Green Labs Initiative

The University of Texas at Austin

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Emery Wolf - Green Labs Coordinator

What is Green Labs?

Two part structure

1. Non-traditional recycling streams
2. Certification process

Composed of 4 person team

Started in EH&S

Adopted by Office of Sustainability

Stakeholders

- Office of Sustainability
- Facilities
- EH&S
- City of Austin
- Austin Resource Recovery
- Other Green Labs Programs
    - UC Boulder
    - Harvard

Recycling Initiatives

Styrofoam

Nitrile Gloves

Batteries

Green Lab Certification Process

Google Form used for simplicity

Walkthrough with Green Labs Team Member

Incentives

- Prizes
- Recognition

Certification Process

- Online Self-Evaluation Form
- Behaviors
- Recycling efforts
- BSL Ratings
- Energy Star Purchasing
- Disconnect Phantom Loads
- Consolidate Freezers / Autoclave loads

Ultra Low Freezers (ULF)

- Can use $1000 of electricity per year
- Generate as much heat as a gas grill
- Month long freezer competition
    - Breathing room for the ULF - gaps on all faces
    - Create inventory map of freezer
    - Clean filter, remove frost from gasket
    - Establish routine maintenance list

Fume Hoods

- Can use as much energy as a house (or more)
- Constantly drawing conditioned air out of the room
- Fume Hood Competition
  - Shut the sash
  - Electronic data sent to facilities

Funding

Green Fee

ULN interns

Challenges Faced by Green labs

Increases in certifications

Labs who want to be certified don’t need it

Labs who need it don’t want it

Labs don’t like being bothered

Successes of the program

	Cost Per Unit	Distance Traveled to be Recycled	Total Amount Recycled since 2013	Carbon Footprint of Shipping to facility	Weight of carbon emitted relative to total weight recycled
Nitrile Gloves	$1.22 / lb	1,090 miles	4,836 lbs	424 lbs	11.4 %
CD's	$1.80 / lb	1,970 miles	146 lbs	23 lbs	15.8 %
Styrofoam	$1.52 / lb	~ 25 miles (local)	4,869 lbs	9.7 lbs	0.2 %
Batteries	$0.00 / lb	~ 25 miles (local)	4,517 lbs	9 lbs	0.2 %
Total: Weighted proportionally by weight recycled	$0.94 / lb	403 miles	14,368 lbs	466 lbs	3.2 %

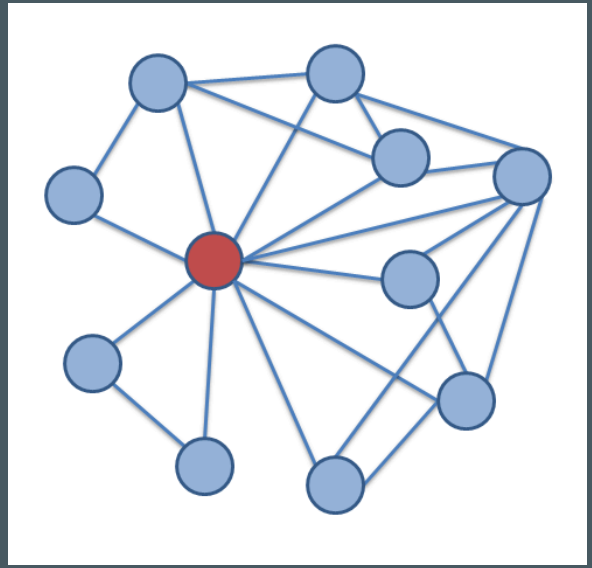
Future of Green Labs

Determining policy changes

- Inventories of energy / water intensive equipment
- Building model to determine energy goal

Creating Networks

1. Network of Green Lab programs across institutions
    a. My Green Lab - direct to labs, not to Universities
2. Network of representatives within a University
    a. Share ULFs, materials, etc.



Conclusions

- Provide resources and support to labs
- Provide jobs and internships to students
- Help university meet its sustainability goals