



UNIVERSITY
OF
CALIFORNIA

Sustainable Procurement Guidelines

Table of Contents

Table of Contents	2
Glossary	3
1. Introduction and Document Purpose	6
2. Document Guide	6
3. Reporting	7
4. Green Spend	7
A. Green Spend General Criteria	7
B. Category Specific Criteria	8
5. Economically and Socially Responsible Spend	12
6. Sustainable Spend	14
7. Category Specific Specifications	15
A. Electronics	15
B. Cleaning Supplies	16
C. Office Supplies	17
E. Indoor Furniture	17
F. Compostable Food Service Ware	18
G. Water Appliances/Fixtures	20
8. Best Practices for Procurement Services	20
9. Certification and Standards Definitions	21
Appendix I - The “Dollar not Spent” and Green Spend	24
Method 1: Reuse (for example, goods reused from surplus operations)	24
Method 2: Normalized Reduction in Purchase of Commodity Goods	25
Method 3: Replacement of disposables with reusables	26

Glossary

The below definitions are copied directly from the UC [Sustainable Practices Policy](#) for reference, unless noted otherwise.

Addressable Spend: Spend that can be impacted through sourcing activities. For the purposes of this policy, addressable spend relates to the spend within a specific product or service category.

Catalog: A catalog is representative of a supplier's product information. A catalog is implemented in one of two formats: 1) through a hosted catalog or 2) through a punch-out catalog. See definitions for Hosted Catalog and Punch Out Catalog for more information. This definition is provided for clarification within the Guidelines and is not defined within the UC Sustainable Practices Policy.

Economically and Socially Responsible (EaSR) Spend: Spend on products or services supplied by a business holding one of the UC-recognized certifications listed the UC Sustainable Procurement Guidelines.

Environmentally preferable products: Designation for those products whose manufacture, use, and disposal results in relatively less environmental harm than comparable products.

Expanded Polystyrene (EPS): As defined by the City of San Francisco, blown polystyrene and expanded and extruded foams which are thermoplastic petrochemical materials utilizing a styrene monomer and processed by any number of techniques including but not limited to, fusion of polymer spheres (expanded bead polystyrene), injection molding, foam molding, and extrusion-blown molding (extruded foam polystyrene).

Full Time Equivalent (FTE): A full-time equivalent employee is the hours worked by one employee on a full-time basis and can be used to convert the hours worked by several part-time employees into the hours worked by full-time employees. A full-time employee is assumed to work 40 hours in a standard week.

Green Spend: Spend on products meeting the UC "Preferred Level" of environmental sustainability criteria as laid out in the UC Sustainable Procurement Guidelines.

Hosted Catalog: As defined in the JAGGAER technical manual, in simplest terms, a hosted catalog is an online version of a supplier's printed catalog. Hosted catalogs contain product data and details, along with pricing information for each item. When a product search is performed, the products in all of the hosted catalogs are searched. Hosted catalog search results contain product information from all suppliers depending on the search criteria entered by the user. This definition is provided for clarification within the Guidelines and is not defined within the UC Sustainable Practices Policy.

LEED™: Leadership in Energy and Environmental Design. LEED is a registered trademark of the U.S. Green Building Council (USGBC). This trademark applies to all occurrences of LEED in this document. LEED is a green building rating system developed and administered by the non-profit U.S. Green Building Council. The four levels of LEED certification, from lowest to highest, are Certified, Silver, Gold, and Platinum. LEED has several rating systems. This Policy refers to the following rating systems:

LEED for Interior Design and Construction (LEED-ID+C) for renovation projects;

LEED for Building Operations and Maintenance (LEED-O+M) for the ongoing operational and maintenance practices in buildings; and,

LEED for Building Design and Construction (LEED-BD+C) for new buildings and major renovations of existing buildings.

Location: As used in this Guidelines document, means any or all campuses. At this time, it does not include UC Health locations or the Lawrence Berkeley National Laboratory. This definition is provided for clarification within the Guidelines and defined differently within the UC Sustainable Practices Policy.

Punch Out Catalog: Modified from the JAGGAER technical manual, punch-out catalogs are integrated external links to a supplier's web-based catalog. The user exits the UC's eprocurement site to search and select products from a supplier's web catalog, then returns the items to the UC's eprocurement shopping cart. The selected items are then submitted through the standard requisition/order process. This definition is provided for clarification within the Guidelines and is not defined within the UC Sustainable Practices Policy.

Required Level Green Spend criteria: The minimum certification standard required for a product or service category. Required Level Green Spend criteria is laid out in the UC Sustainable Procurement Guidelines.

Solicitation: The process of seeking information, bid proposals, and quotations from suppliers.

Sustainable Practices Policy: Refers to the University of California Sustainable Practices Policy, Governed by the UC Sustainability Steering Committee.

Sustainable Procurement: [Modified from the UK Government's Sustainable Procurement Task Force (2012)] Purchasing that takes into account the economic, environmental and socially responsible requirements of an entity's spending. Sustainable Procurement allows organizations to procure their goods and services in a way that achieves value for money on a whole-life basis in terms of generating benefits not only to the organization, but also to society and the economy, while remaining within the carrying capacity of the environment.

Sustainable Procurement Working Group (SPWG): Is the working group charged with improving the integration of sustainable principles and practices into the UC's procurement practices. The SPWG recommends changes to this document to the UC Procurement Leadership Council, and changes to the

UC Sustainable Practices Policy to both the UC Procurement Leadership Council and UC Sustainability Steering Committee. See definitions for UC Procurement Leadership Council and UC Sustainability Steering Committee for more information. This definition is provided for clarification within the Guidelines and is not defined within the UC Sustainable Practices Policy.

Sustainable Spend: The intersection of Green and Economically and Socially Responsible (EaSR) Spend. UC Sustainable Spend is defined as spend that meets the criteria and requirements for Green Spend as well as EaSR Spend as laid out in the UC Sustainable Procurement Guidelines.

Total Cost of Ownership (TCO): An analysis of cost that considers not only purchase price, but also any costs associated with the acquisition, use, and disposal of the product. These costs may include some or all of the following: freight, taxes and fees, installation, operation/energy use, maintenance, warranty, collection, end-of-life disposal or recycling, as well as social or environmental costs, such as the cost of purchasing pollution offsets or monitoring labor practices.

UC Procurement Leadership Council (PLC): Is the system wide leadership council, composed of the Chief Procurement Officer (or equivalent) at each UC campus, charged with developing the overall strategic direction for the UC Procurement Services program that enables the organization to align objectives, initiatives, and projects to deliver on system wide procurement and supply chain initiatives. The PLC is ultimately responsible for the approval of changes and updates to this document. This definition is provided for clarification within the Guidelines and is not defined within the UC Sustainable Practices Policy. This definition is provided for clarification within the Guidelines and is not defined within the UC Sustainable Practices Policy.

UC Sustainability Steering Committee: Is the UC system wide committee charged with overseeing updates to and progress against the UC Sustainable Practices Policy. This definition is provided for clarification within the Guidelines and is not defined within the UC Sustainable Practices Policy.

1. Introduction and Document Purpose

The University of California’s Sustainable Procurement Guidelines (“Guidelines”) lay out the minimum sustainability requirements for products and services purchased by the University of California and identify those product attributes that are strongly preferred, if not mandatory.

The University of California’s Sustainable Procurement Guidelines act as a companion to the Sustainable Procurement Policy and Procedure Sections of the [UC Sustainable Practices Policy](#).

In general terms, the UC Sustainable Practices Policy outlines the University’s targets for sustainable procurement as well as requirements for UC sustainable procurement practices, that is the activities of University of California buyers as they relate to sustainable procurement. This Guidelines document breaks down what the University considers to be sustainable at the product, product category, service or industry level.

The UC Sustainable Practices Policy prioritizes waste reduction in the following order: reduce, reuse, and then recycle. Accordingly, sustainable procurement should look to reduce unnecessary purchasing first, then prioritize purchase of surplus or multiple use products, before looking at recyclable, compostable, or otherwise sustainable products.

2. Document Guide

These Guidelines are intended to be used by the following parties, for the following purposes:

1. University of California, Office of the President, Strategic Sourcing Centers of Excellence and University Campus Procurement Services Departments (not including UC Health locations or the Lawrence Berkeley National Laboratory)
 - a. To educate personnel purchasing on behalf of the University on Required and Preferred Green (environmentally) and Economically and Socially Responsible (EaSR) sustainability criteria to be included in solicitation specifications and reporting.
 - b. To negotiate better pricing for products and services meeting the criteria described throughout these Guidelines and the Sustainable Practices Policy over traditional products and services, where opportunities exist.
 - c. To develop language and specifications for solicitations stating that product and service offerings meeting the criteria described in these Guidelines will be required where they exist.
2. Department Level Buyers
 - a. To educate personnel purchasing on behalf of the University on Required and Preferred environmental (Green) and Economically and Socially Responsible (EaSR) sustainability criteria when making purchasing decisions.

3. Reporting

Reporting will be required in line with the University of California sustainable purchasing targets and reporting requirements as outlined in the Sustainable Practices Policy (see III. Policy Text, G. Sustainable Procurement; V. Procedures, G. Sustainable Procurement). Reporting will be based on the percent spend in each of the following categories out of the total addressable spend. Reporting will commence by product or service category based on instruction in the sections below.

1. Green (environmentally preferable) Spend
2. Economically and Socially Responsible (EaSR) Spend
3. Sustainable Spend (the intersection of Green and EaSR Spend)

Clarification on each of these spend categories can be found in the sections below.

4. Green Spend

Green Spend is defined as spend on products meeting the UC Preferred Level of environmental sustainability criteria (see Table 1 below). The percentage of Green Spend is calculated using the following methodology, for a given product category over a particular period of time:

$$\frac{\text{Total spend on items meeting Preferred Level criteria in a given product category}}{\text{Total Addressable Spend in a given category}} \times 100$$

For example, the percent Green Spend calculation for computer electronics for Fiscal Year 16/17 is:

$$\frac{\text{Total Spend on EPEAT Gold registered computers during FY 16/17}}{\text{Total Addressable Spend on computers during FY 16/17}} \times 100$$

In addition to the above calculations, campuses may also calculate the “Dollar not Spent” to add to their overall Green Spend percentage. Please note that calculating the “Dollar not Spent” for an individual campus is optional and not required as part of a sites annual Green Spend reporting. Please see **Appendix I – The “Dollar not Spent” and Green Spend** to find more information on the various allowable methodologies to calculate the “Dollar not Spent.”

A. Green Spend General Criteria

Some Green (environmental) sustainability criteria are applicable across all, or a large number of different product or service categories. The following criteria must be applied to all applicable categories, and included in the specifications for all relevant solicitations and contracts.

1. ENERGY STAR® and WaterSense® certified products are required across all applicable product categories where price comparable (based on a total cost of ownership assessment) and consistent with the needs of University researchers, faculty, and staff.
2. Products and packaging shall be free of hazardous additives, including those mixed into the product and those used as surface treatments, unless no feasible alternative exists, and it is determined that the benefit outweighs the risk. Products and packaging must meet all eleven of the [Kaiser Permanente Chemicals of Concern Criteria](#), including, but not limited to.
 - a. Cadmium, mercury, lead, hexavalent chromium, polybrominated biphenyls, and polybrominated diphenyl ethers - All homogenous electronic parts are compliant with all European Union Restriction of the Use of Certain Hazardous Substances (EU RoHS) Directive’s restricted limits (excluding exemptions).
 - b. Polyvinyl chloride (PVC)
 - c. Prop 65 Chemicals - Does not contain intentionally added chemicals listed by the State of California to cause cancer, birth defects, or reproductive harm that require warning or are prohibited from release to the environment under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). If contains Prop 65 chemicals, supplier must disclose Chemical Abstracts Service (CAS) #'s.
 - d. Persistent, bioaccumulative and toxic chemicals (PBTs) - All homogeneous materials must contain less than 1000 ppm of PBTs.
 - e. Organohalogen-based chemicals (bromine, chlorine, fluorine, and iodine)
 - f. Antimicrobial/antibacterial agents¹ - Does not contain intentionally added antimicrobial/antibacterial agents to reduce surface pathogens.

B. Category Specific Criteria

Table 1 outlines the environmental sustainability criteria the University uses to define a given product category as “Green,” for purposes of identifying products in hosted and punchout catalogs, and for calculating and reporting on Green and Sustainable Spend.

Recognized Certifications - These are reputable third party certifications the UC recognizes for identifying products that may have a reduced impact on humans and/or the environment. At a location’s discretion, products with these certifications can be flagged as “light green” in hosted and punchout catalogs.

Required Level - These are the minimum mandatory requirements for each product category, which should be included in all relevant bid solicitations. Products and

¹ This includes hand and dish soaps labelled as antibacterial, except where required for use in hospitals and food service settings. Antimicrobials added to raw materials for the sole purpose of preserving the product are exempt, with the exception of triclosan and triclocarban which are explicitly prohibited.

services that fall into these categories but do not meet these minimum requirements will not be listed in UC product catalogs except with the express request of campuses. Products in a given category must meet all required level criteria listed, unless otherwise noted (e.g. if Energy Star and EPEAT Silver are listed, product must have both certifications).

Preferred Level - The Preferred Level of criteria is used for calculating Green and Sustainable Spend (see Section 6 below). At a location's discretion products meeting these criteria may be labelled as "dark green" in hosted and punchout catalogs, and shall be given preference during evaluation in all relevant bid opportunities, where price comparable (based on a total cost of ownership assessment) and consistent with the needs of University researchers, faculty, and staff. Products must meet all applicable Required Level criteria to qualify for Preferred Level criteria.

Table 1 - Category Specific Green Spend Criteria

<u>Product or Service Category</u>	<u>Recognized Certifications and Standards</u>	<u>Required Level (minimum mandatory requirements)</u>	<u>Preferred Level</u>
Electronics	ENERGY STAR ®	ENERGY STAR ®	ENERGY STAR ®
	EPEAT	EPEAT Bronze	EPEAT Gold
Cleaning Supplies	Green Seal	A minimum of 25% of purchases are certified by one of the recognized certifications	At least 75% of purchases are certified by of the recognized certifications
	UL Ecologo		
	EPA Safer Choice		
	FSC (for janitorial paper products)		
Office Supplies			
Copy Paper	FSC Recycled	A minimum of 30% PCRC or agricultural residue content (or GS-07 certified)	100% PCRC or agricultural residue content, or FSC Recycled labelled, with additional preference for paper that is PCF
	Post-consumer recycled content (PCRC)		
	Processed Chlorine Free (PCF) ²		
	Green Seal (GS-07)		
	Agricultural residue ³ content		
Paper Office Supplies (other than copy paper)	FSC - Chain of Custody	A minimum of 30% PCRC ⁴	100% recycled content with minimum 50% PCRC; 90% PCRC wire components; water-
	Sustainable Forestry Initiative (SFI)		

² <http://www.calrecycle.ca.gov/paper/chlorinefree/default.htm>

³ Must come from sustainably grown and harvested, non-GMO sources that do not replace forest stands or food crops

⁴ Aligns with [CA Department of General Services \(DGS\) Purchasing Standard DGS-441200-A for Paper Product Office Supplies](#) and [Northeast Recycling Council \(NERC\) Model EPP Specifications and Purchasing Guidelines for Office Supplies](#)

	Post consumer recycled content (PCRC)		based or plant-based adhesives; and additional preference for PCF, FSC, and/or SFI labelled products ⁵
	Total recycled content		
	Processed Chlorine Free (PCF)		
	Green Seal (GS-07)		
Non-paper Office Supplies	Post-consumer recycled content (PCRC)	Meets the minimum CPG recycled-content levels for Non-Paper Office Products , and a minimum 30% recycled content for all writing utensils (dry-erase markers, highlighters, markers, pens, and pencils) or other plastic-based accessories	Meets the recycled content specifications in the Preferred EPP Specifications as listed by the Northeast Recycling Council (NERC) , and free of antimicrobial coatings
	Total recycled content		
	Non-antimicrobial		
	EPA Comprehensive Procurement Guidelines (CPG)		
	Northeast Recycling Council (NERC) Model EPP Specifications and Purchasing Guidelines for Office Supplies		
Toner	Remanufactured ⁶	Meets one of the recognized standards	Meets both of the recognized standards
	High yield		
Indoor Furniture	GREENGUARD Gold	Must meet all of the following: <ul style="list-style-type: none"> ● GREENGUARD Gold or SCS Indoor Advantage Gold ● Free of the 6 classes of chemicals of 	Must have at least one of the following additional certifications: <ul style="list-style-type: none"> ● BIFMA Level certified (preference for 2 or 3) ● C2C Certified
	SCS Indoor Advantage Gold		
	Cradle to Cradle (C2C)		
	BIFMA Level		

⁵ Modelled from [Northeast Recycling Council’s Preferred EPP Specifications for Paper Office Supplies](#)

⁶ Shall meet the State of California’s Specifications for Remanufactured Toner and Ink Cartridges: https://www.documents.dgs.ca.gov/pd/epp/goods/officesupplies/inktonercartridges/20140902_Ink_Toner_Engineering_Spec.pdf

	<p>Meets the Healthier Hospitals Initiative (HHI) Safer Chemicals Challenge and is listed on the Healthier Hospitals Healthy Interiors Goal website</p> <p>FSC (for products containing wood)</p> <p>Textile certifications:</p> <ul style="list-style-type: none"> ● GOTS ● Standard 100 by Oeko-Tex ● STeP by Oeko-Tex ● Cradle to Cradle ● Facts <p>Health Product Declaration (HPD)</p> <p>Declare Label</p>	<p>concern as described in Section 7.E.</p>	<p>(preference for Silver or Gold)</p> <ul style="list-style-type: none"> ● HHI compliant with published product list on their website ● FSC Certified wood ● Textiles certified by one of the recognized certifications ● Complete HPD ● Complete Declare label
<p>Compostable Food Service Ware</p>	<p>Biodegradable Products Institute (BPI)</p> <p>Green Seal GS-35</p> <p>Cedar Grove Accepted Items List for Commercial Compostability</p>	<p>Certified Compostable by BPI or GS-35, or made 100% from uncoated, unlined, obviously plant-based material, and appears on the Cedar Grove Accepted Items List</p>	<p>Meets additional criteria as described in the Compostable Food Service Ware section below</p>
<p>Water Appliances/Fixtures</p>	<p>WaterSense®</p>	<p>WaterSense® Certified</p>	<p>WaterSense® Certified</p>

5. Economically and Socially Responsible Spend

Economically and Socially Responsible (“EaSR”) Spend is defined as spend on products or services supplied by a business holding at least one of the UC-recognized classifications or certifications listed below. Recognized Certifications and Standards, listed in Table 2 below, outline the certifications and

criteria that the University uses to define “EaSR” spend. Table 2 also includes a category for Preferred Certifications, which are certifications offered by California government agencies and/or of CA-based businesses. Currently there is no goal set for spend with suppliers meeting Preferred Certification standards.

The percentage of EaSR Spend is calculated using the following methodology, for a particular time horizon:

$$\frac{\text{Spend on products or services from a business that holds a UC-recognized EaSR certification}}{\text{Total Addressable Spend}} \times 100$$

A. EaSR Spend Criteria

Expenditures on products supplied by businesses holding at least one of the UC-recognized certifications and standards outlined under Recognized Certifications and Standards, see Table 2 below, will be considered EaSR Spend for the purposes of calculating the percent EaSR and Sustainable Spend.

Recognized Certifications and Standards - These are reputable government or nationally recognized certifications and criteria the UC recognizes for identifying suppliers that may have a positive impact on society and/or the economy. Suppliers with these certifications should be flagged as a color or symbol differentiated like ‘green spend’ such as yellow in hosted and punchout catalogs.

Preferred Certifications - These are reputable government or nationally recognized certifications and criteria the UC recognizes for identifying suppliers that may have a positive impact on society and/or the economy within California specifically. Suppliers with these certifications should be flagged as a color or symbol differentiated like ‘green spend’ such as yellow in hosted and punchout catalogs.

Table 2 - EaSR Spend Criteria

Business Classification	Recognized Certifications and Standards	Preferred Certifications
Small Business Enterprise	All government agency certifications and accepted third party certifiers such as: <ul style="list-style-type: none"> • SBA-approved Third Party Certifiers Note that self-certification in SAM is accepted as well as any other small business certifications that also certify a businesses status as socially and economically disadvantaged such as (WOSB, SDVOSB, DBE, etc.)	CA DGS certification or California state or local agency certification HUBZone certified SBA 8(a)

Disadvantaged Business Enterprise	All government agency certifications	All government agency certifications accepted, but principal office of business must be located in California and owners (officers, if a corporation) domiciled in CA.
Women-owned Business Enterprise	All government agency certifications	All government agency certifications accepted, but principal office of business must be located in California and owners (officers, if a corporation) domiciled in CA.
Minority Business Enterprise	All federal, state and local government agency certifications <ul style="list-style-type: none"> • State and Local Government Certifying Agencies • Federal includes (SBA 8(a), EPA, etc.) 	All government agency certifications accepted, but principal office of business must be located in California and owners (officers, if a corporation) domiciled in CA.
Veteran-owned Business Enterprise	All government agency certifications	All government agency certifications accepted, but principal office of business must be located in California and owners (officers, if a corporation) domiciled in CA.
Service Disabled Veteran-owned Business Enterprise	All government agency certifications	DGS DVBE

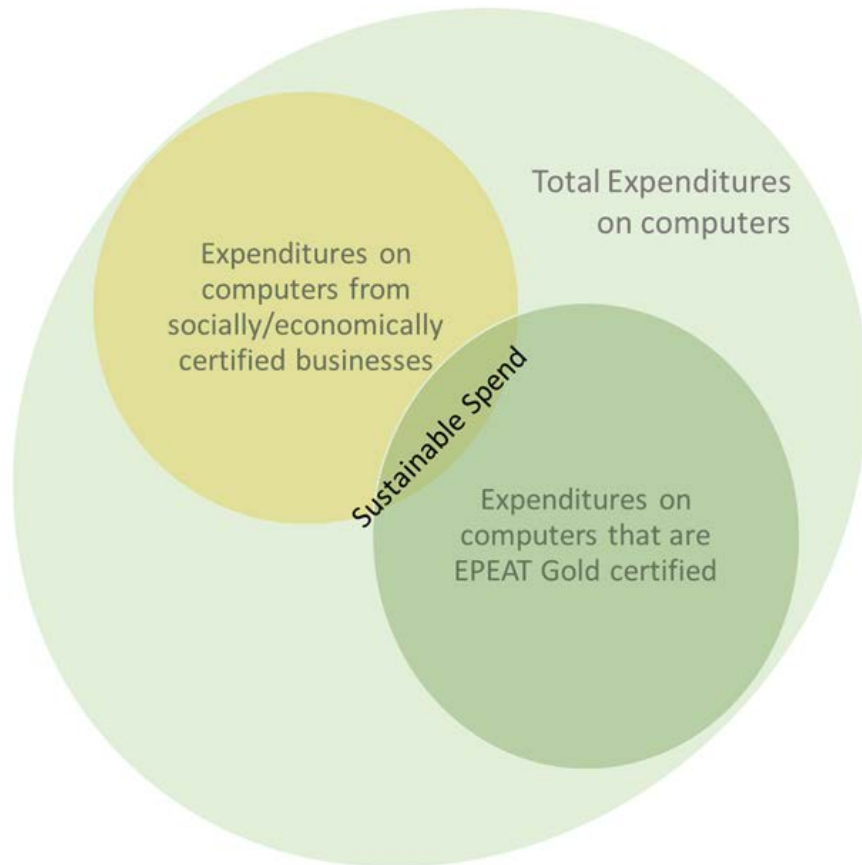
6. Sustainable Spend

Sustainable Spend is the intersection of Green and EaSR Spend. UC Sustainable Spend is defined as spend that meets the criteria and requirements in Section 4 for Green Spend and Section 5 for EaSR Spend (simultaneously). Thus, Sustainable Spend is defined as the expenditures on products in a particular product category that are supplied by a business holding one of the UC-recognized EaSR certifications, in addition to meeting the Preferred Level Green Spend criteria from Table 1.

An example of the percentage of Sustainable Spend calculated for computers (Figure 1) over a particular time horizon would be:

$$\frac{\text{Expenditures on EPEAT Gold certified computers from SBE businesses}}{\text{Total Addressable Spend on computers}} \times 100$$

Figure 1. Sustainable Spend for Computers



7. Category Specific Specifications

These additional guidelines and specifications should be used during solicitations, contracting and as a reference when making department purchases. Minimum requirements for each product category are outlined in column three of table one. The below items are recommended for inclusion in RFPs. Other than those items referred to in Policy as mandatory, project teams need to determine which of the below items will be mandatory and preferred during the RFP development phase.

A. Electronics

Electronics includes any product for which an EPEAT certification is available. EPEAT currently includes product ratings for **PCs and Displays** (including tablets), **Imaging Equipment** (which includes printers,

copiers, scanners and multifunction devices) and **Televisions**. Environmental leadership standards are currently under development with the intent to form the basis of future EPEAT categories for **Mobile Phones, Servers** and other electronic products (<https://www.epeat.net/about-epeat/>). Registration criteria and a list of all registered equipment are provided on the [EPEAT registry](#).

In addition to the criteria established in Table 1, the University will ensure the following:

1. In accordance with Policy, all recyclers of the University's electronic equipment must be e-Steward certified by the Basel Action Network (BAN) (www.ban.org). In cases where the University has established take-back programs with a manufacturer, the University will require the manufacturer to become a BAN-certified e-Steward Enterprise ([e-Stewards for Enterprises](#)).
2. Printers and copiers must have duplex printing capabilities and hold their warranty while using 100% recycled content paper.
3. Suppliers shall be required to deliver items to the University with energy efficiency and duplex printing functions enabled.
 - a. Departments will work with their IT departments to ensure that features remain enabled for the duration of the product's use.

B. Cleaning Supplies

Cleaning supplies include general purpose bathroom, glass and carpet cleaners; degreasing agents; biologically-active cleaning products (enzymatic and microbial products); floor-care products (e.g. floor finish and floor finish strippers); hand soaps and hand sanitizers; disinfectants; and metal polish and other specialty cleaning products. Also included are janitorial paper products such as toilet tissue, tissue paper, paper towels, hand towels, and napkins. Other janitorial products and materials (e.g. cleaning devices that use only ionized water or electrolyzed water) are excluded from this category.⁷

Disinfectants

All disinfectants must be EPA-registered, and contain only the following active ingredients: hydrogen peroxide, citric acid, lactic acid, thymol, or caprylic acid. As there is no sustainability certification for disinfectants, in order to increase your % Green Spend for Cleaning Supplies and follow green cleaning practices, it is recommended that each site assess its current usage and application of disinfectants. Disinfectant use should be limited to high-risk surfaces [locations where there is a higher risk for blood borne incidents, skin contact (MRSA risk), or contact with feces and body fluids] and where required by regulation. Microbes can be effectively removed from high-touch surfaces touched by multiple people throughout the day (door handles, faucet handles, handrails, drinking fountains etc.) by frequent and proper cleaning with a regular cleaning product.⁸

⁷ Based on STARS Technical Manual Version 2.1, Administrative Update Three, July 2017

⁸ UMass Lowell Toxics Use Reduction Institute's Guide to Safe and Effective Cleaning and Disinfecting: https://www.turi.org/Our_Work/Cleaning_Laboratory/Resources_and_Information/Disinfection/Guide_to_Safe_and_Effective_Cleaning_and_Disinfecting

C. Office Supplies

Copy paper - refers to standard office printing and copy paper.

Paper Office Supplies - includes Writing Paper (pads), Packing Paper, Folders, Letter folders, Expandable Filing Folders, Hanging folders or accessories, binders and indexes, Hanging Folders, Dividers, File Pockets, Standard Envelopes, Packaging Carton, Mailers, Easel Pads, Sticky Note, Storage Boxes, Desk Pad Calendar.

Non-paper Office Supplies - includes binders, clipboards, file folders, clip portfolios, presentation folders, plastic desktop accessories (desk organizers, desk sorters, desk and letter trays, and memo, note and pencil holders etc.), plastic envelopes, and writing utensils (dry-erase markers, highlighters, markers, pens, and pencils).

Toner - Additional recommendations can be found from the State of New York's Approved Specifications for Monochrome Toner Cartridges: <https://www.ogs.ny.gov/green/y/specs/green-specs-MonochromeTonerCartridge.asp>

E. Indoor Furniture

Furniture includes individual (e.g. task chair) and group seating; open-plan and private-office workstations; desks of all types, tables of all types; storage units, credenzas, bookshelves, filing cabinets and other case goods; integrated visual display products (e.g. markerboards and tackboards, excluding electronic display products); hospitality furniture; and miscellaneous items such as mobile carts, freestanding screens, and movable partitions. Movable partitions include office furniture system cubicle panels that are typically integrated with work surfaces, desks, and storage furniture. Furniture does not include office accessories, such as desktop blotters, trays, tape dispensers, waste baskets, all electrical items such as lighting and small appliances, and accessories such as aftermarket keyboard trays, monitor stands and monitor arms.

The University shall prefer furniture meeting specifications for the following hazardous chemical classes:

1. Flame Retardants: All furniture shall be free of flame retardant chemicals at levels above 1,000 parts per million in both standard and optional components, excluding electrical components.
 - a. All upholstered seating subject to TB 117-2013 shall be labeled as not containing flame retardant chemicals consistent with the manner described in Section 19094 of the California Business and Professions Code.
 - b. A product may contain flame retardants if required to meet code or regulation (e.g., TB 133 or ASTM E 1537), in accordance with the following criteria:
 - i. No halogenated flame retardant chemical may be used at levels above 1,000 parts per million by weight of the homogeneous material, excluding electrical components.

- ii. Products that contain flame retardant chemicals that have been fully assessed using GreenScreen v1.2 (or newer) and meet the criteria for benchmark 2, 3, or 4 will be preferred.
- 2. Formaldehyde and Volatile Organic Compounds (VOCs): All furniture shall comply with ANSI/BIFMA e3-2014 Furniture Sustainability Standard, Sections 7.6.1 and 7.6.2, using either the concentration modeling approach or the emissions factor approach.
 - a. Test results shall be modeled using the open plan, private office, or seating scenario in ANSI/BIFMA M7.1, as appropriate.
 - b. Furniture products that additionally meet ANSI/BIFMA e3-2014 Section 7.6.3 and/or California Department of Public Health Standard Method v1.1 (emission testing method for California Section 01350) are preferred.
 - c. Salvaged and refurbished furniture more than one-year old at the time of re-use is considered compliant, provided it meets the requirements for any site-applied paints, coatings, adhesives, and sealants.
 - d. All composite wood materials, including hardwood plywood, particleboard, or medium density fiberboard, used in office, classroom, or healthcare furniture shall comply with Phase 2 of California's Code of Regulations, Title 17 §93120.2 – Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products.
- 3. Per and Poly-Fluoroalkyl Substances (PFASs) used as stain/water/oil resistant treatments: All furniture shall be free of any long- and/or short-chain per- and poly-fluorinated alkyl compounds and fluorinated polymers used as stain, water, or oil resistant treatments above 100 ppm by weight of the homogenous material.
- 4. Antimicrobials: All furniture shall be free of any added or built-in chemical antimicrobials. Antimicrobials added to raw materials for the sole purpose of preserving the product are exempt, with the exception of triclosan and triclocarban which are explicitly prohibited.
- 5. Polyvinyl Chloride (PVC): All furniture shall be free of polyvinyl chloride (PVC) greater than 1% of product by weight, excluding electrical components. Electrical components that are free of PVC are preferred.
- 6. Heavy Metals: All furniture shall be free of any heavy metals, including hexavalent and trivalent chromium, in concentrations greater than 100 ppm.

F. Compostable Food Service Ware

Compostable food service containers and packages that have recycled and/or sustainably harvested content are preferred wherever possible.

1. All products must be certified compostable by the Biodegradable Products Institute (BPI) or Green Seal GS-35, proving that the finished product meets ASTM standards D6400 or D6868 for compostability. BPI-certified products can be accessed at: <http://products.bpiworld.org/>. Documentation may be required.

2. Products made 100% from paper, wood, bamboo or other obviously plant-based material, that are uncoated, unlined, or clay-coated (such as wooden stir sticks or uncoated paper plates) automatically meet this commercial compostability requirement without certification, so long as they appear on the Cedar Grove Accepted Items list for commercial compostability (<https://cedar-grove.com/compostable/accepted-items>), and the material type is disclosed.
3. Products with polyethylene liners are not compostable, and therefore do not meet the intent of these specifications.
4. Products shall not contain highly hazardous additives, including but not limited to persistent, bioaccumulative, or toxic chemicals (PBTs); carcinogens; mutagens; reproductive toxins, organohalogen-based chemicals (bromine, chlorine, fluorine or iodine); and endocrine disruptors.
5. Products shall not contain polyvinyl chloride (PVC), acrylonitrile butadiene styrene (ABS), polycarbonate (PC), polyurethane (PU), or any fluorinated chemicals. If product is fiber-based (including paper), ask for identification of the type of grease barrier or coating used.
6. Product is manufactured entirely with chlorine-free processing, meaning that no chlorine or chlorine compounds were used during manufacturing. Products may be unbleached or whitened in a chlorine-free process (if certified process chlorine-free).
7. Paper products are made from 40% post-consumer recycled content or 100% total recycled content (pre- or post- consumer), unless intended for hot beverages, in which case they are made from a minimum of 10% post-consumer recycled content. Bidder should disclose the amount and type of recycled content.
8. Non-cutlery products contain at least 90% biobased carbon content; cutlery products contain at least 70% biobased carbon content. Bidder can provide documentation demonstrating that its biobased carbon content meets the above specifications through one of the following:
 - a. ASTM Standard D6866 laboratory test data
 - b. USDA's BioPreferred Label
 - c. Products made of 100% uncoated wood, bamboo, paper or other obviously fiber-based material will automatically meet these biobased content requirements. Samples may be requested.
9. Product shall not contain added engineered nanomaterials.
10. Product materials were sustainably produced and are certified as one of the following:
 - a. Forest Stewardship Council (FSC)
 - b. Protected Harvest
 - c. Rainforest Alliance
 - d. Fair Trade USA
11. Feedstock and final product are produced in North America.
12. Product material grown without genetically modified organisms and certified to be GMO-free by one of the following:
 - a. Non-GMO Project Verified (www.nongmoproject.org)
 - b. CERT ID NonGMO
 - c. ProTerra Certifications (www.geneticid.com/services/certification)

13. Product is made from sustainably grown, non-food agricultural resources such as perennial biomass crops and sustainably harvested residues (for more information, see the Sustainable Bioplastic Guidelines:
<https://healthybuilding.net/uploads/files/sustainable-bioplastic-guidelines.pdf>
14. Product is EcoLogo or Green Seal-certified by one of the following:
 - a. EcoLogo CCD-084 (Table Napkins),
 - b. EcoLogo CCD-085 (Kitchen Towels),
 - c. EcoLogo CCD-086 (Hand Towels),
 - d. Green Seal GS-1 (Sanitary Paper Products),
 - e. Green Seal GS-9 (Paper Towels and Napkins),
 - f. Product meets the standard for biodegradability in the marine environment (ASTM D7081-05).
15. Inks for printing and graphics are vegetable-based and approved for use by U.S. Food and Drug Administration, where required.

G. Water Appliances/Fixtures

This category includes all products covered by WaterSense including residential toilets, showerheads, bathroom faucets, commercial toilets, urinals, pre-rinse spray valves, irrigation controllers, and spray sprinkler bodies.

8. Best Practices for Procurement Services⁹

1. Market basket lists can be used as a tool for increasing the purchase of sustainable products at competitive and affordable prices. By only including products meeting the Required and Preferred Level of sustainability criteria in a market basket list, the University may be able to achieve reduced rates that will in turn direct spend towards sustainable products over conventional products. Allowing for revisions to the market basket beyond traditional changes in volume/spend patterns may allow for more competitive pricing on newly added sustainable items.
2. Through solicitation specifications and contract provisions, suppliers are required to:
 - a. Clearly identify UC-recognized “light green” and “dark green” sustainable items in product catalogs.
 - b. Ensure that any additional sustainability symbols/icons/certifications are displayed along with attribute details per product (e.g. a product with a recycled content symbol must also have in its product description details about the % total recycled content and % post consumer recycled content).
 - c. Offer capabilities to:

⁹Modified from: <https://nerc.org/documents/EPP/Office%20Supplies/EPP%20Specs%20-%20Office%20Supplies.pdf>

- i. Block and/or restrict pre-identified conventional items from being purchased online so University employees are compelled to purchase products that are in compliance with UC's Sustainable Procurement Policies and Guidelines.
 - ii. Auto-substitute pre-identified conventional products with sustainable products on the market basket list when end-user places conventional item in online cart.
- d. Make sustainable items display first in online catalog search results, or make them easily found within online product catalogs through effective search tools, search filters, and related navigational tools.
- e. Incentivize consolidated deliveries whenever feasible (e.g. deliveries only on certain days of the week or reduced pricing for consolidated shipping).
 - i. Document or illustrate how the delivery consolidation method reduces the UC and supplier's carbon footprint (e.g. reduction in fossil fuel use, carbon emissions, packaging materials, or on-site vehicle traffic).
- f. Use only delivery service companies that are participants in EPA's Smartway Program.
- 3. LEED credits should be incorporated into all materials procurement associated with new facility constructions and major renovations.¹⁰

9. Certification and Standards Definitions

- a. [BIFMA Level®](#) - BIFMA Level is a multi-attribute furniture certification based on the ANSI/BIFMA e3 standard, addressing material use, energy, atmosphere, human and ecosystem health, and social responsibility at the product, facility, and organizational level. Certification is based on a points system with three levels of achievement, from Level 1 through Level 3.
- b. [Biodegradable Products Institute \(BPI\)](#) - BPI is a non-profit organization with the largest certification program for compostable products and packaging in North America. Their single-attribute certification indicates compliance with the ASTM D6400 and/or D6868 standards for commercial compostability.
- c. [Cradle to Cradle TM](#) - Cradle to Cradle is a multi-attribute standard that evaluates a wide range of products across five categories of human and environmental health, including Material Health, Material Reutilization, Renewable Energy and Carbon Management, Water Stewardship, and Social Fairness. Product certification is awarded at five levels, from Basic to Platinum, with an emphasis on continuous improvement.
- d. [ENERGY STAR®](#) - Energy Star is a standard for energy efficient consumer products administered by the U.S. Environmental Protection Agency and the U.S. Department of Energy.
- e. [EPA Safer Choice](#) - Formerly known as Design for the Environment (DfE), the Safer Choice label is the U.S. Environmental Protection Agency's program to identify products with safer chemical ingredients.¹¹

¹⁰ <https://www.phoenix.gov/oepsite/Documents/070520.pdf>

¹¹ Definition taken from STARS Technical Manual Version 2.1, Administrative Update Three, July 2017

- f. [EPEAT®](#) - The Electronic Product Environmental Assessment Tool is a method for consumers to evaluate the effect of a product on the environment. It ranks products as gold, silver or bronze based on a set of environmental performance criteria. It is managed by the Green Electronics Council.
- g. [FACTS](#) - Facts is a sustainability certification program for commercial textiles, recognizing textiles conforming to the NSF/ANSI 336 multi-attribute standard, evaluating a textile for environmental, economic and social aspects across its life cycle. Facts utilizes four conformance levels from Compliant to Platinum.
- h. [Forest Stewardship Certification](#) - The Forest Stewardship Council (FSC) is an independent, non-profit organization that protects forests for future generations. FSC Chain-of-Custody certification traces the path of products from forests through the supply chain, verifying that FSC-certified material is identified or kept separated from non-certified material throughout the chain. FSC Forest Management certification confirms that a specific area of forest is being managed in line with the FSC Principles and Criteria.¹²
 - i. FSC Recycled - The FSC Recycled on-product label means all the wood or paper in the product comes from reclaimed (re-used) material.¹³
- i. [Global Organic Textile Standard \(GOTS\)](#) - GOTS is a textile processing standard for organic fibres, which includes both ecological and social criteria, from harvesting of raw materials through manufacturing and labelling.
- j. [GREENGUARD®](#) - The GREENGUARD Environmental Institute certifies products and materials for low chemical emissions. Greenguard Gold ensures that a product is safe for use in schools and healthcare facilities, and is referenced by LEED.
- k. [Green Seal®](#) - Green Seal is an independent nonprofit organization “dedicated to safeguarding the environment and transforming the marketplace by promoting the manufacture, purchase, and use of environmentally responsible products and services.” The Green Seal certification is based on multi-attribute environmental standards that meet the ISO 14024 standards for eco-labeling.¹⁴
- l. [Healthier Hospitals Healthy Interiors Goal \(HHI\)](#) - The Healthy Interiors Goal aims to promote public and environmental health, and urge the furnishings market to develop safer products, while reducing disposal costs and liability. Furniture and textiles that meet the Healthy Interiors Goal claim contain no formaldehyde, perfluorinated compounds, polyvinyl chloride, antimicrobials, or flame retardants above the specified minimum levels. Products meeting the Goal must be listed on the website, and are not verified.
- m. [Process Chlorine Free \(PCF\)](#) - PCF means that no chlorine or chlorine derivatives were used in the recycling process. Paper that was originally bleached with chlorine or chlorine derivatives may be used as feedstock, however. Only paper that is “totally

¹² Ibid

¹³ <https://ic.fsc.org/en/choosing-fsc/fsc-labels>

¹⁴ Definition taken from STARS Technical Manual Version 2.1, Administrative Update Three, July 2017

chlorine-free” (TCF) is produced with pulp that has been bleached without any type of chlorine or chlorine derivative, or has not been bleached.¹⁵

- n. [STANDARD 100 by OEKO-TEX®](#) - Certification for raw, semi-finished, and finished textile products at all processing levels, as well as accessory materials used. Criteria focuses on product safety based on test criteria for numerous harmful chemicals.
- o. [STeP by OEKO-TEX®](#) - STeP assesses against criteria for sustainable, environmentally and socially responsible textile and apparel production and logistic sites, addressing the reduction of hazards and risks throughout the production chain, with the goal of improving factory resource efficiency.
- p. [UL Ecologo](#) - The UL Environment ECOLOGO program certifies products, services and packaging for reduced environmental impact. ECOLOGO Certifications are voluntary, multi-attribute, lifecycle based environmental certifications that meet the ISO 14024 standards for eco-labeling.¹⁶
- q. [WaterSense®](#) - WaterSense is a U.S. Environmental Protection Agency program designed to encourage water efficiency in the United States through the use of a special label on consumer products.

10. Approval procedure updates and changes

Changes to this document must be approved by the UC Procurement Leadership Council (PLC) on the recommendation of the Sustainable Procurement Working Group.

11. Change Log

Approval Date	Summary of Changes	Approved by	Product Categories Impacted	Start Date for Reporting on New or Updated Categories
8/10/18	Implementation of UC Sustainable Procurement Guidelines	UC Procurement Leadership Council	Electronics, Cleaning Supplies, Copy Paper, Paper Office Supplies (other than copy paper), Non-paper Office Supplies, Toner, Indoor Furniture, Compostable Food Service Ware, Water Appliances/Fixtures	7/1/2018

¹⁵ <http://www.calrecycle.ca.gov/paper/chlorinefree/default.htm>

¹⁶ Definition taken from STARS Technical Manual Version 2.1, Administrative Update Three, July 2017

Appendix I - The “Dollar not Spent” and Green Spend

As with waste, the hierarchy of environmentally sustainable spend starts with reduce and reuse. As such, in the assessment of Green Spend, the “dollar not spent” can be included in Green spend calculations. This concept is addressed in the following section. Please note that calculating the “Dollar not Spent” for an individual campus is optional and not required as part of a sites annual Green Spend reporting (outlined in section 4. Green Spend above).

How to calculate the dollar not spent:

Items that are not purchased due to education and reduction activities and/or items that are reused on campus may be added to the Green Spend calculation at a location’s discretion. The process for adding these to the Green Spend calculation is as follows:

$$\frac{\text{Green Spend purchase per category} + \text{approximate market value of goods not purchased}}{\text{Addressable spend per category} + \text{approximate market value of goods not purchased}} \times 100$$

To determine the approximate value of goods not purchased, locations should use an appropriate combination of the below methodologies:

Method 1: Reuse (for example, goods reused from surplus operations)

STEP 1. Determine the current market value of the goods were they to be purchased new.

STEP 2. Sum the product cost (quantity of goods x current market value of goods).

STEP 3. Include the current market value of goods in the numerator and denominator of the Green Spend calculation.

Where:

Current market value of goods is to be determined as the average purchase price of the equivalent good available on system wide contracts (or an average market value of equivalents if no system wide contract exists).

Method 1 Example: 4 desks and 3 desk chairs re-used on campus in surplus operations.

STEP 1: Determine the average cost for the 4 desks and 3 desk chairs from relevant system wide contracts (e.g. average cost of desk is \$2000 each, average cost of chair is \$1,500 each).

STEP 2. Sum the product cost of the items (4 x \$2,000) + (3 x \$1,500) = \$12,500

STEP 3. Include the market value of the goods in the numerator and denominator for the calculation for green spend;

$$\frac{\text{Green Spend purchase per category} + \$12,500}{\text{Addressable spend per category} + \$12,500} \times 100$$

Method 2: Normalized Reduction in Purchase of Commodity Goods

Where:

Product use (goods purchased) is a function of the number of staff/users.

STEP 1. Determine the quantity of goods purchased per driver in a baseline year:

Equation:

$$\frac{\text{Baseline quantity of goods consumed}}{\text{Baseline quantity of driver}}$$

For example:

$$\frac{\text{Baseline \# reams of copy paper purchased}}{\text{Baseline \# Full Time Equivalent staff}}$$

$$\frac{\text{Baseline \# gallons of cleaning products purchased}}{\text{Baseline \# square feet of cleaned space}}$$

STEP 2. Determine the quantity of goods purchased per driver in the current year using equations as above:

Equation:

$$\frac{\text{Current quantity of goods purchased}}{\text{Current quantity of driver}}$$

For example:

$$\frac{\text{Current \# reams of copy paper purchased}}{\text{Current \# Full Time Equivalent staff}}$$

$$\frac{\text{Current \# gallons of cleaning products purchased}}{\text{Current \# square feet of cleaned space}}$$

STEP 3. Determine the total difference in the quantities of goods purchased between the baseline and current years (savings) using the following equation:

Equation:

Current quantity of driver x (Baseline quantity of goods per driver - Current quantity of goods per driver)

Example:

Paper: Current number of FTEs x (Baseline number of reams of copy paper purchased per FTE - Current number of reams of copy paper purchased per FTE)

Cleaning: Current number of sq. ft. cleaned x (Baseline number of gallons of cleaning product purchased per sq. ft. cleaned - Current number of gallons of cleaning product purchased per sq. ft. cleaned)

STEP 4. Determine the value of savings based on the current market value of goods.

STEP 5. Include the current market value of goods in the numerator and denominator of the Green Spend calculation.

Where:

Current market value of goods: is to be determined as the average price of the equivalent good available on system wide contracts (or an average market value of equivalents if no system wide contracts product available).

Note that if the purchase of one commodity is replaced with purchase of a different (but similar) commodity, this should not be considered a reduction.

Method 2 Example (Using copy paper as example good):

STEP 1: Determine the quantity of goods purchased per driver in baseline year

Baseline year: 2005/06 FY

Quantity of goods purchased: 500 reams of copy paper/year

Driver: 800 Full Time Equivalent staff

Number of reams of copy paper purchased per FTE: $500/800 = .625$ reams per FTE

STEP 2: Determine the quantity of goods purchased per driver in current year

Current year: 2017/18 FY

Quantity of goods purchased: 500 reams of copy paper/year

Driver: 1500 Full Time Equivalent staff

Number of reams of copy paper purchased per FTE: $500/1500 = .33$ reams per FTE

STEP 3: Determine savings per driver between baseline and current year

Current # FTEs x (reduction in reams per FTE) = $1500 \text{ FTEs} \times (.625 \text{ reams per FTE} - .33 \text{ reams per FTE})$

= 421.5 reams of paper

STEP 4: Determine the average value of the savings/reduction

Average value of a ream of paper in UC contract: \$5

$\$5 \times 421.5 \text{ reams of paper} = \$2,107.5$

STEP 5: Add the value of the reduction to both the numerator and the denominator of the Green Spend equation for the product category

$$\frac{\text{Green Spend purchase per category} + \$2,107.5}{\text{Addressable spend per category} + \$2,107.5} \times 100$$

Method 3: Replacement of disposables with reusables

If successful methods have been found to identify reuse numbers where disposables were the standard business as usual, the market value of these disposables may be used in Green Spend calculations. An example of this might be the use of reusable to-go containers at dining locations where reusables are “checked out,” so specific numbers of reusables are available.

In these cases, the value of the disposables displaced may be considered Green Spend and added to the numerator and the denominator for the Green Spend calculation. The process for calculating this is as follows:

STEP 1. Determine number of goods displaced.

STEP 2. Determine value of goods displaced per unit.

STEP 3. Calculate total value of goods displaced (number of goods displaced) x (value of goods displaced per unit)

STEP 4. Include the current market value of goods in the numerator and denominator of the Green Spend Calculation.

Method 3 Example:

For this example, a dining operation uses reusable to-go containers and tracks their usage. 500 reusable to-go containers are used in a year.

STEP 1. Determine number of goods displaced

From the example above, 500 to-go containers are displaced

STEP 2. Determine value of goods displaced per unit

Alternative compostable to-go containers cost \$0.20 each (on system wide or local contract).

STEP 3. Calculate total value of goods displaced

500 compostable to-go containers x \$0.20/container = \$100

STEP 4: Add the value of the savings/reduction to both the numerator and the denominator of the Green Spend equation for the product category:

$$\frac{\text{Green Spend purchase per category} + \$100}{\text{Addressable spend per category} + \$100} \times 100$$