



PROJECT SCOPE: ISSUES AND SOLUTIONS: COOLERS & RECYCLING

During my co-op, I identified multiple areas for sustainability-based improvement to reduce costs and TCCC's carbon footprint, with a focus on the following two initiatives:

- 1.) Removing underused coolers from TCCC's campus in Atlanta.
- 2.) Increasing awareness to employees about how to recycle.



NAT Floor 3: cooler, vending machine, water rack all offering Dasani plastic bottles



NAT 10: Waste bin: "Food Scraps Only/Landfill" & "Single-Stream Recycle"

Detailed how-to recycling sign: not placed near waste bins

COOLERS:

Marketplace:

- **Issue:** 1 cooler consumes ~697.15 kWh annually. AOC's stop & shop store, Marketplace, has 5 coolers with various beverages for purchase, some which have low selling numbers.
- **Solution:** Remove one cooler & consolidate the beverages based on sales without resulting in a revenue loss.

Total Carbon Savings: 697.15 kWh * 1.68 lbs of CO₂ = **1168.45 lbs**
Total Cost Savings: 697.15 kWh * \$0.09 = **\$62.74**

North Avenue Towers:

- **Issue:** 1 countertop cooler consumes ~872.35 kWh annually, but has a 25-50% lower drink capacity.
- **Solution:** Remove the countertop cooler, still allowing for water bottle availability.

Total Annual Carbon Savings: 872.35 kWh * 1.68 of CO₂ = **1455.05 lbs**
Total Annual Cost Savings: 872.35 kWh * \$0.09/kWh = **\$78.51**



These carbon savings are equivalent to carbon held by .6 acres of a forest!

RECYCLING:

- Coca-Cola reported an 81% recycling rate of which 43% were recoverable items (PPA,C&D).
- **Issue:** Inconsistent signage that contributes to a lack of employee recycling engagement.
- **Solution:** Increase recoverable waste recycling rate by 10%, thus increasing overall recycling to 91%.

	Current Status	Future Status (10% increase)
Ton inch of waste	1,896	1,896
Ton inch recycled	1,536 (81%)	1,725 (91%)
Ton inch of recoverable recyclables	660 (43%)	814 (53%)

Using the WARM model, by increasing recycling by 10% in one year (which could potentially be done through recycling initiatives), the extra 1.9 MM lbs of waste we would recycle would result in eliminating 901 CO₂ per year.

RESULTS & FUTURE:

During my internship, I worked on establishing a strong foundation for the next intern who decides to continue this project at Coca-Cola, including ideas, data, contacts, and test trial data. I have been able to work with the store manager of the Marketplace to discuss consolidating beverages in four coolers, as well as the Food & Beverage manager to remove the underused cooler from the NAT 3. Furthermore, I'm working with a sustainability manager to advocate for fixing inconsistencies in recycling information.

References: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator> | https://www3.epa.gov/epawaste/conserve/tools/warm/Warm_Form.html
<https://www.cokesolutions.com/equipment/coolers>

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