



HARVARD UNIVERSITY SUSTAINABLE PURCHASING GUIDE



HARVARD UNIVERSITY

Sustainability



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INTRODUCTION

The Sustainable Purchasing Guide is a reference to help people who have influence over departmental purchases make informed choices that will contribute to a more sustainable future.

There are many ways to pursue sustainable purchases. These measures can have a positive influence on the environment and local communities.

Harvard's purchasing decisions can send signals to vendors indicating a preference for more sustainable practices. Our community can influence market transformation by focusing on climate change and natural resources, equity, health, and waste prevention when purchasing goods and services.

The Sustainable Purchasing Guide is just one component of Harvard University's strategy for sustainable purchasing. The Office for Sustainability works closely with Strategic Procurement and other procurement offices to collaborate with vendors on sustainability. However, because purchasing is largely decentralized, this guide can provide purchasers with the knowledge to make sustainable purchasing decisions. B THE POWER

Leveraging Harvard's large purchasing power can help move markets toward healthier, more sustainable, and more just value chains.

This Guide is intended to support a multitude of goals, but only when safe. Purchasers should take whatever precautions necessary during the COVID-19 pandemic to decrease the risk of disease transmission and should refer to trustworthy guidelines by the CDC and Harvard University.

The Office for Sustainability (OFS) collaborated with Strategic Procurement and others across the University, including faculty and students, to create this Sustainable Purchasing Guide. The categories included represent some of the areas where the University spends the most, as well as categories where University-wide Sustainability Standards (Cleaning, Food, and IT) already exist.

This is a living document that will be continually updated to guide individual purchasers to relevant resources.

GENERAL TIPS TO PURCHASE SUSTAINABLY CONSIDERING CLIMATE, EQUITY, HEALTH, AND WASTE

- Be mindful about the harms of an immediacy economy (e.g., next-day deliveries may have a higher emissions footprint than a 2-day order).
- Buy less by right-sizing orders of office materials and food for events.
- Choose biodegradable products when possible.
- Give preference to companies that have healthier and safer labor practices.
- ✓ Purchase for quality and long-term durability, not quantity.
- Buy in bulk when needed to reduce unnecessary packaging.



BEFORE BUYING, ASK YOURSELF THE FOLLOWING QUESTIONS:



Do you need the product? Can you share or borrow the product instead of purchasing?



What will happen to the product when you are done using it?



What are the impacts of the product? (Pay particular attention to climate, equity, health, and waste prevention.)

Aim to choose products that minimize waste and negative impacts and focus on sustainable end-of-life practices. Use the decision tree on the following page to choose the best course of action.



updated over time.

- 1 See Appendix on page 16 for more details on greenwashing.
- 2 Local business has no universal definition, but the term generally describes businesses that reside in our communities (city, state, region) and help build capital in those communities.
- 3 See Appendix on page 16 for more details on third-party certifications.

PURCHASING & SUPPLY CHAIN CONSIDERATIONS

The Sustainable Purchasing Guide considers a holistic set of criteria across a product's lifecycle, from the extraction of raw materials to shipping, consumer use, and end-of-life disposal.

Harvard considers the climate, equity, health, and waste impacts of a product in addition to broader environmental, economic, and social impacts such as worker well-being, stewardship, and transparency.



AREAS OF IMPACT

When examining a product, purchasers should focus on at least four priority areas of impact: Climate, Equity, Health, and Waste. These four categories allow for a holistic evaluation of a product's impact, integrating the immediate impacts to the health of consumers and workers, as well as the impacts on the environment and communities.



CLIMATE PAGE 5



EQUITY PAGE 7



HEALTH PAGE 8



WASTE PAGE 9

AREA OF IMPACT CLIMATE



EMISSIONS REDUCTION

One of the largest impacts a product has on the climate is from the greenhouse gas emissions produced during manufacturing.

There are three scopes of greenhouse gas emissions that explain the emissions associated with the University's operations.

- SCOPE 1 EMISSIONS Direct emissions from controlled sources such as burning natural gas on-site.
- SCOPE 2 EMISSIONS Indirect emissions from the generation of purchased energy, such as buying electricity from a local utility.
- SCOPE 3 EMISSIONS Emissions resulting from assets not owned or controlled by the reporting organization, but that indirectly impact an organization's value chain¹, such as the emissions from food, shipping, and travel.

"Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly impacts in its value chain."

 EPA SCOPE 3 INVENTORY GUIDANCE

¹ As classified by the Greenhouse Gas Protocol standards

AREA OF IMPACT CLIMATE

Scope 3 does not describe a single category. It is a collection of dozens of diverse categories of indirect emissions related to purchasing, and other upstream and downstream impacts, including business travel, waste disposal, commuting, food supply, and other purchased goods and services.

While Harvard does not have direct control over other industries' emissions (e.g., choosing how a product is manufactured), the University could have indirect influence over these emissions by choosing how to conduct its business. Harvard and others can request transparency around the impacts of purchases from vendors, which can motivate manufacturers to seek emissions reduction opportunities.

For most organizations, including Harvard, Scope 3 emissions are much larger in scale than Scope 1 and 2 emissions. Purchased goods and services are one of the largest categories of Scope 3 emissions. By making more sustainable departmental purchases, Harvard can reduce its contribution to climate change.



AREA OF IMPACT **EQUITY**



SUPPLIER DIVERSITY

This guide maintains a commitment to promoting local minority- and women-owned business enterprises (MWBEs) and small business enterprises (SBE).

Harvard's Supplier Diversity and Small Business Program, led by the Supplier Diversity and Inclusion Office (SDIO) supports School and Unit SDI efforts, helping to build a culture of inclusive excellence across Harvard. Visit the <u>Harvard Strategic Procurement website</u> to search for a certified MWBEs and SBEs or contact SDIO at <u>supplierdiversity@harvard.edu</u> for additional support.

FAIR TRADE

When possible, purchasers should consider the treatment of workers throughout a product's supply chain. For instance, the Fair Trade Certified seal confirms that a product was produced by workers who had access to better wages and safer working conditions.

AREA OF IMPACT HEALTH



SAFETY AND WELL-BEING

While the human health impacts of a product are numerous, Harvard focuses on worker, consumer, and community safety and well-being.

When considering a product's impact on health, it is especially important to evaluate any toxic classes of chemicals used to create the product. Instead of vetting supply chains for specific toxic chemi-cals, look for entire classes of chemicals that are linked to human health concerns to avoid regrettable substitutions.

As an example, experts recommend avoiding all perfluoroalkyl and polyfluoroalkyl substances (PFAS), which are artificial chemicals found in cleaning products, food packaging, fabrics, and paints. Exposure to PFAS has been linked to adverse human health effects, and more information can be found from the Harvard Healthier Building Academy.

AREA OF IMPACT WASTE



PREVENTION AND REDUCTION

To pursue a sustainable framework for purchasing, organizations need to rethink the value chain of products.

Try to rethink concepts such as "use phase" or "end-of-life" and embrace concepts such as "reuse" or "repurpose" and "repair." This transformative thinking of the lifecycle aims to achieve the ultimate goal of preventing waste by building a circular economy.

To achieve a true circular economy, society will require a monumental shift in how it does business. An important first step involves driving manufacturers to consider the concept of circular economy when creating products and services. As manufacturers and vendors move toward more circular models, Harvard can make more sustainable and responsible purchasing decisions immediately. The guide provides links to resources, third-party certifications, and other considerations that can help purchasers at Harvard prevent waste and make better decisions for people and the planet. A circular economy is "an industrial system that is regenerative by design. It replaces the end-of-life concept with restoration, shifts towards renewable energy use, eliminates toxic chemical use, and aims for waste elimination through superior design of materials, products, systems, and business models."

- WORLD ECONOMIC FORUM REPORT

PURCHASING TIPS BY CATEGORY



CLEANING PRODUCTS & EQUIPMENT PAGE 11

Informed by the Harvard University **Sustainable Cleaning Standards.**



ELECTRONICS PAGE 12 Informed by the <u>Harvard University</u> Sustainable Information Technology (IT) Standards



FOOD PRODUCTS PAGE 13 Informed by the <u>Harvard University</u> Sustainable and Healthful Food Standards



FOODSERVICE PRODUCTS PAGE 14

Informed by the <u>Harvard University</u> <u>Sustainable and</u> <u>Healthful Food Standards</u>



LAB PRODUCTS PAGE 15 Informed by the Harvard Green Labs Guide



PURCHASING TIPS

CLEANING PRODUCTS & EQUIPMENT

Informed by the Harvard University Sustainable Cleaning Standard

Created in collaboration with the Silent Spring Institute, Harvard's Sustainable Cleaning Standards are designed to help Harvard's cleaning vendors move toward cleaning practices and products that limit worker and occupant exposure to harmful chemicals, drive ingredient transparency, promote healthier spaces, and reduce, minimize, or eliminate chemical classes of concern whenever possible. Although these standards were created to help Harvard's Schools and departments hold their cleaning vendors to a higher standard, they can also provide useful guidance for departmental purchases.

LOOK FOR THESE THIRD-PARTY CERTIFICATIONS AND STANDARDS:



Avoid the following classes of chemicals because they have been linked to one or more health problems including specific types of cancers, thyroid disruption, and development issues:

- × Antimicrobials
- × Chemical flame retardants (CFRs)
- × Flammable concentrated products
- × Formaldehyde and volatile organic compounds (VOCs)
- PFAS (Per- and polyfluoroalkyl substances)
- × Phosphates and phosphonate
- X Skin irritants (e.g., ascorbic acid and alpha hydroxy acids)

Did you know?

PFAS are artificial chemicals that can be found in stain repellents, water repellents, and cleaning products. These chemicals do not break down for millennia and accumulate in the human body and the environment. Exposure to PFAS has been linked to adverse human health effects such as elevated cholesterol, risk of some cancers, and decreased antibody production.

Learn more about the Harvard Healthier Building Academy.



PURCHASING TIPS ELECTRONICS

Informed by the <u>Harvard University Sustainable</u> Information Technology (IT) Standards

Sustainable IT Standards, developed in collaboration with Harvard University Information Technology (HUIT) and the Sustainable IT committee, focus on three areas: waste, energy, and practice. Although these standards were created as a roadmap for making IT on campus more sustainable and for identifying opportunities where IT can be leveraged to operate the campus more sustainably, they can also provide useful guidance for departmental purchases (e.g., small electronics and printers).

PRODUCT	PREFERRED VENDOR	CERTIFICATION	NOTES
Batteries	N/A	Energy Star	Choose rechargeable
Electronic Devices	Contact your local IT Management Group (for disposal advice too)	EPEAT Energy Star	Consider iFixIt reparability scores when purchasing
Printers + Copiers	Ricoh – Work with Strategic Procurement to implement "Crimson Print" (a managed print strategy) ¹	N/A	Avoid purchasing personal printers and choose multi-functional devices that can be shared/networked
Printer Paper	WB Mason ²	Forest Stewardship Council (FSC)	Use tree-free ³ or FSC certified paper with minimum 30% recycled content (100% recycled content is preferred).

1 Send RICOH toner back to manufacturer for recycling.

2 HP Toner cartridges can be recycled through WB Mason. Toner bottles are not accepted in MA single stream recycling.

3 Tree-free paper is an alternative to wood-pulp paper, and is commonly made from agricultural residues (e.g., sugarcane bagasse, husks, and straw), fiber crops and wild plants (e.g., bamboo, hemp, and flax), and textiles.

ALWAYS KEEP CIRCULARITY IN MIND

- Look for technology that is reusable, rechargeable, recyclable, easily disassembled, fixable (e.g., at Fix-it events), upgradeable, or part of supplier take-back programs
- Choose products that use post-consumer recycled plastic and/or include repair service report
- ✓ Identify components that require a special disposal treatment (e.g., lithium batteries).
- ✓ Ask vendor for specific information on end-of-life practices.

For help with end-oflife management, contact **Recycling & Waste Management** and **Environmental Health & Safety**



BUYING GUIDES + RESOURCES

Sustainable and Healthful Food Standards

Agriculture and forestry activities generate 24% of global greenhouse gas emissions. By shifting diets and addressing food waste, the global demand for food can significantly drop. Eating lower on the food chain and ensuring what's grown gets eaten lowers farming inputs, land-clearing, and all associated emissions."

 PROJECT DRAWDOWN: "FOOD, AGRICULTURE, AND LAND USE SECTOR SUMMARY"

FOOD PRODUCTS

Informed by the: <u>Harvard University Sustainable</u> and <u>Healthful Food Standards</u>

Harvard's Sustainable and Healthful Food Standards, informed by research and developed by a multi-disciplinary faculty committee and student leaders, apply to the major food vendors on campus and seek to align food providers around a shared vision for a sustainable food system. This guide applies the principles of these standards – to increase access to sustainable and healthful food offerings and optimize the impacts of food choices on people, animals, and the planet – to local purchasing decisions.

CONSIDERATIONS

- Prioritize foods that have a smaller climate emissions footprint (e.g., plant-based proteins, fruits, vegetables, and whole grains) and limit animal products such as meat and dairy.
- Consider making plant-based foods the default and give attendees the choice to opt in for meals with animal products through RSVPs. By making plant-based meals the norm, you can help reshape what society thinks of as a "normal" meal. Check out the Greener By Default website for tips and tricks.
- Promote healthier choices (e.g., plant-based proteins, healthy oils, whole grains, fruits, and vegetables), guided by the <u>Healthy Eating Plate</u>.
- Limit wasted food from events by ordering just what you need.
 Ask for RSVPs to better predict attendance.
- Choose Fair Trade certified products, when possible.
- Ask for off-menu items if sustainable menu options are not available.



- Limit animal products such as red meat and dairy.
- Avoid purchasing meat from animals routinely given antibiotics.
- Avoid purchasing single serving condiments and items (such as plastic coffee pods) and opt for refillable condiment containers and bean to cup options*

*Single-serve items, though not ideal, may be necessary in some instances due to the COVID-19 pandemic. Purchasers should adhere to the health safety guidelines proposed by the CDC and Harvard University.



PURCHASING TIPS

FOOD SERVICE PRODUCTS

Informed by the <u>Harvard University Sustainable</u> and Healthful Food Standards

Make sure you have appropriate bins (compost, recycling, trash) and signage for the products you purchase.





TOP PURCHASING TIPS

- Buy tips and tubes in bags instead of racks to reduce plastic use.
- Buy autoclavable glassware instead of disposable plastic products to reduce plastic use.

THIRD-PARTY CERTIFICATIONS AND STANDARDS:

- Choose Accountability,
 Consistency, Transparency (ACT)
 labeled products and consider
 the product's ACT score.
- Purchase Energy Star Certified lab equipment when possible.

PURCHASING TIPS

LAB PRODUCTS

Informed by the Harvard Green Labs Guide

PURCHASING CONSIDERATIONS

- Consider purchasing outlet timers to automatically shut off certain equipment, like water baths and hot plates.
- Consider purchasing or using a mop to clean up water and ice spills as opposed to paper towels.
- Consider purchasing consumables from vendors that use less packaging or have take-back programs for their packaging.
- Consider the quantity of new chemicals you purchase. Bulk discounts may later lead to a bulk disposal of chemical waste.
- Avoid purchasing new lab equipment. Develop a culture of equipment sharing in your building and department.

OTHER CONSIDERATIONS

- Try the MilliporeSigma DOZN Tool, which evaluates the sustainability of chemicals and chemical processes, to make your chemistry more sustainable.
- Educate occupants about lab and office recycling procedures.
- Engage vendors by asking about the sustainability of their company products.
- Talk to your research group about switching to sustainable and reusable lab products.
- Participate in lab free-cycle events. Information about these events is distributed via Harvard Environmental Health & Safety and department email lists.
- Check out the Lab Reuse Rooms located on the Cambridge and Longwood campuses.

APPENDIX

END-OF-LIFE

The end-of-life stage begins when the used product is discarded by the consumer and ends when the product is returned to nature (e.g., incinerated) or allocated to another product's life cycle (e.g., recycled).¹

When purchasing products consider options for when they have fulfilled their original use. Can the product be:

- Repurposed
- Re-used (Donated to <u>Harvard Recycling and Surplus Center</u>)
- Returned to vendor (RICOH toner cartridges, laptops, etc.)
- Re-imagined before it is sent to landfill (permanently disposed of)

HARVARD PREFERRED AND CONTRACT VENDORS

Preferred Vendors (PV) are vendors that have been awarded a contract and/or pricing agreement with negotiated terms and conditions and pricing favorable to Harvard, for use by University schools or units, after successfully completing a formal sourcing process. In addition, Harvard may access competitively bid contracts conducted by different group purchasing organizations (GPO) and consortia based on evidence of consortia's sound competitive and ethical procurement practices. Contract Vendors (CV) are vendors with whom Procurement has negotiated a favorable contract and/or pricing agreement with, but do not meet Uniform Guidance (UG) requirements for a purchases made with federal or cost-share funds, or expenses transferred to federal funds.

Visit the Preferred/Contract Vendor Page on the <u>Harvard Strategic Procurement Website</u> for current vendor lists and complete UG requirement information.

Contract vendors: Vendors with a contract and/or a pricing agreement that have negotiated terms and conditions or pricing favorable to Harvard for use by University schools or units.

THIRD-PARTY CERTIFICATIONS

Harvard has strong relationships with the following third-party certifications and has participated in due diligence to ensure their efficacy. These certifications can be good indicators of sustainable products; however, new sustainability developments may change the level of prioritization for these standards.

Beware of false sustainability certifications or companies who greenwash their products. **Greenwashing** is the practice of misleading consumers about the environmental impact of a product. The U.S. Federal Trade Commission (FTC) created the Green Marketing Guides to regulate companies' use of greenwashing. By understanding the FTC's regulations, it is easier for purchasers to identify corporations who are non-compliant with these standards, and who engage in greenwashing. Purchasers should remain skeptical of corporate sustainability claims and do their own research on products when possible.

¹ WRI/WBCSD: "Greenhouse Gas Protocol Product Life Cycle Standard," page 40.

GLOSSARY THIRD-PARTY CERTIFICATIONS

Accountability, Consistency, Transparency (ACT)	The ACT label is an eco-nutrition label for laboratory products, including consumables, chemicals, and equipment. It emphasizes accountability, consistency, and transparency around manufacturing, energy and water use, packaging, and end-of-life. ACT-labeled products are independently audited by Sustainability Made Simple and verified by My Green Lab. Most categories are rated on a scale of 1-10, and the lower the ACT score, the lower the impact on the environment.
Biodegradable Products Institute (BPI)	BPI is a certifier of compostable products and packaging. Their third-party certifica- tion program ensures that products and packaging displaying the BPI logo have been independently tested and verified according to scientifically based standards.
Cradle-to-Cradle	Cradle-to-cradle is measure of safer, more sustainable products made for the circular economy. Products are assessed for environmental and social performance across five categories: material health, material reuse, renewable energy and carbon management, water stewardship, and social fairness. A product is assigned an achievement level (Basic, Bronze, Silver, Gold, Platinum) for each category. A product's lowest category achievement also represents its overall certification level.
Declare	The Declare certification is a transparency tool created to support the Living Building Challenge (LBC), sponsored by the International Living Future Institute. The LBC is a sustain- ability program designed around a framework to promote regenerative design to create spaces that give more to the earth than they take.
ECOLOGO	ECOLOGO [®] Certified products, services and packaging are certified for reduced environ- mental impact. ECOLOGO Certifications are voluntary, multi-attribute, life cycle-based environmental certifications that indicate a product has undergone rigorous scientific testing, exhaustive auditing or both, to prove its compliance with stringent, third-party, environmental performance standards.
Energy Star	ENERGY STAR [®] is the government-backed symbol for energy efficiency, providing simple, credible, and unbiased information that consumers and businesses rely on to make well-informed decisions. The EPA ensures that each product that earns the label is independently certified to deliver the quality, performance, and savings that consumers have come to expect. This certification is given to products, buildings, and power plants.

EPEAT	EPEAT is a certification for electronic products. The Green Electronics Council uses a "declare and verify" system to govern the addition of products to EPEAT. To register products in EPEAT, manufacturers must sign a contract requiring them to accurately declare that their products meet system criteria. Manufacturers must possess and produce evidence to support all declarations upon request by the Green Electronics Council and/or their Conformity Assurance Body.
Fair Trade	Products with Fair Trade Certified [™] seal are made according to rigorous social, environ- mental, and economic standards. Fair Trade works closely on the ground with producers and certify transactions between companies and their suppliers to ensure that the people making Fair Trade Certified goods work in safe conditions, protect the environment, build sustainable livelihoods, and earn additional money to empower and uplift their communities.
Forest Stewardship Council (FSC)	The FSC's forest management certification confirms that the forest is being managed in a way that preserves biological diversity and benefits the lives of local people and workers, while ensuring it sustains economic viability.
Green Seal (GS)	Green Seal [®] is a US ecolabel, symbolizing transparency, integrity and proven environmental leadership. They develop life-cycle-based, multiattribute standards and certify products and services that can prove they meet their strict criteria for human health, reduced environ-mental impact, and excellent performance.
Health Care Without Harm (HCWH)	Health Care Without Harm launched the Green Guide for Health Care, the first free self-certi- fication green building rating system specifically tailored to the unique design, construction and operational realities of the health care sector. The Green Guide is the first green building tool to directly correlate green building strategies with health through specific health issue statements for each credit. Addresses evidence-based design issues such as outdoor places of respite and acoustics, as well as an increased emphasis on daylight and views.
Health Product Declaration Collaborative (HPDC)	The Health Product Declaration Open Standard is a standard specification – composed of a format and instructions—for the accurate, reliable and consistent reporting of product contents and associated health information, for products used in the built environment.
Safer Choice	The Safer Choice Program is one of the U.S. Environmental Protection Agency's (EPA's) partnership programs. The Safer Choice Program works in partnership with a broad range of stakeholders to reduce risk to people and the environment by preventing pollution. Safer Choice focuses on industries that combine the potential for chemical risk reduction and improvements in energy efficiency with a strong motivation to make lasting, positive changes. Safer Choice convenes partners, including industry representatives and environmental groups, to develop goals and guide the work of the partnership. Partnership projects evaluate human health and environmental characteristics, performance and other considerations of traditional and alternative technologies, materials, and processes.

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