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Fall 2024

Accelerating a Zero Waste Future: A Framework for Waste Stewardship



*We do not need everyone doing zero waste perfectly —
we just need many people doing it well with systems in place to move us in the right direction.*

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Foreword

The Harvard Community has a longstanding commitment to efficient resource management. This framework will take our work to the next level and truly ensure that we are using university and environmental resources wisely. Our ability to realize a zero waste future will require a systemic approach in which each of us will play an important role. At Harvard, we aim to sustainably manage all material streams—including plastics, electronics, recyclables, and organics, as well as construction, demolition, universal, and hazardous waste—while prioritizing waste prevention and reduction. Not only is this beneficial for the environment, but reducing waste also ensures efficient use of finances, assets, and natural resources.

This framework is meant to serve as a guide, helping Schools and business units understand how they can plan for a zero waste future. Campus Services is committed to building even stronger partnerships with the Harvard community and leading initiatives that reduce waste, enhance recycling opportunities, and improve our reuse and surplus programs. Together, we can make zero waste a reality.

We thank the Waste Stewardship Working Group, which is composed of representatives from the 13 degree-granting Schools at Harvard University, the Radcliffe Institute, Arnold Arboretum, Facilities Maintenance Operations, Environmental Health & Safety, the Office for Sustainability, and Central Administration, for their tireless efforts in developing this framework. Achieving ambitious goals requires dedication and a lot of hard work and the Working Group has created a strong foundation upon which the University can build a more sustainable future.

Bill VanSchalkwyk
Managing Director, Environmental Health & Safety

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Managing Director, Facilities Maintenance Operations



Executive Summary

Accelerating a Zero Waste Future: A Framework for Waste Stewardship has been developed by **Harvard's Waste Stewardship Steering Committee (WSSC)** to transition the university to a Zero Waste campus. The framework is grounded in the Zero Waste Hierarchy, which prioritizes waste prevention, reduction, repair, reuse, and responsible material recovery, in alignment with state and federal regulations. This effort addresses the critical need to manage waste sustainably, particularly given the limited disposal capacity in Massachusetts and the Northeast U.S., and aligns with Harvard's Sustainability Action Plan.

The framework, created with input from a cross-campus working group, **provides guidance for Harvard's Cambridge, Allston, Longwood Medical Area, and Arnold Arboretum campuses.** It outlines Harvard's current waste programs, which include recycling, composting, and specialty waste recovery efforts, and sets clear objectives to enhance waste stewardship. The objectives emphasize sustainable purchasing, developing reuse systems, engaging the campus community, and ensuring standardized recovery infrastructure. The framework presents a detailed matrix of actionable strategies for schools and units to implement. These strategies are ranked to prioritize essential actions, such as improving waste collection systems, reducing single-use items, enhancing reuse programs, and promoting Zero Waste events.

Additionally, the framework recognizes gaps in university-wide infrastructure and calls for increased capacity in education, outreach, resource sharing, and enforcement to achieve a cohesive approach to waste reduction.

Implementation of the Waste Stewardship Framework will begin in 2025, with schools and units using provided toolkits and templates to develop customized action plans based on their specific needs. The WSSC will play an advisory role throughout the School and business unit implementation process, ensuring continuous improvement through regular progress check-ins.

University-wide capacity building will address broader gaps through initiatives such as collaborative task forces focused on key areas, such as purchasing, events, and lab waste.

The Waste Stewardship Framework is a critical step toward advancing Harvard's sustainability goals, creating a unified, evidence-based approach to materials management that prioritizes resource conservation, compliance, and cross-campus collaboration.



Waste Stewardship Working Group

Introduction

Harvard's Waste Stewardship Steering Committee (WSSC), led by representatives from Recycling & Waste Services, Environmental Health & Safety, and with support from the Office for Sustainability, has developed a framework to transition Harvard to a Zero Waste campus. The Zero Waste Hierarchy prioritizes waste prevention through reduction, repair, and reuse, and also requires that materials recovered through recycling or compost are put to the highest and best end-use available.

The Committee formed a Working Group with representatives from the 13 degree-granting Schools, the Radcliffe Institute, Arnold Arboretum, and Central Administration to develop this framework. The Working Group met six times in 2024 and focused on assessing current practices, identifying initiatives, analyzing priorities, and how to rank and prioritize strategies. This framework will serve as a guiding document to help Harvard achieve its waste reduction goals on Harvard's Cambridge and Boston campuses.

Why Zero Waste

Disposal capacity is severely limited in Massachusetts and the Northeast U.S., highlighting the critical need to reduce waste. Focusing on Zero Waste conserves resources, minimizes pollution, and prioritizes the sustainable management of materials. Reducing the amount of material destined for landfills or incinerators also reduces the negative environmental impact that these facilities have on the surrounding area, most of which are in Environmental Justice designated neighborhoods¹.

Implementing a Waste Stewardship Framework ensures that Harvard complies with all federal and state regulations, including the waste disposal bans set by the Massachusetts Department of Environmental Protection (MassDEP)²; see "Current State" for more information on state waste bans. These regulations keep valuable and recoverable materials out of the waste stream, save energy, and reduce pollution, such as greenhouse gas emissions. For decades, Harvard's leadership in recycling and reuse has significantly reduced waste. However, we must take the next step to make an even greater impact. Establishing a Waste Stewardship Framework also aligns with the goals and priorities of Harvard's Sustainability Action Plan.



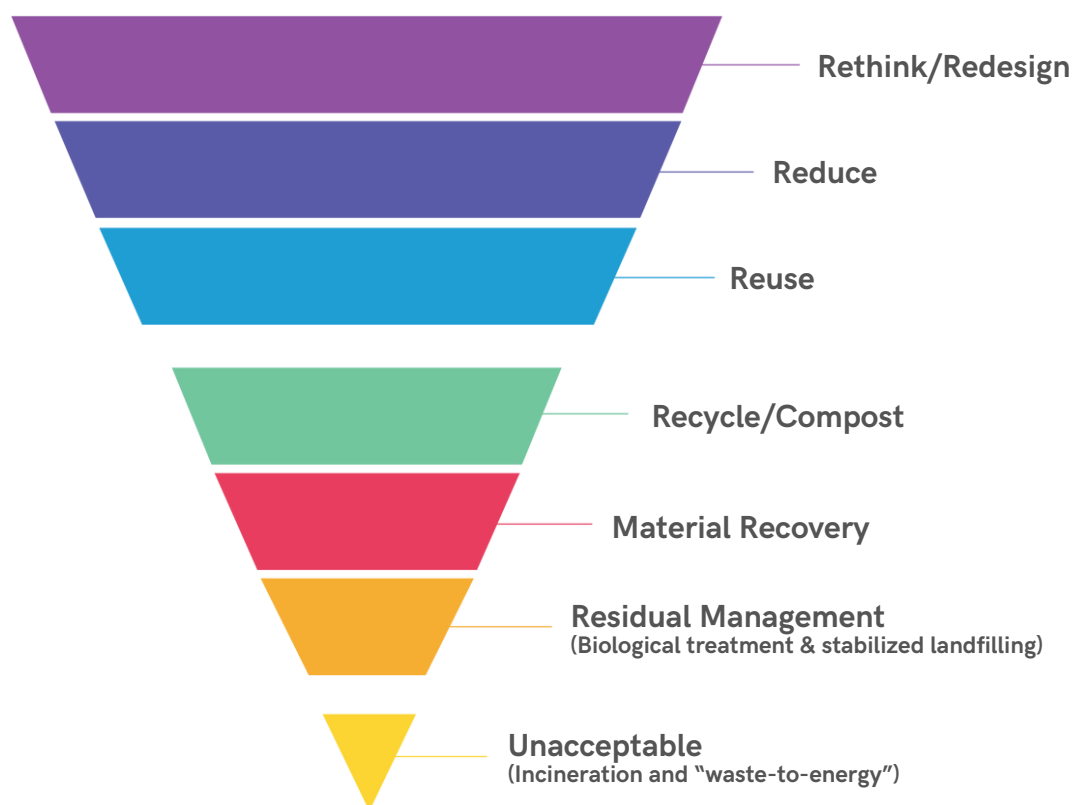
¹ www.mass.gov/info-details/environmental-justice-populations-in-massachusetts;

² www.mass.gov/guides/massdep-waste-disposal-bans

Zero Waste Hierarchy

The Zero Waste Hierarchy is a comprehensive approach to sustainable materials management. We have defined this as Waste Stewardship and apply the principles as defined by the Zero Waste International Alliance³:

Zero Waste International Alliance Version 8.0



*"Zero Waste: The conservation of all resources by means of responsible production, consumption, reuse, and recovery of all products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health."*⁴

³ zwia.org/zwh/

⁴ zwia.org/zero-waste-definition

Waste Stewardship at Harvard



Framework Purpose

- Enable the Harvard community to be able to follow the waste stewardship hierarchy, as defined by this framework, through supported infrastructure and processes
- Provide training and education on best practices and existing resources to promote waste reduction and diversion in the Harvard community
- Assess and synthesize common needs and gaps to determine efficient and impactful solutions
- Connect efforts and information across a decentralized campus by facilitating information-sharing and cross-collaboration
- Ensure Harvard is in compliance with all federal and state waste disposal and handling regulations



Current State - Waste Reduction & Recovery on Campus

The four principal campuses included in this Waste Stewardship Framework are Cambridge, Allston, Longwood Medical Area, and the Arnold Arboretum. The University's 400+ buildings across these campuses generate waste and recyclable materials from their diverse uses:

- Academic and administrative buildings
- Libraries, classrooms, laboratories
- Residences
- Dining facilities
- Athletics venues
- Grounds and special events

The major Schools and units (see inset) administer, manage, and fund waste and recycling operations across the campuses. These operations are supported by Recycling & Waste Services and Environmental Health & Safety.

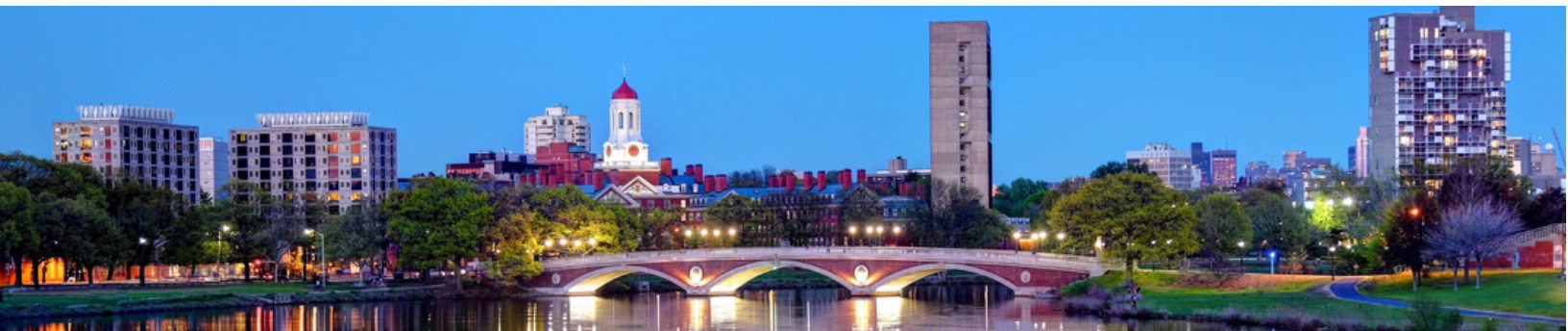
Schools

Harvard Business School
Harvard College*
Harvard Divinity School
Harvard Extension School*
Harvard Graduate School of Design
Harvard Graduate School of Education
Harvard John A. Paulson School of Engineering and Applied Sciences*
Harvard Kennedy School
Harvard Kenneth C. Griffin Graduate School of Arts and Sciences*
Harvard Law School
Harvard Medical School
Harvard Radcliffe Institute
Harvard School of Dental Medicine
Harvard T. H. Chan School of Public Health

*part of the Harvard Faculty of Arts and Sciences

Campus Services including, but not limited to:

Harvard University Housing & Real Estate
Harvard University Dining Services





Current Waste Programs and Initiatives

Many material streams are collected across campus. In most cases, these materials are collected by Harvard Recycling & Waste Services and recycled or processed for the highest possible use. If the materials are not collected by Harvard Recycling, then they are collected by a vetted vendor. (See Appendix for definitions of these material streams)

1. Standard or single-stream recycling: paper* and cardboard*; glass bottles* and jars*; plastic bottles*, jars*, jugs*, and tubs*; and metal food and beverage bottles* and cans*
2. Food*, food waste* & compostable materials
3. Landscaping waste*
4. Mattresses*
5. Universal waste, electronic waste, batteries, and cartridges
6. Surplus furniture, supplies, and equipment
7. Textiles*
8. Scrap metal*
9. Plastic film
10. Lab plastics
11. Expanded polystyrene
12. Untreated wood*
13. Construction and demolition waste*
14. Waste vegetable oil
15. Lead acid batteries*
16. Whole tires*
17. Hazardous waste
18. Municipal Solid Waste (trash)

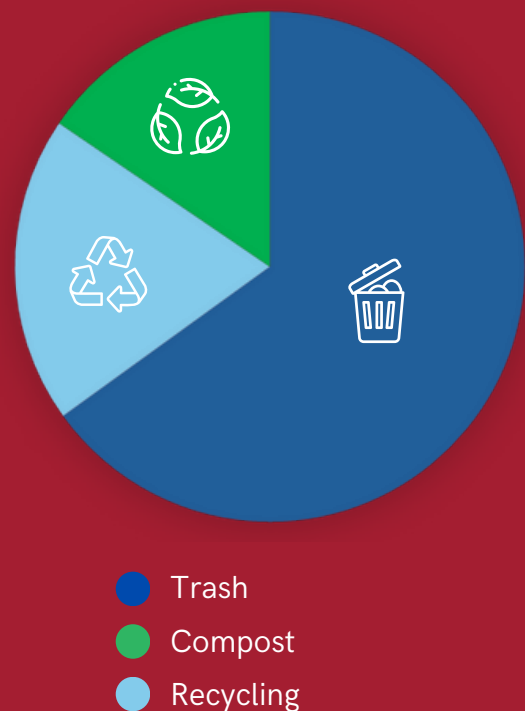
**indicates material on Massachusetts Waste Bans (310 CMR 19.017)*

Source Reduction & Reuse

Harvard's campus has a robust recovery system for reusable items. Harvard Recycling picks up donations across Cambridge, Allston, and Longwood, and makes those items available for reuse through the Recycling & Surplus Center. Donations come from building renovations, office clean-outs, dorm renewal projects, and more. Multiple Freecycles, or swap events, are held each semester, both university-wide at the Smith Campus Center and at individual offices and Schools. Fixit Clinics are also held periodically on campus through Harvard Recycling and Harvard Libraries. In addition to these reuse initiatives, Harvard University Dining Services' partnership with Food for Free saves on average 15,000 lbs. of food from being wasted each year.



Chart 1: 2024 Harvard University Waste Profile



Data

In 2024, Harvard disposed of 6,462 tons of trash, recycled 1,932 tons of single-stream recycling, and sent 1,539 tons of compostable materials to anaerobic digestion (See Chart 1). Current efforts are underway to improve building-level trash, recycling, and compost data, and to improve available reuse data. At present, most School or building level-data is estimated from container volume, not from actual tonnages.

With support from Harvard Recycling, several Schools and units hold regular waste audits to understand their contamination rates and missed diversion opportunities. There has not been a campus-wide waste audit or waste characterization study.

Compliance

Environmental Health and Safety (EHS) plays a critical role in ensuring that Harvard complies with both federal and state waste management regulations. EHS conducts routine inspections of universal waste, such as batteries and fluorescent bulbs, ensuring proper handling and storage per regulatory standards. EHS also oversees chemical waste accumulation areas, verifying that hazardous materials are properly labeled, stored, and disposed of in compliance with safety guidelines. For construction and renovation projects, EHS provides design guidelines that outline proper waste handling and disposal procedures, ensuring compliance with state waste bans both during construction and for operational use of the building. Additionally, EHS vets disposal facilities used by the university to ensure they meet regulatory requirements for proper waste processing and disposal.



top: EHS conducting Universal Waste inspections.

bottom: Harvard Recycling vehicles are used to safely transport materials around campus.

Education, Training, & Outreach

Harvard Recycling supports many university-wide waste education efforts, such as the online Waste Wizard search tool, a regular newsletter with waste-related updates and resources, and updated waste signage available online. They also host educational presentations and tours of both the Surplus Center and off-campus waste processing sites.

Harvard Recycling and EHS collaborate extensively with university sustainability partners. This includes participating in the outreach events sponsored by the Student Sustainability Associates at HBS, the Graduate Commons Program of Harvard University Housing & Real Estate (HUHRE), and the Harvard Office for Sustainability's Resource Efficiency Program (REP) in undergraduate residences and Green Teams across campus. Harvard Recycling collaborates with EHS, Dining Services, Custodial Services, and others in training custodians, caterers, building operations staff, and other members of the campus community on matters related to waste reduction, reuse, recycling, and disposal.

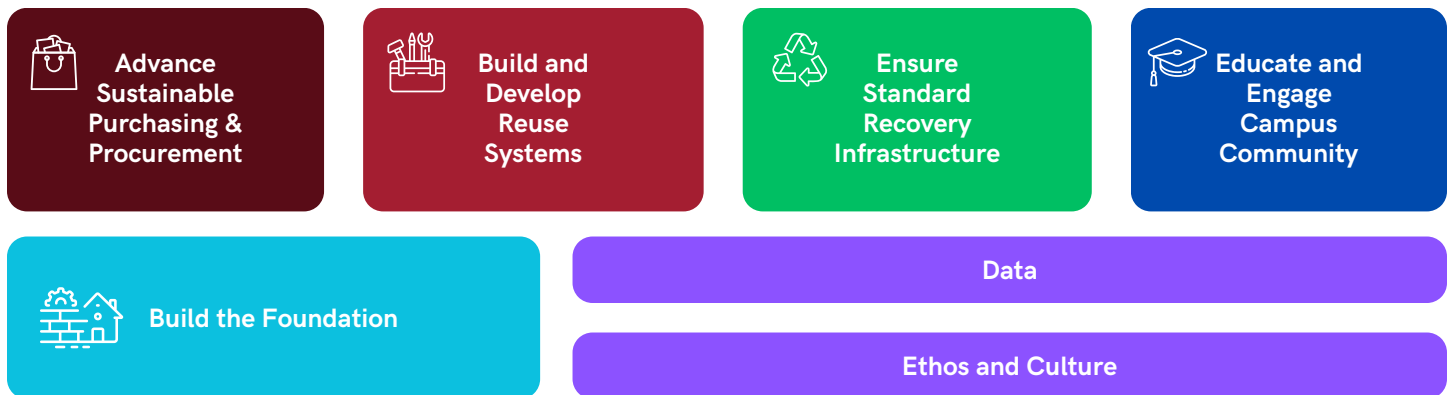


Students and staff touring sites where Harvard's recycling and compost are processed.



Guiding Objectives

During the Waste Stewardship Working Group (WSWG) meetings, through collaboration and interactive techniques, we solicited input on what should be included in Harvard's Waste Stewardship Framework and challenges to address. We sifted through these ideas to find common themes and grouped them into categories to develop our guiding objectives. We also worked as a group to define the objectives into clear expectations. Below are the results of our work.



Advance Sustainable Purchasing & Procurement through the strategic procurement of goods and services aimed at reducing waste and negative impacts throughout their lifecycle. Prioritize durable products made from renewable or recycled materials, support fair labor practices, and integrate sustainable end-of-life practices

Build and Develop Reuse Systems through a university strategy that ensures consistent, equitable, and functional systems for reusing, sharing, and allocating physical resources.



Ensure Standard Recovery Infrastructure by establishing and maintaining a standardized program and ecosystem across the university that supports waste reduction and maximizes diversion potential.

Educate and Engage Campus Community by enacting structures and strategies to establish a baseline of accepted behaviors and knowledge regarding waste stewardship on campuses for all Harvard community members.

Build the Foundation by providing fundamental support for waste stewardship through the collection and analysis of data related to waste generation and reduction, as well as creating a shared culture and values to guide the University's approach to Zero Waste.

Waste Stewardship Essentials

To put our Guiding Objectives into practice, the WSWG identified actionable strategies to accomplish our goal. These strategies were ranked through collective input to help outline how to prioritize and implement a successful Waste Stewardship Plan.

Opportunities for Action

1. Standard Recovery Infrastructure
2. Sustainable Procurement Practices & Policies
3. Reuse & Reduction Infrastructure
4. Education & Engagement
5. Zero Waste Events
6. Tracking Waste Generation & Reduction
7. Institutionalize Waste Stewardship

1. Standard Recovery Infrastructure	Baseline & Compliance	Progressing	Excelling	Highest Potential
Maintain separate, monitored, and clearly labeled collection areas for all MA waste ban items and regulated items	X			*
Locate trash/recycling/compost bins together	X			*
Verify that all bins have approved signage	X			*
Follow waste bins color standard of black or gray for trash, blue for recycling, green for compost	X			
Perform periodic audit or evaluation of collection bins (location, usage, labels, etc.)	X			
Prioritize reuse and recycling during clean-outs, renovations, or move-outs		X		*
Provide liquid collection adjacent to recycling bins (to empty beverage containers)		X		*
Limit or control access to loading docks and other waste collection areas		X		
Centralize waste collection for offices, classrooms, etc. (e.g. elimination of deskside bins)			X	*
Establish special collection programs: lab plastics, plastic film, PPE, etc.			X	

Opportunities for Action

2. Sustainable Procurement Practices & Policies	Baseline & Compliance	Progressing	Excelling	Highest Potential
Establish an informal environmentally preferable purchasing (EPP) policy (reference OFS sustainable purchasing guidance)	X			
Periodic audit of purchasing practices	X			
Regularly update and train staff on purchasing guidelines	X			
Enforce EPP policies (e.g. include in purchaser training)	X			
Develop process to check reuse options first before purchasing	X			
Formalize a buy recycled policy	X			
Work with vendors that have existing takeback programs		X		*
Create purchasing program evaluation		X		
Formalize an EPP policy: purchasing in bulk		X		
Formalize an EPP policy: for compostable or recyclable (aluminum or paper) items for food service		X		*
Formalize an EPP policy: purchasing durable goods		X		*
Implement bans (e.g. single use items)			X	*
Support or help implement vendor takeback programs			X	*

Opportunities for Action

3. Reuse & Reduction Infrastructure	Baseline & Compliance	Progressing	Excelling	Highest Potential
Establish a local reuse option (i.e., dorm swap shelf; Listserv)	X			
Create communal, shared resources (e.g., shareable office mugs, "Library of Things")	X			
Replace single-use items with bulk or reusable options when available		X		*
Promote and/or host reuse/repair events (i.e. Freecycle)		X		
Establish a system for office supplies reuse		X		*
Provide reusable takeout containers			X	*
Replace all single-use items; redesign systems as necessary			X	*
Develop a packaging reduction strategy (e.g. consolidating shipments; related to "2. Sustainable Procurement Practices & Policies")			X	*
4. Education & Engagement	Baseline & Compliance	Progressing	Excelling	Highest Potential
Share information with your local community (e.g., building, department) on waste resources and practices	X			*
Include updates and/or resources in communications to your local community	X			
Include waste information in orientation for staff, faculty, and students	X			*
Publicly communicate progress towards goals		X		
Perform awareness surveys		X		
Have an occasional waste stewardship section (brief updates, resources) in large department meetings		X		
Use audit findings to inform education campaigns (see "6. Tracking Waste Generation and Measuring Reduction")			X	*
Foster and utilize engagement teams			X	

Opportunities for Action

5. Zero Waste Events	Baseline & Compliance	Progressing	Excelling	Highest Potential
Use OFS Sustainable Events Guide to aid planning	X			
Reduce/eliminate waste in event decorations and favors	X			
Locate trash/recycling/compost bins together with proper labels	X			
Follow waste hierarchy for food service-ware: reusables if possible; then compostables or recyclables (inc. utensils)	X			*
Use bulk condiments instead of single serve		X		
Provide liquid collection for emptying beverage containers		X		*
Limit event swag, programs, etc.			X	*
Monitor and/or sort waste			X	*
6. Tracking Waste Generation & Reduction	Baseline & Compliance	Progressing	Excelling	Highest Potential
Monitor waste generation	X			*
Assess and analyze any new waste reduction program	X			
Provide the correct size and number of collection containers based on usage	X			
Track specific specialty recycling streams (i.e. count and type of surplus items, e-waste, etc.)		X		*
Set targets for waste reduction		X		
Perform regular waste audits to measure contamination		X		
Analyze and evaluate data from purchasing, awareness, waste, and infrastructure survey and audits (see earlier sections)			X	*
Perform waste characterization to determine material composition of the waste stream			X	*

Opportunities for Action

7. Institutionalize Waste Stewardship	Baseline & Compliance	Progressing	Excelling	Highest Potential
Assign any waste stewardship program to a leader or point of contact	X			
Set clear responsibilities for any waste stewardship process or program	X			*
Establish leadership buy-in and active support		X		*
Share publicly the commitment to waste stewardship and connect to mission statement		X		*
Support community outreach and lead by example (e.g. collection drives)			X	
Establish commitment to Waste Stewardship as part of employee's performance standards			X	

School & Business Unit-level Implementation

The WSSC has created internal resources to help schools and units kick off their waste stewardship planning, including a planning timeline, and a how-to guide. With support from the WSSC, Schools and business units will use these resources, along with the Waste Stewardship Essentials matrix to assess their current practices and infrastructure. This will involve an audit of bin infrastructure, signage, reuse infrastructure and practices, and waste collection areas. Onsite visits and stakeholder meetings will be conducted to understand their specific environment and priorities as it relates to waste stewardship. The WSSC will use the matrix to work with each School and business unit to develop specific actions customized to their environment.

Implementation will begin in 2025. To streamline efforts and encourage information sharing, Schools and business units will work on implementation in collaborative groups, or cohorts. The WSSC will play an advisory role to support implementation and will participate in progress check-ins. A mechanism for sharing successes and challenges will be created.



University-wide Capacity Building

Through the Waste Stewardship Working Group's work, several gaps in university-wide resources and recycling/reuse infrastructure were identified. The Working Group recommends enhanced central infrastructure, capacity, and support with dedicated resources for waste reduction programs. Specific identified needs include:

- Increased infrastructure for training, outreach and education, such as:
 - Central resource for all waste information
 - Toolkits and customizable templates
 - Staff, faculty, and student orientation materials
 - Training available for all Harvard affiliates
 - Staff engagement programs
- Purchasing structures and enforcement
- Increased capacity for cross-campus sharing of resources and supplies, including a central reuse platform
- Increased capacity for cross-campus information sharing
- Improved Surplus Center and campus reuse systems
- Increased auditing and compliance support



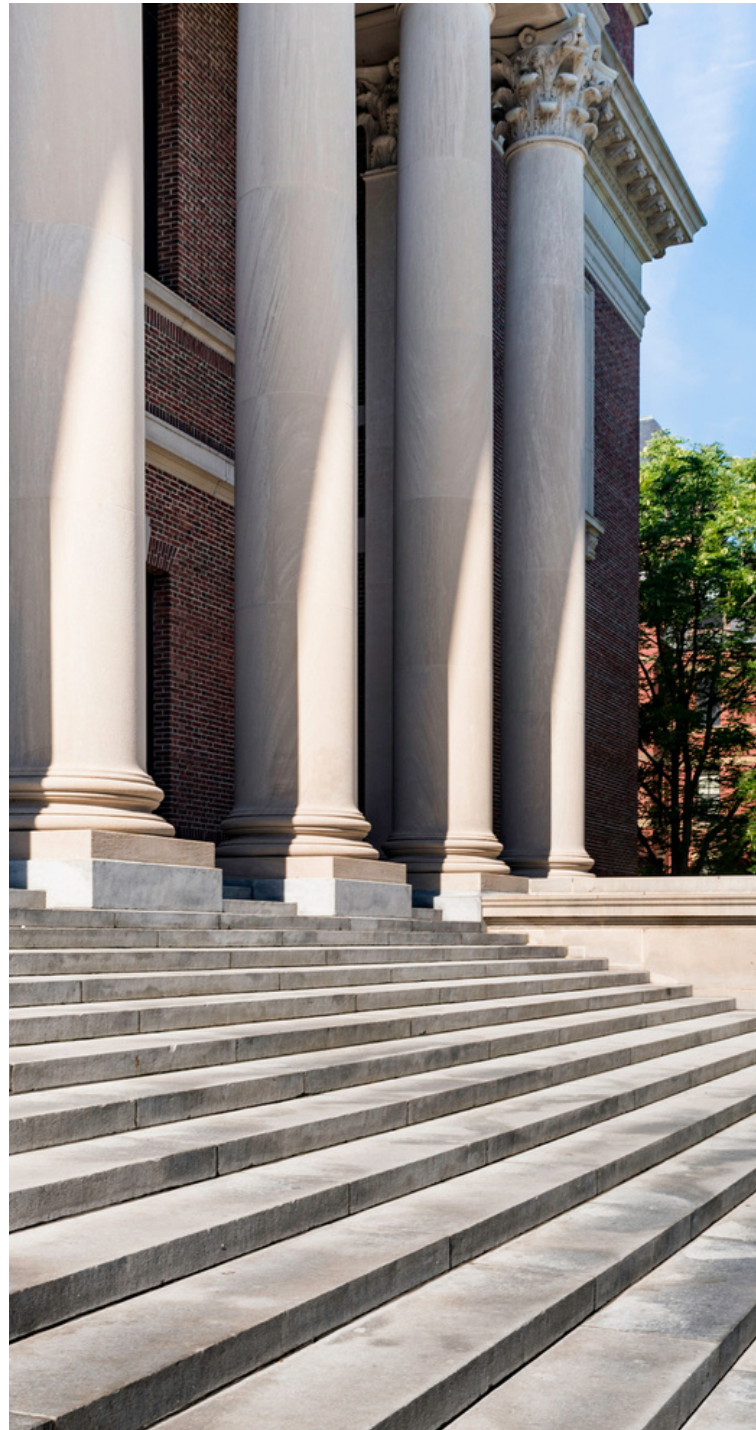
Waste Stewardship Steering Committee

Task Forces can be formed to work on some of these gaps in university-wide resources, such as: Purchasing, Zero Waste Events, Campus Reuse, Lab Waste, and Construction and Demolition. The existing Sustainable IT Committee will serve as a successful Task Force model. The Committee, established in 2008, reports directly to the Chief Information Officer (CIO) Council and comprises 20+ representatives from various schools and units across Harvard. The Committee is working on creating a university-wide electronic waste (e-waste) policy, finding improved ways to track e-waste metrics, identifying new e-waste recycling vendors, and developing a new e-waste webpage.

Next Steps

While finalizing this framework, the Waste Stewardship Steering Committee (WSSC) asked each working group participant to complete a baseline assessment using targeted questions from the Waste Stewardship Essentials to evaluate their School or unit's status and readiness. Initial results indicate that while many schools have successful waste reduction programs and initiatives, there is still a lot of work to be done. Many schools are eager to start the planning process for their individual waste stewardship implementation.

1. The WSSC will create a resource hub for the Harvard community with new and existing waste reduction resources.
2. The WSSC will begin working with Schools & units to implement their own plans.
3. Collaboration will continue through a new Waste Stewardship Coalition, an extension of the Working Group that will meet periodically to share progress and updates.
4. The WSSC will begin exploring additional options to address the university-wide gaps identified in the previous section.



Participants

The Waste Stewardship Working Group was comprised of representatives from the 13 degree-granting Schools at Harvard University, the Harvard Radcliffe Institute, Arnold Arboretum, and Central Administration to develop this framework during the 2024 calendar year. We'd like to thank the members for their time, input, and dedication to this project.

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Appendix

Definitions

Below are the definitions of the materials streams collected and/or processed by Harvard University. For comprehensive guidance for proper handling, please contact Environmental Health and Safety.

1. Standard or Single-stream Recycling
 - a. Plastic bottles*, jars*, jugs*, and tubs*, clear deli containers.
 - b. Recyclable Paper*: All paper, cardboard, and paperboard products.
 - c. Glass Containers*: Glass bottles and jars. All colors.
 - d. Metal Containers*: Aluminum, steel, or bi-metal beverage and food containers.
2. Food*, food waste* & compostable food service materials: All food scraps, this includes food items from kitchen waste and non-consumed portions of meals. These items must be segregated from trash and recycling and managed as compostables.
3. Landscaping Waste*: Leaves, grass clippings, weeds, garden materials, shrub trimmings, and brush one inch or less in diameter (excluding diseased plants)
4. Mattresses*: Any resilient material or combination of materials that is enclosed by ticking, used alone or in combination with other products, that is intended for sleeping upon. Includes any foundation or boxspring.
 - o The ban does not include mattresses that are contaminated with mold, bodily fluids, insects, oil, or hazardous substances. This does not include any mattress pad, mattress topper, sleeping bag, pillow, car bed, carriage, basket, dressing table, stroller, playpen, infant carrier, lounge pad, or crib bumper. Nor any water bed or air mattress that does not contain upholstery material between the ticking and the mattress core, nor any mattresses in futons or sofa beds.
5. Universal waste, electronic waste, batteries, and ink or toner cartridges
 - a. Universal waste refers to batteries, pesticides, mercury-containing equipment** (such as thermostats or thermometers), lamps (such as fluorescent bulbs, high pressure sodium, or metal halide lamps), aerosol cans that contain(ed) hazardous waste.
 - b. Electronic waste: any electrical or electronic equipment that has been discarded, anything with a plug or battery such as computers, TVs, and phones. Cathode-ray tubes * (CRTs) are banned from disposal.

- c. Batteries: a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed. Includes single-use alkaline batteries (AAA, AA, C, D, 9-volt), Lithium Ion, rechargeable Nickel Metal Hydride (NiMH), Nickel Cadmium (NiCad), small-sealed Lead Acid* (Pb Acid)
 - d. Toner cartridges: the consumable component of a laser printer that contains toner powder
- 6. Surplus furniture, supplies, and equipment: items that are no longer needed, but still in useable condition
 - 7. Textiles*: Clothing, footwear, bedding, towels, curtains, fabric, and similar products. This does not include items contaminated with mold, bodily fluids, insects, oil, or hazardous substances
 - 8. Scrap metal*: Ferrous and non-ferrous metals derived from used appliances, building materials, industrial equipment, vehicles, and manufacturing processes.
 - 9. Plastic film: A thin, flexible plastic commonly used for packaging, made from polyethylene. #2 HDPE and #4 LDPE are accepted for specialty recycling.
 - 10. Lab plastics: a wide range of rigid plastic products used in laboratory settings for storing, testing, and handling chemicals, reagents, and other materials. Includes pipette tips, tubes, well plates, bottles.
 - 11. Expanded polystyrene, StyrofoamTM: rigid, lightweight closed-cell foam commonly used for insulation and packaging
 - 12. Wood*: Treated and untreated wood, clean wood waste (trees, stumps, and brush, including but not limited to sawdust, chips, shavings, and bark).
 - 13. Construction and demolition (C&D) waste:
 - a. Asphalt pavement, Brick, and Concrete*: From construction and demolition of buildings, roads, bridges, and similar sources.
 - b. Clean gypsum wallboard*
 - c. Also includes wood* and scrap metal*, as defined above

d. EHS specifications for construction projects require that vendors submit a Waste Management Plan that clearly states the diversion rate the project will strive to meet. The contract requires recycling of all clean gypsum wallboard scraps and sent to a permitted C&D processing facility, plus maximum possible diversion of as much other waste as possible, including asphalt, bricks, concrete, scrap metal, electronics, cardboard, and other materials. It is recommended to stage separate collection containers for waste ban items. In addition, the specifications require that the vendor's plan identify the dump sites for all materials. The final report must include verification of total weights delivered to each site. Contact EHS for details.

14. Waste Vegetable oil: Oils that have been used for cooking or frying food. Harvard recovers waste vegetable oil for recycling into fuel.

15. Lead Acid Batteries*: a rechargeable battery that uses lead and sulphuric acid to function, weighing more than five kilograms and with a capacity of six volts or more, typically used in motor vehicles or stationary applications

16. Whole tires*: motor vehicles tires of all types

17. Hazardous Waste:

Common hazardous wastes include:

a. Spent solvents, acids, bases and oxidizers used in extractions, cleaning or other processes.

b. Unused reagents and other chemicals that are no longer needed, do not meet specifications, are contaminated, have exceeded their storage life, or are otherwise unusable in the lab.

c. Waste oils.

d. Other miscellaneous materials, including broken mercury thermometers, heavy-metal salts, poisons, etc.

These wastes require special handling and management practices and disposal by licensed hazardous waste facilities. Mismanagement of chemical or hazardous waste poses a threat to employees and the environment.

18. Municipal solid waste (MSW): Trash generated by residents, businesses, institutions, and municipalities; discarded materials; should only contain items that cannot be recycled, composted, reused, or repurposed.

*Indicates material is included on the Massachusetts Waste Ban (310 CMR 19.017)

**Disposal prohibited by the Massachusetts Mercury Management Act (MGL Chapter 21H)