

Waste Reduction at Georgia Tech: Insights into Sustainable Procurement and Purchasing for Student Groups



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Goals

- Review current Georgia Tech operations in sustainable waste management
- Analyze student swag purchases (Greek life, club organizations)
- Research GT policies leading to poor waste diversion
- Create sustainable purchasing guidelines for student groups

Challenges to waste diversion

AASHE STARS report shows Georgia Tech's poor rankings compared to peer institutions

Institution Name	STARS sustainability rating	STARS Waste Score (out of 10)	Waste Minimization and Diversion Score (out of 8)	Percent of landfill waste diverted through recycling, composting, etc.	Sustainable Procurement Score (out of 3)	Published sustainability guide for procurement?	LCCA used for procurement?
Carnegie Mellon University	Gold	5.77	3.84	34.83	1.5	Yes	No
Cornell University	Platinum	6.55	5.12	63.35	3	Yes	Yes
Massachusetts Institute of Technology	Gold	5.48	3.51	30.84	2.25	Yes	Yes
Pennsylvania State University	Gold	4.36	2.41	80.38	3	Yes	Yes
Purdue University	Silver	6.81	5.25	31.92	1.75	Yes	Yes
Stanford University	Platinum	5.79	4.03	66.58	3	Yes	Yes
Texas A&M	Gold	4.61	2.73	65.81	1.25	Yes	No
Georgia Institute of Technology	Silver	2.79	0.89	29.75	0	No	No
University of California - Berkeley	Platinum	7.27	5.29	52.72	3	Yes	Yes
University of Wisconsin - Madison	Silver	6.35	4.42	43.41	1.75	Yes	Yes
University of Michigan - Ann Arbor	Gold	4.19	3.19	38.16	2.5	Yes	Yes

Waste diversion depends on both **sustainable procurement** and **efficient recycling/composting systems**

Georgia Tech's procurement system is robust and efficient, but resistant to change.

- Review current Georgia Tech operations in sustainable waste management
- Analyze student swag purchases (Greek life, club organizations)

Environmental impacts of common swag items

- Manufacturing a T-shirt emits 4.7 kg of CO2 and consumes 2700 liters of water from start to finish
- Student clubs purchased approximately 1000 T-shirts this year; the carbon emissions from these are equivalent to driving a car 10,000 miles and drinking water for 4000 people for a year

Purchasing guide for student groups

The Purchasing Guide was created with student leadership in mind and promotes a few main suggestions.

- Having an understanding of the sustainability of vendors and products bought for events and initiatives
- Being conscious of how to avoid over production, by thinking in depth of what the swag item will be used and distributed for.
- Understanding how to make and buy swag that can be reused.
- Understanding how to properly dispose of things no longer used: food, etc.
- Understanding how to be more sustainable in running events, including buying décor, etc. that can be reused and doing reflection upon events to improve in the future.

Sustainable Purchasing Roundtable for Student Leaders

- Planning for Event:
 - Utilized research from SGA to identify clubs that spent the most on wasteful items and invited their presidents and financial officers
- Reception of Event:
 - Email outreach yielded minimal responses
 - Led to cancelation of our event
- Main Issue:
 - Main problems were due to:
 - A late announcement
 - A potential lack of interest in learning about sustainable purchasing
- For future references:
 - Advertise ahead of time
 - Explain in more detail why it is important these student organizations should attend

Project Future

- The future of the project would include:
 - Attempting to run the sustainable purchasing and programming summit on a larger or more successful scale inviting more organizations and departments
 - Updating the Guidelines yearly and include feedback and suggestions from all organizations
- Project Successes:
 - Able to get feedback from many departments and incorporate that into the project
- Project failures:
 - Pivot of the project
 - Redecided due to a lack of information, communication, and a pre-existing project similar to the original scope

Where to Find Our Work

The guideline & our research paper will be posted to the GT Sustain website by the end of the semester for use by clubs.