 16 CFR §260, that apply to claims about the environmental attributes of a product, package, or service in connection with the marketing, offering for sale, or sale of such item or service.”</p>
<a href="#">21.11.07.01</a>	<p><b>Definitions</b>          Defines a variety of terms such as “Environmentally Preferable Products and Services” and “Environmentally Preferable Purchasing”.</p>

[21.11.07.03](#)**Recycled Paper Purchases**

"A. Of the total volume of paper that the Secretary of General Services buys, at least 90 percent shall be recycled paper.

B. In purchasing any paper or paper products as supplies for any using agency pursuant to State Finance and Procurement Article, Title 4, Subtitle 3, Annotated Code of Maryland, the Secretary of General Services, to the fullest extent practicably possible, shall purchase or approve for purchase only such supplies as are manufactured or produced from recycled paper.

C. If recycled paper that meets the definition set forth in Regulation .01B(7) of this chapter [contains at least 80% post-consumer recycled content] is unavailable, then for purposes of complying with the requirements of this chapter, the Department of General Services and other State agencies may purchase recycled paper and paper products that have the highest percentage of post-consumer material that, at minimum, meets EPA guidelines, provided that reasonable levels of competition, cost, availability, and technical performance are maintained."

[21.11.07.04](#)**Low Noise Supplies**

"A. All units of State government shall acquire by purchase or lease, to the greatest extent practicable, the quietest available supplies.

B. Supplies certified by the Administrator of the United States Environmental Protection Agency as "low noise emission products" pursuant to §15 of the Noise Control Act of 1972 shall be considered to meet the intent of this regulation."

[21.11.07.07](#)**Mercury and Products that Contain Mercury**

"All procurement agencies shall give a [5 percent] preference under this regulation to procuring products and equipment that are mercury-free. If mercury-free products and equipment that meet the agency's product performance requirements are not commercially available, the procurement agency shall give preference under this regulation to products containing the least amount of mercury necessary to meet performance requirements."

[21.11.07.08](#)**Locally Grown Foods**

"State schools and facilities shall include in procurement solicitations a price preference not exceeding 5 percent to bids or proposals for locally grown food."

[21.11.07.09](#)**Environmentally Preferable Purchasing**

"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."

[21.11.07.10](#)**Compost**

"A State or local unit responsible for the maintenance of public lands in the State, to the maximum extent practicable, shall give preference to the use of compost in any land maintenance activity that is publicly funded."

[21.11.07.11](#)**Energy Efficient Outdoor Lighting Fixtures**

"If State funds are used to install or replace a permanent outdoor luminaire for lighting on the grounds of any building or facility owned or leased by the State or a unit of the State, procurement specifications shall require that:

- (1) Design of the luminaire maximizes energy conservation and minimizes light pollution, glare, and light trespass;
- (2) Illumination produced by the luminaire is the minimum illumination necessary for the intended purpose of the lighting; and
- (3) For a luminaire with an output of more than 1,800 lumens, the luminaire is a restricted uplight luminaire."

[21.11.07.13](#)**Purchasing Electronic Products**

“When purchasing an electronic product to be used by the State, a procurement agency shall purchase an electronic product that:

- (1) Is listed and rated silver or gold on the EPEAT registry; or
- (2) Meets nationally-recognized and consensus-based standards established by a comprehensive environmental rating system approved by the Department of Information Technology.”

[21.11.07.14](#)**Recycle Services — Electronic Products.**

“When awarding a procurement contract for services to recycle electronic products, a State unit shall award the contract to a recycler of electronic products that:

- (1) Is R2 or e-Stewards certified; or
- (2) Meets nationally recognized and consensus-based guidelines, standards, and systems for recycling that are approved by the Department of the Environment in consultation with the Department of General Services.”

[21.13.01.14](#)**Report on Green Purchasing**

“A. On or before September 1 of each year, each procurement agency shall report to the Department of General Services on the agency’s procurement of environmentally preferable products and services during the preceding fiscal year, including the types and quantities of products and services procured. The report format shall be determined by the Department of General Services.

B. Green Purchasing Committee. On or before October 1 of each year, the Maryland Green Purchasing Committee, as established in State Finance and Procurement Article, §14-410, Annotated Code of Maryland, shall report to the General Assembly on the Committee’s activities and the progress made on the implementation of the Green Maryland Act of 2010. The report is subject to State Government Article, §2-1246, Annotated Code of Maryland.”

[26.02.04.04](#)**Labeling Standards for Mercury-Added Products**

“The label of a mercury-added product shall clearly inform the purchaser or consumer that: (i) Mercury is present in the product; and (ii) The product shall be managed in accordance with federal and State environmental laws to minimize the release of mercury into the environment.”

[26.11.19.32](#)**Control of Volatile Organic Compounds (VOCs) from Wood Coating Operations**

“The requirements of this regulation apply to a person that owns or operates a wood coating operation with actual VOC emissions of 20 pounds or more per operating day from all wood coating operations at the premises determined on a monthly average.

**Spray Gun Application.** A person subject to this regulation that applies a coating with a spray gun shall use a high volume-low pressure (HVLP) spray gun or other high efficiency application method approved by the Department. A person subject to this regulation may achieve compliance with the requirements of this regulation through use of a control device that reduces emissions from the wood coating operation by not less than 90 percent overall.

**VOC Content Limits.** A person subject to this regulation shall meet the VOC content limits for coatings and non-coating materials described in this regulation.

**Record Keeping Requirements.** A person subject to this regulation shall maintain a monthly record of:

- (a) The quantity of all coatings and materials used (liters); and
- (b) Material data sheets, material lists, container labeling or records sufficient to show the VOC content of all coatings and materials used.

A person demonstrating compliance using the daily weighted average of coatings as provided in §E(2) of this regulation shall maintain records sufficient to show daily compliance. Records shall be maintained for at least 2 years and made available to the Department upon request.”

[26.11.32.08](#) **Requirements for Contact Adhesives, Electronic Cleaners, Footwear or Leather Care Products, General Purpose Degreasers, Bathroom and Tile Cleaners, Construction Panel and Floor Covering Adhesives, Electronic Cleaner Labeled “Energized Electronic Equipment Use Only”, General Purpose Cleaners, and Oven or Grill Cleaners**  
 “A person may not sell, supply, offer for sale, or manufacture for use in the State any contact adhesive, electronic cleaner, footwear or leather care product, or general purpose degreaser that contains any of the following compounds:  
 (1) Methylene chloride;  
 (2) Perchloroethylene; or  
 (3) Trichloroethylene”

[26.11.39.05](#) **VOC Content Limits**  
 This regulation lists VOC Content Limits for Architectural and Industrial Maintenance Coatings.

[26.13.10.26](#) **Special Requirements for Fluorescent Lamps - Disposition of Waste Fluorescent Lamps.**  
 “A person that generates, in a calendar year, more than 200 kilograms of waste fluorescent lamps meeting the criteria of §A of this regulation shall assure that the waste lamps are delivered to a:  
 (a) Reclamation facility, as defined in §C of this regulation; or  
 (b) Destination facility, as defined in COMAR 26.13.01.03B.  
 Agency note: 200 kilograms represents, for example, approximately 720 4-foot T12 fluorescent lamps. For the purposes of §B(1) of this regulation, waste fluorescent lamps include lamps that are to be disposed and lamps that are to be recycled.”

Statute	Title
Environment Article <a href="#">§6–1201:§6–1204</a>	<b>Limitations on Hazardous Substances</b> A person may not manufacture, process, sell, or distribute in the State a new product or flame-retardant part of a new product that contains more than one-tenth of 1% of pentaBDE (pentabrominated diphenyl ether) or octaBDE (octabrominated diphenyl) by mass. A person may not manufacture, lease, sell, or distribute for sale or lease in the State electrical or electronic equipment that contain more than one-tenth of 1% of decaBDE (decabrominated diphenyl ether) by mass.
Environment Article <a href="#">§9–1901:§9–1907</a>	<b>Limitations and Prohibitions on Heavy Metals in Packaging</b> “Except as provided in § 9-1903 and § 9-1904 of this subtitle, on or after July 1, 1993, a manufacturer or distributor may not sell or offer for sale or for promotional purposes any package or packaging component or any product in a package or packaging component to which any of the following was intentionally added during manufacture or distribution: (1) Lead; (2) Cadmium; (3) Mercury; or (4) Hexavalent chromium.



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The sum of the concentration levels of lead, cadmium, mercury, and hexavalent chromium incidentally present in a package or packaging component may not exceed: ...By July 1, 1995, 100 parts per million by weight or 0.01%.”

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Environment Article [§9-2102](#)

**Standards for Plastic Ware**

“A person may not sell in the State a plastic product that is labeled as biodegradable, degradable, decomposable, or with any other term to imply that the product will break down, fragment, biodegrade, or decompose in a landfill or any other environment” unless the product meets the standards set forth in this Article.

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Environment Article [§9-2103](#)

**Labeling Standards for Compostable Plastic Bags**

“A person that distributes or sells a compostable plastic bag intended for sale or distribution by a retailer in the State shall ensure that the compostable plastic bag” meets the standards set forth in this Article.

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Environment Article [§9-2104](#)

**Labeling Standards for Compostable Plastic Bags**

“A person that distributes or sells a compostable food or beverage product intended for sale or distribution by a retailer in the State shall ensure that the compostable food or beverage product is labeled” in accordance with the standards set forth in this Article.

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Environment Article [§6-501](#)

**Lead and Mercury Wheel Weights - Prohibitions**

“A motor vehicle or tire manufacturer, wholesaler, or retailer, motor vehicle repair facility, or any other person who installs wheel weights may not use, allow to be used, or sell an externally attached lead wheel weight that is composed of greater than 0.1% lead by weight or greater than 0.1% mercury by weight during the first tire installation, replacement, or balancing after January 1, 2020, for all new and used vehicles registered in the State.

The State shall ensure that no vehicle purchased for the State fleet after January 1, 2019, is equipped with an externally attached lead wheel weight that is composed of greater than 0.1% lead by weight or greater than 0.1% mercury by weight.

Each tire on a vehicle in the State fleet that is balanced or replaced after January 1, 2018, may not be equipped with a lead wheel weight that is composed of greater than 0.1% lead by weight or greater than 0.1% mercury by weight.

Lead and mercury wheel weights removed and collected shall be properly recycled.”

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## C. Updated Specifications

### Food Service Ware Specification



#### Maryland Green Purchasing Committee Approved Specification – Food Service Supplies

#### **How to use this document:**

This document sets the minimum standards for environmentally preferable food service supplies by the State of Maryland. Vendors are strongly encouraged to follow and, when possible, go beyond these standards in their product offerings to the maximum extent practicable when such products are cost competitive and meet form, function and utility requirements.

For State procurement officers, this document outlines the legislation, statutes, and regulations that guide State purchasing practices for food service supplies. The document also provides boilerplate language to be included in State procurement contracts associated with food service supplies.

#### **Index**

The following information is included in this document:

1. Environmentally Preferable Purchasing Legislation, Statutes, and Regulations
  - a. For Procurement Officers and Agencies
  - b. For Vendors, Bidders, and Offerors
2. Prohibited Products
3. Environmentally Preferable Standards for Food Service Supplies
4. Additional Contract Language for Environmentally Preferable Purchasing

Originally issued: 2014

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Maryland Green Purchasing Committee Approved Specification – Food Service Supplies

**1. Environmentally Preferable Purchasing Legislation, Statutes, and Regulations**

***For Procurement Officers and Agencies***

**Environmentally Preferable Purchasing** (COMAR: [21.11.07.09\(A\)](#))

“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.”

***For Vendors, Bidders, and Offerors***

**Verifying Environmental Claims** (State Finance and Procurement Article [§14-410\(g\)](#))

“A bidder or offeror for a procurement contract [with the Department of General Services] shall certify in writing that any claims of environmental attributes made relating to a product or service are consistent with the Federal Trade Commission’s Guidelines for the Use of Environmental Marketing Terms.”

**Expanded Polystyrene Food Service Products – Prohibitions** (Environment Article [§9-2203](#))

(a) “On or after July 1, 2020, a person may not sell or offer for sale in the State an expanded polystyrene food service product.”

(b) “On or after July 1, 2020, a food service business or school may not sell or provide food or beverages in an expanded polystyrene food service product.”

**Limitations and Prohibitions on Heavy Metals in Packaging** (Environment Article [§9-§1902\(a\)-\(b\)](#))

“Except as provided in § 9-1903 and § 9-1904 of this subtitle, on or after July 1, 1993, a manufacturer or distributor may not sell or offer for sale or for promotional purposes any package or packaging component or any product in a package or packaging component to which any of the following was intentionally added during manufacture or distribution:

- (1) Lead;
- (2) Cadmium;
- (3) Mercury; or
- (4) Hexavalent chromium.

The sum of the concentration levels of lead, cadmium, mercury, and hexavalent chromium incidentally present in a package or packaging component may not exceed: ...By July 1, 1995, 100 parts per million by weight or 0.01%.”

### Maryland Green Purchasing Committee Approved Specification – Food Service Supplies

#### **Standards for Plastic Ware** (Environment Article [§9-2102](#))

“Except as provided in subsection (c) of this section, on or after October 1, 2018, a person may not sell in the State a plastic product that is labeled as biodegradable, degradable, decomposable, or with any other term to imply that the product will break down, fragment, biodegrade, or decompose in a landfill or any other environment.

(b) On or after October 1, 2018, a person may not sell in the State a plastic product that is labeled as compostable or home compostable unless the plastic product meets the following standards:

- (1) For a plastic product labeled as compostable, the plastic product shall meet:
  - (i) 1. The ASTM D6400 standard specification; or 2. The ASTM D6868 standard specification; and
  - (ii) Any applicable labeling guidelines in the federal Guides for the Use of Environmental Marketing Claims.
- (2) For a plastic product labeled as home compostable, the plastic product shall meet:
  - (i) The OK Compost Home certification standard adopted by Vincotte; and
  - (ii) Any applicable labeling guidelines in the federal Guides for the Use of Environmental Marketing Claims.

(c) On or after October 1, 2018, a person may not sell in the State a film plastic product labeled as soil degradable ag mulch film or biodegradable mulch film unless the product:

- (1) (i) Meets the OK Biodegradable Soil certification standard adopted by Vincotte; or
  - (ii) At ambient temperatures and in soil, shows at least 90% biodegradation absolute or relative to microcrystalline cellulose in less than 2 years’ - 963 - time, tested according to the ISO 17556 standard test method or ASTM D5988 standard test method; and
- (2) Fulfills the plant growth and regulated metals requirements under section 6.4 of the ASTM D6400 standard specification.”

#### **Labeling Standards for Compostable Plastic Bags** (Environment Article [§9-2103](#))

“Subject to § 9–2102(b) of this subtitle and subsection (b) of this section, on and after October 1, 2018, a person that distributes or sells a compostable plastic bag intended for sale or distribution by a retailer in the State shall ensure that the compostable plastic bag is:

- (1) Labeled in a manner that is readily and easily identifiable from other plastic bags;
- (2) Labeled in a manner that is consistent with the federal Guides for the Use of Environmental Marketing Claims;
- (3) Labeled with a certification logo indicating the bag meets the ASTM D6400 standard specification; and
- (4) (i) A uniform color of green and labeled with the word “COMPOSTABLE” in at least a 1 inch font on one side of the bag;
  - (ii) Labeled in green writing with the word “COMPOSTABLE” in at least a 1 inch font on both sides of the bag; or
  - (iii) Labeled with the word “COMPOSTABLE” in at least a one–half inch font on both sides of the

### Maryland Green Purchasing Committee Approved Specification – Food Service Supplies

bag within a green color band that:

1. Contrasts with the compostable bag's background color; and
2. Is at least 1 inch in height.

(b) If a compostable plastic bag is smaller than 14 inches by 14 inches, the compostable bag may be labeled in a manner that is in proportion to the size of the bag.

(c) A compostable plastic bag sold or distributed in the State may not be labeled as recyclable.

(d) A provision of this section has effect only to the extent that the provision does not conflict with the federal Guides for the Use of Environmental Marketing Claims."

#### **Labeling Standards for Compostable Food Service Ware** (Environment Article [59-2104](#))

Subject to § 9–2102(b) of this subtitle, on and after October 1, 2018, a person that distributes or sells a compostable food or beverage product intended for sale or distribution by a retailer in the State shall ensure that the compostable food or beverage product is labeled:

- (1) In a manner that is readily and easily identifiable from other food or beverage products;
- (2) In a manner that is consistent with the federal Guides for the Use of Environmental Marketing Claims; and
- (3) (i) With a certification logo indicating the compostable food or beverage product meets the ASTM D6400 standard specification or ASTM D6868 standard specification;

or

(ii) As compostable.

(b) Subsection (a) of this section has effect only to the extent that the provision does not conflict with the federal Guides for the Use of Environmental Marketing Claims.

## **2. Prohibited Products**

Pursuant to § 9-2203(B) of the Environment Article of the Annotated Code of Maryland, the sale or provision of expanded polystyrene food service products by a food service business or school is banned in the State of Maryland.

Pursuant to § 9-1902 of the Environment Article of the Annotated Code of Maryland, packages or packaging components must not contain any intentionally added (whether during manufacture or distribution) lead, cadmium, mercury, or hexavalent chromium in excess of 100 parts per million by weight or 0.01%.

## **3. Environmentally Preferable Standards for the Food Service Supplies**

This specification covers food service supplies in the following categories:

- Food Service Bowls, Plates, Containers, Clamshells and Trays
- Cups and Cup Lids
- Paper Bags, Towels and Napkins
- Food Storage Bags and Food Waste Bags
- Utensils, Food Service Gloves and Straws
- Cloth Towels, Food Coverings and Wraps

### Maryland Green Purchasing Committee Approved Specification – Food Service Supplies

*Food service head wear and cooking bags will be exempted from any environmental preferability criteria.*

For a product to be classified as an environmentally preferable product by the State of Maryland, it must:

- Fall within one of the five categories listed in Section I: Material Composition and comply with the related requirements.

**AND**

- If applicable, comply with the requirements listed in Section II: Chemicals of Concern

#### **I. Material Composition**

##### **a. Reusable**

All food service ware, including plates, bowls, cups, trays, glasses, straws, stirrers, and utensils, must meet the following criteria in order to be considered an environmentally preferable reusable product:

- Be manufactured of durable materials;
- Be specifically designed and manufactured to be washed and sanitized and intended to be used repeatedly at least 1000 times; and
- Be safe for commercial washing and sanitizing according to Maryland Department of Health regulations (COMAR [10.15.03.16](#)).

##### **b. Compostable**

Food service supplies, except paper napkins and paper towels, must meet the following criteria in order to be considered an environmentally preferable compostable product:

- Be certified by the Biodegradable Products Institute (BPI), or equivalent\*, for commercial compostability.

\*BPI is the primary commercial compostability certifier in the United States. Other equivalent international certifiers include Vinçotte OK Compost and DIN CERTCO.

OR

- Appear on the Compost Manufacturers Alliance list or are certified compostable under Canada's Bureau de Normalisation du Québec or appear on Cedar Grove's accepted Items list and have no more than 100 parts per million fluorine

##### **c. Recycled Content**

Food service supplies must meet the following minimum requirements in order to be considered an environmentally preferable recycled-content product:

- Fiber-based products (e.g. paper, sugarcane, wheat straw etc.), excluding paper towels:
  - Must contain minimum 20% post-consumer recycled content or 100% total recycled content

### Maryland Green Purchasing Committee Approved Specification – Food Service Supplies

- Plastic products:
  - Must contain minimum 20% post-consumer recycled content or 100% total recycled content
- Aluminum Foil must:
  - Contain 100% total recycled content
- d. **Polyvinyl Chloride (PVC) Free**  
Food Service Ware Gloves must be free of polyvinyl chloride (PVC).
- e. **Contain Sustainably Harvested Content and/or Other Environmental Attributes**  
Food service supplies must meet the following criteria for sustainably harvested content or possess one of the ecolabel certifications listed below in order to be considered an environmentally preferable product:
  - Paper, wood or agricultural fiber certified by the Forest Stewardship Council (FSC) as sustainably harvested;
  - Paper or agricultural fiber products manufactured entirely with chlorine-free processing, meaning that no chlorine or chlorine compounds were used in the manufacture of the products; or
  - Paper napkins and paper towels that are Green Seal or UL ECOLOGO certified.

#### II. Chemicals of Concern

In addition to meeting Maryland's Toxics in Packaging Law cited above, food service supplies, that fall within one of the categories listed below, must meet the following criteria in order to be considered an environmentally preferable product:

- a. Food service containers and wrappers:
  - Must not contain any intentionally added perfluorinated chemicals, formaldehyde, bisphenols (e.g. BPA) and phthalates

#### 4. Additional Contract Language for Environmentally Preferable Purchasing

##### ***On Environmentally Preferable Purchasing:***

**The State of Maryland is committed to purchasing environmentally preferable products and services (EPPs).** Maryland's State Finance & Procurement Article §14-410 defines environmentally preferable purchasing as "the procurement or acquisition of goods and 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."

Accordingly, Bidders/Offerors are strongly encouraged to offer EPPs to fulfill this contract, to the greatest extent practicable.



Maryland Green Purchasing Committee Approved Specification – Food Service Supplies

***On Maryland's Green Purchasing Reporting Requirements:***

**The State of Maryland requires the Contractor to submit, at a minimum, quarterly sales data over the life of this contract per a schedule established and deemed reasonable by both parties, or by request by the Department of General Services.** This information must include details about the recycled content, third-party sustainability certifications, and other environmental attributes of products and services sold on this price agreement per the contract specifications.

To facilitate consistent reporting on this contract, the Contractor will be provided with a VENDOR GREEN SALES REPORT template from the Green Purchasing Committee (GPC), the Office of State Procurement (OSP) or the Department of General Services (DGS).

This information will enable Maryland State agencies to comply with Md. Code Ann., State Finance & Procurement, §14-405 and COMAR 21.13.01.14, which require Maryland State agencies to report to the Department of General Services on their procurement of environmentally preferable products and services.

## Lighting Specification



## Maryland Green Purchasing Committee Approved Specification – Lighting Products

**How to use this document:**

This document sets the minimum standard for lighting products procured by the State of Maryland. Vendors are required to follow and when possible, go beyond these standards in their product offerings to the maximum extent practicable when such products are cost competitive and meet form, function and utility requirements.

For State procurement officers, this document outlines the legislation, statutes, and regulations that guide State purchasing practices for lighting products. The document also provides boilerplate language to be included in State procurement contracts associated with lighting products.

**Index**

The following information is included in this document:

1. Environmentally Preferable Purchasing Legislation, Statutes, and Regulations
  - a. For Procurement Officers and Agencies
  - b. For Vendors, Bidders, and Offerors
2. Prohibited Products
3. Required Environmental Specifications for Lighting Products
4. Required Environmental Specifications for Limited Use Lighting Products
5. End-of-Life Management
6. Utility Energy-Efficiency Rebate Programs
7. Additional Contract Language for Environmentally Preferable Purchasing

*Appendix*

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Maryland Green Purchasing Committee Approved Specification - Lighting Products

## 1. Environmentally Preferable Purchasing Legislation, Statutes, and Regulations

### *For Procurement Officers and Agencies*

#### **Environmentally Preferable Purchasing** (COMAR: [21.11.07.09\(A\)](#))

"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."

#### **Mercury and Products that Contain Mercury** (COMAR: [21.11.07.07\(A\)](#))

"All procurement agencies shall give a preference under this regulation to procuring products and equipment that are mercury-free. If mercury-free products and equipment that meet the agency's product performance requirements are not commercially available, the procurement agency shall give preference under this regulation to products containing the least amount of mercury necessary to meet performance requirements."

#### **ENERGY STAR® Purchase Requirement** ([Executive Order 01.01.2001.02\(C\)\(3\)](#), Effective date: March 13, 2001 (28:7 Md. R. 675))

Efficient Product Purchase Goal: "The State shall purchase Energy Star products when purchasing energy-using products, including computers, printers, copiers and other office equipment, or shall purchase products in the top 25% in energy efficiency for products where labels are not available."

#### **Responsible Recycling of Electronic Products** (State Finance and Procurement Article [§14-415\(b\)](#))

"When awarding a procurement contract for services to recycle electronic products, a State unit shall award the contract to a recycler of electronic products that:

- (1) Is R2 or e-Stewards certified; or
- (2) Meets nationally recognized and consensus-based guidelines, standards, and systems for recycling that are approved by the Department of the Environment in consultation with the Department of General Services.

### *For Vendors, Bidders, and Offerors*

#### **Verifying Environmental Claims** (State Finance and Procurement Article [§14-410\(g\)](#))

"A bidder or offeror for a procurement contract shall certify in writing that any claims of environmental attributes made relating to a product or service are consistent with the Federal Trade Commission's Guidelines for the Use of Environmental Marketing Terms."

#### **Energy Efficient Outdoor Lighting Fixtures** (COMAR: [21.11.07.11\(A\)](#))

"If State funds are used to install or replace a permanent outdoor luminaire for lighting on the grounds of any building or facility owned or leased by the State or a unit of the State, procurement specifications shall require that:

**Maryland Green Purchasing Committee Approved Specification - Lighting Products**

- (1) Design of the luminaire maximizes energy conservation and minimizes light pollution, glare, and light trespass;
- (2) Illumination produced by the luminaire is the minimum illumination necessary for the intended purpose of the lighting; and
- (3) For a luminaire with an output of more than 1,800 lumens, the luminaire is a restricted uplight luminaire."

**Mercury-Added Fluorescent Lamps: Labeling and Disposal** (Environment Article: [§6-905](#), [§6-905.4](#))  
§6-905

"Mercury-added product' means any of the following products if containing elemental mercury or a mercury compound that has been added to the product for any reason:...Fluorescent lamps."

§6-905.4

(a) "This section does not apply to: Products that contain mercury-added products [fluorescent lamps] that are labeled in accordance with this section."

(b)(1) "On or after April 1, 2006, unless the product is labeled in accordance with subsection (c) of this section and the regulations adopted by the Department under this section, a manufacturer or wholesaler may not sell a mercury-added product:(i) At retail in the State; or (ii) To a retailer in the State. "

(b)(2) "On or after April 1, 2006, unless the product is labeled in accordance with subsection (c) of this section and the regulations adopted by the Department under this section, a retailer may not knowingly sell a new mercury-added product in the State."

(c) "Except as provided in paragraph (2) of this subsection, the label of a mercury-added product shall clearly inform the purchaser or consumer that: (i) Mercury is present in the product; and (ii) The product shall be managed in accordance with federal and State environmental laws to minimize the release of mercury into the environment."

(e)(1) "In this subsection, "mercury-added fluorescent lamp" means a fluorescent lamp that exhibits the toxicity characteristic for mercury under Title 26, Subtitle 13, Chapter 2 of the Code of Maryland Regulations."

(e)(2) "...on or after October 1, 2006, a person who, during a calendar year, discards at least the minimum weight or minimum number of mercury-added fluorescent lamps, as established in regulations adopted under subsection (f) of this section, shall arrange for the final reclamation or destination of the lamps at a: (i) Reclamation facility; or (ii) Destination facility, as defined by the Department in regulation.

## Maryland Green Purchasing Committee Approved Specification - Lighting Products

**2. Prohibited\* Products**

- Any lighting product (lamp, fixture, luminaire, retrofit kit or driver) that does not meet the Required Environmental Specifications for Lighting below.
- Non-LED luminaires or fixtures.
- Any exit sign that is not LED or code-approved photoluminescent.
- General-purpose incandescent lamps, compact fluorescent lamps (CFLs) and halogen lamps, except when an LED alternative is determined to be unavailable. *See list of prohibited incandescent and halogen lamps below.*

**PROHIBITED Ballasts:**

- Magnetic fluorescent ballasts.
- Mercury vapor and low-pressure sodium HID ballasts.
- Probe-start metal halide HID ballasts (except for those designed to power lamps over 1000 watts).

**PROHIBITED Fluorescent Lamps:**

- Fluorescent lamps that do not comply with Environment Article §6-905, §6-905.4, Annotated Code of Maryland (referenced above).
- Fluorescent lamps with a Color Rendering Index (CRI) of less than 80.

**PROHIBITED Halogen and Incandescent Lamps:**

- Exit sign lamps
- Lamps with a medium screw base except appliance, stage and studio, miniature, decorative, and clear light bulbs needed for historic fixtures.
- All A19, A21 and PAR38 lamps except clear light bulbs needed for historic fixtures.
- MR16 lamps, except those that use halogen infrared (HIR) technology.
- Other types of lamps identified by the MD GPC based on energy efficiency or toxicity concerns.

**PROHIBITED High-Intensity Discharge Lamps:**

- Mercury vapor and low-pressure sodium (all wattages)
- Probe start metal halides (except wattages above 1000 watts).

\* Exceptions may be granted by the Maryland Green Purchasing Committee (GPC) where circumstances of an extreme nature are encountered. Thorough justification of an exception request, including energy usage, performance information, life-cycle costing, and pricing that compares all available alternatives, must be provided with the request.

## Maryland Green Purchasing Committee Approved Specification - Lighting Products

### 3. Required Environmental Specifications for Lighting Products

The following specifications support the purchase of lighting equipment products that are energy-efficient, have a long rated life, and are low in toxicity.

#### A. LIGHT-EMITTING DIODES (LEDs)

*LEDs are the preferred lighting technology and are recommended over other lighting products.*

1. All LED lamps, retrofit kits, luminaires, and fixtures (except miniature LEDs and LED exit signs) must be :
  - On the US Department of Energy and Environmental Protection Agency's criteria for use of the ENERGY STAR® trademark label; ENERGY STAR® Program certification list can be accessed at [https://www.energystar.gov/products/lighting\\_fans](https://www.energystar.gov/products/lighting_fans)
  - OR
  - On the DesignLights Consortium® (DLC) Qualified Products List (QPL), which can be accessed at <https://www.designlights.org/search/?search=>. *Products listed DLC Premium are preferred.*

The Maryland Green Purchasing Committee recommends replacing an old fixture with a new fixture, whenever possible. Use of an LED retrofit kit\* is recommended as a secondary option. Installation of tubular LEDs (TLEDs) and other types of LED replacement lamps in an existing non-LED fixture is recommended only when the first two options are not technically feasible.

\*A retrofit of existing equipment is any application that makes use of the existing luminaire housing as aligned by DLC Primary Use Designation. Retrofit kits and lamps must be listed under DLC Primary Use Designation to qualify for a corresponding measure code.

2. All exterior LED luminaires shall be fully shielded to minimize light pollution.
  - a. **Additional Desirable Attribute:** Products that are approved by the International Dark Sky Association (IDA) are preferred. A list of IDA-approved products can be found at <http://www.darksky.org/fsa/fsa-products/>.
3. All LED drivers must have a minimum rated life of 50,000 hours and comply with the EU's Restriction of Hazardous Substances (RoHS) Directive.

#### B. EXIT SIGNS

1. All exit signs must be:
  - LED (Light Emitting Diode) lamps;
  - OR
  - Code-approved photo-luminescent (non-power using)

Maryland Green Purchasing Committee Approved Specification - Lighting Products

**4. Required Environmental Specifications for Limited Use Lighting Products**

Fluorescent lamps, HID lamps, and ballasts are considered to be limited use lighting products and shall only be used when LED equipment is not yet a practical solution or LED replacements do not exist.

Vendors must only offer limited use lighting products that meet the following minimum requirements.

**A. FLUORESCENT LAMPS**

1. All fluorescent lamps must have a color rendering index (CRI) of 80 or higher.
2. Four-foot linear T8 fluorescent lamps must have a minimum rated life of 24,000 hours when tested on instant start ballasts with 3-hour starts.
3. All other T8 lamps must have a minimum rated life of 18,000 hours when tested on instant start ballasts with 3-hour starts.
4. All T5 fluorescent lamps must have a minimum rated life of 30,000 hours when tested on programmed start ballasts with 3-hour starts.
5. Fluorescent lamps that are labeled TLCP-compliant (e.g., ECO) or RoHS-compliant are preferred.

*Many fluorescent lamps (including fluorescent tube lamps and compact fluorescent lamps) can be cost-effectively replaced by LED lamps, retrofit kits or luminaires. Compared to fluorescent lamps, LEDs are more energy-efficient, longer lasting, and free of toxic mercury.*

**B. HIGH-INTENSITY DISCHARGE (HID) LAMPS**

1. All HID lamps must be either metal halide (ceramic metal halides preferred) or high-pressure sodium (HPS).
2. HID lamps that are labeled TLCP-compliant (e.g., ECO) or RoHS-compliant are preferred.

*Many HID lamps can be cost-effectively replaced by LED lamps, retrofit kits or luminaires. Compared to HID lamps (such as high-pressure sodium and metal halides), LEDs are more energy efficient, longer lasting, and free of toxic mercury.*

**C. BALLASTS**

1. All fluorescent ballasts must be electronic.
2. All electronic ballasts must be RoHS-compliant.
3. All HID ballasts must be designed to operate either metal halide lamps or high-pressure sodium (HPS) lamps. Probe-start ballasts are allowed only when they are designed to operate metal halide lamps over 1000 watts. Ballasts designed to operate lower-wattage metal halide lamps must use pulse start technology, which is more energy efficient.

*Many fluorescent and HID ballasts (and accompanying lamps) can be cost-effectively replaced with LED drivers (and LED lamps). When fluorescent and HID ballasts reach the end of their useful life, they must be replaced with LED luminaires, LED retrofit kits, or LED drivers and lamps.*

## Maryland Green Purchasing Committee Approved Specification - Lighting Products

### 5. End-of-Life Management

All lighting equipment recycled under this contract shall be managed by an authorized lamp, ballast or electronic waste recycling company.

Pursuant to State Finance and Procurement Article §14-415 of the Annotated Code of Maryland, contractors shall use recyclers that are certified by either **e-Stewards** (<http://e-stewards.org/>) or **R2** (<https://sustainableelectronics.org/recyclers>).

#### Mercury-Added Fluorescent and HID Lamps

Mercury-added fluorescent and HID lamps shall be managed in accordance with U.S. EPA standards and State environmental laws to minimize the release of mercury into the environment.

Mercury-added fluorescent and HID lamps that have been replaced shall not be installed or retrofitted in another location for reuse.

More information on EPA guidelines on proper disposal can be found here:

[Hazardous Waste - Universal Waste | US EPA](#)

### 6. Utility Energy Efficiency Rebate Programs

Vendors are strongly encouraged to promote the purchase of LED lighting products that are eligible for utility energy-efficiency rebates. These programs incentivize lighting products that are listed on the ENERGY STAR Certification List or the DesignLights Consortium (DLC) Qualified Product List (QPL).

Financial incentives provided by the utility companies are an important instrument for increasing the use of energy-efficient technologies in State buildings and facilities. Taking advantage of utility financial incentives can help contract users overcome market barriers by lowering inhibitive upfront costs. Financial incentives also complement other energy-efficiency policies such as appliance standards and energy codes.

More information on utility incentives and eligibility requirements can be found in the Appendix of this document.

### 7. Additional Contract Language for Environmentally Preferable Purchasing

#### *On Environmentally Preferable Purchasing:*

**The State of Maryland is committed to purchasing environmentally preferable products and services (EPPs).** Maryland's State Finance & Procurement Article §14-410 defines environmentally preferable purchasing as "the procurement or acquisition of goods and 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."

Accordingly, Bidders/Offerors are strongly encouraged to offer EPPs to fulfill this contract, to the greatest extent practicable.



Maryland Green Purchasing Committee Approved Specification - Lighting Products

***On Maryland's Green Purchasing Reporting Requirements:***

**The State of Maryland requires from the Contractor, at a minimum, quarterly sales data over the life of this contract per a schedule established and deemed reasonable by both parties, or by request by the Department of General Services.**

The report shall include at a minimum:

- Identification of the agencies using the contract
- Total cost of all invoiced purchases for each state agency
- Total cost of all invoiced lighting purchases for each state agency
- Itemized list, invoiced purchases, and total cost by state agency, of all lighting equipment, including an indication of whether the product is an LED luminaire, fixture, retrofit kit, driver or lamp, and whether it is a DesignLights Consortium-qualified or ENERGY STAR®-certified product.

To facilitate consistent reporting on this contract, the Contractor will be provided with a VENDOR GREEN SALES REPORT template from the Green Purchasing Committee (GPC), the Office of State Procurement (OSP) or the Department of General Services (DGS).

This information will enable Maryland State agencies to comply with Md. Code Ann., State Finance & Procurement, §14-405 and COMAR 21.13.01.14, which require Maryland State agencies to report to the Department of General Services their procurement of environmentally preferable products and services.

## Maryland Green Purchasing Committee Approved Specification - Lighting Products

## Appendix

### Utility Incentives - Eligibility Requirements

Utility rebate programs incentivize lighting products that are on the ENERGY STAR certification list or DesignLights Consortium (DLC) Qualified Product List (QPL).

### Lighting Controls

Lighting controls (e.g., photocells for outdoor lighting, occupancy sensors, daylight sensors, etc.) can provide an average of 30% savings on top of a luminaire or lamp replacement or retrofit. Each utility has requirements for controls on certain fixtures (see below) with extra incentives for networked controls that set lighting schedules and respond to peak demand opportunities. To be eligible for incentives, lighting controls are required to be installed as follows:

- Daylight controls are required to be installed in spaces with a total of more than 150 watts of general lighting within toplight and/or sidelight daylight zones.
- Daylight controls are not required in spaces in health care facilities where patient care is directly provided, dwelling units and sleeping units.
- Occupancy/vacancy controls are required to be installed in the following areas: classrooms/lecture/training rooms, Janitorial closets, Restrooms, Conference/meeting/multipurpose rooms, Locker rooms, Storage rooms, Copy/print rooms, Lounges, Warehouses, Employee lunch and break rooms, Private offices, Other spaces 300 sq. ft. or less that are enclosed by floor-to-ceiling height partitions.
- Lighting controls are not required in the following areas: electrical rooms, areas designated as security or emergency areas that are required to be continuously lit, interior exit stairways, interior exit ramps, and exit passageways, emergency egress lighting that is normally off.
- Space types which fall under the requirements of needing both a daylight and occupancy/vacancy control require a dual daylight and occupancy/vacancy DOS control or a combination of separate daylight and occupancy/vacancy controls (for example, an enclosed office containing windows with luminaires totaling more than 150W within the daylight zone). For combinations of separate control types, only one control incentive will be paid. Spaces with existing control types are not eligible for control incentives.
- Exterior lighting requires a functioning time clock or photocell to qualify for advanced network control and/or occupancy/vacancy control incentives, but are not eligible for daylight control incentives.

For further details, see:

**BG&E:** [BGE CI Retrofit Lighting Tech Sheet 091217](#)

**Delmarva Power:** [Lighting Fixtures and Controls Technical Sheet](#)

**PEPCO:** [Lighting Fixtures and Controls Technical Sheet](#)

**Potomac Edison:** [Potomac Edison Energy Solutions for Business Lighting Incentives](#)

## D. Green Purchasing Checklist



### Green Purchasing Checklist for State of Maryland Employees

Please complete this checklist for every new procurement and submit to:  
[DGS.Buygreen@maryland.gov](mailto:DGS.Buygreen@maryland.gov) AND [DGS.OSP-Requisitions@maryland.gov](mailto:DGS.OSP-Requisitions@maryland.gov)  
 (Submitted with your requisition package)

1. What type of product(s) or service(s) are you trying to buy?

2. Are any of these product(s) or service(s) covered by a Maryland Green Purchasing Committee (MD GPC) Specification?

Yes  No

The Maryland Green Purchasing Committee (MD GPC) Specifications currently cover the following types of goods and services:

**Commodities**

- [Appliances and Heating & Cooling Equipment](#)
- [Janitorial Supplies](#)
- [Lighting Products](#)
- [Food Service Supplies](#)
- [Paper and Office Supplies](#)
- [Shell Eggs](#)
- [Paint](#)
- [Snow and Ice Control](#)

**Services**

- [Electronic Product Disposal](#)
- [Janitorial Services](#)
- [Organics Recycling](#)

**Information Technology**

- [Electronic and IT Products](#)

3. If this is a category with a MD GPC Specification, did you include the Specification in your bid solicitation or purchase order?

Yes  No





**If yes, the following language must be included in the solicitation:**

**The State of Maryland is committed to purchasing environmentally preferable products and services (EPPs).** [Maryland's State Finance & Procurement Article §14-410](#) defines environmentally preferable purchasing as "the procurement or acquisition of goods and 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." Accordingly, Bidders are strongly encouraged to offer EPPs to fulfill this contract, to the greatest extent practicable.

**If yes, the following language must be included in the contract or purchase order:**

**Contractors must comply with Maryland's Green Purchasing Reporting Requirements.**

The State of Maryland reserves the right to request from the Contractor quarterly sales data over the life of this contract. This information must include details about the recycled content, third-party sustainability certifications, and other environmental attributes of products and services sold on this price agreement per the contract specifications.

This information will enable Maryland State agencies to comply with Article §14-405 of the Annotated Code of Maryland and COMAR [21.13.01.14](#), effective October 1, 2014, which requires Maryland state agencies to report to the Department of General Services on their procurement of environmentally preferable products and services.

To facilitate consistent reporting on targeted contracts, the Contractor will be provided with a VENDOR GREEN SALES REPORT template by the Maryland DGS.

- **If no**, explain why you did not include the MD GPC-approved Specification in your solicitation or Purchase Order (including whether you used another method to specify green products on this contract).



**If no and the procurement is expected to exceed \$200,000, Maryland DGS Office of State Procurement (OSP) oversight approval is required.**

**The following is to be completed by the DGS OSP Procurement Officer for Agency procurements and the DGS OSP Supervisor for DGS procurements (or Maryland Green Purchasing Committee Representative):**

APPROVAL by Maryland DGS (Yes  No  )

\_\_\_\_\_

Name Title Signature Date

\_\_\_\_\_

Name Title Signature Date

COMMENTS by Maryland DGS:

\_\_\_\_\_

Questions about this form may be directed to: [Kshirajaa.Ramesh@maryland.gov](mailto:Kshirajaa.Ramesh@maryland.gov)

\_\_\_\_\_

Your Name: Print and Sign

\_\_\_\_\_

Your Title and Department

\_\_\_\_\_

Solicitation/Contract Name and Number

\_\_\_\_\_

Date



## E. Definitions

- **Biodegradable:** Ability of a substance to decompose in the natural environment into harmless materials.
- **Blanket Purchase Order (BPO):** A contractual agreement between a purchaser and supplier for the delivery of goods and services at a predetermined price and schedule.
- **Carbon Dioxide Equivalent (CO<sub>2</sub>e):** Ratios are based off of the Global Warming Potential of Greenhouse Gases.
- **Ecolabel:** A single- or multi-attribute environmental certification and labeling method to identify products and services proven to be environmentally preferable within a specific product category. The use of ecolabels limits occurrences of greenwashing by verifying and validating environmental claims.
- **End-of-life management:** Process by which products are disposed of after their term of useful service expires.
- **Energy efficient:** The ability of a product to perform more work per unit of energy compared to all similar products.
- **ENERGY STAR:** A joint program of the U.S. Department of Energy and the U.S. Environmental Protection Agency that certifies and lists relatively energy-efficient products in several categories such as light fixtures, lamps, appliances, and office equipment.
- **Environmentally preferable:** A determination that products or services have a lesser or reduced effect on human health and the environment when compared to other products or services that serve the same purpose.
- **Environmentally Preferable Purchasing:** The procurement of environmentally preferable products and services.
- **EPEAT (Electronic Products Environmental Assessment Tool):** An independent program that certifies “green” electronic equipment such as computers, monitors, laptops, tablets, imaging equipment, servers, TVs, and cell phones. EPEAT-registered products meet certain required and optional criteria that address the full product lifecycle, from design and production to energy use and recycling. There are three levels of registered products: Bronze, Silver, and Gold.
- **Global Warming Potential (GWP):** A measure of a greenhouse gas’s impact on global warming compared to 1 ton of carbon dioxide (CO<sub>2</sub>) over a period of 100 years. Some examples of the use of GWP, as provided by the EPA, includes:
  - Carbon Dioxide (CO<sub>2</sub>): 1 GWP
  - Methane (CH<sub>4</sub>): 28-36 GWP
  - Nitrous Oxide (N<sub>2</sub>O): 265-298 GWP

- **Greenhouse Gas Equivalency Calculator:** Provides an estimate of how many million metric tons of carbon dioxide (CO<sub>2</sub>) are offset by pursuing a specific action - in this case, the purchase of environmentally preferable products and services.
- **Hazardous substance:** 1) Material posing a threat to human health and/or the environment, that can be toxic, corrosive, ignitable, explosive, or chemically reactive; 2) substance that must be reported to the EPA if released into the environment.
- **Intergovernmental Cooperative Purchasing Agreement (ICPA):** Contract that is intended to promote efficiency and savings that can result from purchasing at economies of scale (i.e., cooperative purchasing between two or more governments). These agreements consolidate the procurement of specified goods and services on behalf of multiple users.
- **Safer Choice:** A certification program developed and maintained by the US Environmental Protection Agency's Design for Environment (DfE) Program. It verifies that consumer and institutional cleaners and facility maintenance products meet its criteria for safer chemicals.



Maryland Green Purchasing Committee

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

Email: [DGS.BuyGreen@maryland.gov](mailto:DGS.BuyGreen@maryland.gov)