STATE OF THE CHAMPLAIN ENVIRONMENT

CHRISTINA ERICKSON, SUSTAINABILITY COORDINATOR

December 15, 2009 || Facilities Committee

Overview of Sustainability Coordinator Role

Sustain Champlain

- Principal promoter of sustainability on campus. Maintains, expands and develops programs aimed at reducing the environmental impact of Champlain College.
- To further the growth of the culture of sustainability
  - Within the **institution**
  - Within the campus **culture**
  - Within our **academic** program
  - Within our physical **operations**

Institution

Sustain Champlain

- Develops overall strategy and direction for campus sustainability goals
  - Policies & guidelines
- Sustain Champlain Committee
  - Members from across campus spectrum (faculty, staff, students)
- Local, Regional, and National Representation and Communication
  - Vermont Campus Sustainability Network (VCSN)
  - Association for the Advancement in Higher Education (AASHE)

Campus Culture

- Intra-campus communication of programs, practices, and events
- Resource person/advisor for student groups, faculty, and staff
  - Environmental Club
  - Sustainability Rep Work Study Students
  - Outreach to students, faculty, staff
- Coordinate events on campus

Academic Programs

Sustain Champlain

- Work with Deans and Faculty to incorporate sustainability into existing curriculum
  - Course content
  - Project ideas
  - Resource for speakers, presentations, etc.
- Media Class example: You Tube Videos
  - Paper Use
  - Mug Incentive Program
  - Composting in the Dining Hall

Physical Operations

Sustain Champlain

- Work with managers and staff to incorporate sustainable principles into routine maintenance, construction & renovation, and purchasing practices
- Review and measure campus operations to ensure environmental best practices and cost efficiency
- Develop and track progress on carbon reduction goals

Utilities: Cost & Consumption
Residence Halls

Sustain Champlain

In order from most to least expensive cost per Gross Square Foot (for FY2009)		In order from most to least expensive cost per bed (for FY2009)	
1. Carriage House	($2.97)	1. Bader	($991.18)
2. Cushing	($2.96)	2. Main Street Suites	($980.32)
3. Lyman	($2.72)	3. Cushing	($897.61)
4. Bader	($2.56)	4. Schillhammer	($627.74)
5. Rowell	($2.39)	5. Lyman	($581.22)
6. Schillhammer	($2.32)	6. South	($561.11)
7. South	($2.27)	7. Summit	($530.72)
8. Jensen	($2.26)	8. 396 Main St.	($507.64)
9. Pearl	($2.22)	9. Adirondack/Lakeview	($495.21)
10. Adirondack/Lakeview	($2.21)	10. Pearl	($492.54)
11. 215 S. Prospect	($2.18)	11. North	($485.16)
12. McDonald	($2.17)	12. McDonald	($483.82)
13. Whiting	($2.14)	13. Hill Hall	($478.22)
14. Hill Hall	($2.13)	14. Bankus	($476.51)
15. 396 Main St.	($2.08)	15. Carriage House	($471.06)
16. Sanders	($2.03)	16. Jensen	($460.94)
17. Bankus	($2.01)	17. Whiting	($455.06)
18. North	($1.89)	18. 215 S. Prospect	($445.59)
19. Main Street Suites	($1.69)	19. Rowell	($442.26)
20. Summit	($1.56)	20. Sanders	($386.71)

Utilities included: Electricity, Gas, Water as per data given from Mary Sanborn, Physical Plant, October 2009. Have data for FY07-FY09.

Notes: Only have electrical costs for Spinner Place, not gas or water; 308 Maple is not included as it only began use in FY10.

Utilities: Cost & Consumption
Academic/Non Residential Buildings

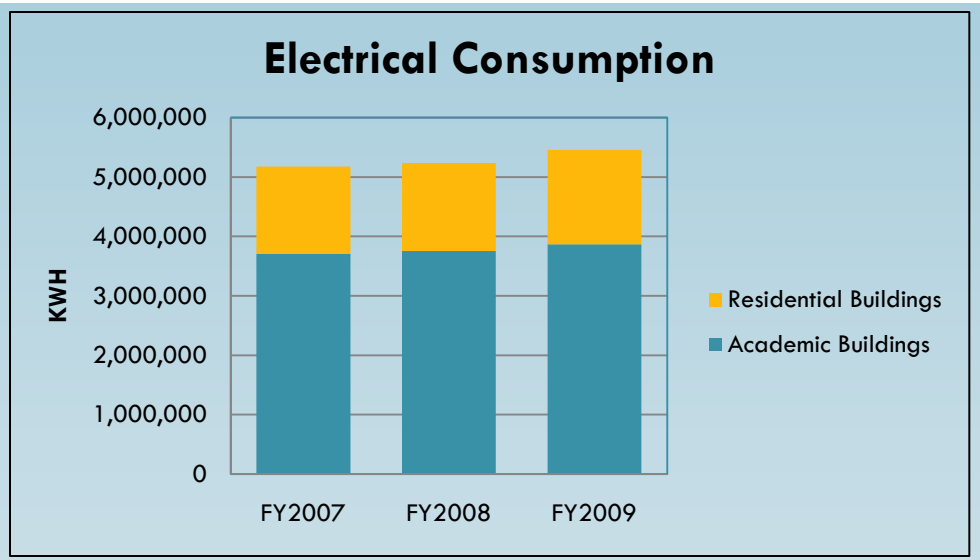
Sustain Champlain

In order from most to least expensive cost per Gross Square Foot (for FY2009) For buildings with complete data		In order from most to least expensive cost per Gross Square Foot (for FY2009) For buildings with *incomplete* data	
1. IDX Student Center	($4.72)	1. Skiff Gallery *does not include water costs	($3.56)
2. Joyce	($3.34)	2. 212 Battery * missing some gas and water costs	($2.36)
3. Ireland Global Business Center	($3.04)	4. Perry Hall * does not include all water costs in 2009	($1.10)
4. Miller Information Commons	($2.89)	5. Skiff Annex * does not include electrical costs	($0.67)
5. Skiff	($2.72)		
6. Hauke	($2.67)		
7. West Hall	($2.21)		
8. Durick	($2.16)		
9. Rowell Annex	($1.97)		
10. Wick	($1.92)		
11. Coolidge	($1.80)		
12. Physical Plant @ 40 Sears Lane	($1.72)		
13. Aiken	($1.12)		
15. Freeman	($0.16)		
16. ARC	($0.06)		
17. Foster	($0.06)		

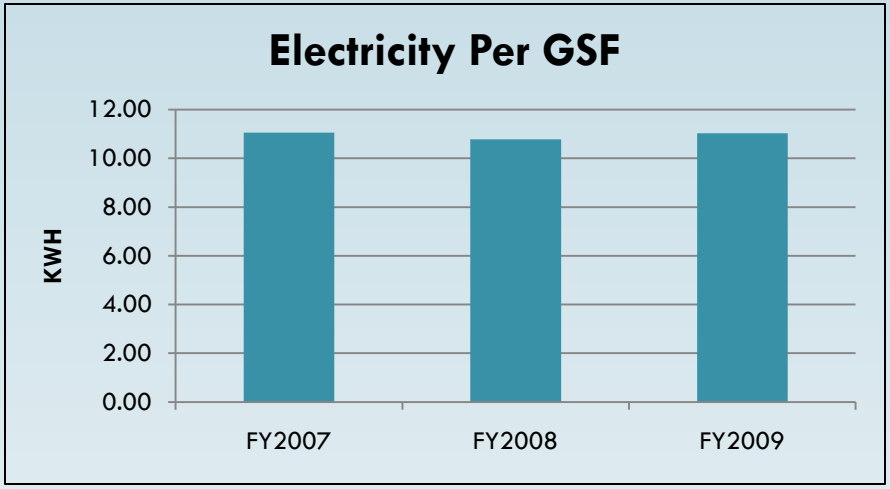
Utilities included: Electricity, Gas, Water as per data given from Mary Sanborn, Physical Plant, October 2009. Have data for FY07-FY09.

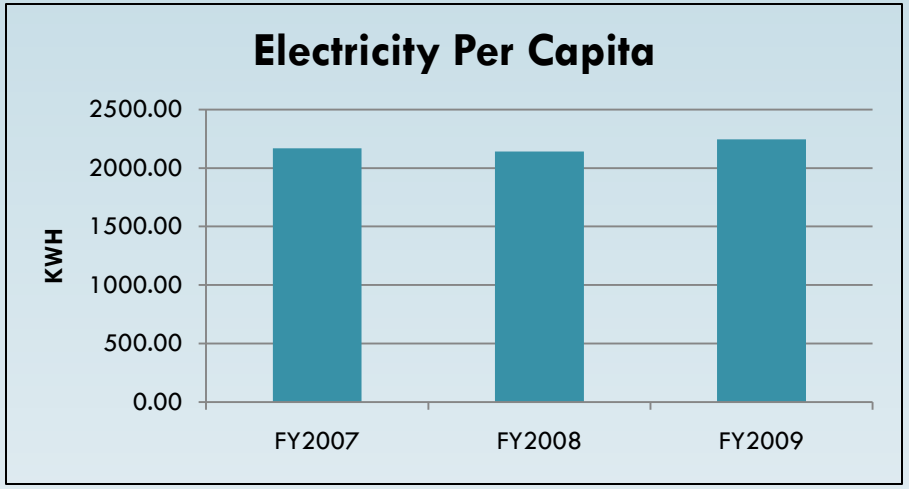
Notes: Buildings serve a variety of functions and therefore can not often have direct comparisons.

Utilities: Electricity FY07-FY09

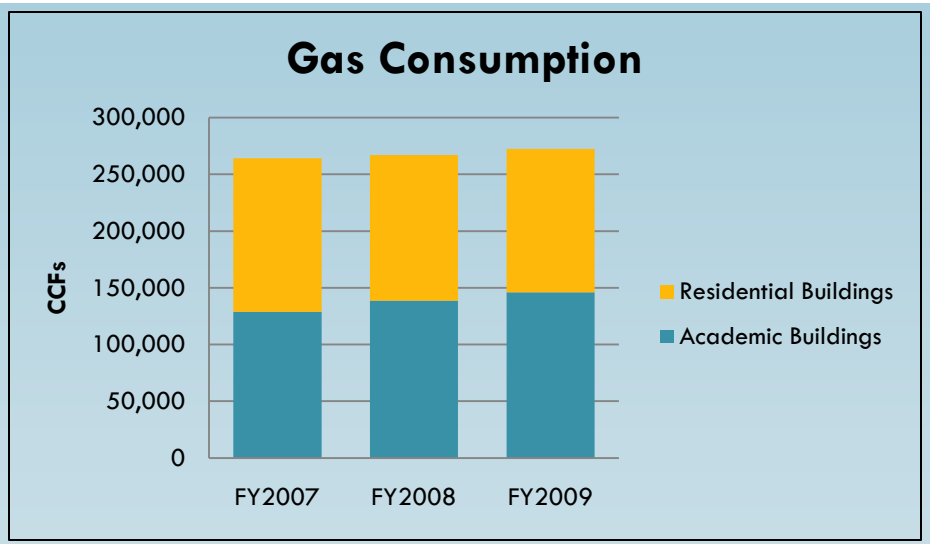


Trends: overall increase in electrical consumption, but fairly level over per GSF and per Capita





Utilities: Gas FY07-FY09



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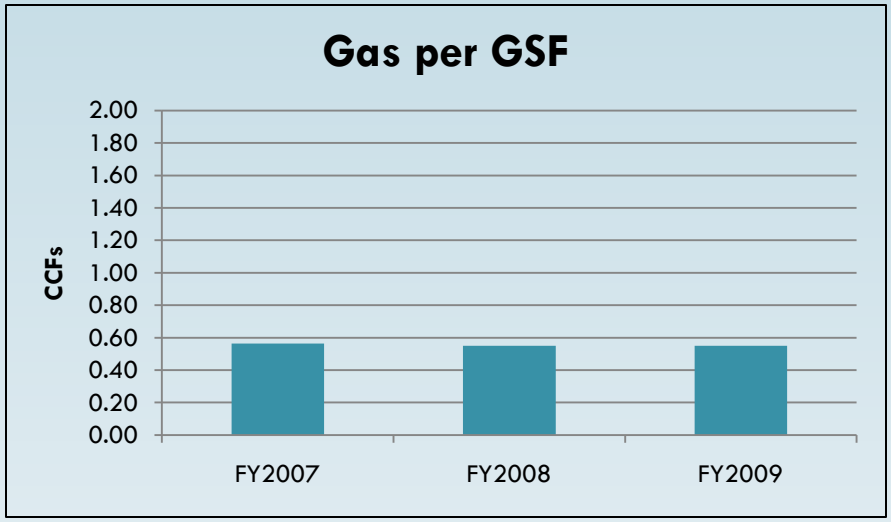
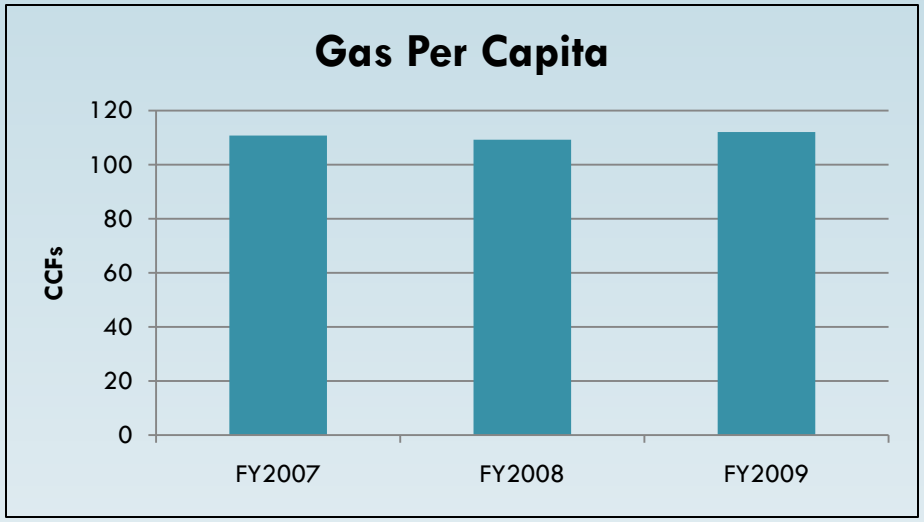
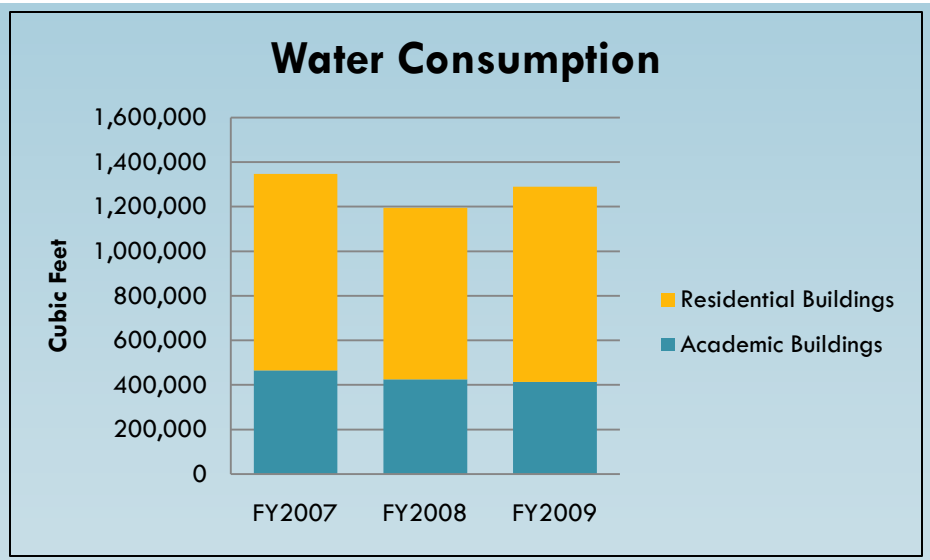
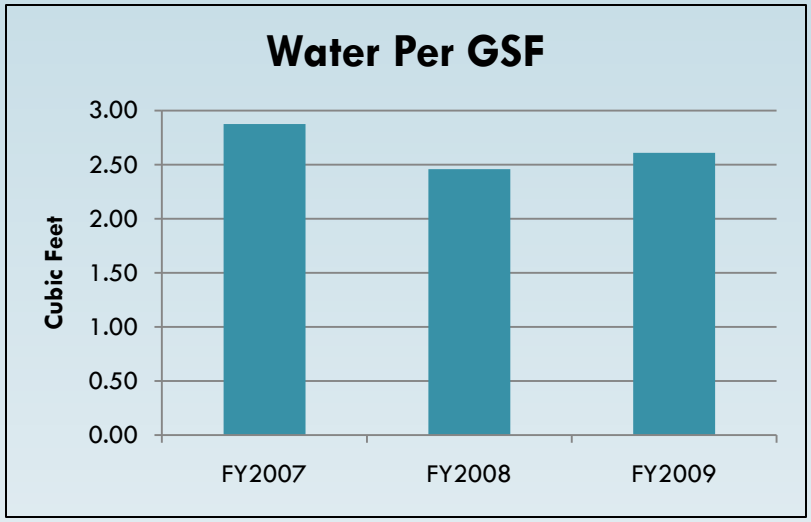


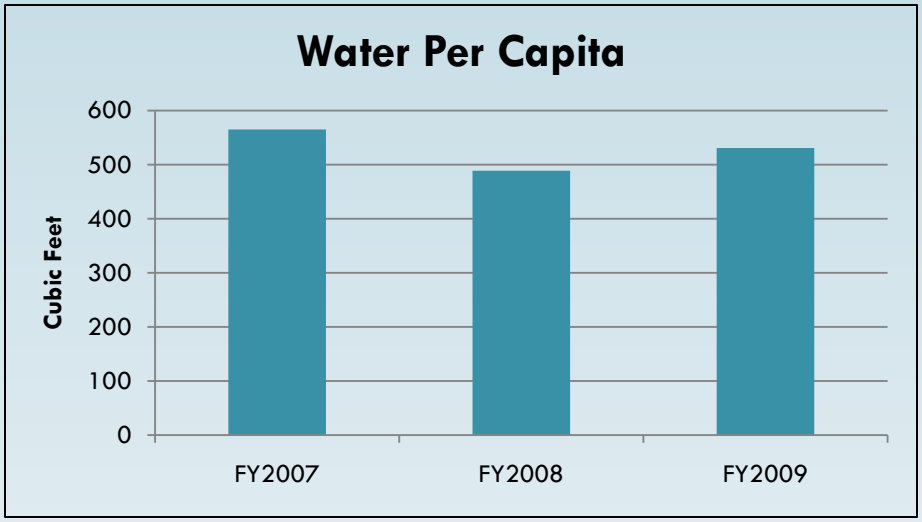


Utilities: Water FY07-FY09



Trends: significant reduction in 2008, slight increase in 2009 while still lower than 2007; same pattern for per GSF & per Capita



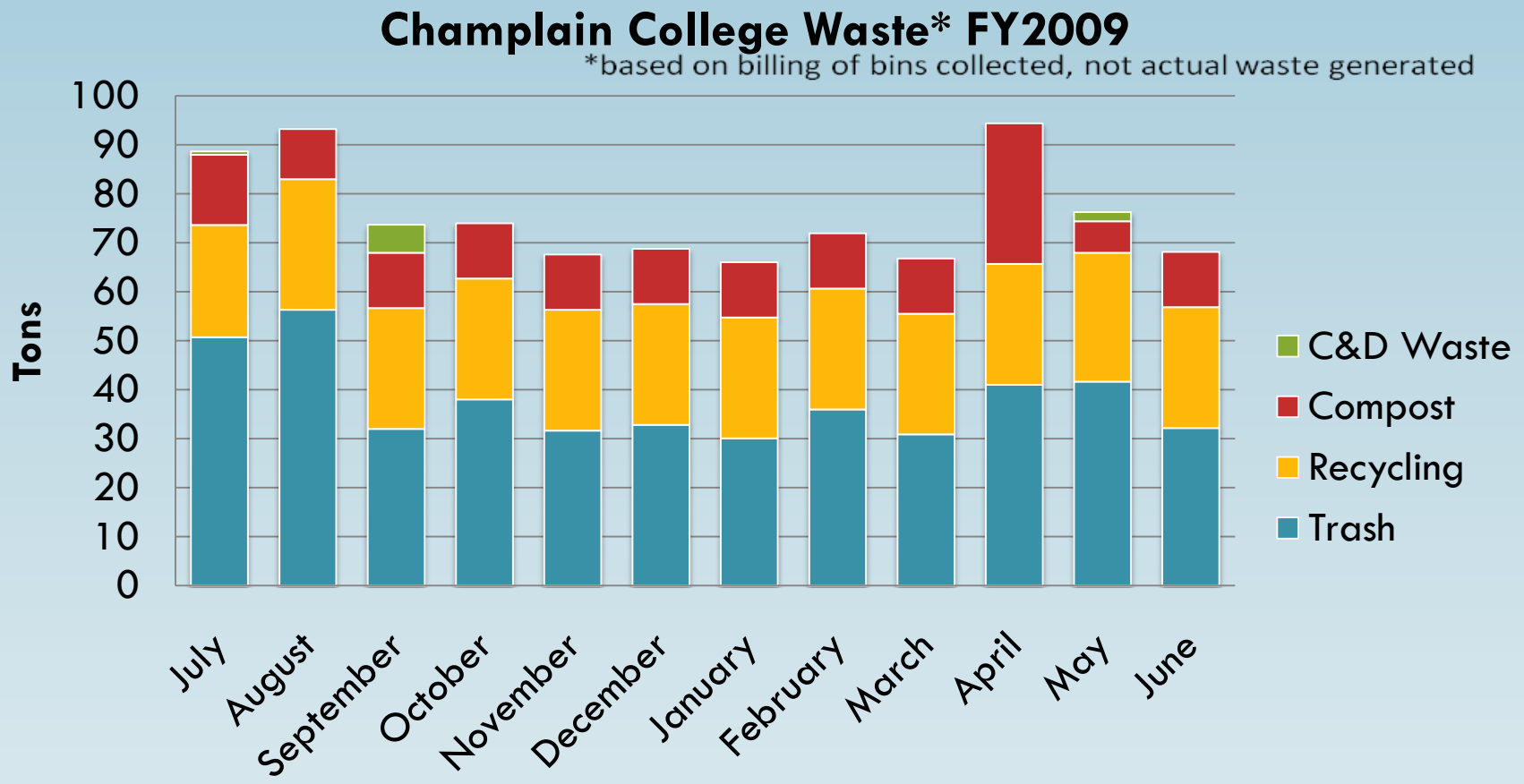


Utility reduction recommendations

Sustain Champlain

- Ensure energy management system is running at best capacity, especially during break times
- Enable best power management systems for computers, etc. on campus
- Continue to look for energy conservation measures (VendingMisers, etc.)
- Base renovation decisions on utility usage per GSF
- Winter break shut-down
  - Ask faculty to shut off/unplug in their offices
  - Res Life policy about unplugging in res halls
  - Schedule staff holidays so that buildings can be shut down

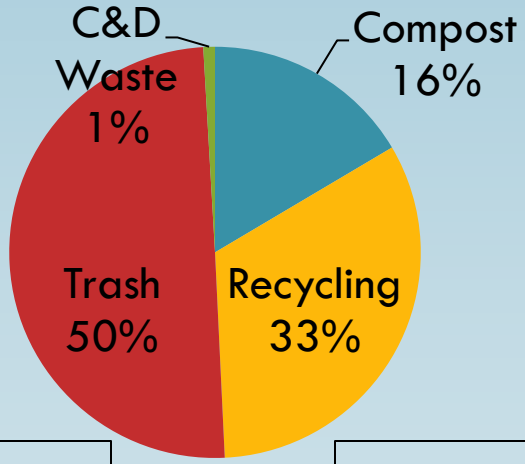
Waste

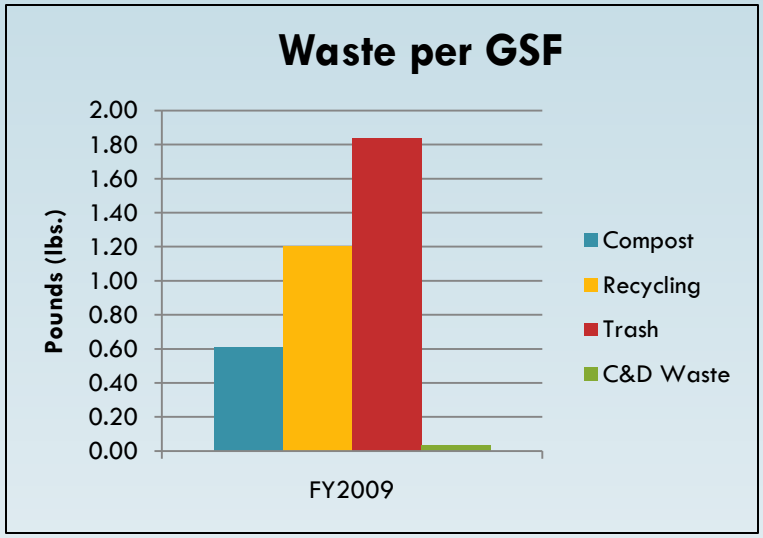


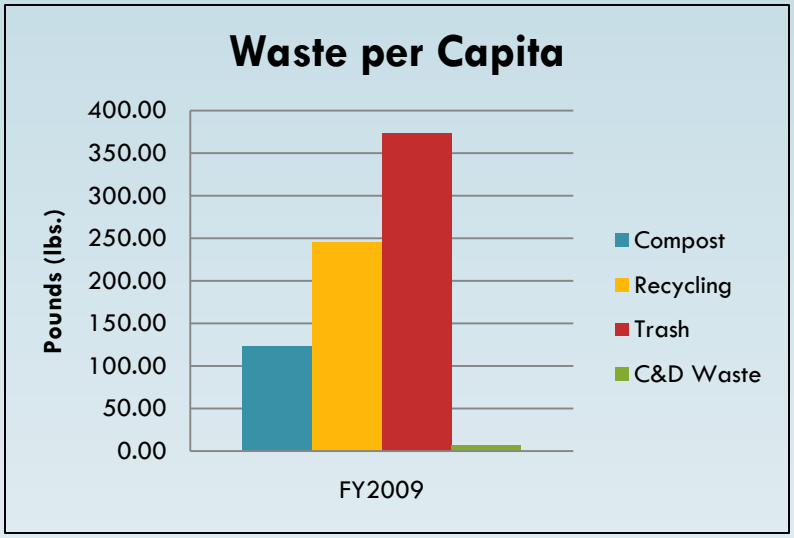
NOTES: Trash is the most accurate weight, as the large compactor is billed by actual weight, not volume as most other bins are. See slight increase in recycling in August and May, reflecting move in/move out. Highest rates of trash are during the summer during conference season. FY09 is the only year we have detailed data.

Waste

Champlain College Waste FY2009







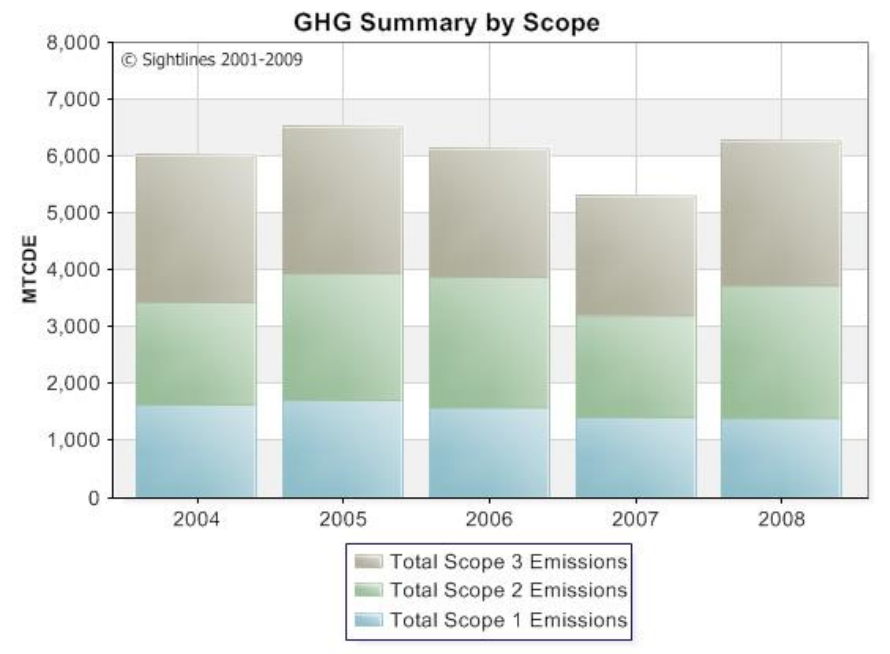
Waste reduction actions

- Increase composting capabilities, especially via Events & Conference Services and Catering
- Explore new options for two bin collection system for academic/non residential buildings and outdoor spaces
- Ensure training of custodial staff regarding current recycling procedures
- Expand waste reduction education program
  - Potential AmeriCorps position via Vermont Campus Compact for 2010-2011

Greenhouse Gas Emissions

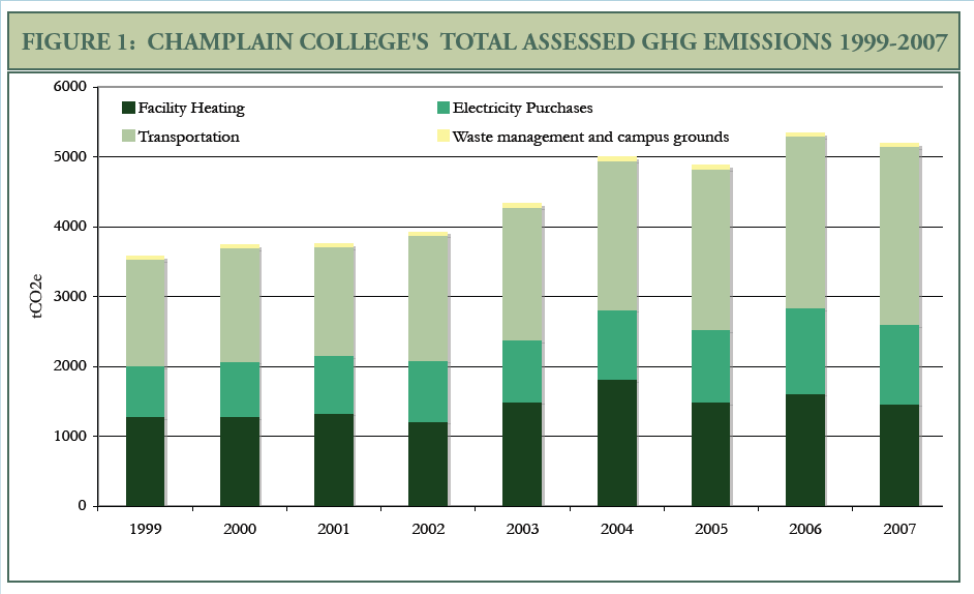
Sustain Champlain

Sightlines Go-Green Portfolio Results



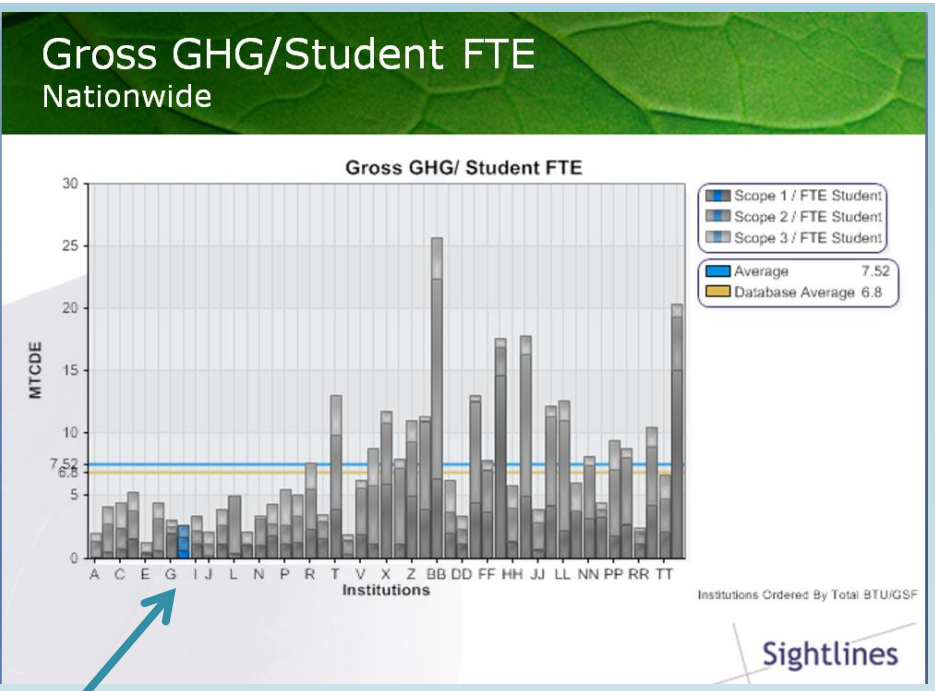
Primary Scope 1 emissions: natural gas
Primary Scope 2 emissions: electricity
Primary Scope 3 emissions: transportation

Springhill Solutions Results

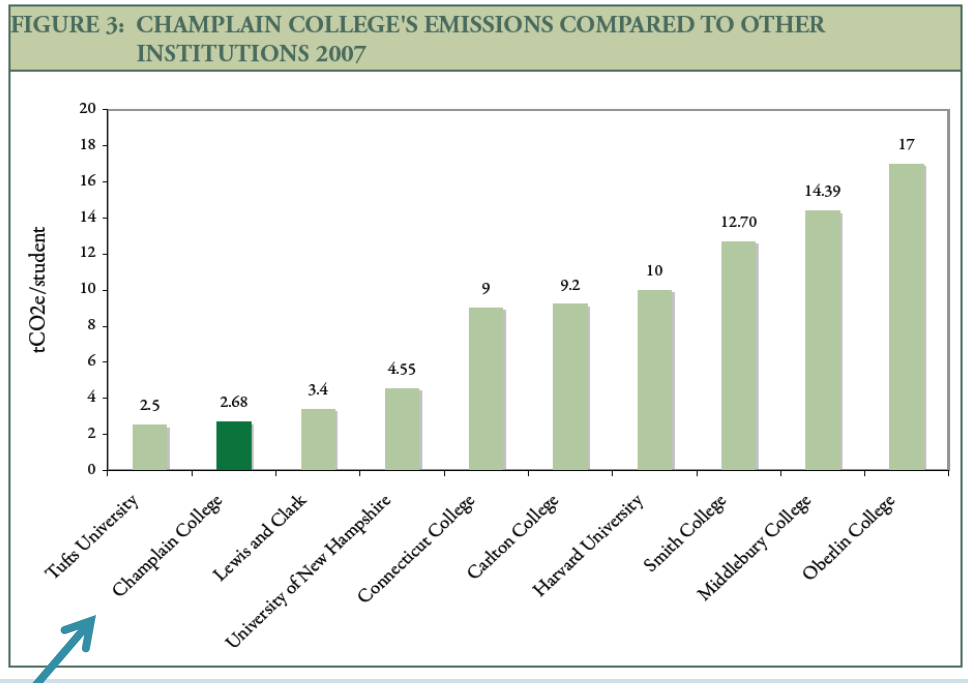


Notes: slight variation between two assessments, likely due to different calculation methods

Greenhouse Gas Emissions: Comparisons to other institutions



Sightlines: National Comparison



Springhill Solutions: Northern Institutions Comparison

Notes: relatively low GHG emissions comparatively, likely due to our high rate of density

GHG Emissions Reduction Recommendations

- Need to set target goals
  - Explore options of signing American College & University Presidents Climate Commitment or other comparable commitments
- Need to develop implementation plan
- Need to keep eye toward GHG regulations for smaller institutions (new EPA regulations for institutions generating over 25,000 CO_2e)