



SF Environment
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2016 Annual Report: Buy Green Program for City Staff

Presented to the San Francisco Commission on the Environment (COE) on September 11, 2017

Prepared by San Francisco Department of the Environment (SFE)

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I. SUMMARY

Environmentally preferable or "green" products are less toxic, more energy efficient and made with higher levels of recycled or recyclable materials than comparable alternative products. By ordinance, City departments are required to purchase green products in certain product categories, which can be viewed at SFApproved.org. The Department of the Environment (SFE) and Office of Contract Administration (OCA) lead the ordinance implementation.

The Precautionary Purchasing Ordinance requires an annual report on the City's progress in green purchasing. The 2016 Annual Report focuses its reporting on janitorial products. Major activities and trends for calendar year 2016 include the following (summarized in Table A): The overall percentage of green janitorial products (in dollar value) purchased from vendors on two citywide contracts decreased slightly, from 87% in 2015 to 80% in 2016. This trend is likely due to changes in manufacturers' product offerings and overall reduced use of the citywide contracts and an increasing use of departmental purchasing authority. Green purchases increased for three product categories.

II. INTRODUCTION

History and Mandate

San Francisco has been buying green since the 1980s, but purchasing requirements were scattered among several ordinances. In 1998, the San Francisco Board of Supervisors passed legislation launching the [Environmentally Preferable Purchasing Pilot Program](#), which:

- Inventoried and assessed hazardous chemical products bought by City departments
- Established environmental and health criteria
- Compared costs between green and conventional products
- Set priorities and field tested products with City departments

In 2003, San Francisco became the first city in the nation to adopt the [Precautionary Principle](#), a policy statement requiring City operations to select alternatives that present the least potential threat to human health and the City's natural systems, based on the best available science. In 2005, San Francisco enacted the [Precautionary Purchasing Ordinance](#) (Environment Code, Ch. 2). This ordinance applies the Precautionary Principle to City purchasing, and requires City departments to purchase only approved alternative ("Required green") products for certain priority product categories. SFApproved.org was created in 2010 to support implementation of this ordinance. This annual report to the Commission is required by the ordinance.

How Green Product Specifications Are Developed

SFE works with City departments and OCA to develop green requirements for City commodity and service contracts. These requirements range from standards or ecolabels, such as Energy Star or Green Seal, to more detailed, independently developed technical specifications. In keeping with the Precautionary Principle, SFE seeks to take anticipatory action to prevent harm from certain products, to conduct assessments of safest alternatives available to fulfill the same product function, and to take a full-cost, life-cycle view of product costs and impacts.

The immediate goals for green products may be summarized as follows:

1. **Performance:** Does the product work well? Is it durable? Does it make efficient use of resources? SFE confers with individual City staff and/or established commodity-specific

Green Teams to obtain information on product performance, in addition to OCA's surveys of City departments.

2. **Impact:** Does the product have unacceptable worker health, public health, or environmental impacts? SFE takes the lead role in assessing impacts on human health and the environment and developing purchasing requirements accordingly.
3. **Cost:** Is it cost-effective in its manufacturing, use and disposal compared to its alternatives? OCA is responsible for obtaining the best possible prices on City purchases.

Green products and specifications are listed on SFApproved.org in one of two ways:

1. **Required green products:** Under the Precautionary Purchasing Ordinance, City departments buying certain categories of products (see list below) may only purchase products that meet Required specifications. Required products meet all three of the above goals - performance, impact, and cost - and are generally listed on citywide term contracts. For example, SFE searches for glass cleaners with the minimum environmental and health impacts, reviews compliant products and their performance with City custodial supervisors, and includes specification language in a citywide janitorial cleaners contract to minimize cost.
2. **Suggested green products:** For Suggested products, SFE has researched environmental specifications, but more work may be needed on cost and/or performance goals. City staff are encouraged to try suggested products and rate them at SFApproved.org, to help determine which products should be included in future contracts. For example, a City department requested suggestions on safer graffiti removers, and SFE developed environmental specifications and identified complying products, but the effectiveness of those products at removing graffiti needs to be fully tested by City staff.

III. GREEN PRODUCT & SERVICE CATEGORIES

To date, the Department of the Environment has created green specifications for the following categories on SFApproved.org. City staff are required to buy green products in categories with asterisks (*).

Art Supplies

Barrier Creams
Brush Cleaners
Mediums and Gessos
Paint (Artist)
Solvents and Oils
Varnishes

Automotive

*Parts Washers
Shop Towel Services
Spraying Equipment
*Vehicles

Automotive Fluids

*Fuel
Hydraulic Fluid (Biobased)
Motor/Engine Oil (Re-refined)

Building Supplies & Services

Building Materials
Flooring: Carpet
Services: Moving
*Services: Pest Management
in Buildings
*Wood

Cleaners

*Abrasive Cleaners
*Bathroom Cleaners
*Carpet Cleaners

*Cleaner Degreasers

*Dish Soaps
Disinfectants
Drain Openers
*Floor Cleaners
*Floor Finishes and Strippers
*Furniture Polish
*General Purpose Cleaners
*Glass Cleaners
Graffiti Control
*Hand Soaps
Odor Control
*Toilet Cleaners (Acid)
*Toilet Cleaners (Non-acid)
*Toilet Deodorizers (Hangers,
Pucks)

Cleaning Supplies

- *Bags: Compostable Plastic
- *Bags: Trash
- *Hand Dryers: Electric
- Microfiber Cleaning Products
- *Paper Towels
- *Toilet Seat Covers
- *Toilet Tissue

Electronics

- Appliances
- Audio Visual Equipment
- *Computer Servers
- *Computers & Monitors
- *Copiers, Printers, Scanners, Fax Machines

Electronics Cleaners

- Keyboard Cleaners

Food, Catering Services

- *Foodware
- *Water Dispensers

Landscaping

Fertilizers

- Hoses (Garden & Soaker)

Services

- Landscaping

Lighting

- *Compact Fluorescent (CFL) Ballasts
- *CFL Bulbs
- *CFL Fixtures
- *Exit Signs
- *Fluorescent Ballasts
- *Fluorescent Fixtures
- *Fluorescent Tubes
- *High Pressure Sodium (HPS) Bulbs
- *LED Bulbs
- *LED Desk Lamps
- *LED Electronic Drivers (Power Supplies)
- *LED Fixtures
- *Metal Halide Bulbs

Lubricants

- Motor/Engine Oil (Re-refined)

Office Supplies

- Batteries
- *Binders
- Correction Tape
- Furniture
- Markers: Permanent
- Markers: Whiteboard
- *Paper
- *Paper Products
- Services: Moving
- Toner Cartridges

Paints, Thinners & Coatings

- Paint (Traffic)
- Paints (Architectural)

Personal Care

- *Hand Sanitizers

IV. F\$P: OPPORTUNITY IN GREEN PURCHASING

F\$P is a \$60M comprehensive, Citywide accounting, purchasing, and budgeting system that began rollout in July of 2017. Once complete, it is intended to record all purchasing transactions in a centralized database, with a wide variety of reporting options. SFE staff have worked with the F\$P team for more than a year on ways to incorporate green purchasing processes seamlessly into the new system. Our long-term goals for F\$P include the following:

- Enable F\$P users to easily see green products whenever they begin a purchasing transaction
- Eliminate non-compliant products from F\$P
- Link F\$P to SFApproved.org listings of Required and Suggested environmental specifications
- Enable automated, detailed reporting of green purchasing performance

There is now a feature in place on F\$P for marking green products, but this awaits full implementation. F\$P has not yet been able to incorporate other elements due to urgent, competing priorities at the City level. SFE staff continue working closely with the Controller’s Office and Office of Contract Administration to ensure that F\$P realizes its potential to improve green purchasing in the City, and to provide greater detail and reliability in sales data.

V. FOCUS ON JANITORIAL PRODUCTS

In previous years, SFE has reported on several product categories in this annual report. However, the quality of sales data from vendors has historically been poor. Extensive staff and contractor time and resources are required to obtain, check and correct the data, turning our attention away from the work of actually improving upcoming contracts. Therefore, this year, SFE focused on tracking and evaluating a single product category: janitorial products. Evaluating 2016 purchases of janitorial products was a high priority for SFE as we prepared for impending green cleaning trainings for City custodians.

Trends in janitorial products sales: As illustrated by Table A, the overall percentage of green janitorial products purchased decreased somewhat, from 87% to 80% of total purchases. Conversations with members of the Custodial Products Green Team suggest that this decrease stems from more extensive use of departmental purchasing authority for janitorial products. Departmental purchases often are not reflected in sales reports from vendors, and purchases may be made from a wide variety of vendors that are not on the current citywide janitorial cleaners contract. This premise is supported indirectly by the data: Total (green and non-green) janitorial products purchased from city contracts decreased significantly over the past four years *according to vendor sales reports*, from about \$2 million in 2013 to a little over \$1 million in 2016. Some common product categories, such as furniture polish and glass cleaners, recorded extremely small sales. SFE is investigating whether the City has increased its use of outside custodial contractors, which would potentially account for some of the decrease in purchases from the citywide contract.

There were several categories where the percentage of green purchases increased:

- Degreasers from 93% to 96%.
- Hand soaps from 27% to 88%.
- Toilet seat covers from 33% to 93%.

These results point to the urgency of fully integrating green purchasing specifications into the F\$P system, in ways that make it more difficult for City agencies to buy non-compliant products. They also point to the hope of improved reporting from F\$P, where *all* City purchases will eventually be recorded and reported. It is important to note that the City is not alone in this struggle and at this time very few cities of similar size have succeeded in creating reliable, efficient systems for tracking green product sales, according to feedback from the Sustainable Purchasing Leadership Council.

VI. ACCOMPLISHMENTS

Awards

On May 9, 2017, San Francisco received a Sustainable Purchasing Leadership Council Leadership Award for an "outstanding case study" for [*Charging Ahead: How to Find Powerful Rechargeable Batteries that Go On...and On*](#). This 2016 report compared the performance of consumer rechargeable batteries, as well as providing an update on new technologies available for these products.

Green Contracts and Products

In 2016, SFE and OCA worked on the following green contracts:

Citywide:

1. Foodware
2. Industrial supplies
3. Janitorial Supplies
4. Office supplies: Focused on new ways to address the office supplier's online shopping platform display of prohibited products and inaccurate green product claims.

Departmental:

1. SFO upholstered chairs
2. SFO industrial supplies
 - a. Specialized industrial cleaners (e.g., graffiti removers)
 - b. Material handling, storage and packaging
 - c. Batteries and flashlights
 - d. Paint, lubricants, sealants, accessories and supplies
 - e. Paints, latex (including recycled)
 - f. Paints and coatings, specialty (e.g., floor coatings, heat-resistant coatings, spray paint, athletic field marking paints, dry fall coatings, stains, varnishes, zone-marking paints)
 - g. Paint removers
 - h. Adhesives
 - i. Caulks and other sealants
 - j. Industrial furniture
 - k. Plastic products

New Efforts

Revised Green Building Ordinance requirements for interior products: To date, SFE's Green Purchasing Program has focused on the acquisition of commodities and services (Administrative Code, Chapter 21), as mandated by the Precautionary Purchasing Ordinance. The Green Building Ordinance (Environment Code, Chapt. 7) was revised in March, 2017, and now includes restrictions on interior products such as furniture and carpet. Such products are usually – but not always – purchased as part of large public works projects, which fall under “Public Works Contracting and Procedures” (Administrative Code, Chapter 6). Working under Chapter 6 differs significantly from commodities purchases because specifications are often more complex, and because large projects generally hire architects, engineers, and construction specifiers trained to use such specifications. SFE's first projects under this new mandate are developing specifications for carpet and furniture (see below).

Six Classes of Toxic Chemicals: SFE is working with the Green Science Policy Institute to identify and then restrict purchases of products that contain any of the below six classes of chemicals that are known to be persistent, bioaccumulative and/or toxic. In 2016, SFE developed draft carpet and furniture regulations that address several of the six classes listed below:

1. Per- and Poly-Fluoroalkyl Substances (PFASs) (often referred to as PFCs or fluorinated chemicals). These chemicals are associated with cancer, high cholesterol and obesity, and are extremely persistent in the environment. PFASs are used to create an oil and water barrier in many consumer products such as textiles, cosmetics and personal care products, cookware and fiber-based single-use compostable foodware.

2. Certain antimicrobial chemicals (triclosan and triclocarban). Data does not support these chemicals' effectiveness in consumer products, and they disrupt the endocrine system and are possible carcinogens.
3. Certain flame retardant chemicals. Many flame retardants are persistent bioaccumulative toxins, linked to low IQ, and do little, if anything, to slow or prevent fire.
4. Bisphenol-A, phthalates and other hormone disrupting chemicals. These are widely used and can harm our health, even at very low levels.
5. Certain solvents that are linked to neurological problems and increased cancer risk.
6. Certain heavy metals such as mercury, arsenic, cadmium, and lead.

F\$P development: As mentioned above, SFE devoted considerable staff time in 2016 to a series of meetings aimed at developing and implementing the F\$P system, which could play a pivotal role in increasing green product purchases and improving accountability.

Outreach

SFE gave two presentations to approximately 100 finance staff that approve purchases (Delegated Purchasers) from all City departments to educate them on the Precautionary Purchasing Ordinance requirements, and to remind them to have City staff check SFApproved.org before making certain purchases. SFE held a public hearing with 30 stakeholders on the draft furniture and carpet regulations and convened a Green Team to assist in finalizing these requirements. SFE staff also work routinely with a variety of City departments to develop their green purchasing efforts, such as the Division of Real Estate, Controller's Office, Recreation and Parks Department, and San Francisco International Airport.

In addition, SFE staff presented a webinar to 60 national Responsible Purchasing Network members on SFE's 2016 rechargeable batteries report.

Staff Working on Green Citywide Contracts

The following staff were involved with greening citywide contracts during 2016:

- SFE: Chris Geiger, Jessian Choy, Julie Bryant, Soko Made, Jen Jackson.
- OCA: Abby Fard, Darlene Frohm, David Bui, Deirdre Darley, Galen Leung, Gwen Williams, Howard Tevelson, Hermilo Rodis, Jaci Fong, Ken Easton, Kofo Domingo, Nishil Bali.

VII. CONCLUSIONS & RECOMMENDATIONS

Based on vendor reporting data, the City spent \$1,049,363 on green janitorial cleaners and papers contracts in 2016; however, at least \$144,236 was spent on non-green products. In addition, as noted above, it is very likely that the City spent far more outside of Citywide contracts. It has not been feasible to track departmental purchases, because these data are not centralized or in a form that allows separation of green from non-green products. Each department has its own system of recording these purchases, and many are paper based. Clearly there is room for improvement in this area.

Below are SFE's recommendations, based on our sales data analyses and on our meetings with more than 1,000 staff from all departments since 2010:

Find more automated ways for the City to find green products

SFE is working to find a more automated technology solution to reduce the considerable staff time it takes to manually:

1. Survey manufacturers to create lists of product names that meet SFE's green specifications.
2. Verify green product claims on manufacturer and vendor websites.
3. Ensure vendors on green Citywide contracts with customizable online shopping platforms or "stores" only display products allowed by SFE. For example, SFE and OCA are customizing the City's office supplies online store so that City staff cannot see or buy prohibited products. This means that City staff do not have to check SFApproved.org before shopping. SFE will continue to explore the potential for online stores in other product categories.

These issues are faced by all organizations trying to buy green.

Incorporate green purchasing into the new Financial Systems Project (F\$P)

While SFApproved.org lists green product names and vendors, the website is not linked with the City's finance system. In recent years, City staff has repeatedly suggested that San Francisco – like numerous other jurisdictions across the country -- should update its finance software to more efficiently steer staff toward green products. SFE's aspirational goals for the new F\$P PeopleSoft e-procurement module are to:

1. Clearly denote green products and steer City staff to buy them
2. Not allow prohibited products
3. Display required green specifications so City staff can create green contracts

Improve the accuracy and availability of sales data for green products

To date, SFE has been forced to rely on sales data submitted by City contracted vendors to measure what the City bought. Unfortunately, this data often includes incorrect information (e.g. prices, product categories and names, departments, purchasers and green product claims). Quality control is expensive; collecting and correcting the 2016 vendor-supplied data required thousands of dollars in consultant time and considerable staff time. Through its reporting functions, F\$P promises to eliminate our reliance on vendor-supplied sales data, and in the process save time and money. SFE is actively working with the Controller's Office to ensure that F\$P will allow SFE to get reports anytime of what the City bought. We have also consulted with the City Attorney to develop stronger vendor reporting contract language. Until F\$P is fully implemented, SFE will work with OCA to identify ways to better incentivize quality data submissions from contracted vendors.

TABLE A. Summary of City Purchases

		2015				2016					
		% Compl iant	\$ Compliant products	\$ Limited use & prohibited products	\$ All products	Notes	% Compl iant	\$ Compliant products	\$ Limited use & prohibited products	\$ All products	Notes
Janitorial Cleaners	Bath, Tub & Tile Cleaners	41%	\$ 4,352	\$ 6,378	\$ 10,730	SFE held four meetings with citywide custodial supervisors to tell them about the new cleaners contract that was awarded in 2015. SFE will continue to remind them to buy compliant cleaners, and help them get required trainings. Data is only from vendors on the citywide contract: Champion, Santora, Supplyworks (Clean Source), United, Waxie.	0%	\$ -	\$ 5,453	\$ 5,453	Data is only from vendors on the citywide contract: Champion, Santora, Supplyworks (Clean Source), United, Waxie.
	Carpet Extraction Cleaners	34%	\$ 4,649	\$ 9,102	\$ 13,751		0%	\$ -	\$ 5,399	\$ 5,399	
	Degreasers	93%	\$ 73,629	\$ 5,784	\$ 79,413		96%	\$ 135,995	\$ 6,239	\$ 142,234	
	Dish soaps	no data	no data	no data	no data		100%	\$ 112	\$ -	\$ 112	
	Floor Cleaners, Strippers, Finishes	77%	\$ 2,859	\$ 841	\$ 3,700		23%	\$ 3,827	\$ 12,515	\$ 16,342	
	Furniture Polishes	48%	\$ 12,991	\$ 13,973	\$ 26,964		0%	\$ -	\$ 59	\$ 59	
	General Purpose Cleaners	61%	\$ 19,656	\$ 12,426	\$ 32,082		50%	\$ 2,844	\$ 2,878	\$ 5,722	
	Glass Cleaners	27%	\$ 993	\$ 2,688	\$ 3,680		0%	\$ -	\$ 1,389	\$ 1,389	
	Hand Soaps	27%	\$ 37,778	\$ 101,034	\$ 138,812		88%	\$ 95,065	\$ 12,613	\$ 107,678	
	Metal Cleaners	no data	no data	no data	no data		29%	\$ 647	\$ 1,580	\$ 2,228	
	Toilet Cleaners	no data	no data	no data	no data		0%	\$ -	\$ 527	\$ 527	
	Toilet Deodorizers (Hangers, Pucks)	54%	\$ 2,717	\$ 2,353	\$ 5,070		69%	\$ 4,282	\$ 1,883	\$ 6,165	
	SUBTOTAL	47%	\$ 182,462	\$ 205,407	\$ 387,869	83%	\$ 242,773	\$ 50,535	\$ 293,308		
Janitorial Papers	Paper Towels	95%	\$ 423,281	\$ 23,364	\$ 446,645	88%	\$ 304,627	\$ 41,834	\$ 346,461		
	Toilet Seat Covers	33%	\$ 12,054	\$ 23,955	\$ 36,009	93%	\$ 157,521	\$ 12,611	\$ 170,132		
	Toilet Tissue	98%	\$ 1,188,818	\$ 24,662	\$ 1,213,480	84%	\$ 200,206	\$ 39,257	\$ 239,463		
		SUBTOTAL	96%	\$ 1,624,153	\$ 71,981	\$ 1,696,134	88%	\$ 662,354	\$ 93,702	\$ 756,056	
TOTAL		87%	\$ 1,806,615	\$ 277,387	\$ 2,084,003	80%	\$ 905,127	\$ 144,236	\$ 1,049,363		