

UNIVERSITY OF VERMONT

ZERO WASTE ATLAS CAMPUS ASSESSMENT 2019



# REPORT PREVIEW

# INTRODUCTION

In Summer 2019, the UVM Office of Sustainability hired the [Post-Landfill Action Network](#) to support UVM Recycling intern, Isabel Lisle, in conducting a holistic assessment of the University's waste management system. Isabel used the Atlas Zero Waste assessment framework, a tool designed to reduce waste by streamlining campus systems for materials management. Isabel completed in-depth interviews with 18 representatives from various campus departments, using PLAN's Atlas Stage 1 Campus Programs Checklist to document and gather data on the current infrastructure, policies, and communication channels related to the University's waste mitigation and management. With insights from Isabel, PLAN's Atlas team scored the campus checklist according to the [zero waste hierarchy](#), awarding 3 points for source reduction initiatives, 2 points for reuse initiatives, and 1 point for recycling/compost initiatives, and used the findings to guide this report. This report offers a snapshot of existing programs, services and infrastructure, illustrates ideal material flows throughout a campus, and proposes recommendations to fill the gaps identified during the assessment. While this Atlas assessment can provide suggestions based on its assessment of the capacity of existing campus systems and best practices from other campuses, campus stakeholders must ultimately decide on the exact path the University takes to achieve zero waste.

This report was prepared for the University of Vermont by the Post-Landfill Action Network, a non-profit zero waste advising organization based in Dover, New Hampshire. Any views, thoughts, or opinions expressed in the text belong solely to the Post-Landfill Action Network and do not reflect the views of the University of Vermont.

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# METHODOLOGY - MATERIAL MANAGEMENT SCOPES

<b>SCOPE 1 HARD GOODS</b> Surplus Property and Hard-to-Recycle Materials  Materials the campus has direct control over	<b>SCOPE 2 SOFT GOODS</b> Food and Single-Use Materials  Materials the campus purchases, but has limited control over which bin the material is placed in
Electronics Furniture Office Supplies Lab/Art Equipment Vehicles/ Tires/ Oil Chemicals/ EH&S Facilities/ C&D	Food Waste Food Packaging Disposal To-Go Ware Disposable Dishware Compostable Dishware Compostable To-Go Ware Reusable Dishware Reusable To-Go Ware

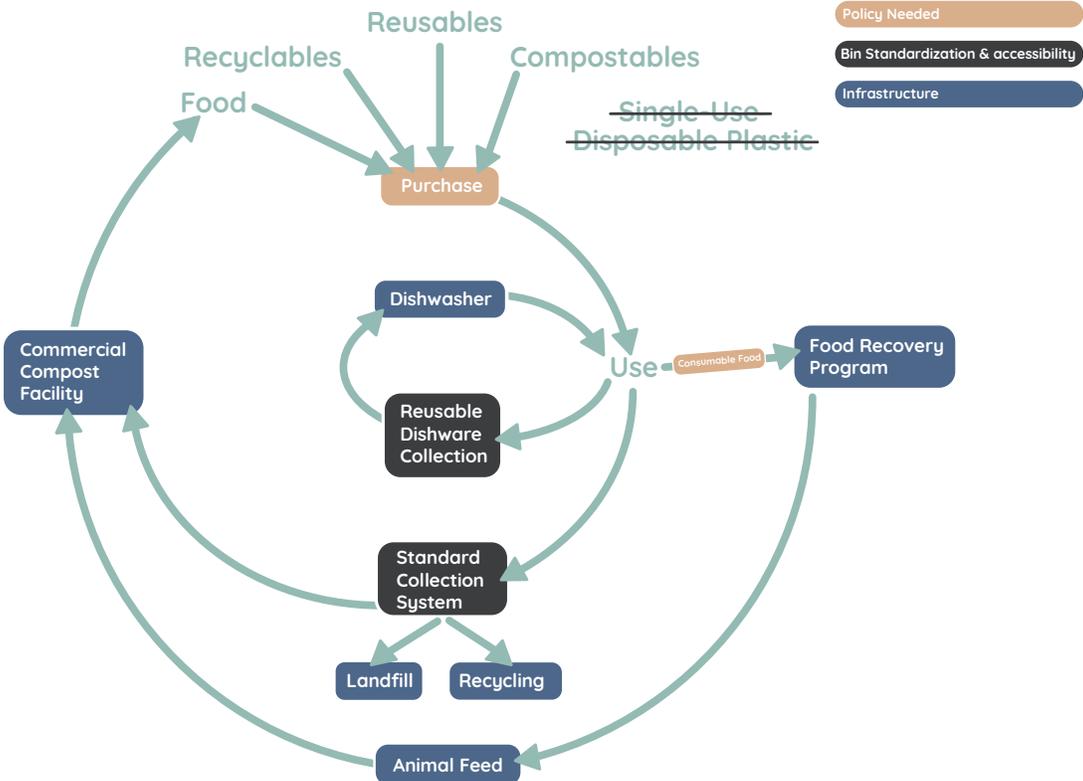
[The Zero Waste Atlas project](#) is unique in that it does not simply measure waste outputs, but instead looks holistically at the entire campus materials management system from purchase to use to collection to disposal.

In **Scope 1 - “Hard Goods”**: We assess the materials management system for all materials the campus has direct control over - namely, items that the campus purchases, manages, uses, and maintains ownership over, and is ultimately fully responsible for the method in which they are discarded. Below is an example of how a campus would manage materials in an ideal version of this system. You can also chart the path of this item through the idealized system map provided on the right.

In **Scope 2 - “Soft Goods”**: We assess the materials management system for all materials that the campus purchases but ultimately has limited control over which bins the material is placed in because disposal of the materials is left in the hands of individual users. Below is an example of how a campus would manage materials in an ideal version of this system. You can also chart the path of this item through the idealized system map provided below.

A student purchases a coffee from a coffee vendor on campus that is required to comply with the **campus procurement policy**. The student can either get the coffee in a **reusable to-go mug** or in a **compostable cup**. The student walks across campus with their coffee, and when finished, discards their coffee container in the **standardized collection bin** for either compostable materials or reusable dishware, available in every building on campus. If compostable, the material is collected and transported to an **industrial composting facility** (either on or off campus). If reusable, the dishes are taken to a **campus dishwasher** to be washed and re-distributed back to campus food vendors.

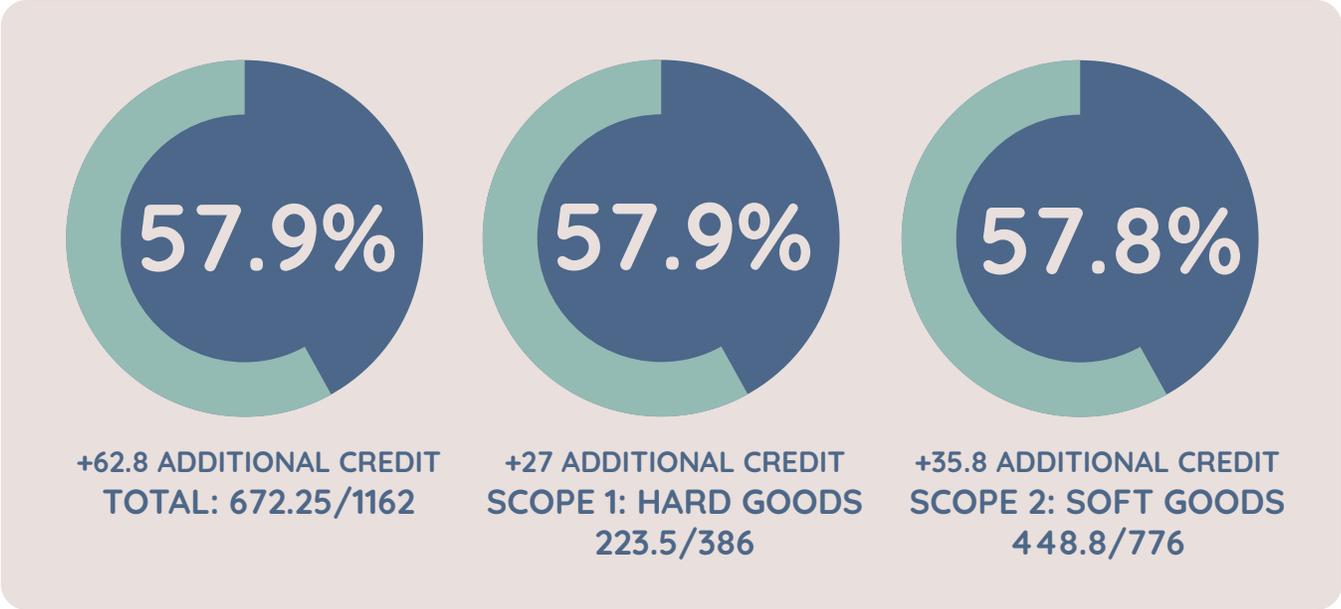
### Scope 2 - An Example of Material Flow Options through an Idealized Version of a Soft Goods System Map



In some sections, findings are presented in the form of tables and can be interpreted as follows:

yes	full points awarded, i.e. 100% adoption across all facilities
half yes	half points awarded, i.e. facilities are still in the process of adoption
no	no points awarded, i.e. facilities have not adopted this practice and are not in the process of adopting it
n/a	question is not asked or is not applicable to this facility
+0	no extra points awarded - this is an additional credit question
+number	extra points awarded - this is an additional credit question

## OVERVIEW OF UVM'S SCORES



PLAN's Zero Waste Atlas project has found so far that the average campus score is between 30-40%. As we expand this project to more campuses, we will continue to update national scoring averages and standings for how campuses compare with each other.

# HARD GOODS INFRASTRUCTURE & PROGRAMS

## I. Surplus: Expand Capacity (Infrastructure and Staffing) for Campus-Wide Management of Surplus Property and Material Donation

This section measures the campus’s capacity in terms of infrastructure, services, and staff to fully capture surplus property from all departments and locations on campus, with the intended purpose of making those items available for reuse on-campus or donation off-campus, as well as non-electronic repair initiatives like textiles and furniture. The campus earned 24 of 67 total possible points for surplus management.

**24/67**

**+ 23**

Surplus Program (Facility, Process & Materials Managed)

Additional Credit - Surplus

**TABLE 1: CAMPUS SURPLUS PROPERTY COLLECTION**

Surplus Property	Collected by Campus for Reuse
Furniture	yes
Electronics (laptops, lab and medical, refrigerators, air conditioners, appliances, handheld devices, wires and cables)	no
Mixed media (CD's, DVD's, etc.)	no
Clothing, uniforms, etc	no
Construction & demolition material (doors, drywall, piping, bathroom fixtures, etc)	no
Misc. household goods (dishware, decorations, school supplies, sporting equipment, etc.)	half yes
Lab equipment*	no
Campus vehicles	no
Books	no
Paint & art supplies	no
Miscellaneous (athletics equipment, classroom equipment, etc.)	no
Medical supplies (e.g. crutches)*	no
Bikes	half yes

*\*can be collected for internal reuse by specific campus department*

## II. Expand Capacity for Food Recovery and Food Waste Minimization to all Food-Service Facilities on Campus

This section assesses the campus's capacity to set up a campus-wide food recovery program, as well as reduce overall food waste via internal audits and external educational efforts.

<b>10/35</b>	Food Recovery Program
<b>28.5/29</b>	Food Waste Reduction Initiatives & Education
<b>+ 0</b>	Additional Credit - Food Recovery and Waste Minimization

**TABLE 4: FOOD RECOVERY & FOOD WASTE REDUCTION PROGRAMS**

	Campus Dining Halls	Restaurants	Campus Cafes	Grab & Go	Convenience Stores (Cat Pause)	Athletics	Events
<b>Food Recovery Program</b>	yes	yes	yes	yes	no	no	yes
<b>Food Waste Reduction</b>							
Run audits	yes	yes	yes	yes	n/a	yes	yes
Purchase gleaned	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Food waste education	yes	yes	yes	half yes	n/a	yes	n/a
Trayless dining	yes	yes	yes	yes	n/a	yes	yes

### Assessment & Recommendations

#### Food Recovery Programs

As shown in **Table 4**, UVM has food recovery efforts in all locations except for Cat Pause and Athletics. UVM could explore expanding collection efforts to these areas, as well as establishing policies and practices that allow for catering to allow clients to take leftover food after an event.

#### Food Waste Reduction Programs

All food-service facilities at UVM have gone trayless, audits are performed to assess food waste, and educational programs exist to encourage reducing food waste at most locations. Grab and Go facilities reported infrequent food waste education efforts, so our only recommendation here is to explore options for expanding that service. We did not assess UVM for purchasing gleaned produce because of a Vermont state law that prohibits the sale of gleaned produce.

## Assessment & Recommendations

### Procurement Policies

In all outgoing RFPs, UVM includes a statement of special interest in “products and services that align with its sustainability goals” and encourages each bidder to “include information about how it will further UVM’s relevant sustainability goals” and that “When applicable, Bidders may also be asked to address specific sustainability criteria related to their products and services.”

UVM also has some existing policies related to sustainable materials management:

- UVM has policies in place that prioritize environmentally friendly custodial products.
- UVM has a stated preference for 100% post-consumer recycled content copy paper. There is a system override where the main supplier substitutes this for non-recycled copy paper when it is ordered with the exception of a few exempt departments. This 100% post-consumer recycled content copy paper is also contracted to be the least expensive paper option.
- Bottled water sales were eliminated on campus in 2013.

### Limiting the Distribution of Single-Use Disposable Plastics

UVM does not have any language within overarching procurement policies that specifically limits the distribution of single-use plastic disposables. However, about half of the relevant stakeholders interviewed for this assessment reported that they require their staff to follow a policy or guideline, but it is not clear which policies those staff were referring to. The other half of stakeholders interviewed staff did not know of any such policies in place.

To ensure that all staff across campus are aware of and familiar with the campus’s materials management system, and are bringing items into campus that effectively utilize that system while reducing the risk of contamination and disposal as much as possible, UVM could enact a policy or policies that apply to all food-service facilities and vendors that state preferences for:

- Packaging made from compostable materials or post-consumer recycled content
- Products made from compostable materials or post-consumer recycled content
- Paper made from post-consumer recycled, agricultural residue, or FSC certified content
- A restriction on disposable swag, in favor of products that are durable, reusable etc (while suggestions are communicated for certain events, no formal guideline or policy exists)
- A restriction/guideline on plastic shopping bags
- A restriction/guideline on styrofoam products

# CONCLUSION

The recommendations outlined above are just the beginning in a multi-stage zero waste planning process. We have provided recommendations based on best practices from campuses across the country, but the next step in zero waste planning is to identify the feasibility of these recommendations at the University and to strategize with the PLAN Atlas team to vision and develop a Zero Waste Task Force and subsequent Zero Waste Roadmap specific to UVM. We encourage the campus to develop a goal that incorporates quantitative measurements like diversion, reduction, and recycling, as well as qualitative goals to develop campus-wide service models for sustainable materials management and program areas such as engagement and education. The University should utilize this report as a wayfinding tool to benchmark and track progress on the remaining opportunities for waste reduction.