

# Reducing Food Waste at Harvard Business School

## Executive Summary

As a [Student Sustainability Associate](#) tasked with promoting sustainable living on campus, I was empowered to pursue an independent project in which I could suggest and pursue policy modifications to improve resource conservation on campus. The area I chose to research was food waste from campus events and conferences, the reduction of which would support the energy conservation, water conservation and waste reduction goals of Harvard Business School.

The unfortunate reality is that a tremendous amount of food goes to waste at HBS, which contributes to the 40% of food produced in the U.S. that goes uneaten. Twenty-five percent of U.S. freshwater, 300 million barrels of oil, and tens of millions of acres of cropland are used to produce that food. As a result, reducing food waste at HBS would not only contribute directly to Harvard's University-wide goal of reducing waste per capita by 50% by 2020 (Figure 1), but also to energy and water conservation efforts of HBS more broadly.

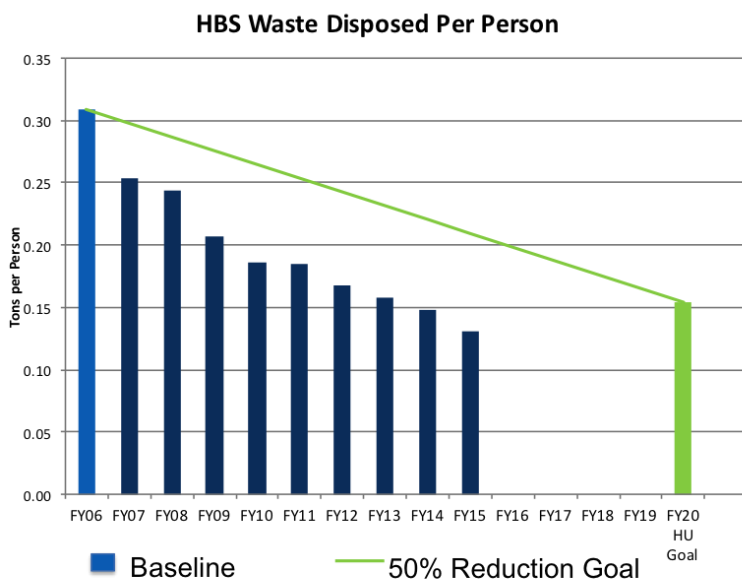


Figure 1: HBS Waste Disposed Per Person

My overall findings highlight the lack of aligned incentives for stakeholders. Those who order food (e.g. conference organizers) are understandably more focused on the event they are running (e.g. lining up speakers and sponsors) than how much food they order (as long as there is enough). Restaurant Associates ("RA") is focused on delivering what has been ordered, and may provide

guidance on how much food would ensure that there is enough. As all food costs are paid for by organizers, this leaves the perfect storm for significant, but avoidable, food waste. With increased awareness, there is opportunity for improvement.

## Food Waste: The Broader Problem

Forty percent of food produced in the U.S. goes uneaten, and the potential to divert some of this would have tremendous environmental and social impact. Fourteen percent of U.S. households are food-insecure, and redistributing just 30% of the wasted food would cover their diets. At the same time, there is significant environmental cost to food that goes to waste, both on the front and back ends. In addition to the resources (i.e. land, water, oil) that go into producing the food, discarded food contributes to over one-fifth of municipal landfills and is the single largest contributor to municipal solid waste in landfills, which is the third largest source of greenhouse gas emissions in the U.S.

## Waste Reduction at HBS

Waste reduction is currently a priority for HBS (Figure 1), with HBS working to make recycling and waste reduction easier for students. Trash, recycling, and compost bins are located throughout campus, and we have single stream recycling, which means that everything that can be recycled goes into one bin. General waste reduction and recycling initiatives, the reuse efforts of the Harvard Recycling and Surplus Center, and an overall reuse before waste strategy resulted in over 400 tons of material goods being reused or donated in 2015 alone.

From the perspective of food-related waste reduction, HBS composts and HBS dining products (e.g. boxes, cups, utensils) are compostable, which means that the back-end environmental impact of food waste is somewhat diverted. However, there is still a lot of food that gets thrown out, which is further distressing for people who have taken out significant student loans. A number of students attempt to combat this waste on an individual level by collecting leftover chips, apples, and sandwiches from bag lunches to donate to local shelters.

## Diverting Food Waste

RA has a policy of donating food under specific circumstances (e.g. food that has been sitting out for less than two hours), which is a starting point. Unfortunately, however, there are limitations to how much actually gets donated given understandable liability concerns of donating food that has been sitting out too long. Figure 2 shows one of several trays of bag lunches that were on their way back from an event to be thrown out a mere hour after they were set out. By the time lunches have been

prepared, set out, acquired by some students and not others (after a year of bag lunches, some students decide to buy their own lunch, further exacerbating the problem), the logistics of refrigerating leftover lunches and coordinating with Project Turnaround (Figure 3) for a pickup often exceeds time limits.



*Figure 2: Leftover bagged lunches at HBS*

There are options that could help tackle this problem. We could incorporate food waste reduction into the Greening Your Events Guide and work with event organizers to better tackle food waste, particularly given tight budgets. The onus would be on event organizers, but the HBS Green Team could be available for an educational/training component.

First, there is the demand side and potential to have a hotline to a student organization to acquire leftover food from events. For instance, Wharton has group messaging for students to blast when food is leftover after an event. We could easily do the same on GroupMe and worst case scenario drop off leftovers in Morris. Even if we did something as simple as leaving food outside a classroom with a sign that says “leftover lunch up for grabs—please take or it will be thrown out!” it would have tremendous impact. Student organizations could be given the option of leaving the sign out with lunches after events and RA staff could be trained to not turn away students who did not attend the event after some predetermined length of time.

Second, there is the supply side and potential to more accurately assess student turnout at catered events in order to reduce food waste. This would require working on the mindset of having too much vs. “too little” food and better forecasting the amount that is needed. Finally, we could reduce the packaging of bag lunches, e.g. paper bags with cookies/chips that get thrown out vs. platters of individually wrapped sandwiches. All this would serve to improve the environmental impact of HBS and make students feel better about not seeing food go to waste when they often are taking on student loans and also know there are people who are hungry.

Sum of Lbs Row Labels	Column Labels	
	HARV-20702	Grand Total
<b>2015</b>		
<b>March</b>	<b>593.0</b>	<b>593.0</b>
03/04-03/11	565.0	565.0
03/11-03/18	28.0	28.0
<b>April</b>	<b>215.0</b>	<b>215.0</b>
04/22-04/29	180.0	180.0
04/08-04/15	35.0	35.0
<b>May</b>	<b>277.0</b>	<b>277.0</b>
04/29-05/06	227.0	227.0
05/06-05/13	50.0	50.0
<b>September</b>	<b>454.0</b>	<b>454.0</b>
09/02-09/09	88.0	88.0
09/23-09/30	115.0	115.0
09/09-09/16	140.0	140.0
09/16-09/23	111.0	111.0
<b>October</b>	<b>210.0</b>	<b>210.0</b>
10/07-10/14	210.0	210.0
<b>November</b>	<b>359.0</b>	<b>359.0</b>
11/11-11/18	55.0	55.0
10/28-11/04	233.0	233.0
11/04-11/11	71.0	71.0
<b>December</b>	<b>972.0</b>	<b>972.0</b>
12/23-12/30	860.0	860.0
12/16-12/23	112.0	112.0
<b>2016</b>		
<b>February</b>	<b>91.0</b>	<b>91.0</b>
02/17-02/24	91.0	91.0
<b>March</b>	<b>118.0</b>	<b>118.0</b>
02/24-03/02	118.0	118.0
<b>Grand Total</b>	<b>3,289.0</b>	<b>3,289.0</b>

Figure 3: Food Donations at HBS