

UBC'S ZERO WASTE ACTION PLAN



- Supporting UBC's commitment to sustainability
- Keep food out of garbage: regional government organics disposal ban





TRANSITIONING TO ZERO WASTE INFRASTRUCTURE



The Past: garbage Now: recycling stations

cans



PROGRESS TOWARD GOALS – FOOD SCRAPS COMPOSTING

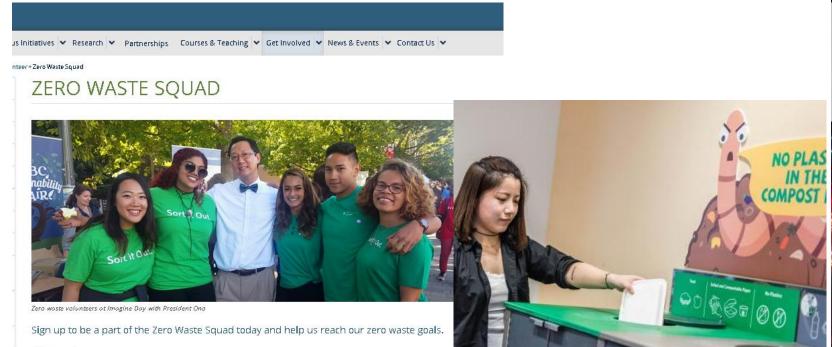






- Compost doubled to nearly 1000 tonnes/year
- Reduced solid waste GHG emissions
- Responded to regional Organics Disposal Ban

PROGRESS TOWARD GOALS - COMMUNICATIONS & ENGAGEMENT



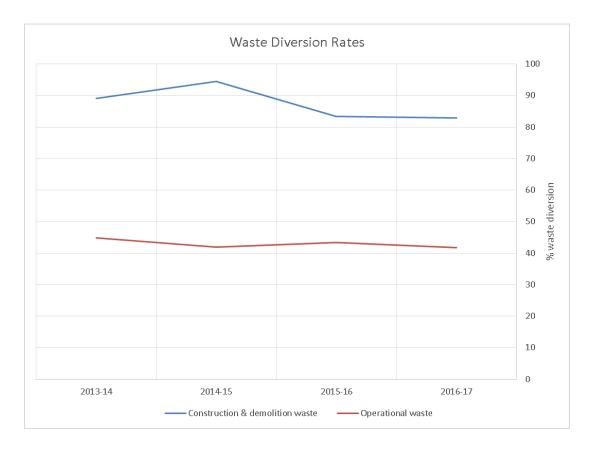
About

The Zero Waste Squad program is a joint peer-led volunteer program open to UBC students brought to you by UBC Sustainability, AMS Sustainability and Common Energy UBC. Get involved today and help UBC become a zero waste campus!

- Successful student volunteer program
- Signage system adopted by other institutions
- Strong campus support for program and recycling goals



CHALLENGES & ISSUES



Low diversion rate for operational waste, flat over last several years

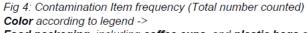


COMPOST FACILITY IMPACTS



FOOD SCRAPS AUDIT RESULTS - COMPOST FACILITY





Food packaging, including coffee cups, and plastic bags are standout contaminants





FOOD SCRAPS AUDIT - PUBLIC REALM STATIONS







Most Common

Second Most Common

Third Most Common



Other Contaminants



OTHER IMPACTS OF SINGLE USE ITEMS





- @ 80% diversion,>300,000/ year to landfill
- Filling up our garbage & recycling bins and trucks



LITTER



OCEAN PLASTICS



UBC Plastics – A short path to the ocean

©cean Leaders

Fiona Beaty and Kaleigh Davis

A collaborative research initiative by Ocean Leaders and SEEDS

Plastics are rapidly accumulating in the ocean

It is estimated that by 2050 the weight of plastic in the ocean will equal that of fish.



Land-sourced ocean plastics can negatively impact marine life in multiple ways



Ocean plastics pose physical (purple arrow) and chemical (yellow and green arrows) to marine organisms. They also persist in the environment for very long periods of time, breaking down into smaller, and more contaminated, pieces.

UBC has an important role to play due to its geographic and social context

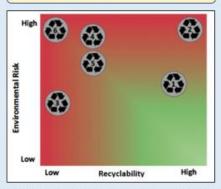
UBC is surrounded on three sides by incredibly productive marine ecosystems including the Fraser estuary, Strait of Georgia, and Salish Sea.

Prioritizing marine ecosystem health in university policy is integral for the socio-ecological function of the marine ecosystems and coastal communities of the Salish Sea.



By developing and endorsing strategies and actions that address marine plastic debris, UBC will emerge as a leader for other coastal institutions and municipalities to follow in the ongoing movement to reduce the impact that human societies have on the health of marine life.

Not all plastics are equal



Our research emphasizes that the plastic types 1-6 have notably different effects on marine ecosystems, and that the sustainable management of plastics on land does not necessarily match up with their environmental risk in the ocean. Importantly, all six plastic types pose a significant threat to marine organisms.

Accordingly, we recommend that:

- UBC should eliminate polystyrene (6) altogether on campus;
- UBC should shift away from low density polyethylene (4) and polypropylene (5) use where possible;
- Plastic-use reduction must be the overarching priority for UBC's sustainability strategy.



KEY ISSUE: CUPS & SINGLE USE CONTAINERS ARE CHALLENGING TO SORT

- Wide range of container types & materials, particularly composites
- Frequent changes
- Lack of labelling
- Hard to create very simple, intuitive sorting rules
- Creates problems at composting facility
- Degrades quality and value of recycling





THE OPPORTUNITY

- Waste diversion rate, contamination, and litter may all be improved with an aligned strategy dealing with how food is packaged and served – with participation of all businesses.
- Businesses can also play a role in implementing excellent recycling practices within their spaces.
- Students (the business customers) are asking for change.



OUR APPROACH

- Include mechanisms to ensure consistent implementation, while allowing needed flexibility
- Ensure economic viability for businesses
- Provide clear direction and expectations and level playing field as much as possible
- Scope is the academic campus



PROCESS

- Consultation with food service stakeholders events and other opportunities for input
- Develop draft strategy
- Communicate the strategy for additional input
- Approve strategy and implement with a timeframe for phasing in



STRATEGY OPTIONS FOR DISCUSSION

Reduction Options

Require single use items to be given out only if customers ask for them, rather than receiving them automatically (Vancouver)

Includes reusables for eat-in

Fees for single use items, or rebates for Bring-Your-Own, at least \$0.25 for cups Fees/rebates must be actively marketed to customers

Loyalty program for Bring-Your-Own

Require reduction plans, annual reporting of the quantity of single use items distributed, and meeting reduction targets (Vancouver)

Certification or recognition program for leading businesses

Mugshare/cup exchange program (implement or participate in a campus program) Food container exchange program

Ban* single use items

(Vancouver: plastic straws, with exemptions; also foam/polystyrene)



STRATEGY OPTIONS FOR DISCUSSION

Recycling Options

Mandatory standards for single use items materials

Straws: non-plastic only - e.g., paper

Food containers and cutlery: compostable, non-plastic - e.g., fibre based

Cups: Recyclable, non-compostable - e.g., plastic, metal, coated fibre

Implement standardized recycling bins and signage – front and back of house

Require staff training for recycling and single use item reduction programs



STRATEGY OPTIONS FOR DISCUSSION

UBC Supporting Actions

Continue to educate the campus community and promote reduction of single use items

Research and explore models for cup and container exchange programs

Continue to expand Sort it Out streetscape recycling

Provide best practice resources such as recycling guidelines and signage artwork

