

**Environmental Audit of Susquehanna University**

FINAL VERSION

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## TABLE OF CONTENTS

I.	Introduction.....	4
II.	Components of Environmental Audit.....	8
	a. Energy.....	8
	b. Solid Waste.....	18
	c. Greenhouse Gas Inventory.....	20
	d. Water.....	27
	e. Food.....	35
	f. Recycling.....	37
	g. Purchasing.....	41
III.	Group of 24 Analysis.....	43
	Bibliography.....	53
	Appendix I: Data Tables.....	55
	Appendix II: Oberlin College’s Green Purchasing Policy.....	71
	Appendix III: Group of 24 Summary Table.....	79
	Appendix IV: Group of 24 Survey Responses.....	87
	ALLEGHENY COLLEGE.....	88
	DICKINSON COLLEGE.....	92
	FURMAN UNIVERSITY.....	96
	HOPE COLLEGE.....	100
	LUTHER COLLEGE.....	104
	MACALESTER COLLEGE.....	108
	MORAVIAN COLLEGE.....	112
	SOUTHWESTERN UNIVERSITY.....	116
	ST. LAWRENCE UNIVERSITY.....	120
	SUSQUEHANNA UNIVERSITY.....	124
	URSINUS COLLEGE.....	128
	WASHINGTON & JEFFERSON COLLEGE.....	132

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## **I. Introduction**

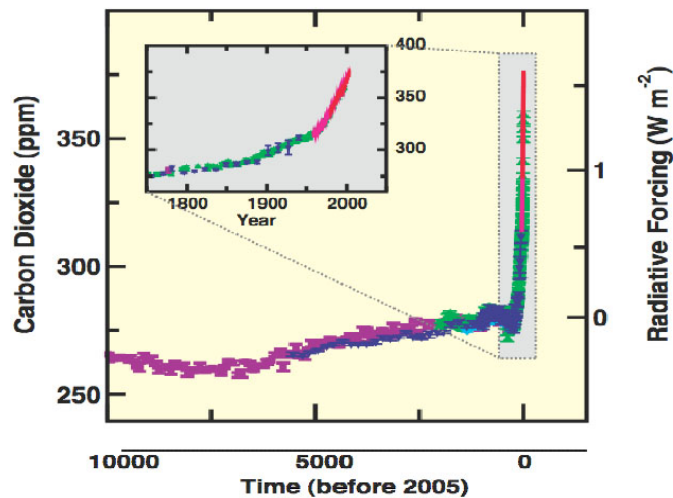
College and university campuses across the U.S. are rapidly shifting toward more environmentally sustainable practices. At Susquehanna University, a Campus Sustainability Committee was formed in the spring of 2008, and its first priority was to complete an environmental audit of SU. An environmental audit is a comprehensive and quantitative analysis of an institution's resource use, policies, and practices related to environmental sustainability. The audit is also a means to promote environmental awareness on campus.

The goals of this audit are:

1. To gather and disseminate information on SU's energy, solid waste, water, food, recycling, and purchasing practices;
2. To calculate SU's overall carbon footprint;
3. To compare SU's practices with its comparison "Group of 24" schools; and
4. To raise environmental awareness across the SU community.

The number of colleges and universities across the United States that are stepping up to become more environmentally sustainable is increasing. There are currently 558 signatories of the American College and University Presidents Climate Commitment (ACUPCC; <http://www.presidentsclimatecommitment.org/>), 375 college and university signatories of the Talloires Declaration (<http://www.iisd.org/educate/declarat/tallore.htm>), and over 500 members of the Association for the Advancement of Sustainability in Higher Education (AASHE; <http://www.aashe.org/>), with the numbers rising yearly. The appeal to incoming students provides part of the answer to why these colleges and universities are investing so much effort in eco-friendly policies. Richard Hurley, president of the American Association of University Administrators, states that school officials across the country are taking conservation seriously because they see advantages both in eventual cost savings and as a recruiting tool (MacDonald, 2007). When asked whether University of Minnesota Morris's renewable energy efforts were a draw for prospective students, Chancellor Jacqueline Johnson said "Are you kidding? The polite answer is yes." (Marshall, 2008). A survey from the Princeton Review, which has recently begun to rate colleges' sustainability, found that two-thirds of prospective students would value a commitment to the environment in their college choice, and almost a quarter said it would strongly influence it (Kinzie, 2008).

Decreasing our resource use is also beneficial for the climate and the environment. The Intergovernmental Panel on Climate Change’s (IPCC) 2007 Fourth Assessment Report states that, “Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level (IPCC, 2007). The report attributes this warming to anthropogenic emissions of greenhouse gases such as carbon dioxide (CO<sub>2</sub>) with a very high degree of certainty. The global atmospheric concentration of CO<sub>2</sub> has increased from 280 parts per million to 379 parts per million since the start of the Industrial Revolution. The rapid increase is primarily due to fossil fuel use and land-use change.



**Figure 1.1:** Changes in carbon dioxide from ice core and modern instrumental data: The large panel shows atmospheric concentrations of carbon dioxide over the last 10,000 years; the inset panel shows them since 1750. Ice core measurements (symbols with different colors for different studies) and atmospheric sample measurements (red lines) are shown. From IPCC (2007).

Al Gore, winner of the 2007 Nobel Peace Prize along with the IPCC, “for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change,” recently summarized our current energy and climate crisis in this way: “Our dangerous over-reliance on carbon-based fuels is at the core of all three of the challenges that the U.S. faces today - the economic, environmental, and national security crises. We’re borrowing money from China to buy oil from the Persian Gulf to burn it in ways that destroy the planet. Every bit of that has to change.” (Gore, 2008)

The third reason to self-assess our resource use at SU is our impact on our local environment. The technological advances that we take for granted on a daily basis, such as running water, waste disposal, and fossil-fuel-based transportation, affect the local environment as well as the global environment. The water used by the University is pumped from groundwater aquifers that recharge very gradually, so that water should not be thought of as a limitless resource. After water flows through the University's faucets, showers, sinks, and toilets, it is treated at a wastewater treatment plant and deposited into the Susquehanna River, the place where we canoe, kayak, and fish.

The University's solid waste is transported to the Lycoming County Landfill. Although this landfill does recover methane from the decomposing trash and use it to generate electricity, the landfill is almost two-thirds full: 57 acres of the 88, or 64%, that are permitted for waste disposal, are filled or in currently the process of being filled. An example of an ongoing solid waste dilemma can be found in Europe. Once Europe's current landfills are full, which is estimated to be in about 9 years, their garbage will have nowhere to go. Recently, the landfills in Naples, Italy have reached capacity, so trash has been piling up in their streets. Hamburg, Germany is currently accepting some of the trash from Naples, but will only do so for a short period of time. No long-term solution has been determined for this problem.

The coal that fires the steam plant on campus is mined locally in PA. Not only is coal mining environmentally damaging, but abandoned coal mines cause acidic waters to drain into many of PA's streams. In addition, the coal burned in the power plant degrades local air quality by releasing pollutants into the air.

Finally, everyone is acutely aware of the current high gasoline prices. The high prices are due to the decreasing supply of oil, the increasing demand, and the instability of the nations that produce most of the world's oil. Once the global supply of oil is depleted, the United States must turn to other energy sources.

In summary, the reasons to complete an environmental audit are straightforward. First, faculty, staff, students, and prospective students all across the U.S. want to see changes in their colleges' current environmental practices, and are becoming increasingly vocal about their wishes. Here at SU, GeoClub distributed a survey in 2005 about SU's recycling practices, in which 345 students participated. One of the questions asked if the University should recycle a) only if it proves profitable, b) only if SU can break even while doing it, or c) even if recycling

costs more than regular trash removal, and a remarkable 78% of respondents said that SU should recycle “even if recycling costs more than regular trash removal.” Faculty members also want to see sustainability issues addressed. In November 2007, faculty members almost unanimously voted in favor of pursuing LEED (Leadership in Energy and Environmental Design; <http://www.usgbc.org/>) certification of the University’s new science building.

The second reason to do an environmental audit is that scientific data show that emissions of greenhouse gases lead to global warming. SU releases greenhouse gases by using electricity, by burning coal, gas, oil, diesel, gasoline, and propane, and by disposing of trash in a landfill. For this reason, it is important to reduce our greenhouse gas emissions as quickly as is realistically possible. Lastly, our local environment is negatively affected by our daily habits like energy use, water use, and solid waste generation.

Sustainability is far more than just recycling competitions and a few LEED certified buildings; it is a way of thinking and a way of living without having a negative impact on the environment. Living sustainably is complex, challenging, and needs the cooperation of students, faculty, staff, and administrators to make it a reality. These changes are plausible, not impossible. This audit was done to assess the current level of sustainability on campus, to compile all the University’s resource use data in one place so that anyone can look through and analyze it, and hopefully, to change the University’s way of thinking on sustainability issues.

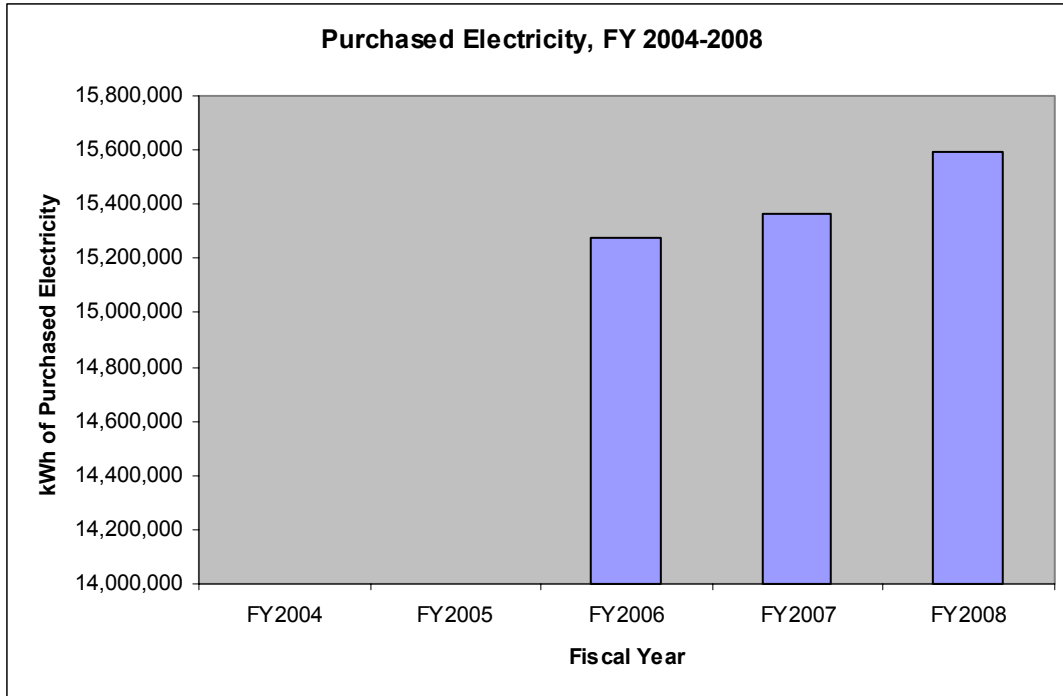
## **II. Components of Environmental Audit**

The environmental audit data in this section are divided into seven subsections: energy, solid waste, greenhouse gas inventory, water, food, recycling, and purchasing. The majority of the data were gathered through questionnaires sent to Facilities Management and Food Service (ARAMARK). Data from Facilities (located in Appendix I, Tables 1.1 through 1.8 and Tables 1.20 to 1.25) are used in the energy (section IIa), solid waste (section IIb), greenhouse gas inventory (section IIc), water (section IId), and recycling (section IIe) components of the audit. Data from Food Services (located in Appendix II, Tables 1.18 and 1.19) are utilized in the solid waste (section IIb), food (section IIe), and recycling (section IIe) components. The purchasing data were gathered from staff at the Office of Information Technology and the SU Print Shop.

### **a. Energy**

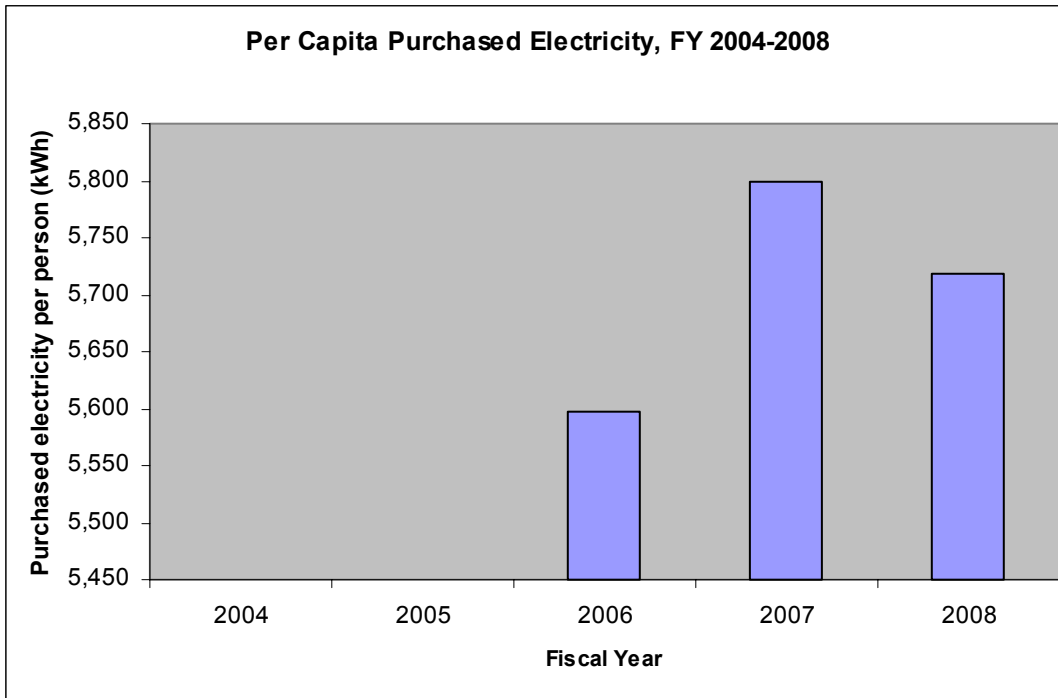
The sources of energy used at SU include purchased electricity, coal, natural gas, distillate oil (#1-#4), propane, gasoline, and diesel. The University buys its electricity from PPL; this electricity provides energy for normal electric uses (lights, computers, etc.), many of the campus water heaters, and the 23 electric carts used by Facilities, Athletics, Information Technology, and Print Shop staff. Bradford Coal supplies the coal that fires the steam plant on campus. UGI-Penn Natural Gas supplies natural gas for some heating systems and a few water heaters. Moyer's Propane supplies the propane for the forklift tanks and the emergency generator in the library. The University purchases distillate oil, gasoline, and diesel from Farm & Home. A few water heaters and some heating systems use distillate oil. Gasoline is used in vehicles, and off-road diesel is used in much of the power equipment (mowers, etc.) used on campus.

Figure 2.1 illustrates the number of kilowatt-hours of electricity used at SU for fiscal years (FY, July 1 – June 30) 2006-2008. The totals have remained relatively constant over the past three years, with a slight increase of 2% from 2006 to 2008. An average of about 15,400,000 kWh per year was used from 2006-2008. There were no data available for the years 2004 and 2005. The total costs for purchased electricity for the three years were \$964,006.96 for 2006, \$928,085.57 for 2007, and \$980,871.96 for 2008. Although the number of kilowatt-hours of electricity was larger in 2007 than in 2006, the cost was lower.



**Figure 2.1:** Purchased electricity data in kWh for FY 2004-2008. Actual data are listed in Table 1.1 in Appendix I. No data are available for 2004 and 2005. Note that y-axis scale begins at 14,000,000 kWh.

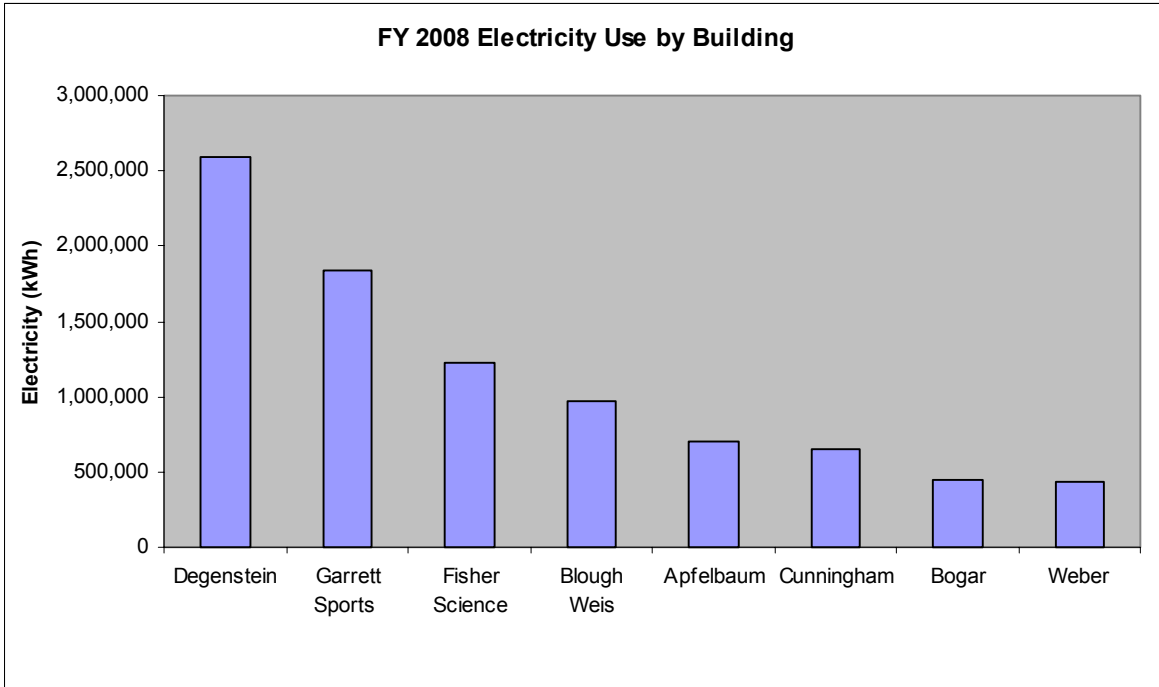
Figure 2.2 illustrates number of kilowatt-hours of electricity per capita for FY 2006-2008. The total number of SU community members used in the per capita calculation includes part-time, full-time, and summer students, faculty, and staff. A data table with this information can be found in Table 1.4 in Appendix I. The average per capita electricity use is 5,705 kWh. The number of kWh per person increased from 2006 to 2007 and decreased from 2007 to 2008.



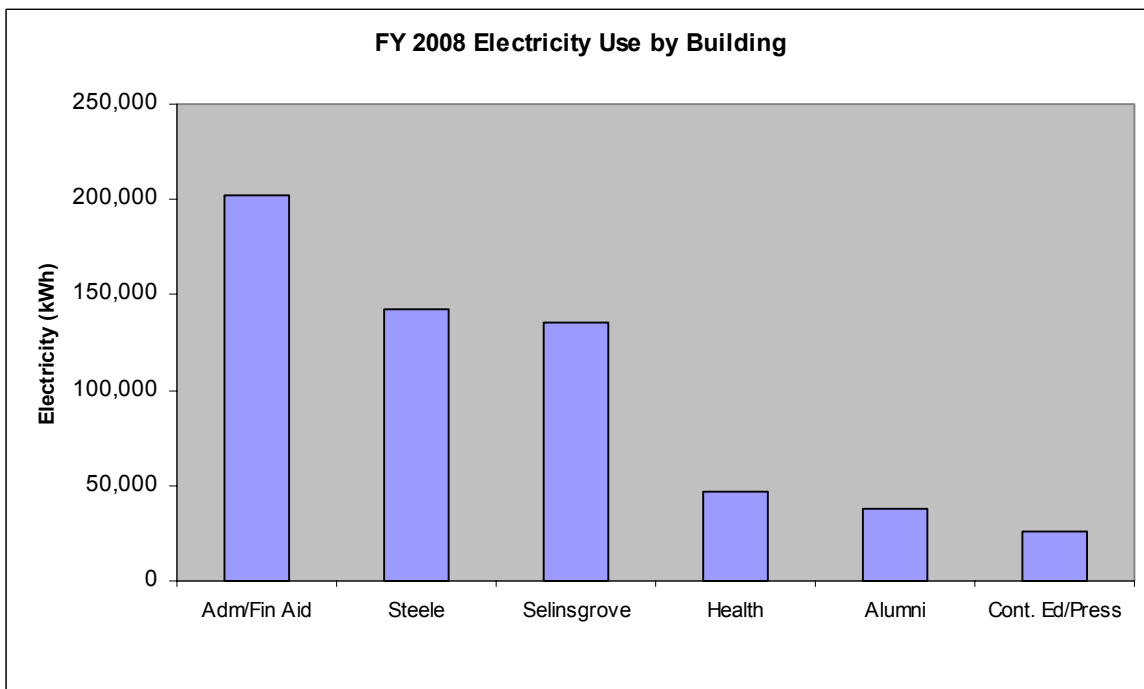
**Figure 2.2:** Purchased electricity per capita for FY 2006-2008: Actual data are listed in Tables 1.2 and 1.3 in Appendix I. No data are available for 2004 and 2005. Note that y-axis scale begins at 5,450 kWh per person.

Figures 2.3 through 2.8 show electricity use for individual campus buildings for FY 2008. Figures 2.3 and 2.4 illustrate the electricity use by on-campus buildings other than dorms. The top electricity users were Degenstein Campus Center (2,596,060 kWh), Garrett Sports Complex (1,844,231 kWh) and Fisher Science (1,222,018 kWh). The three buildings with the lowest electricity use were the Health and Counseling Center (46,896 kWh), Alumni House (37,473 kWh), and the Continuing Education and Press Offices (25,955 kWh).

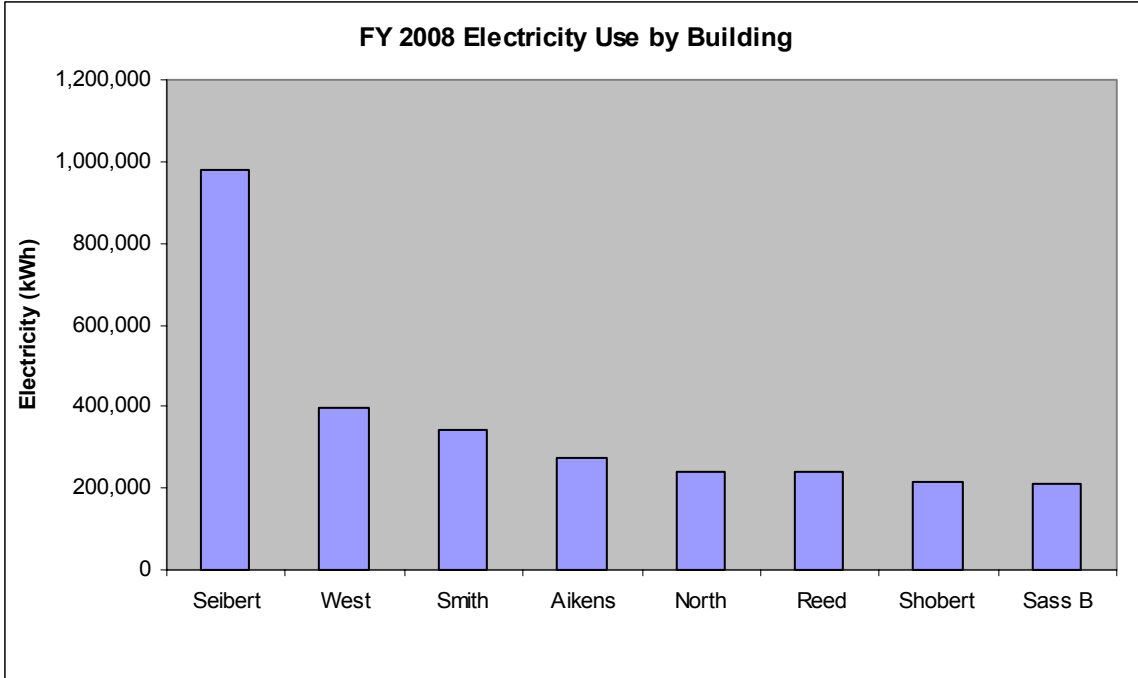
Figures 2.5 and 2.6 illustrate electricity use in dormitories during FY 2008. Seibert Hall was the largest electricity user, using more than double the next leading dormitory, with 981,200 kWh. The next two top dormitory electricity users were West Hall (394,475 kWh) and Smith Hall (343,936 kWh). The three dorms that used the least electricity were Roberts House (18,992 kWh), Isaacs House (14,048 kWh), and Sassafras C (7,597 kWh).



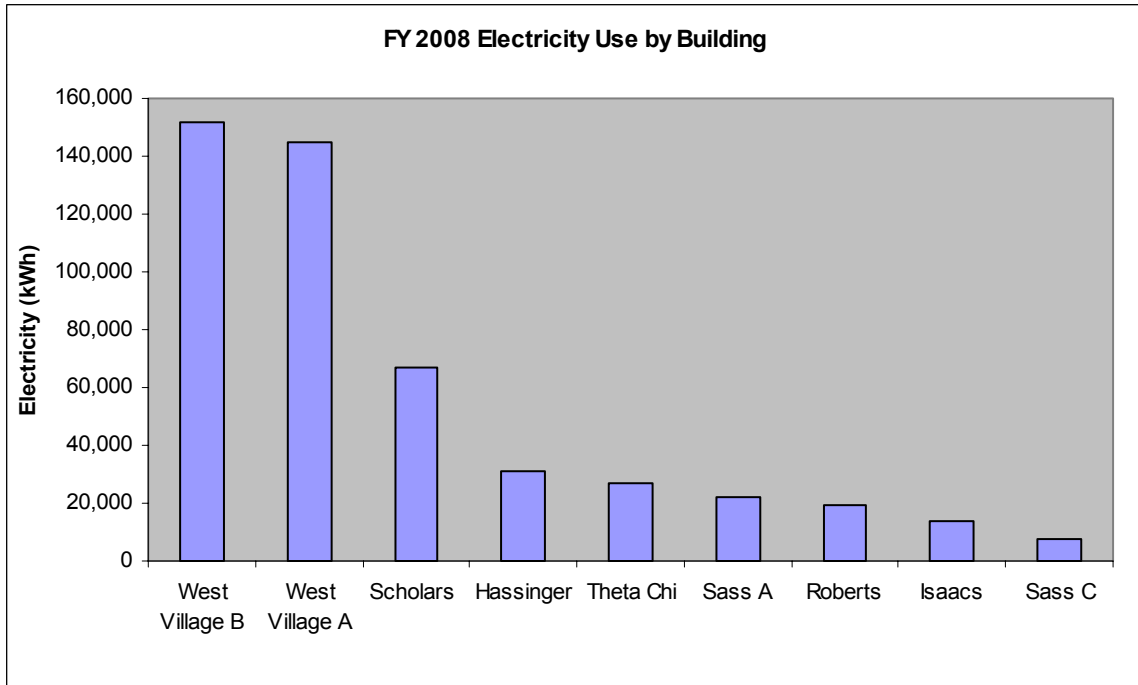
**Figure 2.3:** FY 2008 electricity use in on-campus buildings with annual totals greater than 400,000 kWh. Actual data are listed in Table 1.4 in Appendix I.



**Figure 2.4:** FY 2008 electricity use in on-campus buildings with annual totals less than 250,000 kWh. Actual data are listed in Table 1.4 in Appendix I.

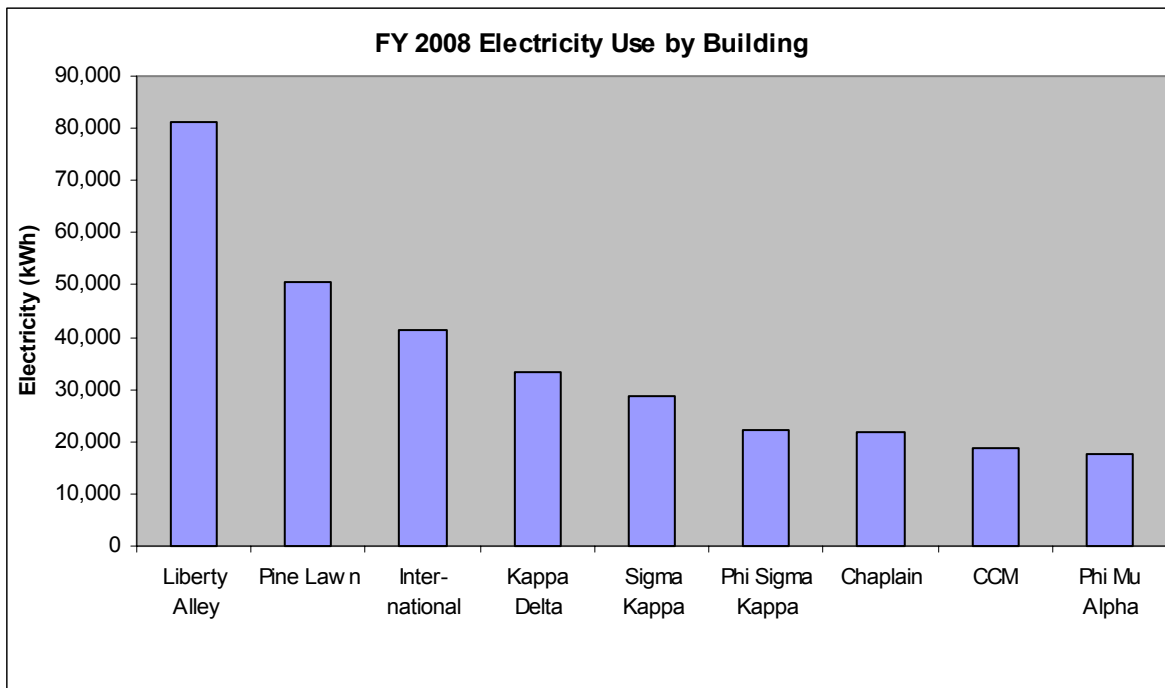


**Figure 2.5:** FY 2008 electricity use in dormitory buildings with annual totals greater than 200,000 kWh. Actual data are listed in Table 1.5 in Appendix I.

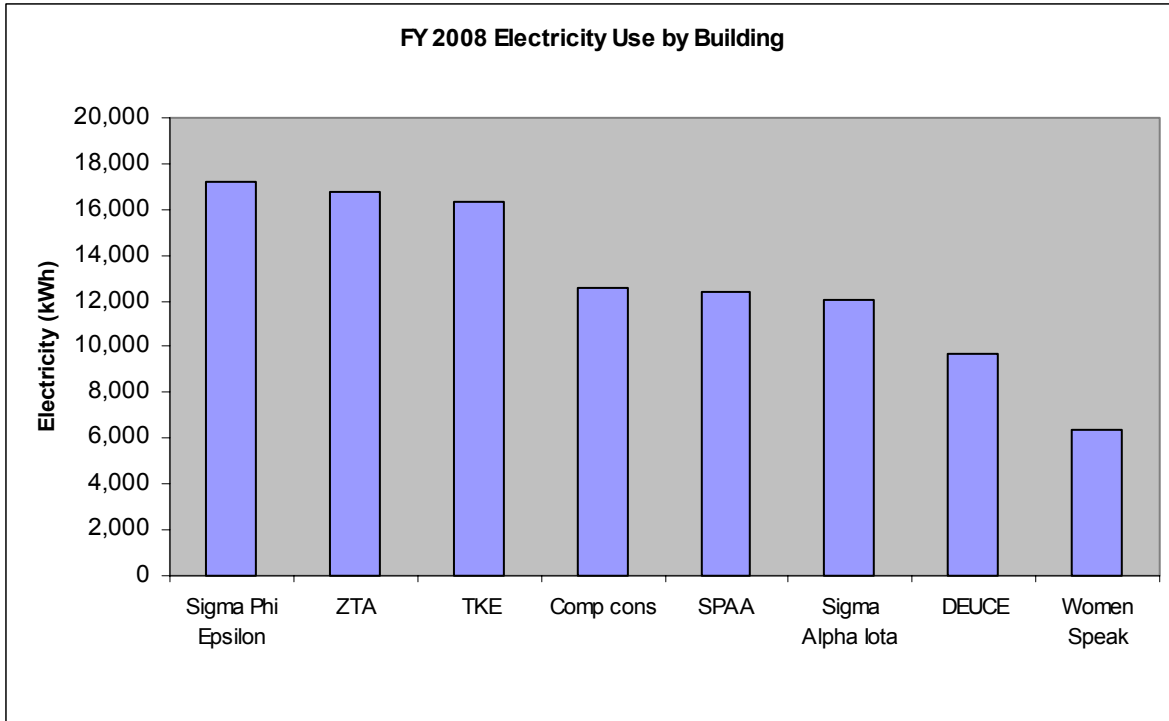


**Figure 2.6:** FY 2008 electricity use in dormitory buildings with annual totals lower than 200,000 kWh. Actual data are listed in Table 1.5 in Appendix I.

Figures 2.7 and 2.8 illustrate the electricity use in University Avenue buildings in 2008. The top electricity users were Liberty Alley (81,173 kWh), Pine Lawn (50,660 kWh), and 313 University Avenue (Presser International House; 41,416 kWh). The three Avenue buildings with the least electricity use were 520 University Avenue (Sigma Alpha Iota House; 12,028 kWh), 409 University Avenue (D.E.U.C.E. House; 9,705 kWh), and 604 University Avenue (Women Speak House; 6,417 kWh).

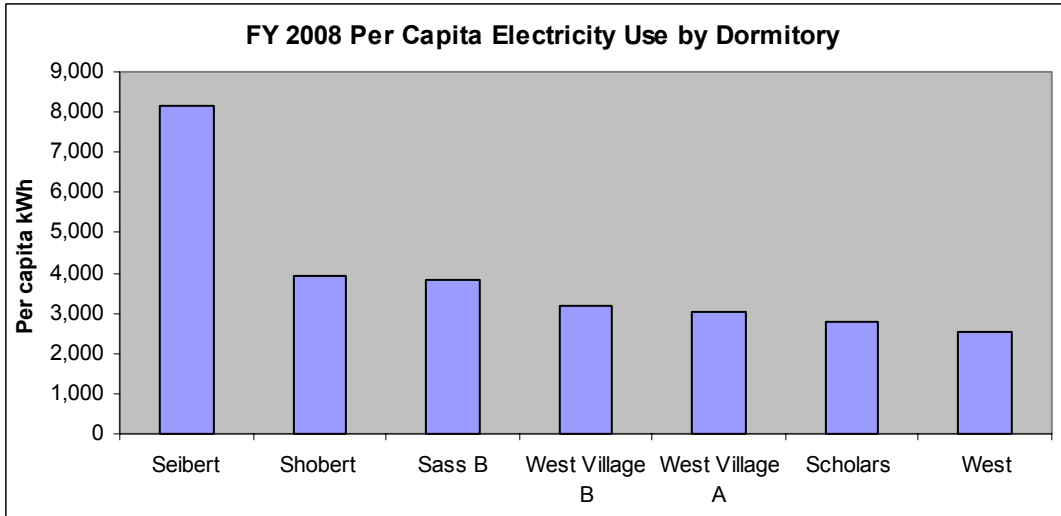


**Figure 2.7:** FY 2008 electricity use in University Avenue buildings with annual totals greater than 17,000 kWh: Actual data are listed in Table 1.6 in Appendix I.

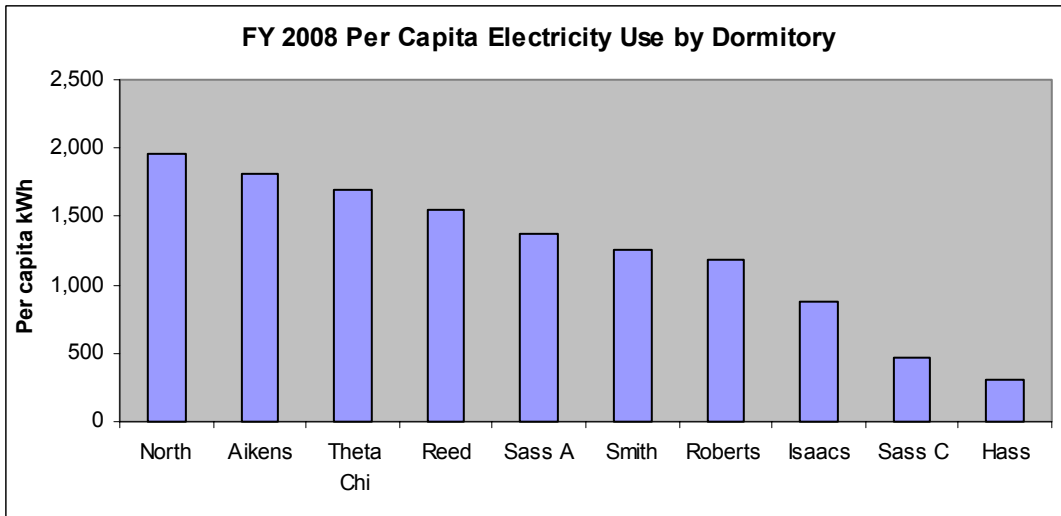


**Figure 2.8:** FY 2008 electricity use in University Avenue buildings with annual totals less than 17,000 kWh: Actual data are listed in Table 1.6 in Appendix I.

Figures 2.9 through 2.12 illustrate per capita electricity use in dormitories and University Avenue houses for FY 2008. Tables 1.7 and 1.8 in Appendix I list the number of students (plus faculty, in Seibert and Hassinger) in each dormitory and University Avenue house. As shown in Figures 2.9 and 2.10, the top per capita dormitory electricity users were Seibert Hall (8,177 kWh per person; 120 individuals), Shobert Hall (3,925 kWh per person; 55 individuals), and Sassafras B (3,850 kWh per person; 55 individuals). It is important to note that Seibert Hall also houses the Office of Information Technology, which uses a significant amount of electricity and is most likely the cause for the high per capita total for Seibert. The lowest per capita dormitory electricity users were Isaacs House (878 kWh per person; 16 individuals), Sassafras C (475 kWh per person; 16 individuals), and Hassinger Hall (308 kWh per person; 101 individuals).



**Figure 2.9:** FY 2008 per capita electricity use in Dormitories with annual totals greater than 2,500 kWh: Actual data are listed in Table 1.7 in Appendix I.

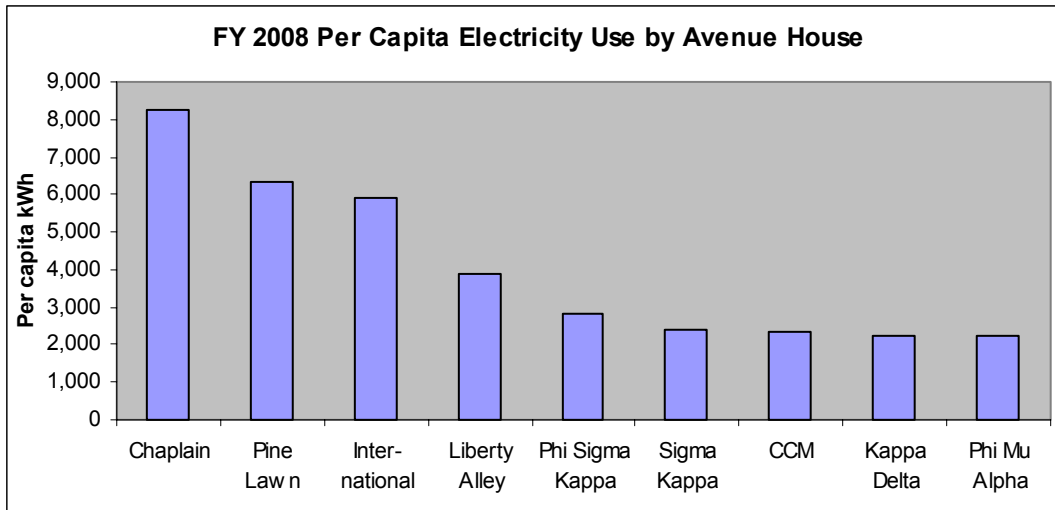


**Figure 2.10:** FY 2008 per capita electricity use in Dormitories with annual totals less than 2,000 kWh: Actual data are listed in Table 1.7 in Appendix I.

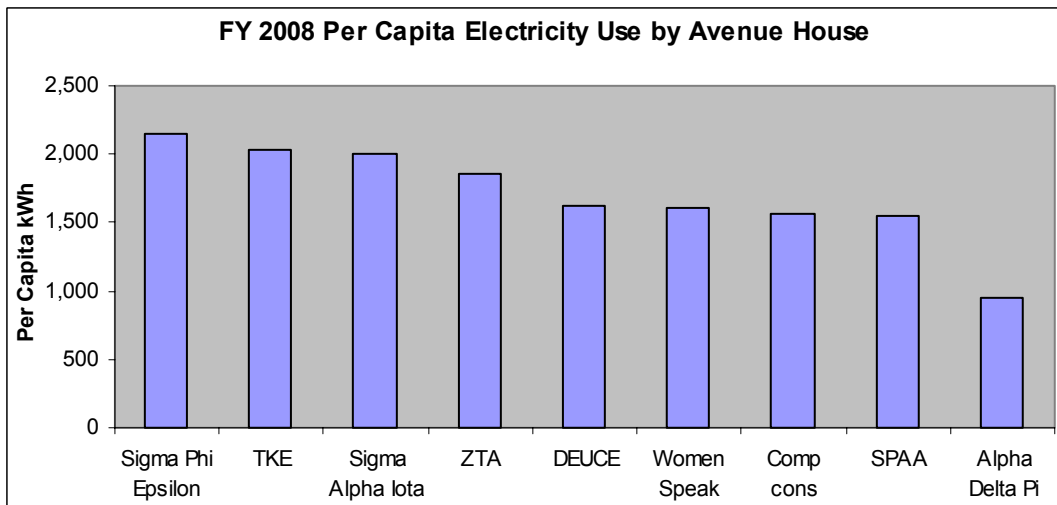
Figures 2.11 and 2.12 illustrate the per capita electricity use in University Avenue houses. The top per capita electricity users in Avenue houses were the Chaplain’s house (8,250 kWh per person; 2 individuals)<sup>1</sup>, Pine Lawn (6,333 kWh per person; 6 individuals), and 313 University

<sup>1</sup> The per capita electricity figures for the Chaplain’s House and Pine Lawn have been multiplied by a factor of 9/12 to reflect the year-round occupancy of these residences, compared to the 9-month residency of other Avenue houses.

Avenue (Presser International House; 5,917 kWh per person; 7 individuals). The lowest per capita electricity users in Avenue houses were 312 University Avenue (Comp Cons; 1,570 kWh per person; 8 individuals), 402 University Avenue (SPAA; 1,552 kWh per person; 8 individuals), and 301 University Avenue (Alpha Delta Pi; 957 kWh per person; 12 individuals).

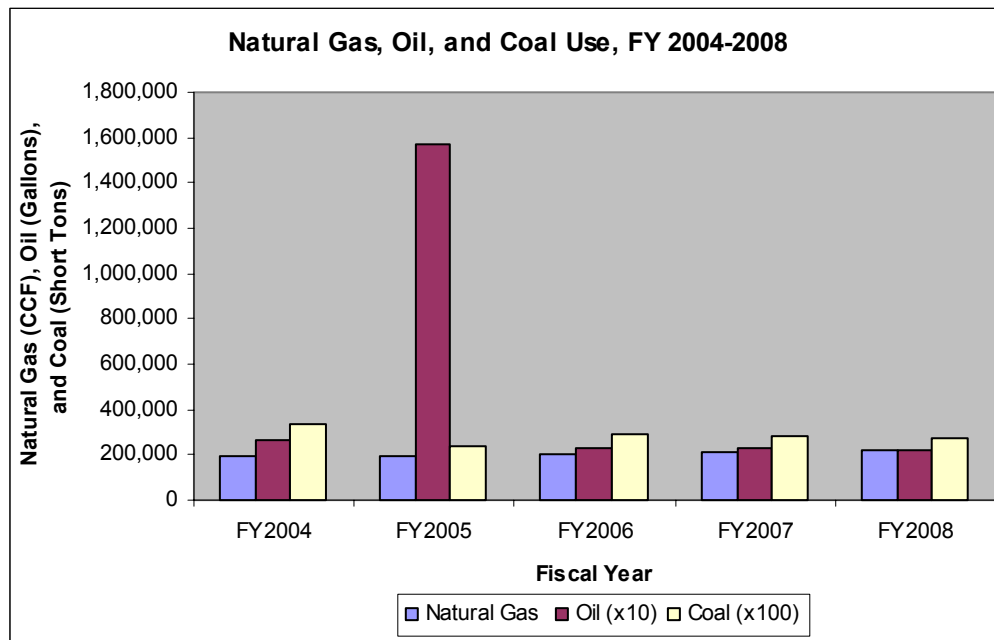


**Figure 2.11:** FY 2008 per capita electricity use in University Avenue buildings with annual totals greater than 2,200 kWh: Actual data are listed in Table 1.8 in Appendix I.



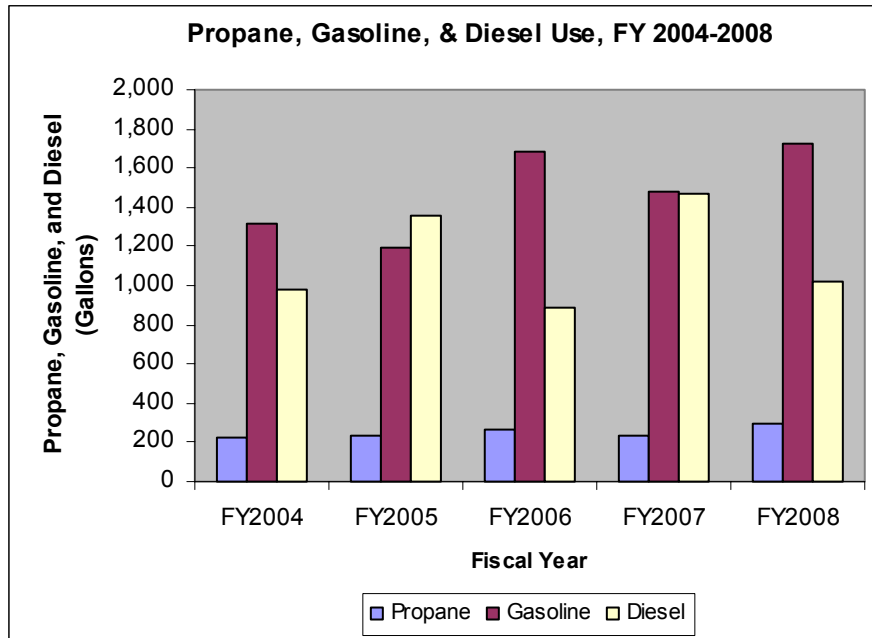
**Figure 2.12:** FY 2008 per capita electricity use in University Avenue buildings with annual totals less than 2,200 kWh: Actual data are listed in Table 1.8 in Appendix I.

Figure 2.13 illustrates the total University usage of natural gas, coal and distillate oil from FY 2004-2008. Natural gas averages about 203,300 CCF (1 CCF = 100 cubic feet of natural gas) per year, distillate oil averages about 50,300 gallons per year, and coal averages about 2,800 short tons (1 short ton = 2,000 pounds) per year. The explanation for the large jump in oil usage in 2005 was that the boiler room burned oil, instead of coal, through much of the winter of 2005. As a consequence, coal consumed in 2005 was 900 tons less than 2004.



**Figure 2.13:** Natural gas (CCF), distillate oil (x10 gallons), and coal (x100 short tons) use for FY 2004-2008: Actual data are listed in Table 1.1 in Appendix I.

Figure 2.14 illustrates the total number of gallons of propane, diesel, and gasoline for FY 2004-2008. Propane averages about 250 gallons per year, diesel averages about 1,150 gallons per year, and gasoline averages about 1,500 gallons per year. Propane use varied in the last three years where it decreased from 265 gallons in 2006 to 239 gallons in 2007 and increased to 294 gallons in 2008. Gasoline use decreased from 2006 to 2007 by 210 gallons, but rose about 600 gallons to 1,725 gallons in 2008. Diesel use has increased in 2006 to 2007 by about 580 gallons, but decreased about 450 gallons in 2008 to 1,022 gallons.



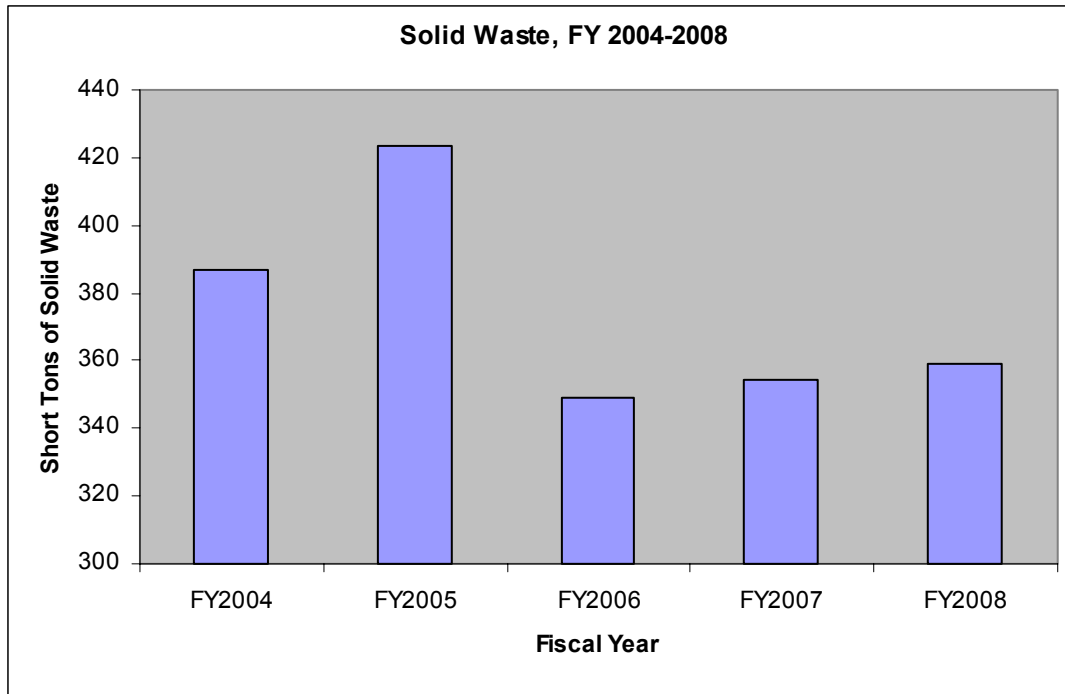
**Figure 2.14:** Total number of gallons of propane, gasoline, and diesel for FY 2004-2008: Actual data are listed in Table 1.1 in Appendix I.

**b. Solid Waste**

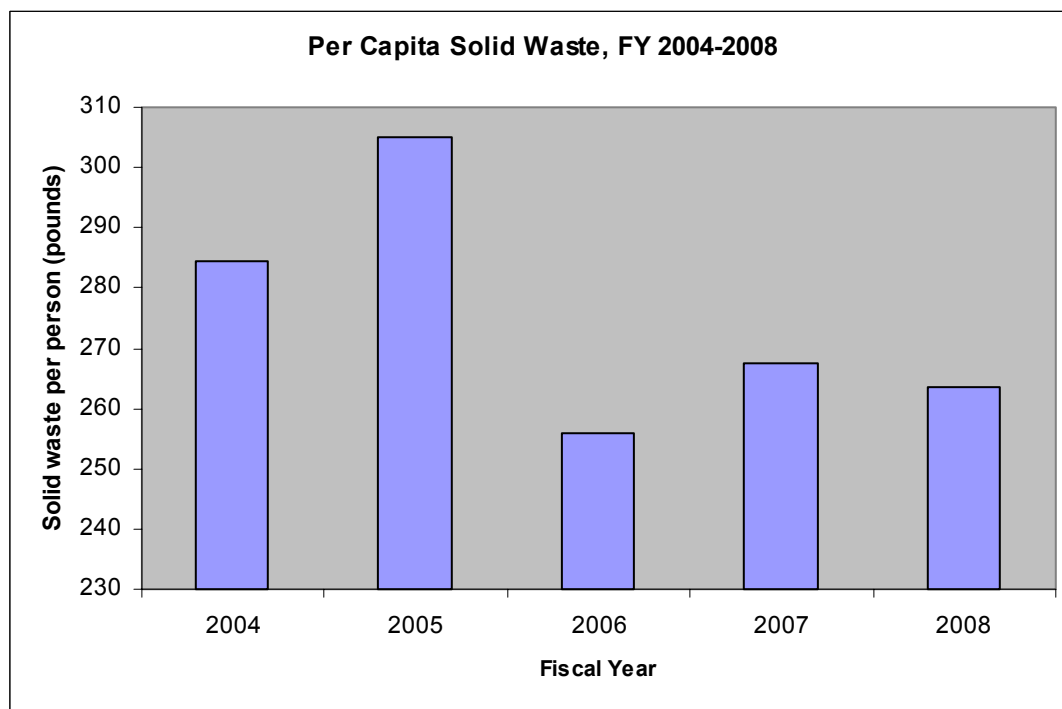
Solid waste is collected by Waste Management and transported to the Lycoming County Municipal Waste Facility. The Lycoming County landfill has a methane recovery facility, which means that the landfill gas produced by the decomposing garbage is collected and is converted by a co-generation plant into electricity, which is then sold to PPL Electric. The co-generation plant generates enough electricity to power about 1000 homes. It also provides hot water for all on-site buildings at the facility.

Figure 2.15 illustrates the solid waste generated at the University for FY 2004-2008. An average of 375 short tons of solid waste is produced each year. The amount of solid waste has decreased since 2005 and has leveled in the past three years.

Figure 2.16 illustrates the solid waste generated per capita for FY 2004-2008. In FY 2008, the solid waste generated was 264 pounds per capita. The per capita solid waste for 2006 decreased about 50 pounds from 2005, increased in 2007 by 11 pounds and decreased in 2008 by 3 pounds.



**Figure 2.15:** Total solid waste generated for the FY 2004-2008: Actual data are listed in Table 1.1 in Appendix I. Note that y-axis scale begins at 300 short tons of solid waste.



**Figure 2.16:** Solid waste generated per capita on campus for the FY 2004 through 2008. Actual data are listed in Tables 1.2 and Table 1.3 in Appendix I. Note that y-axis scale begins at 230 pounds of solid waste per person.

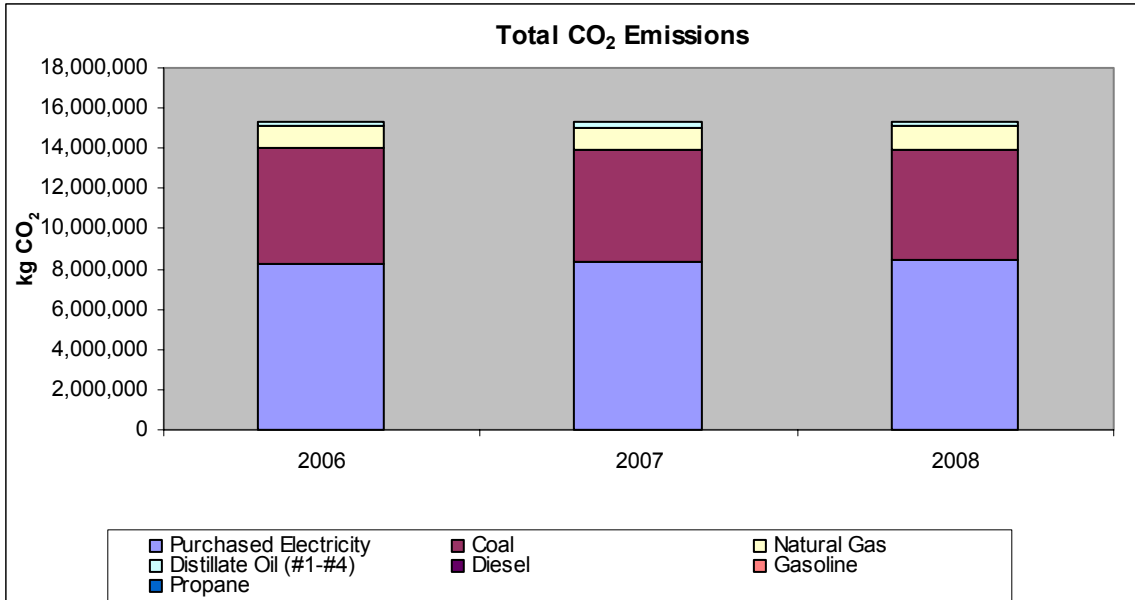
### c. Greenhouse Gas Inventory

A greenhouse gas inventory is a quantitative measurement of all greenhouse gas emissions from a given entity, such as a home, university, or even an entire nation. The three main greenhouse gases (GHGs) of interest to SU are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O), all of which are given off in some form by the University. GHGs trap Earth's radiation in the atmosphere, warming the surface of the planet in what is commonly known as the "greenhouse effect." The IPCC stated in its Fourth Assessment Report in 2007 that "Most of the observed increase in global average temperatures since the mid-20th century is *very likely* due to the observed increase in anthropogenic greenhouse gas concentrations," where "very likely" is defined as a likelihood of greater than 90% (IPCC, 2007). For this reason, it is important to assess each entity's contributions to the global total GHG emissions, with the goal of reducing GHG emissions as quickly as is realistically possible.

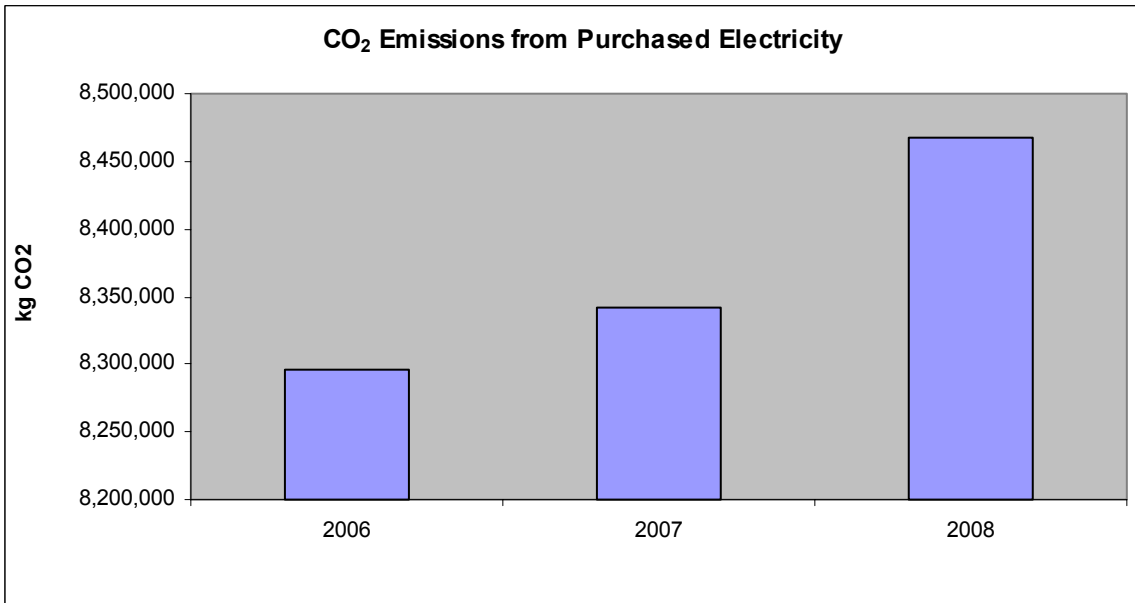
The GHG inventory detailed in this section was completed using the Clean Air Cool Plant Greenhouse Gas Calculator (<http://www.cleanair-coolplanet.org/>), with data inputs from the energy and solid waste data tables (Table 1.1). The calculator computes the total carbon dioxide emissions from each sector (purchased electricity, coal, natural gas, etc.), as well as the equivalent carbon dioxide emissions, which is a measure used to consolidate the emissions from various greenhouse gases in terms of CO<sub>2</sub>, based upon the global warming potential of each individual gas.

Figure 2.17 illustrates the total carbon dioxide emissions from all sources from FY 2006-2008. The largest source of carbon dioxide is from purchased electricity, followed by coal, natural gas, and distillate oil. Diesel, gas, and propane are barely visible on the chart because they have relatively low CO<sub>2</sub> emissions.

Figure 2.18 illustrates the carbon dioxide emissions from purchased electricity from FY 2006-2008. Purchased electricity is the largest source of carbon dioxide. Since the amount of electricity SU purchases has only increased by 2%, the carbon dioxide emissions from electricity have also risen slightly over the past 3 years from 8,296,650 to 8,467,680 kg CO<sub>2</sub>.

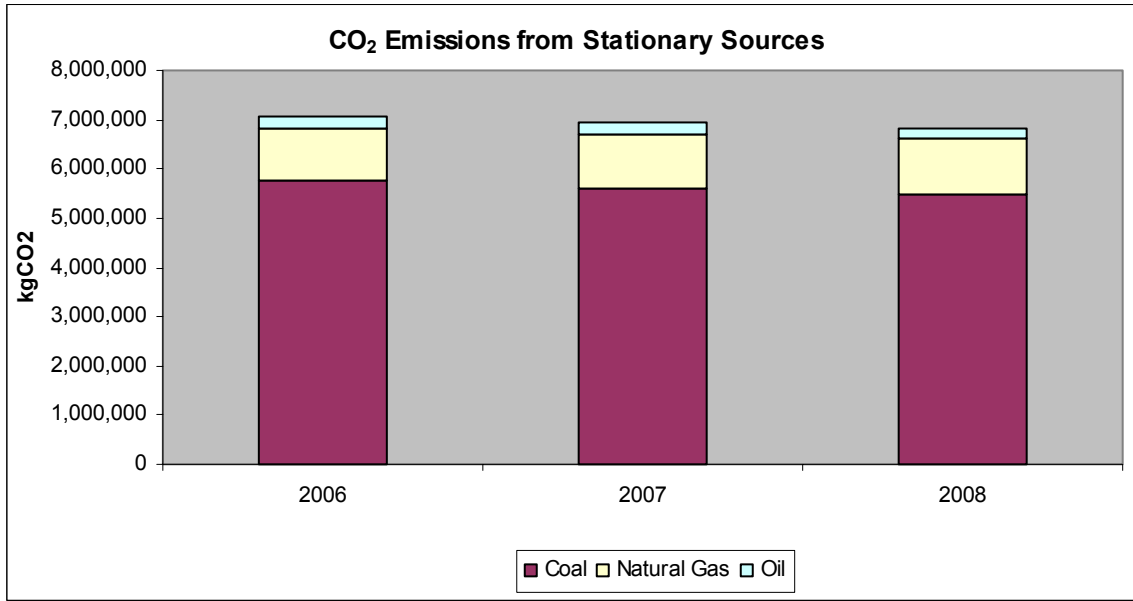


**Figure 2.17:** Total carbon dioxide emissions from all sources for FY 2006-2008. Actual data are listed in Table 1.11 in Appendix I.



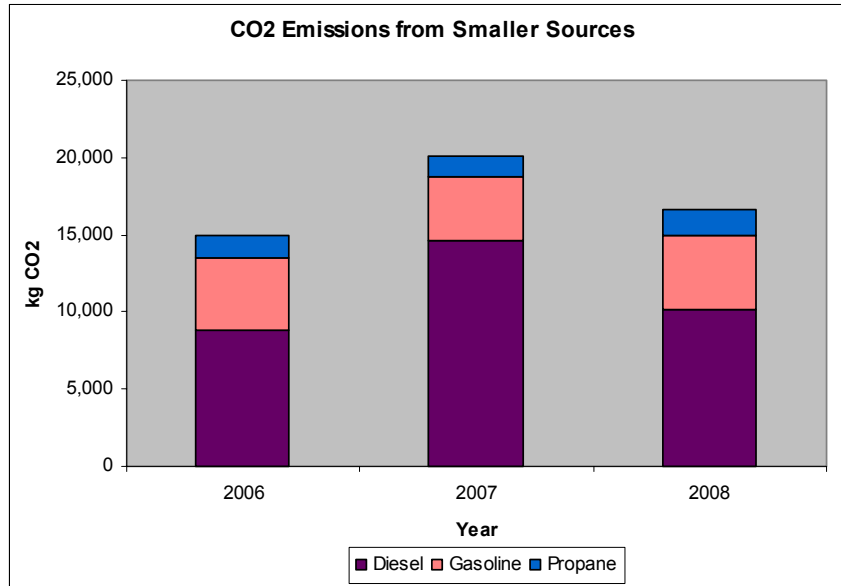
**Figure 2.18:** Carbon dioxide emissions from purchased electricity from 2006-2008. Actual data are listed in Table 1.11 in Appendix I. Note that y-axis scale begins at 8,200,000 kg CO<sub>2</sub>.

Figure 2.19 illustrates the carbon dioxide emissions from stationary sources (coal, natural gas, and distillate oil). The majority of the emissions from stationary sources are from coal, averaging about 5,600,000 kg CO<sub>2</sub> per year. Natural gas is the second largest stationary source emitter, averaging 1,090,000 kg CO<sub>2</sub> per year. Lastly, oil averages about 230,000 kg CO<sub>2</sub>.



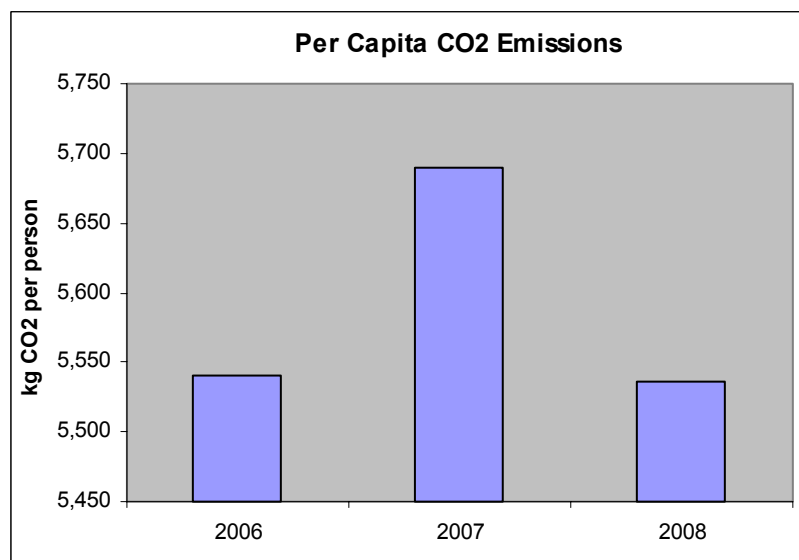
**Figure 2.19:** Total carbon dioxide emissions by stationary sources. Actual data are listed in Table 1.11 in Appendix I.

Figure 2.20 illustrates the carbon dioxide emissions from smaller sources. The least carbon dioxide emission sources are diesel, gasoline, and propane. Diesel emits about 12,700 kg CO<sub>2</sub> per year, gasoline emits about 4,200 kg CO<sub>2</sub> per year, and propane emits about 1,400 kg CO<sub>2</sub> per year. The total amount of carbon dioxide emissions from lesser sources decreased from 2007 to 2008. Diesel emissions decreased by about 4,000 kg CO<sub>2</sub>, gasoline emissions decreased by about 300 kg CO<sub>2</sub>, and propane emissions decreased by about 150 kg CO<sub>2</sub>.



**Figure 2.20:** Carbon dioxide emissions from smaller sources: Actual data are listed in Table 1.11 in Appendix I.

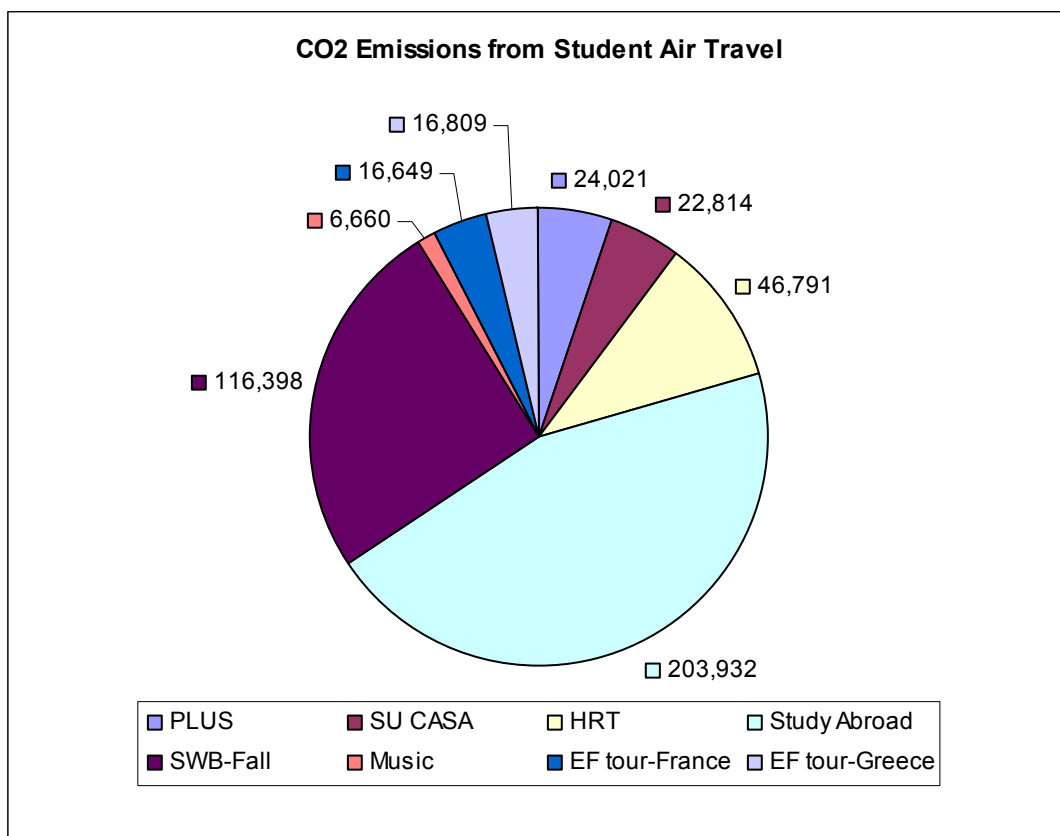
Figure 2.21 illustrates the carbon dioxide emissions per capita for FY 2006-2008. The average per capita emissions were 5,589 kg CO<sub>2</sub>. The 2008 per capita CO<sub>2</sub> emissions were 5,536 kg CO<sub>2</sub>. The number increased from about 5,500 kg CO<sub>2</sub> in 2006 to about 5,700 kg CO<sub>2</sub> 2007, but decreased from 2007 back to about 5,500 kg CO<sub>2</sub> in 2008.



**Figure 2.21:** Per capita CO<sub>2</sub> emissions for FY 2006-2008. Actual data are listed in Tables 1.2 and 1.3 in Appendix I. Note that y-axis scale begins at 5,450 kg CO<sub>2</sub> per person.

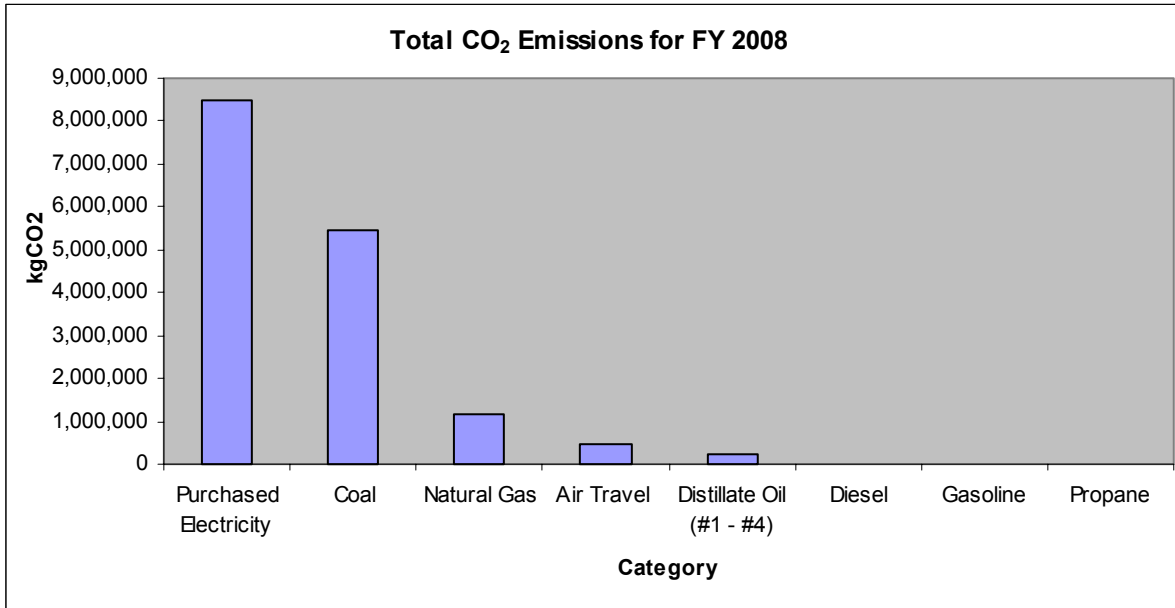
Since the American College and University Presidents Climate Commitment requires an air travel sector included in the greenhouse gas inventory, air travel mileage was calculated for all study abroad trips and student group trips for FY 2008. The mileage was calculated and converted to kg of CO<sub>2</sub> emissions.

Figure 2.22 illustrates the carbon dioxide emissions from each group. The greatest contributor from air travel is individual study abroad trips (203,932 kg CO<sub>2</sub>), followed by the Sigmund Weis Business trip semesters (116,398 kg CO<sub>2</sub>), and the Hurricane Relief Team trips (46,791 kg CO<sub>2</sub>).



**Figure 2.22:** Air travel carbon emissions distribution: Actual data are listed in Tables 1.12 through 1.14 in Appendix I.

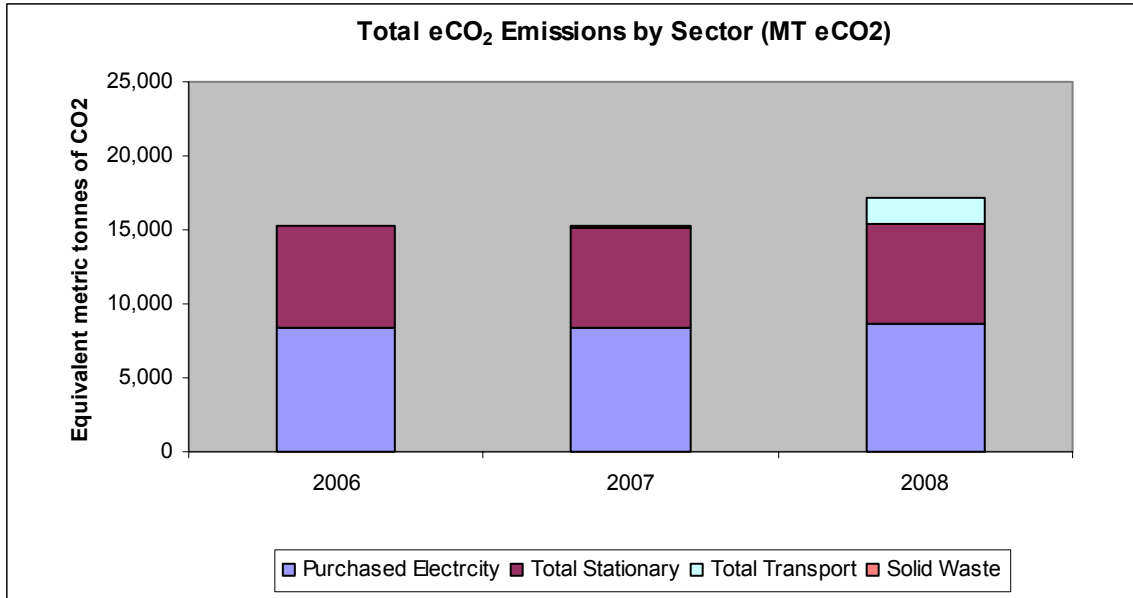
Figure 2.23 illustrates the total carbon dioxide emissions by sector for the FY 2008. The top emitters are purchased electricity, coal, and natural gas, in a similar manner to the total CO<sub>2</sub> emissions (Figure 2.13). When air travel is included in the total, it is a larger source than distillate oil.



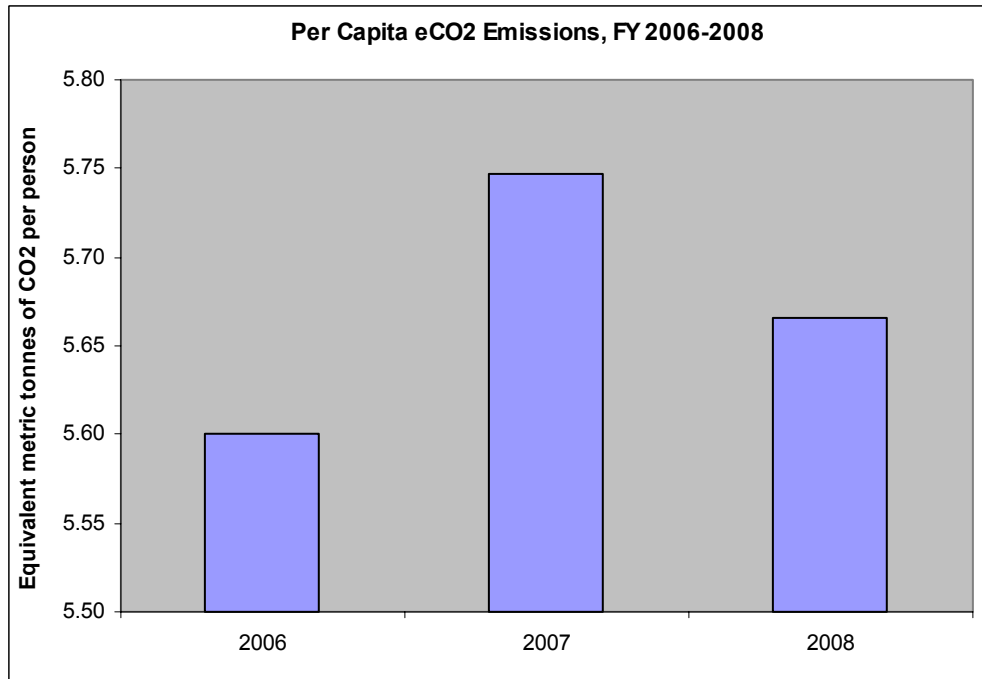
**Figure 2.23:** Total carbon dioxide emissions from each source for the FY of 2008: Actual data are listed in Table 1.11 in Appendix I.

Figure 2.24 illustrates the total equivalent carbon dioxide emissions by sector for FY 2006-2008. For the years without air travel data (2006 and 2007), the biggest equivalent CO<sub>2</sub> sources were purchased electricity and stationary sources (coal, oil, natural gas), with the total transport and solid waste categories barely visible on the graphs. When air travel was included in 2008, total transport increased significantly, leading to a significant increase in equivalent CO<sub>2</sub> emissions.

Figure 2.25 illustrates the equivalent carbon dioxide emissions per capita for FY 2006-2008. The average per capita eCO<sub>2</sub> for 2006-2008 was 5.76 metric tons (MT) per person. The quantity decreased from 2007 to 2008 from 5.75 to 5.67 MT per person.



**Figure 2.24:** Equivalent carbon dioxide emissions from purchased electricity, stationary sources, transport, and solid waste: Actual data are listed in 1.15 in Appendix I.

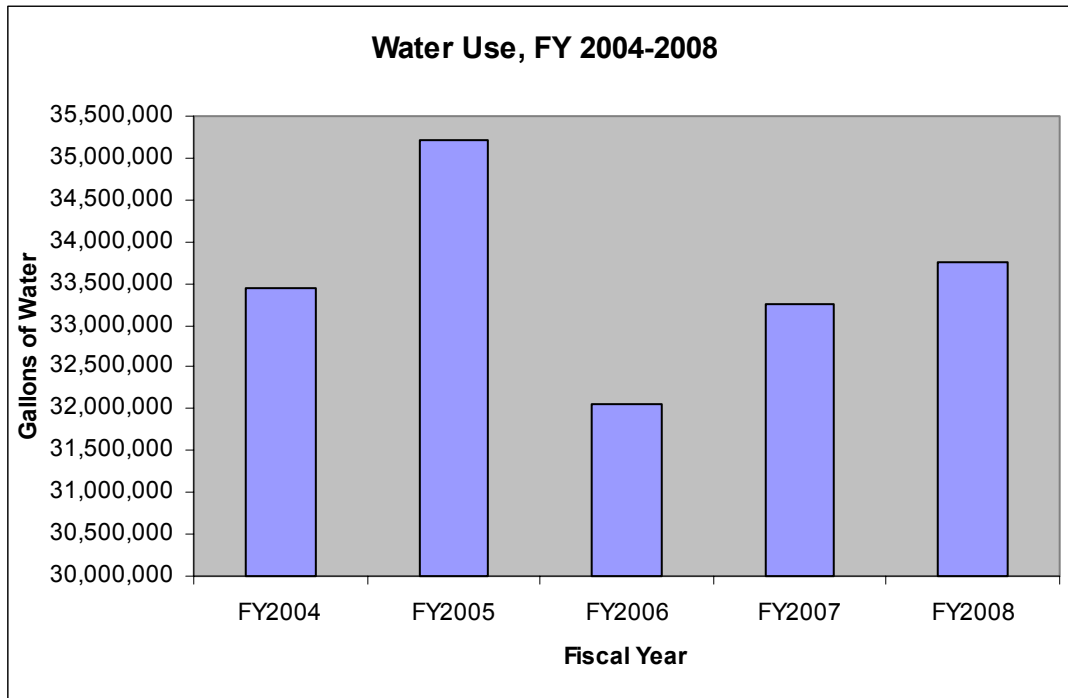


**Figure 2.25:** Per capita eCO<sub>2</sub> emissions for FY 2006-2008. Actual data are listed in 1.2 and 1.3 in Appendix I. Note that y-axis scale begins at 5.50 equivalent metric tons of CO<sub>2</sub> per person.

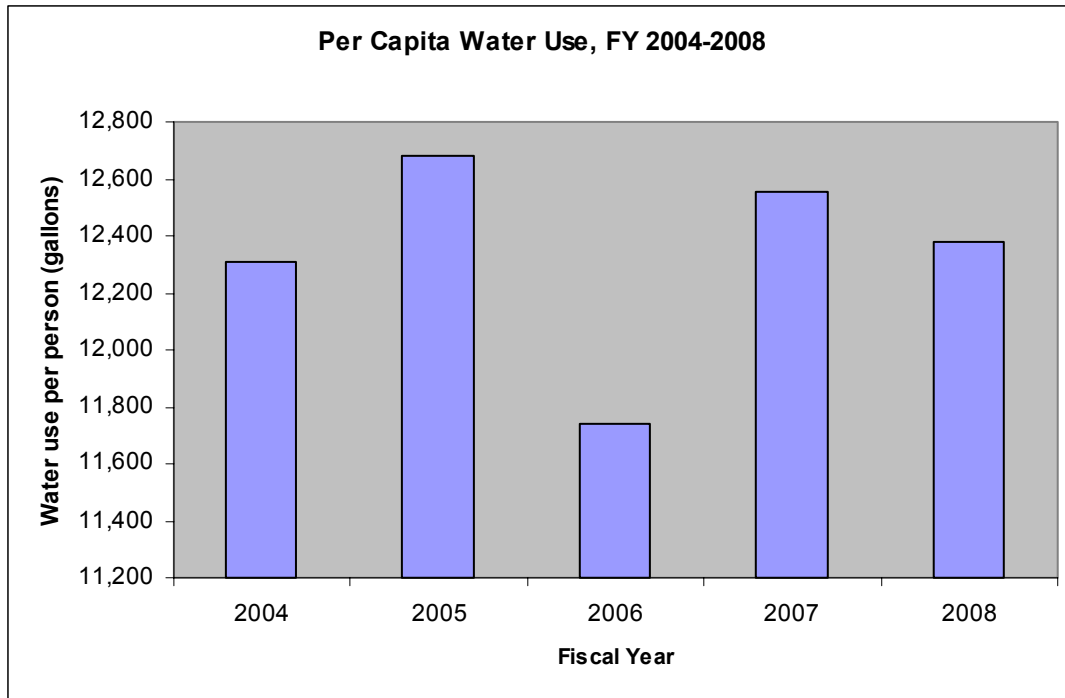
**d. Water**

Figure 2.26 illustrates water usage during FY 2004-2008. The University uses an average of 33,540,000 gallons of water per year. From 2004 to 2005, water usage increased by about 2 million gallons, but after 2005, water usage decreased by about 3 million gallons. Usage has steadily increased over the last three years from 2006 to 2008. The figure shows that in 2008, SU used 500,000 more gallons of water than in 2007.

Figure 2.27 illustrates the per capita water usage during FY 2004-2008. The average per capita water usage was 12,380 gallons per year. From 2005 to 2006, water usage per capita decreased by about 1,000 gallons, but increased in 2007 by about 800 gallons. In 2008, water usage per capita decreased by about 200 gallons from 2007, with a total of 12,380 gallons.

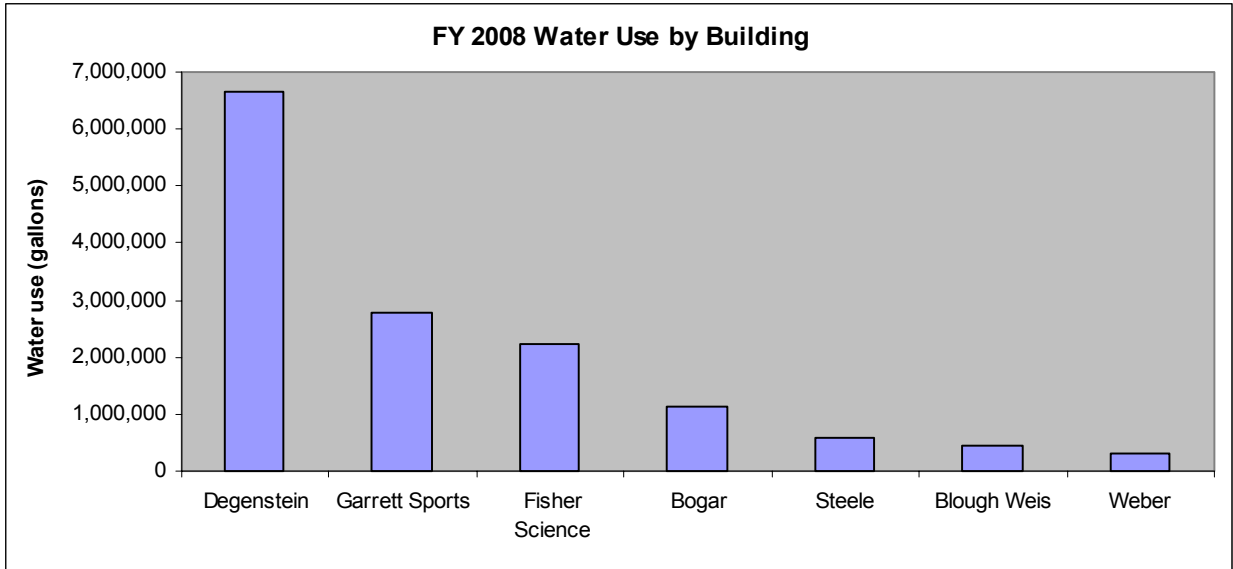


**Figure 2.26:** Water usage for the FY 2004 through 2008: Actual data are listed in 1.1 in Appendix I. Note that y-axis scale begins at 30,000,000 gallons.

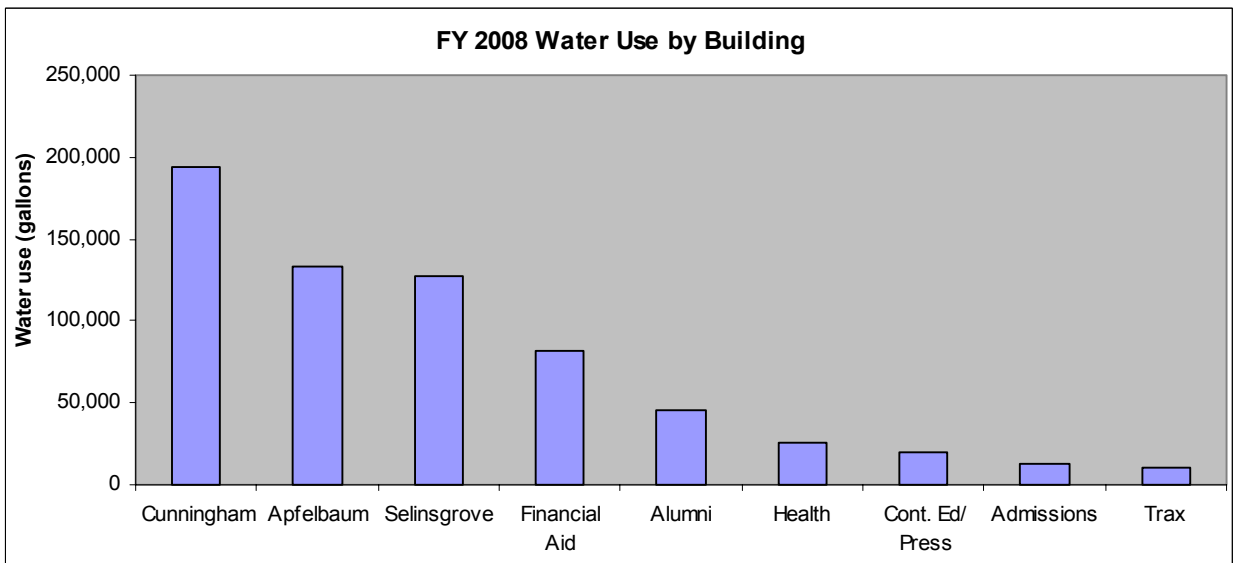


**Figure 2.27:** Per capita water use for FY 2004 through 2008: Actual data are located in Tables 1.2 and 1.3 in Appendix I. Note that y-axis scale begins at 11,2000 gallons per person.

Figures 2.28 through 2.31 show water usage for individual campus buildings for FY 2008. Figures 2.28 and 2.29 illustrate the water use by on-campus buildings other than dormitories. The top water users were Degenstein Campus Center (6,658,000 gallons), Garrett Sports Complex (2,763,000 gallons) and Fisher Science (2,235,000 gallons). The three buildings with the lowest water use were the Continuing Education and Press Offices (20,000 gallons), Admissions building (13,000 gallons), and Trax (10,000 gallons).



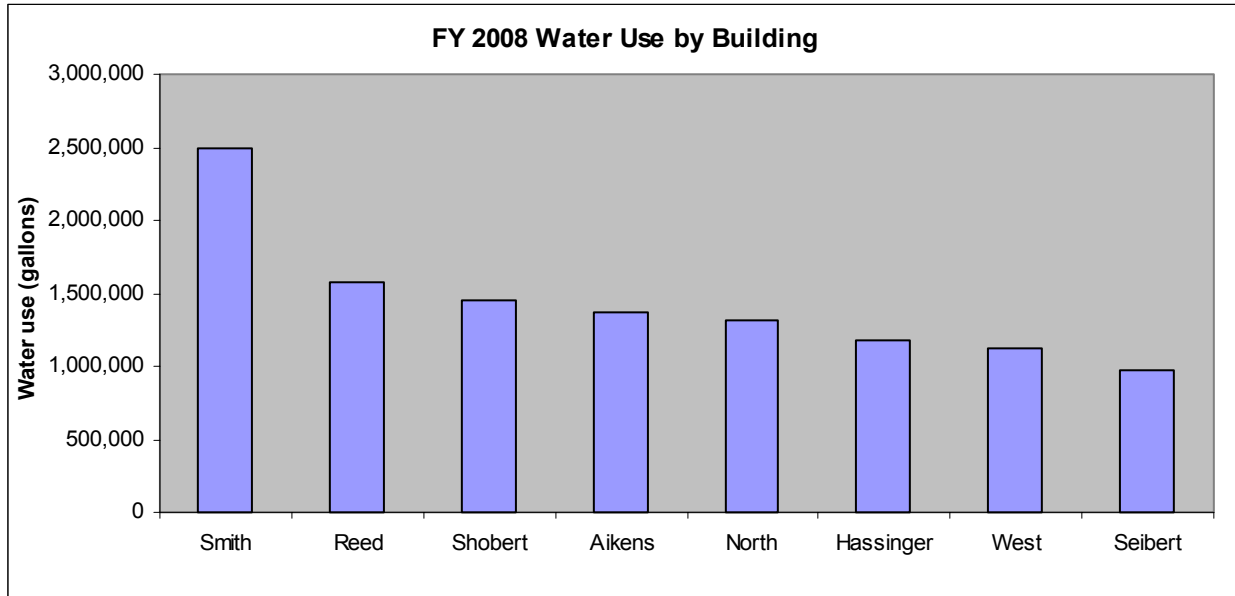
**Figure 2.28:** FY 2008 water use in on-campus buildings with annual totals greater than 250,000 gallons. Actual data are listed in Table 1.4 in Appendix I.



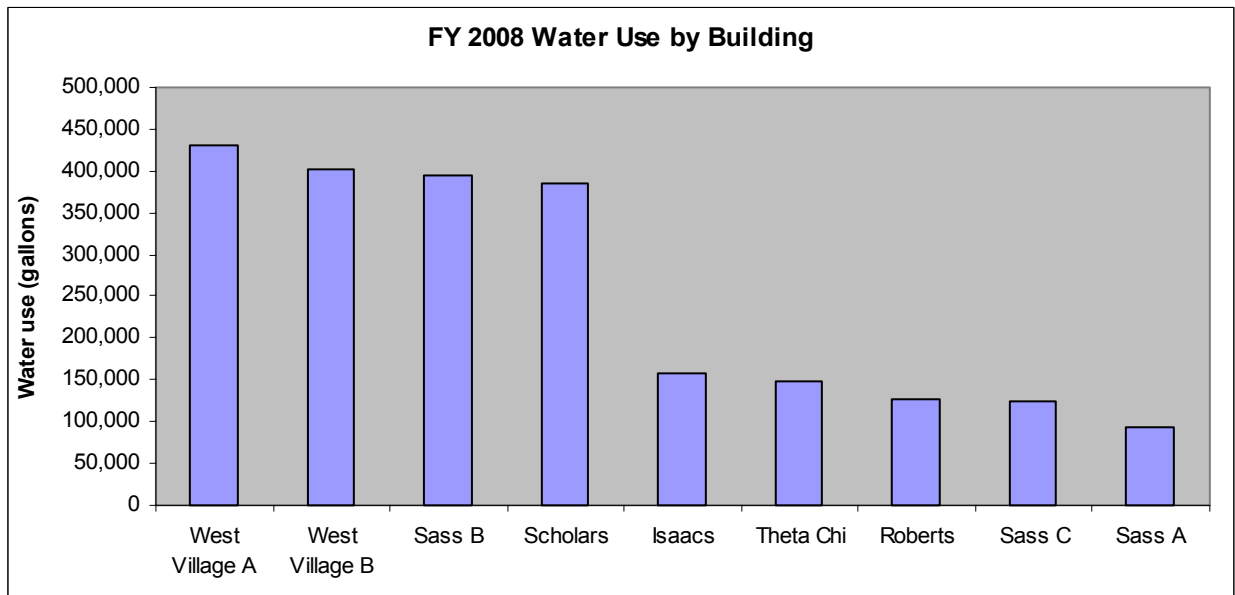
**Figure 2.29:** FY 2008 water use in on-campus buildings with annual totals less than 250,000 gallons: Actual data are listed in Table 1.4 in Appendix I.

Figures 2.30 and 2.31 illustrate water use in dormitories during FY 2008. The top dormitory water users were Smith Hall (2,489,000 gallons), Reed Hall (1,577,000 gallons), and

Shobert Hall (1,453,000 gallons). The three dorms that had the least water usage are Roberts House (127,000 gallons), Sassafras C (125,000 gallons), and Sassafras A (93,000 gallons).

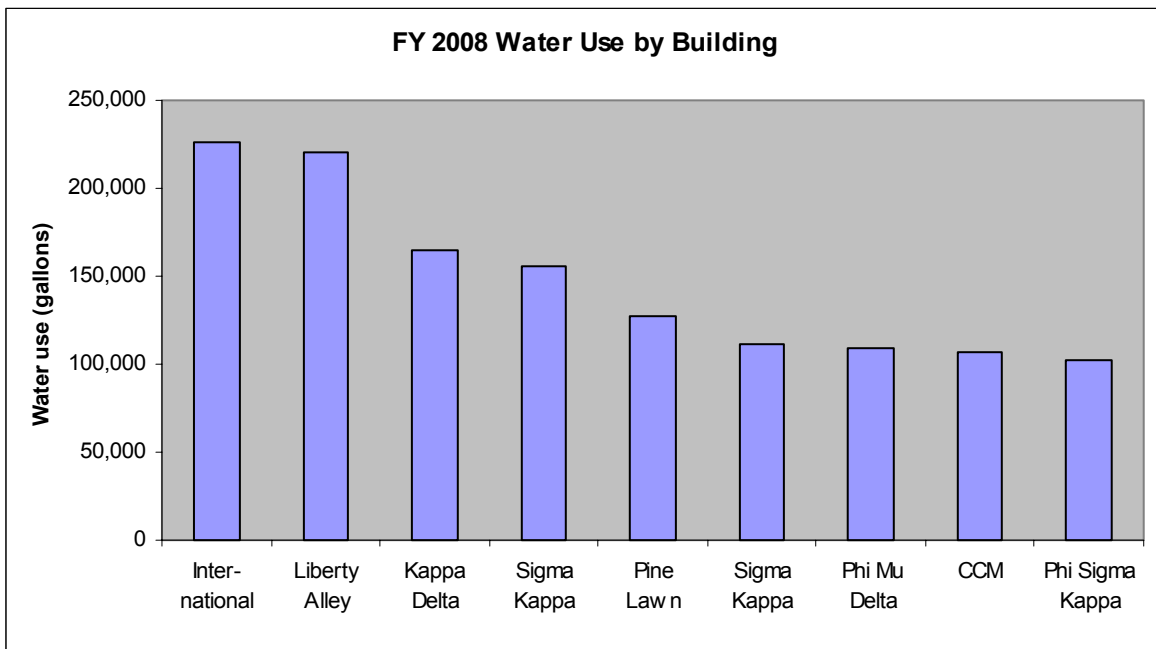


**Figure 2.30:** FY 2008 water use in dormitory buildings with annual totals greater than 900,000 gallons: Actual data are listed in Table 1.5 in Appendix I.

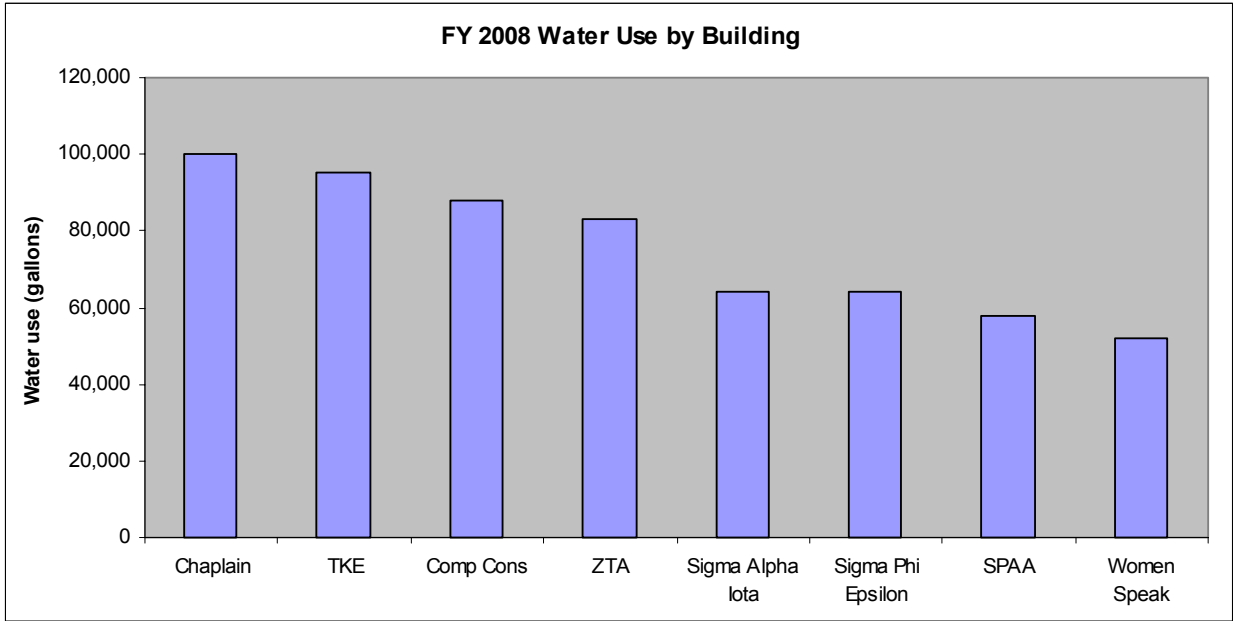


**Figure 2.31:** FY 2008 water use in dormitory buildings with annual totals less than 500,000 gallons: Actual data are listed in Table 1.5 in Appendix I.

Figures 2.32 and 2.33 illustrate the water use in University Avenue buildings in 2008. The top water users were 313 University Avenue (Presser International House; 226,000 gallons), Liberty Alley (221,000 gallons), and 309 University Avenue (Kappa Delta House; 165,000 gallons). The three Avenue buildings with the least water use were 520 University Avenue (Sigma Alpha Iota) and 600 University Avenue (Sigma Phi Epsilon), each with 64,000 gallons, 402 University Avenue (SPAA; 58,000 gallons), and 604 University Avenue (Women Speak House; 52,000 gallons).

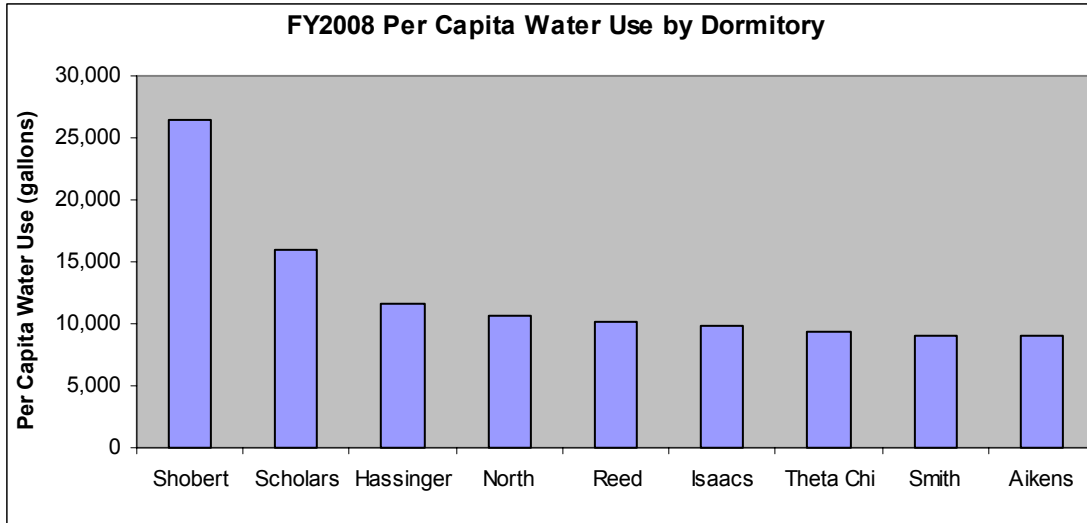


**Figure 2.32:** FY 2008 water use in University Avenue buildings with annual totals greater than 100,000 gallons: Actual data are listed in Table 1.6 in Appendix I.

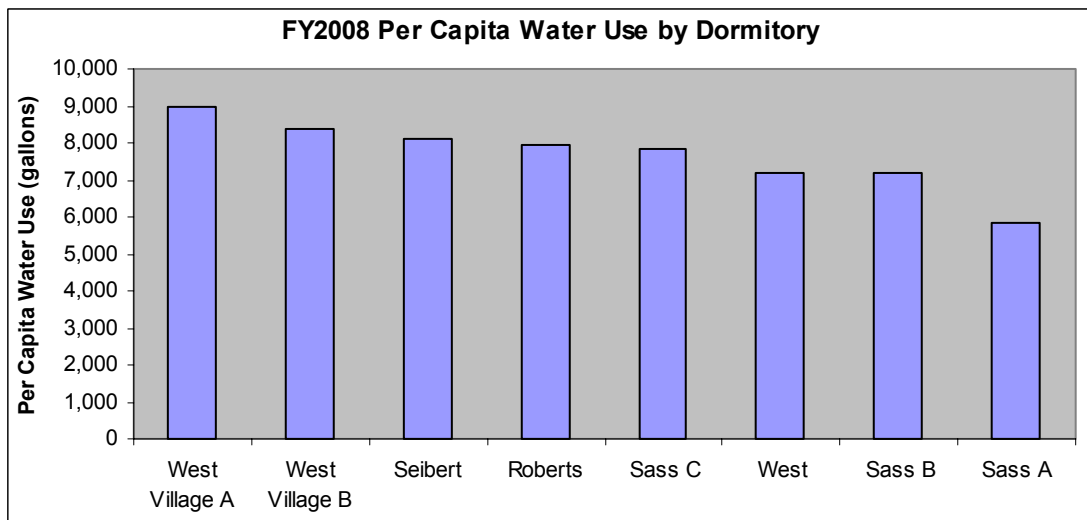


**Figure 2.33:** FY 2008 water use in University Avenue buildings with annual totals less than 100,000 gallons: Actual data are listed in Table 1.6 in Appendix I.

Figures 2.34 and 2.35 illustrate per capita water use by dormitories on campus for FY 2008. The top dormitory water users per capita were Shobert Hall (26,418 gallons per person; 55 individuals), Scholars House (16,000 gallons per person; 24 individuals), and Hassinger Hall (11,683 gallons per person; 101 individuals). The bottom dormitory electricity users per capita were West Hall (7,186 gallons per person; 16 individuals), Sassafras B (7,182 gallons per person; 55 individuals), and Sassafras A (5,813 gallons per person; 16 individuals).



**Figure 2.34:** FY 2008 per capita water use in dormitories with annual totals greater than 8,990 gallons. Actual data are listed in Table 1.16 in Appendix I.

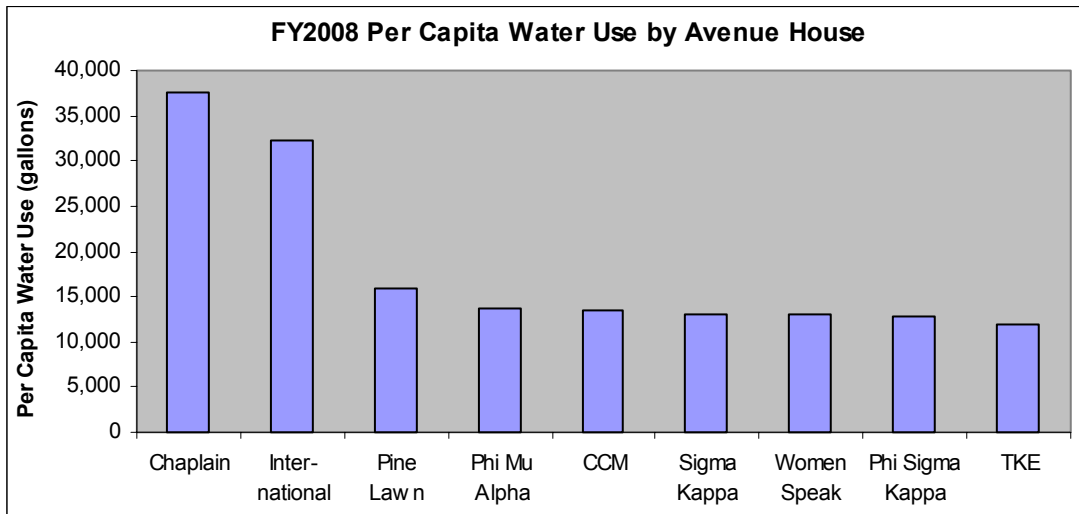


**Figure 2.35:** FY 2008 per capita water use in dormitories with annual totals less than 8,890 gallons. Actual data are listed in Table 1.16 in Appendix I.

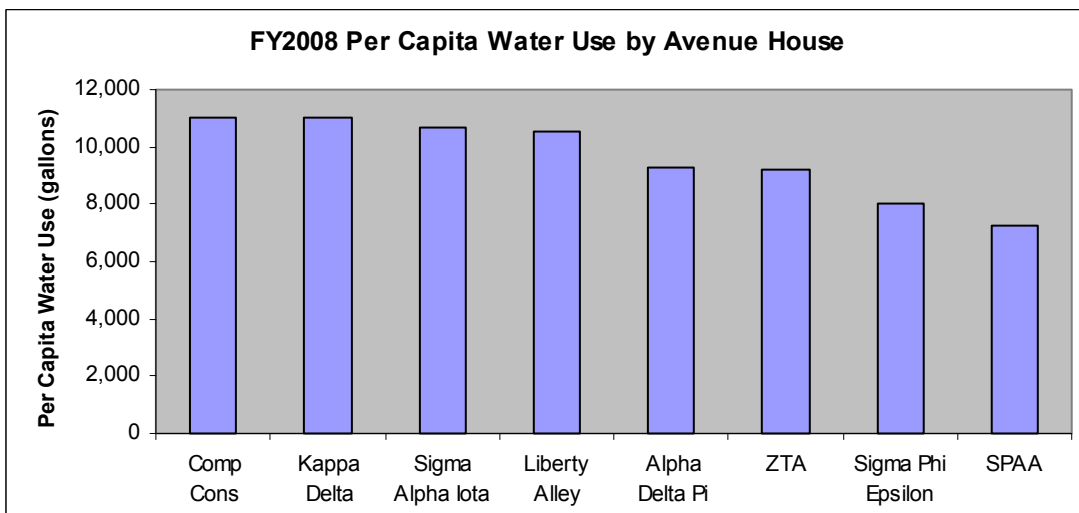
Figures 2.36 and 2.37 illustrate the per capita water use in University Avenue houses. The top per capita water users in Avenue houses were the Chaplain’s house (37,500 gallons per person; 2 individuals)<sup>2</sup>, 313 University Avenue (Presser International House; 32,286 gallons per

<sup>2 2</sup> The per capita water usage figures for the Chaplain’s House and Pine Lawn have been multiplied by a factor of 9/12 to reflect the year-round occupancy of these residences, compared to the 9-month residency of other Avenue houses.

person; 7 individuals), and Pine Lawn (15,875 gallons per person; 6 individuals), and the lowest water users per capita in Avenue houses were 401 University Avenue (Zeta Tau Alpha; 9,222 gallons per person; 8 individuals), 600 University Avenue (Sigma Phi Epsilon; 8,000 gallons per person; 12 individuals) ,and 402 University Avenue (SPAA; 7,250 gallons per person; 8 individuals).



**Figure 2.36:** FY 2008 per capita water use in University Avenue buildings with annual totals greater than 11,500 gallons. Actual data are listed in Table 1.17 in Appendix I.



**Figure 2.37:** FY 2008 per capita water use in University Avenue buildings with annual totals less than 11,500 gallons. Actual data are listed in Table 1.17 in Appendix I.

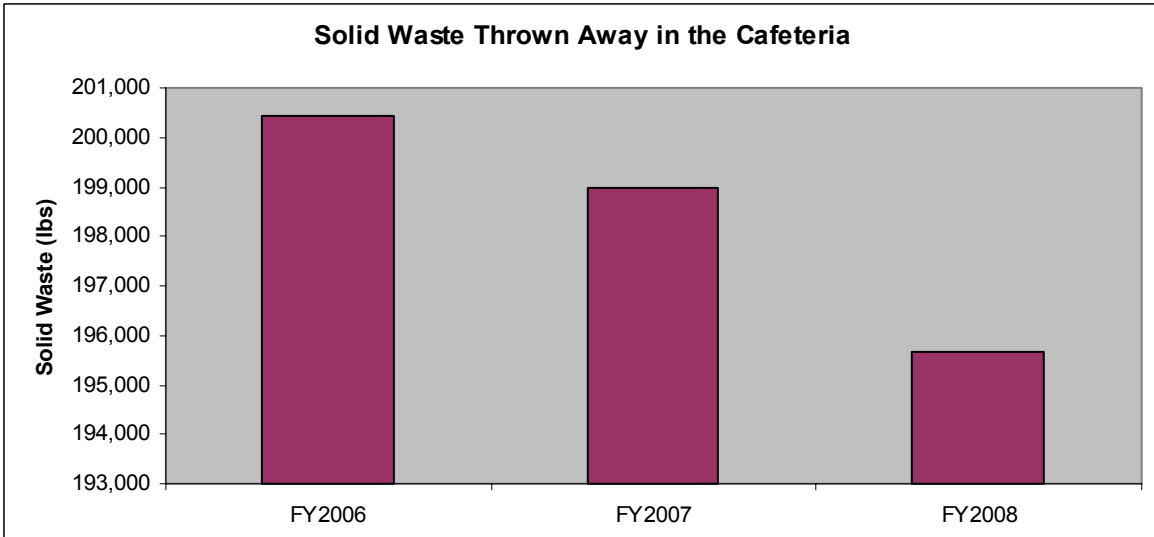
**e. Food**

The motivation for analyzing the food sector of the University in this audit was to determine where our food comes from, how much is local, and how much is organic. Buying local strengthens the local economy and protects the environment by cutting down travel time. Local food tastes fresher and better than non-local foods since it is bred for freshness, not shelf life. Organic foods are healthier and safer because they doesn't contain toxins like pesticides, heavy metals, or industrial chemicals.

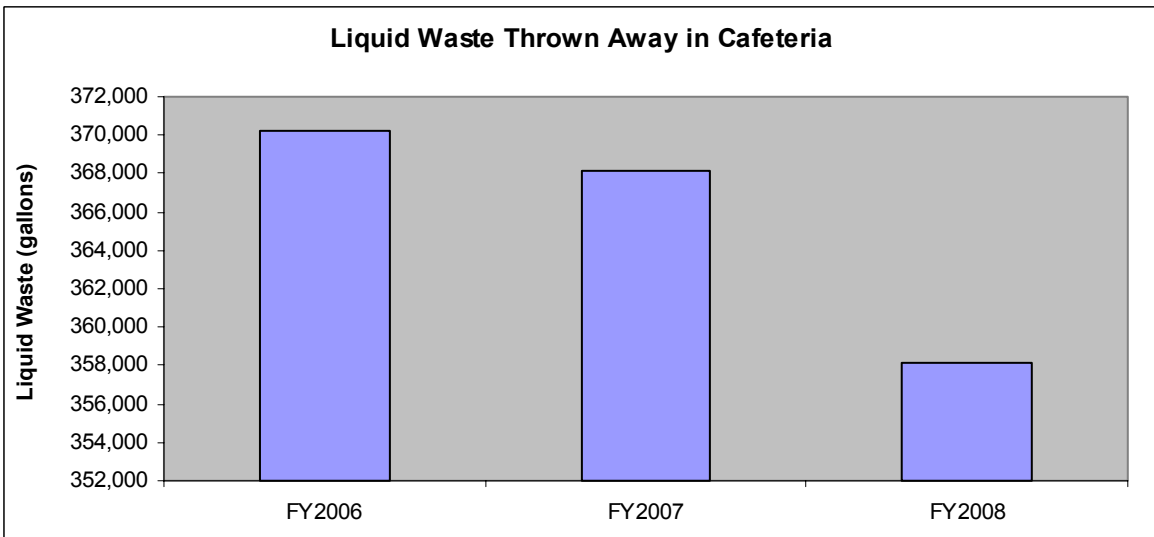
ARAMARK is the food service company that services the University. Eighty percent of SU's food is bought from Sysco, in Harrisburg. Items that are bought locally are bagels, spring water, some produce, pretzels, potato chips, and soda. The Crusaders spring water comes from Pennsylvania springs located in the mountains near Gratz, Sugar Loaf Township, and White Haven and is bottled at the Tulpehocken Spring Water facility in Northumberland. All Pepsi products are bought in Selinsgrove. Approximately 80% of the coffee bought by Aramark is organic and/or fair trade. There is currently about \$3500-5000 of food donated per year.

ARAMARK has its own solid waste disposal, separate from the University. The cost for removing food-related waste costs ARAMARK approximately \$21,500 per year, but the cost has decreased from \$24,572 in 2006 to (an estimate of) \$18,200 for 2008.

Figures 2.38 and 2.39 illustrate the amount of solid and liquid waste thrown away in the cafeteria from FY 2006 through 2008. Solid waste averages about 198,363 gallons per year and liquid waste averages about 365,494 gallons per year. Both solid and liquid waste has been decreasing since 2006. In 2008, there were 195,670 pounds of solid waste; about 2,000 pounds lower than 2007 and 358,185 gallons liquid waste, which was about 10,000 gallons less than in 2007.



**Figure 2.38:** Amount of solid waste thrown away in the cafeteria from FY 2006-2008. See Table 1.19 in Appendix I for numerical data. Note that y-axis scale begins at 193,000 pounds.



**Figure 2.39:** Amount of liquid waste thrown away in the cafeteria from FY 2006-2008. See Table 1.18 in Appendix I for numerical data. Note that y-axis scale begins at 352,000 gallons.

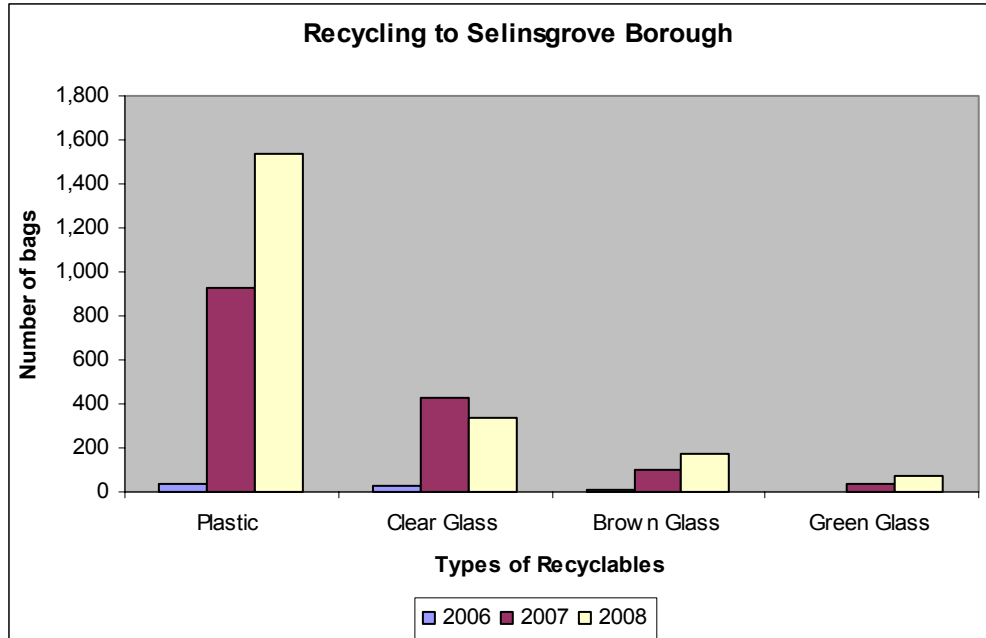
In 2008 during Earth Week, April 20-26, GeoClub organized a trayless dining week in the cafeteria. ARAMARK saw immediate reductions in food waste, beverage waste, and water usage. A typical week with trays produces 6,632 pounds of food waste and 12,270 pounds of beverage waste. The trayless dining week resulted in 6,367 pounds of food waste, 6,500 pounds

of beverage waste, as well as 3,000 gallons of water conserved from the dish machine. The most impressive savings were from beverage waste, which decreased by 47% due to trayless dining. Every tray run through the dishwasher uses 3 cups of water; therefore the lack of trays caused a significant amount of water conservation. The liquid waste savings during the trayless dining week were so significant that ARAMARK plans to continue the trayless system for FY 2009.

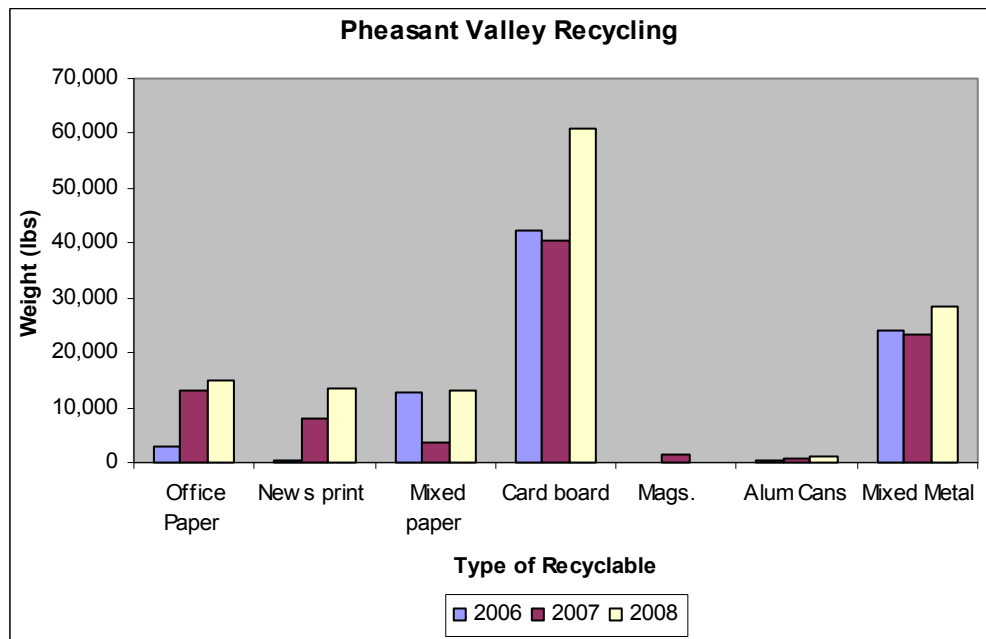
**f. Recycling**

Susquehanna University's formal recycling program was started in 2005. SU currently recycles #1 (clear) and #2 (opaque) plastic bottles, clear, green, and brown glass, aluminum cans, office and notebook paper, magazines, catalogs, books, phone books, construction paper, plain envelopes, corrugated cardboard, and batteries. Collection bins are located throughout University buildings and dorms. At present, ARAMARK recycles only cardboard boxes, and does not collect recycling at catered events. For more information, refer to Appendix I, Tables 1.16 through 1.21.

Figures 2.40 and 2.41 show recycling data for materials sent to Selinsgrove Borough and Pheasant Valley Recycling. Selinsgrove Borough accepts the University's glass (clear, brown, and blue/green) and plastics (No. 1's and 2's). Pheasant Valley Recycling, which is located in Lewistown, PA, accepts the University's office paper, newsprint, mixed paper, cardboard, magazines, aluminum cans, and scrap metal. Plastic recyclables have increased drastically since the recycling program started. In 2006, there were only 37 bags collected, but in 2008 there were more than 1,500 bags brought to the Borough. Clear glass increased from 31 bags to 425 bags in 2007, and has decreased to 332 bags in 2008. Brown glass and green glass have increased since 2006 from 8 to 176 bags and 1 to 75 bags in 2008. Office paper has increased in weight since 2006, from about 3,000 pounds to about 15,000 pounds in 2008. Newsprint has increased from 450 pounds in 2006 to about 13,700 pounds in 2008. Mixed paper decreased from about 13,000 pounds in 2006 to 3,500 pounds in 2007, but increased back up to 13,000 pounds in 2008. Cardboard decreased slightly from 2006 to 2007 from about 42,300 pounds to 40,400 pounds, but rose significantly to almost 61,000 pounds in 2008. Magazines only have a one year record for 2007 with 1,350 pounds. Aluminum cans have increased from 442 pounds in 2006 to 971 pounds in 2008. Mixed metal has increased from 24,200 pounds in 2006 to about 28,400 pounds in 2008.



**Figure 2.40:** Total number of bags of plastic, clear glass, brown glass, and green glass deposited at Selinsgrove Borough’s recycling drop-off site for FY2006-2008. See Table 1.20 for numerical data.



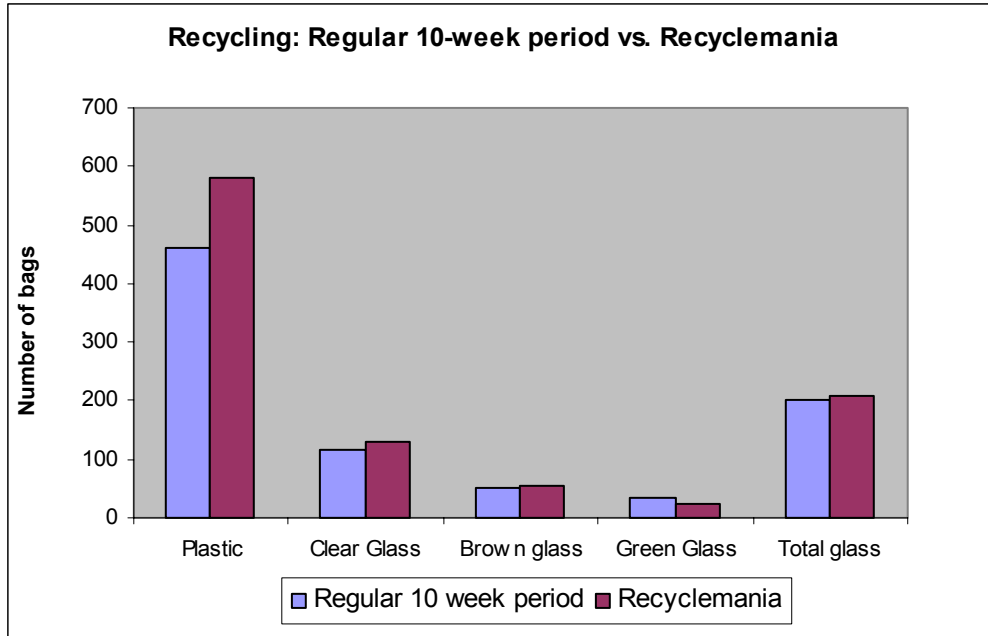
**Figure 2.41:** Total weight of office paper, news print, mixed paper, cardboard magazines, aluminum cans, and mixed metal collected by Pheasant Valley for FY 2006-2008. See Table 1.21 for numerical data.

During January-April 2008, the University took part in Recyclemania, which is a 10-week friendly competition between college institutions' recycling programs to encourage waste reduction activities on their campuses. The schools report recycling and trash data during the 10 weeks and throughout the time are ranked by the College and University Recycling Council (CURC). The competition began in 2001 with 2 schools and has grown to over 200 participating colleges and universities in 2008.

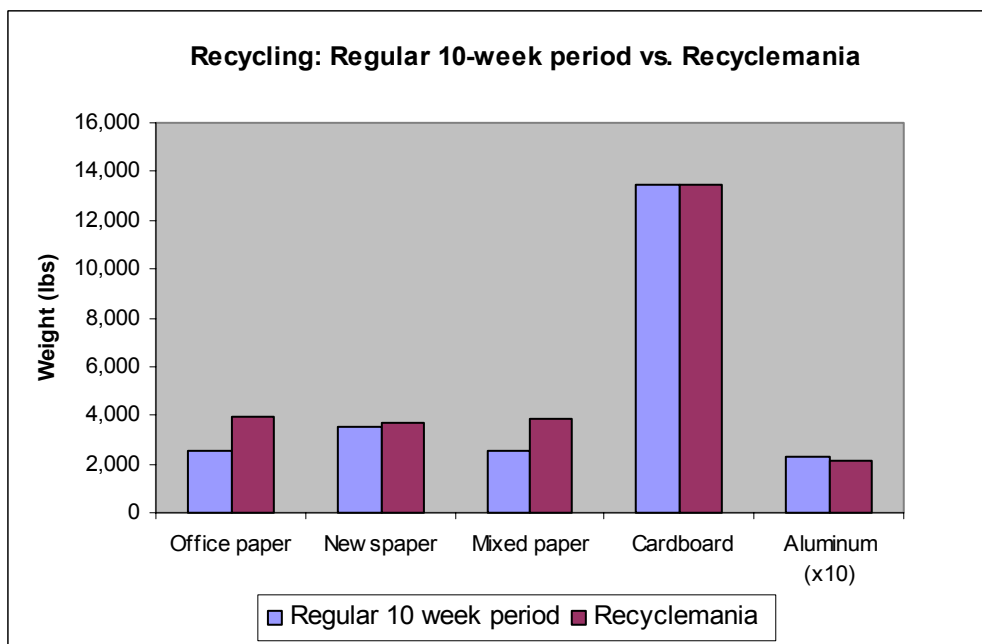
SU takes part in the Per Capita Classic, Gorilla Prize, Targeted Material - Bottles and Cans, Targeted Material - Paper, and Targeted Material - Corrugated Cardboard competitions. SU finished 107<sup>th</sup> out of 180 participating schools in the Per Capita Classic with 12.21 cumulative recyclable pounds per person. In the Gorilla Prize division, SU took 160<sup>th</sup> out of 200 with 31,477 cumulative recyclable pounds. SU took 58<sup>th</sup> out of 161 in the Targeted Material - Bottles and Cans division with 2.51 cumulative bottles and cans pounds per person. In the Targeted Material - Paper division, SU took 100<sup>th</sup> out of 163 with 4.47 cumulative paper pounds per person. SU took 71<sup>st</sup> out of 160 in the Targeted Material - Corrugated Cardboard division with 5.23 cumulative corrugated cardboard pounds per person.

Figures 2.42 and 2.43 show the differences between a 10 week recycling period during 2007 Fall Semester and the Recyclemania period during 2008 Spring Semester. Figure 2.42 shows the number of bags of plastic, clear glass, brown glass, green glass, and total glass of recycling to Selinsgrove Borough. Plastic recyclables increased by 120 bags, clear glass increased by 15 bags, brown glass increased by 6 bags, green glass decreased by 9 bags, and total glass increased overall by 10 bags between the two periods.

Figure 2.43 shows the differences for office paper, newspaper, mixed paper, cardboard, and aluminum. The total office paper weight increased by 1,400 pounds, newspaper weight increased by 168 pounds, mixed paper increased by 1,346 pounds, cardboard increased by 14 pounds, and aluminum decreased 19 pounds between the two periods.



**Figure 2.42:** Comparison of a regular 10-week period (September 13, 2007-November 21, 2007) to Recyclemania (January 30, 2008-April 5, 2008). See Tables 1.22 and 1.24 for numerical data.



**Figure 2.43:** Comparison of a regular 10-week period (September 13, 2007-November 21, 2007) to Recyclemania (January 30, 2008-April 5, 2008). See Tables 1.23 and 1.25 for numerical data.

**g. Purchasing**

Currently, SU has no formal policies on green purchasing. For an example of a green purchasing policy, see Oberlin College's policy in Appendix II.

The following computer purchasing information was obtained from SU's Office of Information Technology (IT). In the past, SU purchased non-flat cathode ray tube (CRT) Dell monitors for all new computers, which consumed about 90 watts of electricity each. For the past few years, IT has purchased only Dell Liquid Crystal Display (LCD) flat panel monitors. The monitors consume about 45 watts, using half as much energy as the older models. All monitors now purchased from Dell meet the Energy Star guidelines for efficiency. IT configures all new computers to automatically turn off monitors after one hour of inactivity, so monitors are using very little electricity when they are not being used. IT also configures other components within the computer to go into a "sleep" mode during inactivity. These features increase the energy efficiency and expand the life of the equipment. In addition, labs are configured to shut down after a period of inactivity so that they are not left on over extended breaks.

In 2008, SU began purchasing Dell's new model, the Optiplex 755 – which is about 50% more energy efficient compared to last year's model. In addition, it was decided to purchase Ultra Small Form Factor (USFF) computers, which reduce energy consumption by about another 25% compared to the full size model. These systems meet the Energy Star guidelines for efficiency. In addition, there has been an increase in the popularity of notebook computers among faculty, staff, and students, which has been beneficial since notebook computers require only about half as much energy as a desktop computer.

Lastly, SU has been working to reduce any IT related waste. IT worked with SAVE to establish paper recycling bins in all of the labs. All empty toner cartridges are sent back to the manufacturer for recycling. All obsolete equipment is either donated to charitable or non-profit organizations or sent to companies that can recycle the products.

The following paper purchasing information was obtained from SU's Print Shop. The Print Shop purchases all the paper for the University, except for Blough-Weis Library. The white paper is virgin (no recycled content). The standard colors of paper are acid free with 30% post consumer content. The bright colored paper is 30% post consumer waste, elemental chlorine free, and acid free.

Dickinson College provides an example of more sustainable paper purchasing, even without a formal policy. Their Print Center, which buys paper for the whole college, purchases a standard of 30% PCR (post consumer recycled) paper for their printers, copiers, and fax machines, while the stationary is 100% PCR. The paper is purchased from Domtar, a Forest Stewardship Council Certified Company.

### **III. Group of 24 Analysis**

The final component to this audit is a comparison of SU's sustainability practices and policies with those of a selected group of comparison schools. SU typically compares itself to a group of 24 colleges and universities:

1. Gustavus Adolphus College, St. Peter, MN
2. Muhlenberg College, Allentown, PA
3. Hope College, Holland, MI
4. Franklin & Marshall, Lancaster, PA
5. Wittenberg University, Springfield, OH
6. Washington & Jefferson, Washington, PA
7. Luther College, Decorah, IA
8. Ohio Wesleyan University, Delaware, OH
9. Southwestern University, Georgetown, TX
10. Augustana College, Rock Island, IL
11. Furman University, Greenville, SC
12. College of Wooster, Wooster, OH
13. DePauw University, Greencastle, IN
14. St. Lawrence University, Canton, NY
15. Allegheny College, Meadville, PA
16. University of the South, Sewanee, TN
17. Millsaps College, Jackson, MS
18. Ursinus College, Collegeville, PA
19. Dickinson College, Carlisle, PA
20. Colorado College, Colorado Springs, CO
21. Moravian College, Bethlehem, PA
22. Gettysburg College, Gettysburg, PA
23. Macalester College, St. Paul, MN
24. St. Mary's College of Maryland, St. Mary's City, MD

To objectively determine how SU's sustainability practices compare to those of its comparison schools, a survey was sent to all 24 schools. The survey consisted of a subset of

questions selected from the College Sustainability Report Card 2008 (CSRC) questionnaire (<http://www.endowmentinstitute.org/sustainability/>). The CSRC is a comparative ranking of the sustainability activities of the 200 colleges and universities in the U.S. and Canada with the highest endowments. The original CSRC survey included eight main categories of questions: Administration, Climate Change & Energy, Food & Recycling, Green Building, Transportation, Endowment Transparency, Investment Priorities, and Shareholder Engagement. Each school was given a grade in each category based on its sustainability practices, and these grades were averaged into an overall grade. Dickinson College, one of SU's "Group of 24" comparison schools, was given an overall grade of B+, and honored as one of 25 "Campus Sustainability Leaders."

The subset of CSRC questions that were asked to SU's "Group of 24" comparison schools included 43 questions in five categories: Administration, Climate Change & Energy, Food & Recycling, Green Building, and Transportation. The questions were:

**Administration:**

1. Has the administration made a commitment to campus sustainability?
2. Has the administration endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?
3. Has the administration assigned and/or hired staff to oversee sustainability programs and policies?
4. Has the administration supported the sustainability staff in terms of funding?
5. Has the administration prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)
6. Has the administration formed an active advisory council to guide on issues of campus sustainability?
7. Does the administration make possible for students to be involved in the decision making process on sustainability issues?
8. Does the administration support student environmental organizations?
9. Does the administration maintain a center or office dedicated to achieving campus sustainability goals?

10. Does the administration offer a school website to facilitate involvement in campus sustainability initiatives?

**Climate Change & Energy:**

11. Has your campus completed a carbon emissions inventory?
12. Has your campus began efforts to reduce carbon emissions?
13. Has your campus made a commitment to carbon neutrality?
14. Does your campus use energy-efficient technology?
15. Does your campus install equipment such as vendor misors, motion sensors or compact fluorescent bulbs to replace incandescent light bulbs?
16. Does your campus facilitate programs that provide incentives for members of the community to reduce energy use?
17. Does your campus purchase electric power from renewable sources or purchase renewable energy credits?
18. Does your campus install or plan to install alternative sources of power?
19. Does your campus invest in renewable energy technology that will benefit non-campus communities?

**Food & Recycling:**

20. Does your campus purchase food from local farmers and producers?
21. Does your campus participate in farm-to-school programs and food production on campus?
22. Does your campus make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?
23. Does your campus support organic food production on campus?
24. Does your campus encourage the use of reusable dishware in dining halls?
25. Does your campus offer to-go containers made from recycled, biodegradable, or eco-friendly materials?
26. Does your campus provide recycling receptacles for items such as paper, printer cartridges, and batteries?

27. Does your campus encourage recycling of office materials by faculty, staff, and students?
28. Does your campus compost landscaping waste?
29. Does your campus recycle landscape waste into mulch for use on campus?
30. Has your campus implemented a composting program for dining hall waste?
31. Has your campus administered a recycling program for dining hall recyclables?

**Green Building:**

32. Does your campus commit through a formal policy to the use of green building criteria in all construction and renovation?
33. Does your campus seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?
34. Does your campus require all new buildings to be LEED certified?
35. Does your campus incorporate green building standards into specific new building projects?
36. Does your campus renovate existing buildings in accordance with green standards?
37. Does your campus install various retrofits such as low-flow plumbing equipment to conserve water?

**Transportation:**

38. Does your campus maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?
39. Does your campus provide transportation or access to public transportation systems around campus or to local destinations?
40. Does your campus create incentives for the campus community to carpool or to use public transportation?
41. Does your campus encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?
42. Does your campus plan and implement a pedestrian friendly and/or bike friendly campus?

43. Does your campus create parking policies to encourage the use of alternative modes of transportation?

Eleven of the 24 schools filled out the survey and returned it: Allegheny College, Dickinson College, Furman University, Hope College, Luther College, Macalester College, Moravian College, Southwestern University, St Lawrence University, Ursinus College, and Washington and Jefferson College. Four of the 24 schools that did not respond had already been evaluated as part the CSRC, so their information was obtained from the CSRC website: Colorado College, DePauw University, Franklin & Marshall College, and Gettysburg College. Nine of the 24 schools did not fill out the survey: Augustana College, College of Wooster, Gustavus Adolphus College, Millsaps College, Muhlenberg College, Ohio Wesleyan University, St. Mary’s College of Maryland, University of the South, and Wittenberg University.

Table 3.1 summarizes the information obtained from the 15 schools that either returned the survey or did not return the survey but were part of the CSRC, and compares the number of schools reporting “yes” to each question to SU’s current practices. The original surveys from the 11 schools that directly responded to the questionnaire, with detailed comments, are located in Appendix IV. The report cards for the four schools from which data were obtained via the CSRC can be found at <http://www.endowmentinstitute.org/sustainability/profiles2008.html>.

**Table 3.1:** Summary of responses to Group of 24 surveys.

**ADMINISTRATION:**

<i>Has the administration...</i>	Number of colleges (out of 15) responding “yes”	SU’s response
1. ... made a commitment to campus sustainability?	14	NO
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?	12	NO
3. ... assigned and/or hired staff to oversee sustainability programs and policies?	8	NO

4. ...supported the sustainability staff in terms of funding?	8	NO
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)	7	NO
6. ... formed an active advisory council to guide on issues of campus sustainability?	14	NO
<i>Does the administration...</i>		
7. ... make it possible for students to be involved in the decision making process on sustainability issues?	14	NO
8. ... support student environmental organizations?	15	<b>YES</b>
9. ... maintain a center or office dedicated to achieving campus sustainability goals?	4	NO
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?	7	NO

#### CLIMATE CHANGE & ENERGY:

<i>Has your campus...</i>	Number of colleges (out of 15) responding "yes"	SU's response
11. ... completed a carbon emissions inventory?	8	<b>YES</b>
12. ... began efforts to reduce carbon emissions?	9	<b>YES</b>
13. ... made a commitment to carbon neutrality?	8	NO
<i>Does your campus...</i>		
14. ...use energy-efficient technology?	13	<b>YES</b>

15. ...install equipment such as vendor misors, motion sensors or compact fluorescent bulbs to replace incandescent light bulbs?	8	<b>YES</b>
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?	5	NO
17. ... purchase electric power from renewable sources or purchase renewable energy credits?	7	NO
18. ... install or plan to install alternative sources of power?	10	NO
19. ... invest in renewable energy technology that will benefit non-campus communities?	3	NO

#### **FOOD & RECYCLING:**

<i>Does your campus...</i>	Number of colleges (out of 15) responding "yes"	SU's response
20. ... purchase food from local farmers and producers?	13	<b>YES</b>
21. ... participate in farm-to-school programs and food production on campus?	6	NO
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	12	<b>YES</b>
23. ... support organic food production on campus?	7	NO
24. ...encourage the use of reusable dishware in dining halls?	11	<b>YES</b>
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?	8	NO
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	13	<b>YES</b>

27. ... encourage recycling of office materials by faculty, staff, and students?	10	<b>YES</b>
28. .... compost landscaping waste?	7	<b>YES</b>
29. ... recycle landscape waste into mulch for use on campus?	7	NO
<i>Has your campus...</i>		
30. ... implemented a composting program for dining hall waste?	6	NO
31. ...administered a recycling program for dining hall recyclables?	5	NO

**GREEN BUILDING:**

<i>Does your campus...</i>	Number of colleges (out of 15) responding "yes"	SU's response
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?	4	NO
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?	12	<b>YES</b>
34. ... require all new buildings to be LEED certified?	4	NO
35. ... incorporate green building standards into specific new building projects?	10	<b>YES</b>
36. ... renovate existing buildings in accordance with green standards?	9	NO
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?	6	<b>YES</b>

**TRANSPORTATION:**

Does your campus...	Number of colleges (out of 15) responding “yes”	SU’s response
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?	6	<b>YES</b>
39. ... provide transportation or access to public transportation systems around campus or to local destinations?	7	NO
40. ... create incentives for the campus community to carpool or to use public transportation?	3	<b>YES</b>
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	13	<b>YES</b>
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?	13	<b>YES</b>
43. ... create parking policies to encourage the use of alternative modes of transportation?	3	NO

Table 3.2 lists additional information about the 15 schools that participated in the survey, including whether they have signed a formal commitment to sustainability and/or carbon neutrality [American College and University Presidents Climate Commitment (<http://www.presidentsclimatecommitment.org/>) or Talloires Declaration (<http://www.iisd.org/educate/declarat/tallore.htm>)] or are a member of a sustainability-related organization [Association for the Advancement of Sustainability in Higher Education (<http://www.aashe.org/>) or the Pennsylvania Environmental Resource Coalition (<http://www.paconsortium.state.pa.us/>)]. SU has not signed any formal commitments, nor does it belong to any sustainability-related organizations.

**Table 3.2:** Summary of formal sustainability commitments by “Group of 24” schools.

<i>Has the University...</i>	Number of colleges (out of 15) responding “yes”	SU’s response
Signed the American College and University Presidents Climate Commitment	10	NO
Signed the Talloires Declaration	3	NO
<i>Is the college a/an...</i>		
AASHE Member	9	NO
PERC member (only PA schools)	5 (out of 8)	NO

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## **Appendix I: Data Tables**

**Table 1.1:** Facilities data on energy consumption (purchased electricity, coal, distillate oil, propane, gasoline, and diesel), solid waste generated, and water usage for FY 2004-2008. The table below includes information on energy consumption, solid waste generation, and water usage. It also shows the cost for each.

	Units	FY2004	FY2005	FY2006	FY2007	FY2008
Purchased Electricity	kWh	n/a	n/a	15,279,282	15,362,153	15,594,254
Purchased Electricity	dollars	\$889,604.17	\$919,664.72	\$964,006.96	\$928,085.57	\$980,871.96
Coal	short tons	3,346.89	2,423.39	2,882.89	2,813.64	2,741.34
Coal	dollars	\$232,567.00	\$189,841.00	\$242,646.00	\$237,751.00	\$243,526.00
Distillate Oil (#1-#4)	<u>gallons</u>	<u>26,803.4</u>	<u>15,6921.5</u>	<u>23,048.6</u>	<u>22,512.9</u>	<u>22,435.1</u>
Natural Gas	CCF	198,158	192,060	201,737	207,887	216,695
Propane Both generator & motor fuel use	gallons	225.6	231.5	264.9	238.9	296.2
Gasoline	gallons	1,320	1,190	1,685	1,475	1,725
Diesel	gallons	974.8	1,356.6	887.3	1,469	1,022.1
Solid Waste generated	short tons	386.63	423.37	349.27	354.13	359.33
Cost of Solid Waste Disposal	dollars	\$30,692.16	\$32,668.92	\$31,842.59	\$33,354.49	\$37,067.26
Water Usage	Gallons	33,450,000	35,211,000	32,049,000	33,250,000	34,840,000
Water Cost	<u>dollars</u>	<u>\$77,966.66</u>	<u>\$78,665.40</u>	<u>\$74,196.55</u>	<u>\$74,704.60</u>	<u>85,318.43</u>
Sewer Cost	dollars	\$122,221.02	\$208,274.00	\$237,400.95	\$268,912.00	266,032.00

**Table 1.2:** Total number of faculty, staff, and students for FY 2004-2008: The table below shows the number of full time, part-time, and summer school students, faculty, and staff for FY 2004-2008. The people on campus per year are totaled in the final column.

Year	Full Time Students	Part-Time Students	Summer School Students	Faculty	Staff	Total
2004	1,992	122	138	194	272	2,718
2005	2,039	137	118	199	284	2,777
2006	1,976	125	140	200	289	2,730
2007	2,000	108	129	126	286	2,649
2008	2,069	73	121	131	333	2,727

**Table 1.3:** Purchased electricity, solid waste, CO<sub>2</sub> emissions, eCO<sub>2</sub> emissions, and water usage per capita for FY 2008: The table below shows the actual amounts of purchased electricity, solid waste, CO<sub>2</sub> emissions, eCO<sub>2</sub> emissions, and water usage and the per capita of each (by dividing totals in Table 1.5). Averages of the actual amounts and per capita are in the final column.

Topic	Units	2004	2005	2006	2007	2008	Average
Purchased Electricity	kWh	n/a	n/a	15,279,282	15,362,153	15,594,254	15,411,896
Electricity per capita	kWh	n/a	n/a	5,597	5,799	5,718	5,705
Solid waste generated	short tons	387	423	349	354	359	375
Solid waste per capita	pounds	1,475	1,444	1,470	1,515	1,473	1,475
Carbon dioxide	kilograms	n/a	n/a	15,126,762	15,070,976	15,095,806	15,097,848
Carbon dioxide per capita	kilograms	n/a	n/a	5,541	5,689	5,536	5,589
eCO <sub>2</sub>	metric tonnes	n/a	n/a	15,290	15,223	17,205	15,906
eCO <sub>2</sub> per capita	metric tonnes	n/a	n/a	5.60	5.75	5.67	5.67
Water Usage	Gallons	33,450,000	35,211,000	32,049,000	33,250,000	33,760,000	33,544,000
Water Usage per capita	Gallons	12,307	12,680	11,740	12,552	12,380	12,332

**Table 1.4:** Electricity and water usage and cost for on-campus buildings for FY 2008. The table below shows electricity and water use in each building on campus and the cost for each. It also shows how the building is heated and cooled.

Buildings	Electricity (kWh)	Electricity cost (dollars)	Water (gallons)	<u>Water cost</u> <u>Sewer cost</u> (dollars)	How Heated and Cooled?
ON CAMPUS					
Apfelbaum Hall	704,896	41,879	133,000	<u>851</u> 1,064	H- Nat Gas C- Chiller
Blough-Weis Library	970,400	57,694	447,000	<u>1,341</u> 3,576	H- Steam C-Chiller
Bogar Hall	452,320	26,868	1,138,000	<u>2,597</u> 9,104	H- Steam C-Chiller
Cunningham Center	651,770	38,694	194,000	<u>668</u> 1,552	H- Steam C-Chiller
Degenstein Campus Center	2,596,060	155,763	6,658,000	<u>15,089</u> 53,288	H- Steam C-Chiller
Fisher Science Hall	1,222,018	72,574	2,235,000	<u>4,900</u> 17,880	H- Steam C- Chiller
Garrett Sports Complex	1,844,231	103,013	2,763,000	<u>6,724</u> 22,104	H- Steam/Nat Gas C- Chiller
Selinsgrove Hall	135,760	8,067	127,000	<u>524</u> 1,016	H- Steam C- Chiller
Steele Hall	142,144	8,441	600,000	<u>1,446</u> 4,800	H- Steam C- Chiller
Weber Chapel	439,600	26,134	295,000	<u>859</u> 2,360	H- Steam C- Chiller
Alumni House	37,473	3,462	45,000	<u>150</u> 360	H- Oil C- Central Air
Continuing Education and SU Press Offices	25,955	2,945	20,000	<u>96</u> 160	H- Oil C- Central Air
Admissions Office	202,440	16,615	13,000	<u>94</u> 104	H- Oil C- Chiller
Financial Aid Office	Incl in Adm	Incl in Adm	82,000	<u>250</u> 656	H- Oil C- Chiller
Health and Counseling Office	46,896	2,719	26,000	<u>113</u> 208	H- Nat Gas C- Central Air
Trax	No meter	No meter	10,000	<u>857</u> 96	H- Nat Gas C- Chiller

**Table 1.5:** Electricity and water usage and cost for dormitories for FY 2008. The table below shows electricity and water use for each dormitory, and the cost for each. It also shows how the building is heated and cooled.

Buildings	Electricity (kWh)	Cost (dollars)	Water (gallons)	<u>Water cost</u> <u>Sewer cost</u> (dollars)	How Heated and Cooled?
DORMITORIES					
Aikens Hall	276,568	16,396	1,376,000	<u>3,121</u> 11,008	H- Steam C- Chiller
Hassinger Hall	31,104	1,843	1,180,000	<u>2,689</u> 9,440	H- Steam C- Chiller
Isaacs House	14,048	834	158,000	<u>429</u> 1,264	H- Nat Gas C- Chiller
North Hall	241,792	14,346	1,319,000	<u>2,997</u> 10,552	H- Nat Gas C- Chiller
Roberts House	18,992	1,123	127,000	<u>360</u> 1,016	H- Nat Gas C- Chiller
Reed Hall	240,200	14,225	1,577,000	<u>3,570</u> 12,616	H- Steam C- Chiller
Sassafras A	22,090	1,317	93,000	<u>524</u> 744	H- Nat Gas C- Chiller
Sassafras B	211,735	12,559	395,000	<u>997</u> 3,160	H- Nat Gas C- Chiller
Sassafras C	7,597	449	125,000	<u>524</u> 1,000	H- Nat Gas C- Chiller
Scholars House	67,008	3,979	384,000	<u>938</u> 3,072	H- Nat Gas C- Chiller
Seibert Hall	981,200	58,353	976,000	<u>2,250</u> 7,808	H- Steam C- Chiller
Shobert Hall	215,872	12,801	1,453,000	<u>3,303</u> 11,624	H- Nat Gas C- Chiller
Smith Hall	343,936	20,395	2,489,000	<u>5,486</u> 19,912	H- Steam C- Chiller
Theta Chi House	27,241	1,610	149,000	<u>412</u> 1,192	H- Nat Gas C- none
Tudor House	No info	No info	No info	No info	H- Nat Gas C- none
West Hall	394,475	23,417	1,121,000	<u>2,546</u> 8,968	H- Nat Gas C- Chiller
West Village A	144,906	14,380	430,000	<u>1,096</u> 3,440	H & C Geothermal
West Village B	151,918	14,801	403,000	<u>1,075</u> 3,224	H & C Geothermal

**Table 1.6:** Electricity and water usage & cost for buildings on University Avenue for FY 2008: The table below shows electricity and water use for each house on University Avenue, and the cost for each. It also shows how the building is heated and cooled.

Buildings	Electricity (kWh)	Cost (dollars)	Water (gallons)	<u>Water cost</u> <u>Sewer cost</u> (dollars)	How Heated and Cooled?
AVENUE					
Chaplain's House	22,001	2,078	100,000	<u>295</u> 800	H- Nat Gas C- Window A/C
Pine Lawn – President's House	50,660	3,009	127,000	<u>360</u> 1,016	H- Nat Gas C- Central Air
300 University Avenue Sigma Kappa	28,732	3,190	156,000	<u>425</u> 1,248	H- Oil C- none
301 University Avenue Alpha Delta Pi	11,489	1,386	111,000	<u>287</u> 792	H- Nat Gas C- none
305 University Avenue CCM	18,709	2,222	107,000	<u>310</u> 856	H- Nat Gas C- none
309 University Avenue Kappa Delta	33,497	3,907	165,000	<u>445</u> 1,320	H- Oil C- none
310 University Avenue TKE	16,296	1,990	95,000	<u>281</u> 760	H- Nat Gas C- none
312 University Avenue Comp Cons	12,559	1,634	88,000	<u>265</u> 704	H- Nat Gas C- none
313 University Avenue Presser International House	41,416	4,906	226,000	<u>583</u> 1,808	H- Nat Gas C- Central Air
401 University Avenue ZTA	16,760	2,000	83,000	<u>252</u> 664	H- Oil C- none
402 University Avenue SPAA	12,419	1,587	58,000	<u>185</u> 464	H- Oil C- none
403 University Avenue Phi Sigma Kappa	22,395	2,533	102,000	<u>296</u> 816	H- Nat Gas C- none
405 University Avenue Phi Mu Alpha Sinfonia	17,688	2,087	109,000	<u>315</u> 872	H- Nat Gas C- none
409 University Avenue D.E.U.C.E. House	9,705	1,143	No info	No info	H- Oil C- none
520 University Avenue Sigma Alpha Iota	12,028	1,529	64,000	<u>202</u> 512	H- Oil C- none
600 University Avenue Sigma Phi Epsilon	17,163	2,023	64,000	<u>202</u> 512	H- Oil C- none
604 University Avenue Women Speak	6,417	722	52,000	<u>169</u> 416	H- Nat Gas C- none
Liberty Alley	81,173	13,544	221,000	<u>856</u> 1,816	H- Electric C- none

**Table 1.7:** Per capita electricity use per dormitory: The dormitory, the number of kilowatt-hours of total electricity, the capacity able to live in each dormitory in 2008, and the per capita of each dormitory is shown below.

Dormitories	kWh	Number of individuals	Per capita
Seibert	394,475	120	8,177
Shobert	67,008	55	3,925
Sass B	151,918	55	3,850
West Village B	343,936	48	3,165
West Village A	276,568	48	3,019
Scholars	27,241	24	2,792
West	241,792	156	2,529
North	215,872	123	1,966
Aikens	211,735	153	1,808
Theta Chi	144,906	16	1,703
Reed	240,200	155	1,550
Sass A	22,090	16	1,381
Smith	981,200	275	1,251
Roberts	18,992	16	1,187
Isaacs	14,048	16	878
Sass C	7,597	16	475
Hassinger	31,104	101	308

**Table 1.8:** Per capita electricity use per University Avenue House: The house, the number of kilowatt-hours of total electricity, the capacity per house in 2008, and the per capita of each house is shown below.

Buildings	kWh	Number of people	Per Capita
Chaplain	22,001	2	11,001
Pine Lawn	50,660	6	8,443
Inter-national	41,416	7	5,917
Liberty Alley	81,173	21	3,865
Phi Sigma Kappa	22,395	8	2,799
Sigma Kappa	28,732	12	2,394
CCM	18,709	8	2,339
Kappa Delta	33,497	15	2,233
Phi Mu Alpha	17,688	8	2,211
Sigma Phi Epsilon	17,163	8	2,145
TKE	16,296	8	2,037
Sigma Alpha Iota	12,028	6	2,005
ZTA	16,760	9	1,862
DEUCE	9,705	6	1,618
Women Speak	6,417	4	1,604
Comp cons	12,559	8	1,570
SPAA	12,419	8	1,552
Alpha Delta Pi	11,489	12	957

**Table 1.9:** Conversions of energy data to kilograms of carbon dioxide for distillate oil, natural gas and coal: Conversion factors were determined from the Clean Air Cool Planet Campus Carbon Calculator (<http://www.cleanair-coolplanet.org/toolkit/content/view/43/124/>). To convert gallons of distillate oil to kg of carbon dioxide, it was converted first to MMBtu by multiplying by 0.14 MMBtu/gallon of oil, and then multiplied by 72.42 kg of CO<sub>2</sub>/MMBtu of oil to get kilograms of carbon dioxide. Natural gas in CCF was converted to MMBtu by dividing by a factor of 10, and then multiplied by 52.79 kg CO<sub>2</sub>/MMBtu of natural gas to get kilograms of carbon dioxide. Short tons of coal was multiplied by 21.20 MMBtu/short ton of coal to get MMBtu units, and then multiplied by 94.09 kgCO<sub>2</sub>/MMBtu of coal to convert it to kilograms of carbon dioxide.

Year	Distillate Oil (#1 - #4)	Distillate Oil (#1 - #4)	Distillate Oil (#1 - #4)	Natural Gas	Natural Gas	Coal	Coal	Coal
	Gallons	MMBtu	kg CO <sub>2</sub>	MMBtu	kg CO <sub>2</sub>	Short Ton	MMBtu	kg CO <sub>2</sub>
2004	26,803	3,752	271,754	19,816	1,046,087	3,347	70,954	6,675,359
2005	156,922	21,969	1,590,996	19,206	1,013,885	2,423	51,376	4,833,442
2006	23,049	3,227	233,685	20,174	1,064,985	2,883	61,120	5,750,132
2007	22,513	3,152	228,254	20,789	1,097,451	2,814	59,649	5,611,794
2008	22,435	3,141	227,465	21,669	1,143,907	2,741	58,116	5,467,592

**Table 1.10:** Conversions of energy data to kilograms of carbon dioxide for propane, gasoline, diesel, and purchased electricity: Conversion factors were determined from the Clean Air Cool Planet Campus Carbon Calculator (<http://www.cleanair-coolplanet.org/toolkit/content/view/43/124/>). Gallons of propane was multiplied by 0.09 MMBtu/gallon of propane, then multiplied by 62.79 kg of CO<sub>2</sub>/MMBtu of propane to get kilograms of carbon dioxide. To convert gallons of gasoline to kilograms of carbon dioxide it was multiplied by 2.75 kg CO<sub>2</sub>/gallon of gasoline. Gallons of diesel were multiplied by 9.99 kg CO<sub>2</sub>/gallon of diesel to convert it to kilograms of carbon dioxide. Purchased electricity in kWh was converted to kilograms of carbon dioxide by 0.543 kg CO<sub>2</sub>/kWh of electricity.

Year	Propane	Propane	Propane	Gasoline	Gasoline	Diesel	Diesel	Purchased Electricity	Purchased Electricity
	Gallons	MMBtu	kg CO <sub>2</sub>	gallons	kg CO <sub>2</sub>	gallons	kg CO <sub>2</sub>	kWh	kg CO <sub>2</sub>
2004	226	20	1,275	1,320	3,630	975	9,738	n/a	n/a
2005	232	21	1,308	1,190	3,273	1,357	13,552	n/a	n/a
2006	265	24	1,497	1,685	4,634	887	8,864	15,279,282	8,296,650
2007	239	22	1,350	1,475	4,056	1,469	14,675	15,362,153	8,341,649
2008	296	27	1,674	1,725	4,744	1,022	10,211	15,594,254	8,467,680

**Table 1.11:** Total kilograms of carbon dioxide for all energy sources, including purchased electricity, distillate oil, natural gas, propane, coal, gasoline, diesel, and air travel (for FY 2008 only). Three-year averages are shown in the last row.

Year	Purchased Electricity	Distillate Oil (#1 - #4)	Natural Gas	Propane	Coal	Gasoline	Diesel	Air Travel
	kg CO <sub>2</sub>	kg CO <sub>2</sub>	kg CO <sub>2</sub>	kg CO <sub>2</sub>	kg CO <sub>2</sub>	kg CO <sub>2</sub>	kg CO <sub>2</sub>	kg CO <sub>2</sub>
2006	8,296,650	233,685	1,064,985	1,497	5,750,132	4,634	8,864	n/a
2007	8,341,649	228,254	1,097,451	1,350	5,611,794	4,056	14,675	n/a
2008	8,467,680	227,465	1,143,907	1,674	5,467,592	4,744	10,211	454,073
Average	8,368,660	229,801	1,102,114	1,507	5,609,839	4,478	11,250	n/a

**Table 1.12:** Individual study abroad mileage during FY 2008, including the location, the number of individual students traveling to each location, the number of miles, the roundtrip distance, and the total number of miles.

Location	# of Students	Miles to	Roundtrip	Total
Cairns, Australia	2	10,046	20,092	40,184
Gold Coast, Australia	6	10,046	20,092	120,552
Sydney, Australia	1	10,046	20,092	20,092
Townsville, Australia	5	10,046	20,092	100,460
Vienna, Australia	2	4,502	9,004	18,008
Macau, China	9	8,184	16,368	147,312
Heredia, Costa Rica	1	2,545	5,090	5,090
Copenhagen, Denmark	1	4,311	8,622	8,622
Brighton, England	3	4,112	8,224	24,672
Lancaster, England	1	4,112	8,224	8,224
London, England	16	4,112	8,224	131,584
Nantes, France	3	4,163	8,326	24,978
Paris, France	5	4,176	8,352	41,760
Athens, Greece	2	5,270	10,540	21,080
Equatorial, Guinea	1	10,100	20,200	20,200
Cork, Ireland	1	4,483	8,966	8,966
Dublin, Ireland	1	4,045	8,090	8,090
Maynooth, Ireland	7	4,045	8,090	56,630
Florence, Italy	3	4,577	9,154	27,462
Japan	1	6,510	13,020	13,020
Merida, Mexico	3	2,644	5,288	15,864
Christchurch, New Zealand	1	12,234	24,468	24,468
New Zealand	1	12,234	24,468	24,468
Massey, New Zealand	1	12,234	24,468	24,468
Edinburgh, Scotland	1	4,333	8,666	8,666
Dakar, Senegal	1	6,557	13,114	13,114
Seville, Spain	4	4,691	9,382	37,528
Barcelona, Spain	2	4,691	9,382	18,764
Geneva	1	4,344	8,688	8,688
			Total	1,023,014

**Table 1.13:** FY 2008 group trip mileages, including the 10 group trips that were taken during FY 2008: PLUS to Japan, SU CASA to Costa Rica, 3 HRT trips to New Orleans, the Sigmund Weis School of Business semesters in London, a Music trip to France, and the EF Tours for Theatre students to Greece and France. Information includes the including the location, the number of individual students traveling to each location, the number of miles, the roundtrip distance, and the total number of miles.

	Location	People	Miles to	Roundtrip	Total
PLUS	Nagoya, Manila, Japan	7	6,867	17,214	120,498
**SU CASA (BWI)	Costa Rica	25	2063	4,126	103,225
**SU CASA (HAR)	Costa Rica	2	2805	5610	11,220
HRT 7	New Orleans	24	1458	2916	69984
HRT 8	New Orleans	21	2247	4694	98574
HRT 9	New Orleans	24	1797	3594	86256
SWB	London	71	4,112	8,224	583,904
Music	France	4	4,176	8,352	33,408
EF tours	France	10	4,176	8,352	83,520
EF tours	Greece	8	5,270	10,540	84,320
Total					1,274,909

\*\* SU CASA offset its carbon emissions by planting 300 trees.

**Table 1.14:** Total carbon dioxide emissions (in kilograms) for all air travel trips: The table below shows the conversion from mileage to kg of carbon dioxide. The air mileage was entered into the American Forests Climate Change Calculator (<http://www.americanforests.org/resources/ccc/>), which calculated the number of pounds of carbon dioxide. Pounds of carbon dioxide were converted into kilograms of carbon dioxide by multiplying by 0.45359237 kg CO<sub>2</sub>/lbs CO<sub>2</sub>. The kilograms of carbon dioxide from each trip were added to get the total amount, which was then added to the GHG data for 2008.

Group	Mileage	lbs CO <sub>2</sub>	kg CO <sub>2</sub>
PLUS	120,498	52,956	24,021
**SU CASA	114,445	50,296	22,814
HRT	254,814	103,157	46,791
Study Abroad	1,023,014	449,593	203,932
SWB-Fall	583,904	256,614	116,398
Music	33,408	14,682	6,660
EF tour-France	83,520	36,705	16,649
EF tour-Greece	84,320	37,057	16,809
		Total	454,073

\*\* SU CASA offset its carbon emissions by planting 300 trees.

**Table 1.15:** Total equivalent carbon dioxide data: In the table below, equivalent CO<sub>2</sub>, which is a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP), is totaled. GWP is the index used to translate the level of emissions of various gases into a common measure in order to compare the relative radiative forcing of different gases without directly calculating the changes in atmospheric concentrations. (Translation: Emission of one kilogram of a greenhouse gas divided by emission of one kilogram of carbon dioxide over a period of time.) (Andrews, 2008).

Year	Purchased Electricity	On-campus Stationary	Transportation			Solid Waste	Total Emissions
			Total MTeCO <sub>2</sub>	Fleet MTeCO <sub>2</sub>	Air Travel MTeCO <sub>2</sub>		
	MTeCO <sub>2</sub>	MTeCO <sub>2</sub>				MTeCO <sub>2</sub>	MT eCO <sub>2</sub>
2006	8,346	6,858	24	24	0	51	15,290
2007	8,391	6,751	28	28	0	52	15,223
2008	8,715	6,658	1,780	26	1,754	53	17,205

\*\*FY2008, without air travel calculated in, would have 15,451 MT eCO<sub>2</sub> as its Total Emissions.

**Table 1.16:** FY 2008 per capita water use by dormitories: The table below shows the dormitories, the total water use in gallons, the capacity of people to live in each dormitory, and the water use per person in each dormitory.

Dormitories	Water Use (gallons)	Number of people	Per capita
Shobert	1,453,000	55	26,418
Scholars	384,000	24	16,000
Hassinger	1,180,000	101	11,683
North	1,319,000	123	10,724
Reed	1,577,000	155	10,174
Isaacs	158,000	16	9,875
Theta Chi	149,000	16	9,313
Smith	2,489,000	275	9,051
Aikens	1,376,000	153	8,993
West Village A	430,000	48	8,958
West Village B	403,000	48	8,396
Seibert	976,000	120	8,133
Roberts	127,000	16	7,938
Sass C	125,000	16	7,813
West	1,121,000	156	7,186
Sass B	395,000	55	7,182
Sass A	93,000	16	5,813

**Table 1.17:** FY 2008 per capita water use by University Avenue houses: The table shows the Avenue houses, the total water use in gallons, the capacity of people to live in each house, and the water use per person in each house.

Buildings	Water Use (gallons)	Number of people	Per Capita
Chaplain	100,000	2	50,000
Inter-national	226,000	7	32,286
Pine Lawn	127,000	6	21,167
Phi Mu Alpha	109,000	8	13,625
CCM	107,000	8	13,375
Sigma Kappa	156,000	12	13,000
Women Speak	52,000	4	13,000
Phi Sigma Kappa	102,000	8	12,750
TKE	95,000	8	11,875
Comp Cons	88,000	8	11,000
Kappa Delta	165,000	15	11,000
Sigma Alpha Iota	64,000	6	10,667
Liberty Alley	221,000	21	10,524
Alpha Delta Pi	111,000	12	9,250
ZTA	83,000	9	9,222
Sigma Phi Epsilon	64,000	8	8,000
SPAA	58,000	8	7,250

**Table 1.18:** Amount of waste from food service: The table below shows the amount of solid and liquid waste thrown away in the cafeteria. The cost of the solid food waste disposal is also shown since ARAMARK has their own dumpster and pays for the removal services themselves.

	Units	FY2006	FY2007	FY2008
Liquid waste from drinks thrown away in cafeteria	gallons	370,182	368,115	358,185*
Solid waste food thrown away in cafeteria	lbs	200,450	198,970	195,670*
Solid Waste Disposal Cost	dollars	\$24,572	\$21,614	\$18,200**

\* three weeks trayless

\*\*estimate through Sept '08 (ARAMARK FY)

**Table 1.19:** Data from the Trayless Dining Week (April 20-26, 2008): A typical week of food waste was compared to the Trayless Dining Week.

Typical Week vs. Trayless Dining Week			
	Units	Typical Week	Trayless Dining Week
Food waste	lbs	6,632--food 12,270--beverage	6,367--food 6,500--beverage
Water use	gallons		3,000 gallons less from dish machine

**Table 1.20:** Number of bags of recyclables deposited at Selinsgrove Borough's recycling dropoff from FY 2006-2008: The table below shows the number of bags of plastic, clear glass, brown glass, and green glass that were deposited at Selinsgrove Borough.

Recycling to Selinsgrove Borough				
	Plastic	Clear Glass	Brown Glass	Green Glass
2006	37	31	8	1
2007	925	425	102	33
2008	1537	332	176	75

**Table 1.21:** Weight of recyclables removed by Pheasant Valley Recycling: The table below shows the weight over of office paper, newsprint, mixed paper, cardboard, magazines, aluminum cans, and mixed metal that was taken by Pheasant Valley Recycling.

Recycling to Pheasant Valley Recycling							
	Office Paper	Newsprint	Mixed Paper	Cardboard	Mags.	Alum. Cans	Mixed Metal
2006	2,984	450	12,918	42,370	0	442	24,200
2007	13,289	8,158	3,519	40,429	1,350	806	23,435
2008	14,833	13,627	12,978	60,875	0	971	28,420

**Table 1.22:** Regular Fall 2007 10-week recycling data: The table shows ten weeks of recycling during Fall Semester 2007 (without the Recyclemania competition) and the total number of bags for plastic, clear glass, brown glass, green glass, and the total of all three types of glass to Selinsgrove Borough.

	Borough date	Plastic	Clear Glass	Brown glass	Green Glass	Total glass
Week 1	9/13/07	51	11	6	2	19
Week 2	9/20/07	42	0	0	0	0
Week 3	9/27/07	55	0	0	0	0
Week 4	10/4/07	28	22	4	5	31
Week 5	10/11/07	46	16	3	0	19
Week 6	10/18/07	27	6	2	6	14
Week 7	11/1/07	31	24	17	4	45
Week 8	11/8/07	70	9	2	3	14
Week 9	11/15/07	50	15	10	5	30
Week 10	11/21/07	60	12	6	10	28
	<b>Total</b>	<b>460</b>	<b>115</b>	<b>50</b>	<b>35</b>	<b>200</b>

**Table 1.23:** Regular Fall 2007 10-week recycling data: The table depicts ten weeks of recycling in Fall 2007 (without the Recyclemania competition), and the weight in pounds of office paper, newspaper, mixed paper, cardboard, and aluminum to Pheasant Valley..

	Borough date	Office paper	Newspaper	Mixed paper	Cardboard	Aluminum
Week 1	9/13/07	153	162	351	1,431	24
Week 2	9/20/07	153	162	351	1,431	24
Week 3	9/27/07	153	162	351	1,431	24
Week 4	10/4/07	153	162	351	1,431	24
Week 5	10/11/07	153	162	351	1,431	24
Week 6	10/18/07	348	545	150	1,263	22
Week 7	11/1/07	348	545	150	1,263	22
Week 8	11/8/07	348	545	150	1,263	22
Week 9	11/15/07	348	545	150	1,263	22
Week 10	11/21/07	348	545	150	1,263	22
	<b>Total</b>	<b>2,505</b>	<b>3,535</b>	<b>2,505</b>	<b>13,470</b>	<b>2,300</b>

\*\*aluminum multiplied by 10 for plotting

**Table 1.24:** 2008 10-week Recyclemania data: The data below shows the ten weeks in 2008 of the Recyclemania competition, and the total number of bags for plastic, clear glass, brown glass, green glass, and the total of all three types of glass, to Selinsgrove Borough.

	Borough date	Plastic	Clear Glass	Brown glass	Green Glass	Total glass
Week 1	1/31/2008	73	15	10	6	31
Week 2	2/7/2008	74	10	7	2	19
Week 3	2/14/2008	24	5	1	0	6
Week 4	2/21/2008	24	5	1	0	6
Week 5	2/28/2008	93	29	14	7	50
Week 6	3/6/2008	61	9	0	0	9
Week 7	3/13/2008	35	3	4	0	7
Week 8	3/20/2008	43	14	7	3	24
Week 9	3/27/2008	69	17	3	5	25
Week 10	4/3/2008	85	23	9	1	33
<b>Total</b>		<b>581</b>	<b>130</b>	<b>56</b>	<b>24</b>	<b>210</b>

**Table 1.25:** 2008 10-week Recyclemania data: The data below shows the ten weeks in 2008 of the Recyclemania competition and the weight in pounds of office paper, newspaper, mixed paper, cardboard, and aluminum to Pheasant Valley.

	Borough date	Office paper	Newspaper	Mixed paper	Cardboard	Aluminum
Week 1	1/31/2008	371	581	383	1347	23
Week 2	2/7/2008	371	581	383	1347	23
Week 3	2/14/2008	371	581	383	1347	23
Week 4	2/21/2008	409	280	386	1349	20
Week 5	2/28/2008	409	280	386	1349	20
Week 6	3/6/2008	409	280	386	1349	20
Week 7	3/13/2008	409	280	386	1349	20
Week 8	3/20/2008	409	280	386	1349	20
Week 9	3/27/2008	409	280	386	1349	21
Week 10	4/3/2008	409	280	386	1349	21
<b>Total</b>		<b>3,976</b>	<b>3,703</b>	<b>3,851</b>	<b>13,484</b>	<b>2,110</b>

\*\*aluminum total is multiplied by 10 for plotting

**Appendix II: Oberlin College's Green Purchasing Policy**

# Oberlin College Green Purchasing Policy

## 1. Policy Statement

Oberlin College is committed to the use and purchase of environmentally and socially responsible materials and products.

This document outlines the multiple factors that determine Oberlin's procurement decisions. These procurement decisions amend economic criteria with strong commitments towards environmental and social responsibility. In 1999, the Oberlin College Sweatshop-Free Apparel Code of Purchasing established Oberlin College's commitment to purchase socially responsible apparel. This Green Purchasing Policy expands our commitment to social responsibility beyond apparel to all products. People authorized to make purchases on behalf of the college are expected to support our commitment to environmental responsibility through the guidelines and procedures contained in this Green Purchasing Policy.

This Green Purchasing Policy provides a means for implementation of the Environmental Policy Statement of March 2004, proposed and approved by the General Faculty Planning Committee and the Board of Trustees, and the Strategic Plan of March 5, 2005, approved by the General Faculty and the Board of Trustees, as it relates to all college purchases. The Green Purchasing Policy shall be implemented to complement the American University and College President's Climate Commitment signed by President Nancy Dye in November, 2006.

## 2. Desired Environmental Attributes

When determining whether a product is environmentally preferable all phases of the product's life cycle will be considered, including: raw materials acquisition, production, manufacturing, packaging, distribution, operation, maintenance, disposal, potential for reuse and ability to be recycled. **The following environmental attributes should be considered desirable:**

- ***Biodegradable \****
- ***Carcinogen-free***
- ***Chlorofluorocarbon (CFC)-free***
- ***Compostable***
- ***Durable***
- ***Energy efficient***
- Heavy metal free (e.g., no lead, mercury, cadmium)
- Less hazardous
- ***Locally manufactured or grown***
- ***Low volatile organic compound (VOC) content***
- Low-toxicity
- Lower embodied energy
- Made from rapidly ***Renewable materials***
- ***Persistent, bioaccumulative toxin (PBT)-free***

- Preservation and enhancement of local economy
- ***Recyclable***
- ***Recycled post consumer content***
- Reduced ***greenhouse gas emissions***
- Reduced packaging
- Refurbished
- Resource efficiency
- Reusable
- Third-party sustainability certification
- Upgradeable
- ***Water efficient***
- 

\* ***Italicized bold listings*** indicate terms defined in section 5. Appendix of Environmental Purchasing Definitions

### 3. Goals

**I. Maintain high environmental standards:** Purchase products that meet the latest and most credible environmental standards available. In addition, any product that earns LEED credit will be considered a priority.

\* See Appendix 4 and 5 for information about these certifications.

**II. Integrate a Closed Loop Supply Chain:** To develop and maintain a consistent ‘cradle-to-cradle’ supply chain and purchasing process which considers economic, ethical, social and environmental impacts for all contracts and purchases; where all waste should first be eliminated or avoided and where any remaining waste be considered feedstock for new product development. To reuse, return or negotiate with suppliers the reduction or elimination of all packing materials.

Ethical and social impact will be documented by posting the supplier and subcontractor’s annual corporate, social, ethical and environmental reports and other supporting documentation. When reports are not currently available the goal will be to work with suppliers to develop and implement corporate social, ethical and environmental reports.

**III. Integrate High Environmental Standards into Buildings and Facilities Management:**

To integrate green purchasing concepts and products into designs, construction documents, final construction and outfitting of all Oberlin College buildings, renovations of property or facilities owned by Oberlin College.

**IV. Research and Procure Alternative Energy:** To conduct research and procure alternative energy from reliable, certified alternative energy suppliers.

**V. Safety:** To ensure that the products and services purchased by Oberlin College improve and strengthen the health of the campus community and natural resources. In addition proper MSDS (Material Safety Data Sheets) are identified in all contract specifications and kept on record.

**Strategy for Implementation:**

The Purchasing Office will implement the Purchasing Policy. The Committee on Environmental Sustainability (CES) will help the Purchasing Office establish goals, benchmarks, assessments, reporting mechanisms, etc. The role of the Office of Environmental Sustainability will be to provide the Purchasing Office with the technical support necessary to implement the policy and to assist with implementation primarily through education--both of the Purchasing Office to get them up to speed on green purchasing and other offices/departments to follow the policy.

**4. Appendix of the Latest and Most Credible Environmental Standards**

Cleaning Supplies, paint, windows, doors, etc. * See appendix 5	<b>Green Seal*</b> certified
Lumber	<b>Forest Stewardship Council</b> certified
Floorings	<b>Floor Score certified, Green Label Plus, or SCS Sustainable Choice Certified</b>
Appliances	<b>ENERGY STAR</b> approved
Computers	<b>EPEAT</b> certified
Products for indoor environments (paints, bedding, furniture, etc. **See Appendix 5	<b>GreenGuard</b>

**5. Appendix of Environmental Purchasing Definitions**

**Biodegradable** – The ability of a substance to decompose in the natural environment into harmless raw materials. To be truly biodegradable, a substance or material should break down into carbon dioxide (a nutrient for plants), water, and naturally occurring minerals that also do not cause harm to the ecosystem. In terms of environmental benefits, a product should take months or years, and not centuries, to biodegrade.

**Buyer** – Anyone authorized to purchase on behalf of the organization or its subdivisions.

**Chlorofluorocarbons (CFCs)** – Any of a group of compounds that contain carbon, chlorine, fluorine, and sometimes hydrogen and have been used as refrigerants, cleaning solvents, aerosol propellants and in the manufacture of plastic foams. The uses of CFCs are being phased out because they destroy the planet's stratospheric ozone protection layer.

**Compostable** – A product that can be placed into a composition of decaying biodegradable materials and eventually turn into a nutrient-rich material. It is synonymous with "biodegradable," except it is limited to solid materials. (Liquid products are not considered compostable.)

**Durable** – A product that remains useful and usable for a long time without noticeable deterioration in performance.

**Energy efficient product** – A product that is in the upper 25 percent of energy efficiency for all similar products, or that is at least 10 percent more efficient than the minimum level meeting US federal government standards.

**ENERGY STAR**- Developed and promoted by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE). Energy Star currently certifies and labels appliances, heating and cooling systems, clothes washers, dehumidifiers, dishwashers, commercial and residential refrigerators & freezers, commercial food service equipment, room AC, lighting, office equipment, and manufactured homes. Criteria for product categories are updated regularly and designed to reduce energy use. In addition, Energy Star and the EPA provide information for reducing the costs of operating buildings through their website and informational material.  
Website: [www.energystar.gov](http://www.energystar.gov)

**EPEAT**- Electronic Product Environmental Assessment Tool is a self-declaration system operated by the Green Electronics Council to help purchasers in the public and private sectors evaluate, compare and select desktop computers, notebooks and monitors based on their environmental attributes. EPEAT was developed with funding from the EPA and the Zero Waste Alliance. EPEAT evaluates products based on: material selection, design for end of life, product longevity/life cycle extension, energy conservation, end of life management, corporate Performance, and packaging. EPEAT™ Performance Tiers evaluates electronic products according to three tiers of environmental performance – Bronze, Silver and Gold. The complete set of performance criteria includes 23 required criteria and 28 optional criteria in 8 categories. To qualify for acceptance as an EPEAT product, it must conform to all the required criteria. Environmental groups were active participants in the EPEAT development process along with other key stakeholders. Manufacturers voluntarily announce what performance criteria they meet based on good faith and pay an annual fee. Dell, Apple, Samsung, Sony, Gateway and many other manufacturers participate in EPEAT.  
Website: [www.epeat.net/](http://www.epeat.net/)

**FloorScore**- is a program for testing and certifying hard floor services compliance with California's indoor air quality emission requirements laid out in California Section 01350 program. Scientific Certification Systems developed the program with the Resilient Floor Covering Institute (RFCI). US Green Building Council approved FloorScore Certification as an indicator for LEED Credit in November 2006.  
Website: <http://www.scs-certified.com/iaq/floorscore.html>

**Forest Stewardship Council (FSC)**- FSC creates the standards for SmartWood and Scientific Certification Systems (SCS) (third-party certifying organizations) to certify forests and chain of custody forest products. As of 2005 FSC has three different labels for wood products: "FSC Pure," "FSC Mixed Sources," and "FSC Recycled."  
Website: [www.fsc.org](http://www.fsc.org)

**Greenhouse gases** – Any of several dozen heat-trapping trace gases in the earth's atmosphere that absorb infrared radiation. The two major greenhouse gases are water vapor and carbon dioxide; lesser greenhouse gases include methane, ozone (O<sub>3</sub>), CFCs, and nitrogen oxides.

**Greenguard**- Greenguard is a for profit company that rates the indoor air quality of a variety of products. Greenguard certified office furniture earns LEED credits for Commercial Interiors Rating System. Companies pay to be Greenguard certified.

According to Environmental Building News, “the most any one company has paid to date is \$180,000 per year.” When considering the indoor air quality of products it is important to remember that after the first few months of occupancy, emissions from furnishings diminish to very low levels, and emissions from maintenance and cleaning products are the real issue in terms of air quality (EBN Volume 12, No.10)

Website: [www.greenguard.org](http://www.greenguard.org)

**Green Label Plus**- The Carpet and Rug Institute (CRI) developed the Green Label in 1992 as a label for carpets and adhesives that pass their independent testing program for indoor emissions from carpets. The program was updated with stricter standards and called Green Label Plus in 2004. “[C]arpet must be tested by Air Quality Sciences, Inc. of Atlanta (the only certified testing laboratory).” 1 There are 109 certified products from 25 different companies, including: Atlas Carpet Mills Inc., Beaulieu of America, Blue Ridge Commercial Carpet, C&A Floor coverings, Inc, Camelot Carpet Mills, Constantine, Millikin and Company, Lees Carpets by Mohawk Industries, InterfaceFLOR Commercial.

Website: [http://www.carpet-rug.org/drill\\_down\\_2.cfm?page=8&sub=3](http://www.carpet-rug.org/drill_down_2.cfm?page=8&sub=3)

**Green Seal**- Green Seal is a non-profit formed in 1989 that began certifying products in 2000. Green Seal certifies Hand Cleaners, Electric Chillers, Cleaners, Fleet Vehicle Maintenance, Floor Care Products, paints, papers, newsprint and windows and doors. Green Seal is a member of the Global Ecolabeling Network (GEN).

**Reputable:** Product standards are developed with the input of the public and industry stakeholders, academia and government agencies. Standards must meet U.S. Environmental Protection Agency (EPA) requirements, International Standards Organization (ISO) requirements and the requirements of third party certifiers. Green Seal cites Ecolab as having Green Seal approved products.

**Widely Used:** All Federal government contracts reference Green Seal Standards for Industrial and Institutional Cleaners (GS-37) for cleaning products. Green Seal certification is required for all industrial cleaning products bought by schools, and local and state agencies in Minnesota, Massachusetts, Connecticut and New York. Montana, Illinois, Pennsylvania, and Washington are considering adopting Green Seal standards. Ecolab, a leading cleaning supply manufacturer, launched a line of products that meet Green Seal criteria in 2005. Maplewood-based 3M Co, Johnson Wax Professional, Benjamin Moore, Dutch Boy and Anderson Corporation product Green Seal certified products.

Website: [www.greenseal.org](http://www.greenseal.org)

**LEED rating system** – A self-assessment system developed by the US Green Building Council for rating the environmental preferability of new and existing commercial,

institutional, and high-rise residential buildings.

Website: [www.usgbc.org](http://www.usgbc.org)

**Life cycle cost** – The amortized annual cost of a product or service, including capital costs, installation costs, operating costs, maintenance costs, and disposal costs discounted over the lifetime of the product or service. (Compare with Product Life cycle.)

**Locally manufactured or grown** – Manufactured or grown within 100 miles of Oberlin, Ohio.

**Material Safety Data Sheet (MSDS)** – Written or printed material about a product that includes information on the product’s physical and chemical characteristics; physical and health hazards; exposure limits; whether the product contains carcinogenic ingredients above a certain threshold; precautions for safe handling and use; control measures; emergency and first aid procedures; the date of preparation of the MSDS or the last change to it; and the name, address, and telephone number of the manufacturer.

**Persistent, bioaccumulative, toxic compounds (PBTs)** – Toxic chemicals that persist in the environment and increase in concentration through food chains as larger animals consume PBT laden smaller animals. They transfer rather easily among air, water, and land, and span boundaries of programs, geography, and generations. As a result, PBTs pose risks to human health and ecosystems. They are associated with a range of adverse human health effects, including effects on the nervous system, reproductive and developmental problems, cancer, and genetic impact. They include heavy metals and chemicals such as mercury, dioxins, and PCBs (polychlorinated biphenyls).

**Post-consumer recycled content** – Percentage of a product made from materials and byproducts recovered or diverted from the solid waste stream after having completed their usefulness as consumer items and used in place of raw or virgin material.

**Product life cycle** – The culmination of environmental impacts for a product, including raw material acquisition, manufacturing, distribution, use, maintenance, and ultimate disposal of the product. (Compare with Life cycle Cost.)

**Recyclable product** – A product that after its intended end use can be diverted from the solid waste stream for use as a raw material in the manufacture of another product.

**Recovered materials** – Waste materials and by-products that have been recovered or diverted from the solid waste stream.

**Recycled materials** – Material and byproducts that have been recovered or diverted from solid waste and have been utilized in place of raw or virgin material in manufacturing a product. It is derived from post-consumer recycled materials, manufacturing waste, industrial scrap, agricultural waste, and other waste material, but does not include material or byproducts generated from, and commonly reused within, an original manufacturing process.

***Refurbished product*** – A product that has been completely disassembled and restored to its original working order while maximizing the reuse of its original materials.

***Renewable materials*** – Materials made from plant-based feedstock capable of regenerating in less than 200 years such as trees and agricultural products. Rapidly renewable resources, such as grain-based feedstocks, regenerate in less than two years.

***Sustainable*** – An action is said to be sustainable if it satisfies present needs without compromising the ability of future generations to meet their needs.

***SCS Sustainable Choice***- Scientific Certification Systems certifies selected carpets and floor coverings for compliance with the NSF 140 Carpet Assessment Standard. The criteria is stipulated by the Sustainable Carpet Assessment Standard and California Gold Sustainable Carpet Standard, California Department of General Services. Eight major carpet companies offer a total of over 25 different products that are SCS Sustainable choice certified. About 190 companies have products that meet SCS's other environmental standards. SCS does not identify products that meet their standards with any label that end users can see. Based in Emeryville, California. SCS is a private for profit company and independent third-party certifier that claims no financial, management or ownership connections between their staff and the clients they certify.

***Upgradeable product*** – The ability to increase a product's performance or features without replacing the product.

***Virgin material*** – Any material occurring in its natural form. Virgin Material is used in the form of raw material in the manufacture of new products.

***Volatile organic compounds (VOCs)*** – Chemicals that readily evaporate and contribute to the formation of air pollution when released into the atmosphere. Many VOCs are classified as toxic and carcinogenic.

***Water efficient*** – A product that is in the upper 25 percent of water efficiency for all similar products, or that is at least 10 percent more efficient than the minimum level meeting US federal government standards.

**Appendix III: Group of 24 Summary Table**

**Table 2.1:** Group of 24 plus SU survey questions and table. For original survey responses, see Appendix IV, Group of 24 Surveys.

Sustainability Practices:	Signed Presidents Climate Commitment	Signed Talloires Declaration	AASHE member	PERC member
Allegheny College	✓		✓	✓
Colorado College			✓	
DePauw University			✓	
Dickinson University	✓		✓	✓
Franklin & Marshall	✓		✓	✓
Furman University	✓		✓	
Gettysburg College	✓			✓
Hope College				
Luther College	✓		✓	
Macalester College	✓	✓	✓	
Moravian College		✓		✓
Southwestern University		✓		
St. Lawrence University	✓		✓	
Susquehanna University				
Ursinus College	✓			
Washington & Jefferson	✓			

Table 2.1 (cont.)

Sustainability Practices:	Sustainability Coordinator/ Director	Sustainability Advisory Committee	Policy on purchasing green products	Involving Students in decisions dealing with Sustainability issues	Support Student Organizations	Office/Center dedicated to sustainability	School website on sustainability
Allegheny College	✓	✓	✓	✓	✓	✓	✓
Colorado College		✓		✓	✓		
DePauw University	✓	✓			✓		
Dickinson University	✓	✓	✓	✓	✓	✓	✓
Franklin & Marshall		✓	✓	✓	✓		
Furman University	✓	✓	✓	✓	✓	✓ -2009	✓
Gettysburg College					✓		
Hope College		✓	✓ - In Progress	✓	✓		✓
Luther College	✓ - Paid Intern	✓		✓	✓		
Macalester College	✓	✓	✓	✓	✓	✓	✓
Moravian College	✓	✓	✓	✓	✓		
Southwestern University		✓		✓	✓		
St. Lawrence University	✓	✓		✓	✓		✓
Susquehanna University					✓		
Ursinus College		✓		✓	✓		✓
Washington & Jefferson		✓		✓	✓		

Table 2.1 (cont.)

Sustainability Practices:	Carbon Emissions Inventory	Efforts to reduce carbon emissions	Carbon neutrality plan	Use energy-efficient technology	Purchase electric power from renewable energy sources or RECs	Install or plan to install alternative sources of power	Invest in renewable energy technology that will benefit non-campus communities
Allegheny College	✓ - In Progress		✓	✓	✓ - wind	✓	✓ - wind
Colorado College				✓	✓	✓	
DePauw University				✓			
Dickinson University	✓ - In Progress	✓	✓	✓	✓	✓	
Franklin & Marshall			✓		✓	✓	
Furman University		✓	✓	✓		✓ - plan	✓
Gettysburg College				✓			
Hope College	✓ - In Progress	✓		✓		✓	
Luther College	✓	✓	✓	✓	✓	✓ - plan	
Macalester College	✓	✓	✓	✓		✓ -have wind turbine	
Moravian College	✓ - In progress	✓		✓			
Southwestern University		✓		✓			
St. Lawrence University	✓	✓	✓	✓ - some	✓	✓	
Susquehanna University	✓	✓		✓			
Ursinus College	✓	✓	✓	✓ - some	✓ -nuclear	✓ -plan	✓
Washington & Jefferson							

Table 2.1 (cont.)

Sustainability Practices:	Purchase food from local farmers and producers	Participate in farm-to-school programs and food production on campus	Make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores	Support organic food production on campus	Encourage the use of reusable dishware in dining halls	Offer to-go containers made from recycled, biodegradable, or eco-friendly materials
Allegheny College	✓		✓ - organic & fair-trade coffee			✓
Colorado College	✓				✓	
DePauw University	✓		✓ -In Progress			
Dickinson University	✓	✓	✓	✓	✓	✓
Franklin & Marshall	✓					
Furman University	✓	✓	✓	✓	✓	✓
Gettysburg College			✓ - granola			
Hope College	✓ -Improving		✓ - organic & fair-trade coffee		✓	✓
Luther College	✓ - limited	✓	✓ - organic & fair-trade coffee	✓	✓	
Macalester College	✓	✓	✓ - organic & fair-trade coffee	✓	✓	
Moravian College	✓ - limited		✓		✓	✓
Southwestern University				✓	✓	
St. Lawrence University	✓	✓	✓	✓	✓	✓ - made in China
Susquehanna University	✓		✓ - organic & fair-trade coffee		✓	
Ursinus College	✓ - limited	✓	✓	✓	✓	✓ - limited
Washington & Jefferson	✓ - promoting		✓ - promoting		✓	✓

Table 2.1 (cont.)

Sustainability Practices:	Provide recycling receptacles for items such as paper, printer cartridges, and batteries	Encourage recycling of office materials by faculty, staff, and students	Compost landscaping waste	Recycle landscape waste into mulch for use on campus	Implemented a composting program for dining hall waste	Administered a recycling program for dining hall recyclables
Allegheny College	✓	✓	✓	✓	✓	✓
Colorado College			✓	✓	✓	
DePauw University				✓		
Dickinson University	✓	✓	✓	✓	✓	✓
Franklin & Marshall	✓	✓				
Furman University	✓ - University Center	✓	✓	✓	✓	✓
Gettysburg College	✓				✓	
Hope College	✓ - Improving	✓				
Luther College	✓	✓			✓	
Macalester College	✓	✓	✓			
Moravian College	✓	✓	✓			✓
Southwestern University	✓	✓		✓		
St. Lawrence University	✓ + more		✓	✓		✓
Susquehanna University	✓	✓	✓			
Ursinus College	✓					
Washington & Jefferson	✓	✓				

Table 2.1 (cont.)

Sustainability Practices:	Commit through a formal policy to the use of green building criteria in all construction and renovation	Seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system	Require all new buildings to be LEED certified	Incorporate green building standards into specific new building projects	Renovate existing buildings in accordance with green standards	Install various retrofits such as low-flow plumbing equipment to conserve water
Allegheny College	✓	✓	✓	✓	✓	
Colorado College		✓				
DePauw University		✓				
Dickinson University	✓	✓	✓	✓	✓	✓ - faucet aerators
Franklin & Marshall		✓		✓ - In Progress	✓ - In Progress	
Furman University	✓	✓	✓ - Silver	✓	✓	✓ - Res Halls
Gettysburg College						
Hope College				✓	✓	✓
Luther College		✓				
Macalester College		✓		✓		✓
Moravian College				✓	✓	✓
Southwestern University	✓	✓		✓	✓	✓
St. Lawrence University		✓	✓ -Silver	✓	✓	
Susquehanna University		✓		✓		✓
Ursinus College		✓		✓	✓ - whenever possible	
Washington & Jefferson						

Table 2.1 (cont.)

Sustainability Practices:	Maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity	Provide transportation or access to public transportation systems around campus or to local destinations	Create incentives for the campus community to carpool or to use public transportation	Encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing	Plan and implement a pedestrian friendly and/or bike friendly campus	Create parking policies to encourage the use of alternative modes of transportation
Allegheny College	✓	✓	✓	✓	✓	
Colorado College	✓	✓		✓	✓	
DePauw University				✓	✓	✓
Dickinson University	✓	✓		✓	✓	
Franklin & Marshall		✓		✓	✓	
Furman University	✓ - 3 hybrids + more to come			✓	✓	
Gettysburg College						
Hope College		✓	✓	✓ -no repair services	✓	✓ - large parking fees
Luther College	✓			✓	✓	
Macalester College		✓	✓	✓	✓	
Moravian College				✓	✓	✓
Southwestern University	✓ - golf carts			✓	✓	
St. Lawrence University				✓		
Susquehanna University	✓		✓	✓	✓	
Ursinus College				✓	✓	
Washington & Jefferson		✓			✓	

**Appendix IV: Group of 24 Survey Responses**

## ALLEGHENY COLLEGE

## ADMINISTRATION:

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?	Yes.		New construction will be LEED certified, 30% local foods, campus composting etc...we have a web page on on-line that you could look at.
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?	Yes		Presidents Climate Commitment
3. ... assigned and/or hired staff to oversee sustainability programs and policies?	Yes		New position of Sustainability Coordinator starts the first part of July.
4. ...supported the sustainability staff in terms of funding?	Yes		New FTE added
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)	Yes		Minimum guidelines written into all of our project specifications
6. ... formed an active advisory council to guide on issues of campus sustainability?	Yes		Task Force on Environmental Responsibility
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?	Yes		At all levels and on all committees
8. ... support student environmental organizations?	Yes		
9. ... maintain a center or office dedicated to achieving campus sustainability goals?	Yes		As of July
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?	Yes		

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?		No	In process at this time, project will be complete in September
12. ... began efforts to reduce carbon emissions?	Yes		
13. ... made a commitment to carbon neutrality?	Yes		
<i>Does your campus...</i>			
14. ...use energy-efficient technology?	Yes		
15. ...install equipment such as vendor misors, motion sensors or compact fluorescent bulbs to replace incandescent light bulbs?	Yes		
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?		No	Not at this time
17. ... purchase electric power from renewable sources or purchase renewable energy credits?	Yes		Wind Energy
18. ... install or plan to install alternative sources of power?	Yes		
19. ... invest in renewable energy technology that will benefit non-campus communities?	Yes		If Wind Energy counts

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?	Yes		Minimum 20%, but average 30%
21. ... participate in farm-to-school programs and food production on campus?		No	
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	Yes		Coffee
23. ... support organic food production on campus?		No	No efforts or interest shown at this time
24. ...encourage the use of reusable dishware in dining halls?		No	
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?	Yes		
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	Yes		
27. ... encourage recycling of office materials by faculty, staff, and students?	Yes		
28. .... compost landscaping waste?	Yes		
29. ... recycle landscape waste into mulch for use on campus?	Yes		
<i>Has your campus...</i>			
30. ... implemented a composting program for dining hall waste?	Yes		
31. ...administered a recycling program for dining hall recyclables?	Yes		

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?	Yes		
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?	Yes		
34. ... require all new buildings to be LEED certified?	Yes		
35. ... incorporate green building standards into specific new building projects?	Yes		
36. ... renovate existing buildings in accordance with green standards?	Yes		We do not have a commitment on renovations to be LEED, but we do incorporate LEED standards
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?	Yes		

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?		No	We are exploring this at this time and will be one of the first research projects for our stus
39. ... provide transportation or access to public transportation systems around campus or to local destinations?	Yes		
40. ... create incentives for the campus community to carpool or to use public transportation?	Yes		
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	Yes		
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?	Yes		
43. ... create parking policies to encourage the use of alternative modes of transportation?		No	

## DICKINSON COLLEGE

### ADMINISTRATION:

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?	X		College president signed the Presidents Climate Commitment, recently created the Center for Environmental and Sustainability Education
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?	X		College president is a Leadership Circle signatory of the Presidents Climate Commitment
3. ... assigned and/or hired staff to oversee sustainability programs and policies?	X		The Sustainability Coordinator works in the Office of Facilities Management to oversee sustainability programs and 5 sustainability interns; the Director of the Center for Environmental and Sustainability Education works to incorporate sustainability into all academic disciplines
4. ...supported the sustainability staff in terms of funding?	X		The administration funds many sustainability projects
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)	X		The College purchases green cleaning products, corn-based, compostable plastic utensils and cups for campus cafes, and recycled paper
6. ... formed an active advisory council to guide on issues of campus sustainability?	X		Dickinson SAVES (Society Advocating Environmental Sustainability) is composed of students, faculty, and staff, and works to further sustainability on campus
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?	X		Students are actively involved in SAVES (see #6 above); each semester, there are 5 sustainability interns that help raise awareness and implement programs regarding sustainability on campus
8. ... support student environmental organizations?	X		EarthNow! and Students for Social Action are two environmental student organizations
9. ... maintain a center or office dedicated to achieving campus sustainability goals?	X		The Sustainability Coordinator's office in Facilities Management
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?	X		<a href="http://www.dickinson.edu/departments/sustainability/">http://www.dickinson.edu/departments/sustainability/</a>

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?		X	Dickinson is currently working to complete the Clean Air Cool Planet Greenhouse Gas Emissions Inventory; the Inventory will be complete by Sept. 15, 2008
12. ... began efforts to reduce carbon emissions?	X		The College purchases 50% of its energy from wind power and has a 60 kW array of solar panels on the roof of Kaufman Hall; there is a biodiesel project on campus that provides fuel for College lawnmowers
13. ... made a commitment to carbon neutrality?	X		By signing the Presidents Climate Commitment, Dickinson has made a pledge to work towards carbon neutrality
<i>Does your campus...</i>			
14. ...use energy-efficient technology?	X		The College uses Energy Star products
15. ...install equipment such as vendor misors, motion sensors or compact fluorescent bulbs to replace incandescent light bulbs?	X		Many rooms on campus are equipped with motion sensors,***
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?	X		The Green Devil Sustainability Challenge is an annual week long competition
17. ... purchase electric power from renewable sources or purchase renewable energy credits?	X		Dickinson purchases 50% of its energy from wind power from Community Energy, Inc.
18. ... install or plan to install alternative sources of power?	X		There is a 60 kW array of solar panels on the roof of Kaufman Hall
19. ... invest in renewable energy technology that will benefit non-campus communities?		X	

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?	X		The College Dining Hall purchases produce from the College Farm and other local farmers
21. ... participate in farm-to-school programs and food production on campus?	X		The Dickinson College Farm is located near campus on 180-acre plot of college owned land
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	X		The Underground, a coffee/snack bar on campus, features organic, fair-trade coffee and
23. ... support organic food production on campus?	X		The College Farm is working to become certified organic, and organic good is purchased for the Underground, a coffee/snack bar on campus
24. ...encourage the use of reusable dishware in dining halls?	X		The Dining Hall has all reusable dishware and silverware
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?	X		The cafes on campus use corn-based, compostable plastic ware
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	X		All campus buildings have paper and comingled (aluminum, plastic) recycling; in addition, the HUB student union building has receptacles for battery recycling, printer cartridges, plastic bags, old cell phones, and used notebooks
27. ... encourage recycling of office materials by faculty, staff, and students?	X		The recycling of paper, ink cartridges, and notebooks is encouraged
28. .... compost landscaping waste?	X		Landscaping waste is composted; compost has been blended with topsoil and used on campus projects such as the Baseball Field and the new Rector Science Complex landscape
29. ... recycle landscape waste into mulch for use on campus?	X		Woodchip waste is being used as mulch in the landscaping around multiple academic buildings
<i>Has your campus...</i>			
30. ... implemented a composting program for dining hall waste?	X		Compost from the dining hall is taken to the College Farm
31. ...administered a recycling program for dining hall recyclables?	X		The dining hall has a composting program; other dining facilities on campus have recycling available

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?	X		All new buildings will be LEED certified and building renovations will work towards LEED certification
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?	X		The Center for Sustainable Living (aka the Treehouse), a residence hall, and the new Rector Science Complex are both expected to be LEED Silver
34. ... require all new buildings to be LEED certified?	X		All new buildings will be LEED certified
35. ... incorporate green building standards into specific new building projects?	X		All new buildings will be LEED certified; The Center for Sustainable Living (aka the Treehouse), a residence hall, and the new Rector Science Complex are both expected to be LEED Silver
36. ... renovate existing buildings in accordance with green standards?	X		Building renovations will work towards LEED certification
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?	X		Faucet aerators have been installed to reduce campus water consumption

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?	X		We have some hybrid cars in the College vehicle fleet; all grounds equipment, garbage trucks, and President Durden's car run on biodiesel
39. ... provide transportation or access to public transportation systems around campus or to local destinations?	X		Weekly shuttle to nearby shopping centers; shuttle to Harrisburg train and bus station and Harrisburg airport during school breaks
40. ... create incentives for the campus community to carpool or to use public transportation?		X	The college is in the process of implementing such incentives
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	X		Bike racks are located all around campus; there is a fleet of red Dickinson bikes that students and faculty can borrow
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?	X		There are well-marked crosswalks on campus as well as sufficient walk ways and bike paths
43. ... create parking policies to encourage the use of alternative modes of transportation?		X	The college is in the process of creating such policies

**FURMAN UNIVERSITY**

**ADMINISTRATION:**

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?	✓		Furman, under the direction of President David Shi, has embraced the campus sustainability paradigm. Eco-cottages, a sustainable Southern Living Showcase home, and constructing all new buildings under LEED standards are just a few examples of this commitment
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?	✓		President Shi was one of the early signers of the PCC, and the Sustainability Planning Group (SPG) was formed to enact this document on campus.
3. ... assigned and/or hired staff to oversee sustainability programs and policies?	✓		Director of Sustainability Angela Halfacre; Coordinator of Sustainability James Wilkins
4. ... supported the sustainability staff in terms of funding?	✓		\$20K sustainability budget per year, plus special project funding as needed
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)	✓		Furman currently follows its own "Green Purchasing Guidelines" (see attached)
6. ... formed an active advisory council to guide on issues of campus sustainability?	✓		The first steps in our efforts included forming the Environmental Sustainability Committee, whose major function was to educate and empower the student body on these issues
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?	✓		Students are included on all sustainability committees
8. ... support student environmental organizations?	✓		Environmental Action Group will get office space in our new Center for Sustainability
9. ... maintain a center or office dedicated to achieving campus sustainability goals?	✓		Set to open in the Summer of 2009
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?	✓		<a href="http://www.furman.edu/sustain">www.furman.edu/sustain</a>

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?		✓	In progress
12. ... began efforts to reduce carbon emissions?	✓		CFL bulbs, bio-diesel fuel, encouraging carpooling
13. ... made a commitment to carbon neutrality?	✓		By signing the PCC
<i>Does your campus...</i>			
14. ...use energy-efficient technology?	✓		CFL's; energy efficient air handlers; more to come
15. ...install equipment such as vendor misors, motion sensors or compact fluorescent bulbs to replace incandescent light bulbs?	✓		
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?	✓		Furman's apartment complexes competed in the "Kill-a-Watt Challenge the past two years, with the building reducing energy use the most receiving a great prize.
17. ... purchase electric power from renewable sources or purchase renewable energy credits?		✓	
18. ... install or plan to install alternative sources of power?	✓		As economies allow
19. ... invest in renewable energy technology that will benefit non-campus communities?	✓		

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?	✓		ARAMARK, our food service provider, has committed to local purchasing as much as possible
21. ... participate in farm-to-school programs and food production on campus?	✓		Furman runs an organic garden on campus
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	✓		
23. ... support organic food production on campus?	✓		See above
24. ...encourage the use of reusable dishware in dining halls?	✓		
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?	✓		In part; ARAMARK is searching for even more alternatives in this area
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	✓		Located in the University Center
27. ... encourage recycling of office materials by faculty, staff, and students?	✓		
28. .... compost landscaping waste?	✓		
29. ... recycle landscape waste into mulch for use on campus?	✓		
<i>Has your campus...</i>			
30. ... implemented a composting program for dining hall waste?	✓		Yes, but getting students to work this on a regular basis is difficult
31. ...administered a recycling program for dining hall recyclables?	✓		

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?	✓		Furman requires minimum LEED Silver on all new construction
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?	✓		
34. ... require all new buildings to be LEED certified?	✓		
35. ... incorporate green building standards into specific new building projects?	✓		As much as possible
36. ... renovate existing buildings in accordance with green standards?	✓		
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?	✓		In residence halls

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?	✓		Public Safety runs three hybrid vehicles, and others are in the planning process
39. ... provide transportation or access to public transportation systems around campus or to local destinations?		✓	
40. ... create incentives for the campus community to carpool or to use public transportation?		✓	
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	✓		Extensive bike racks across campus; local bike repair shop is near campus
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?	✓		No driving on the interior of campus
43. ... create parking policies to encourage the use of alternative modes of transportation?		✓	

**HOPE COLLEGE**

**ADMINISTRATION:**

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?	X		THE PRESIDENT HAS CONSTITUTED A CAMPUS SUSTAINABILITY TASK FORCE OF 14 PEOPLE
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?		X	
3. ... assigned and/or hired staff to oversee sustainability programs and policies?	X		ONE ALREADY EXISTING STAFF PERSON HAS BEEN ASSIGNED TO GIVE MORE ATTENTION TO SUSTAINABILITY PROJECTS
4. ... supported the sustainability staff in terms of funding?	X		THERE IS A MODEST BUDGET IN PLACE FOR THE WORK OF THE TASK FORCE
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)	X		WE HAVE A WAY TO GO ON THIS, BUT SOME PROGRESS HAS BEEN MADE, EG, RECYLED PAPER, BANNING STYROFOAM, GREENER CLEANING PRODUCTS
6. ... formed an active advisory council to guide on issues of campus sustainability?	X		THE CAMPUS SUSTAINABILITY TASK FORCE MENTIONED ABOVE
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?	X		TWO STUDENTS ARE ON THE TASK FORCE
8. ... support student environmental organizations?	X		THE ENVIRONMENTAL ISSUES GROUP IS AN OFFICIAL STUDENT GROUP, WITH MONEY FROM STUDENT CONGRESS, AND HAS BEEN AROUND FOR 25 YEARS
9. ... maintain a center or office dedicated to achieving campus sustainability goals?		X	
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?	X		YES, THOUGH WE ARE JUST GETTING GOING ON USING THE WEBSITE THIS SUMMER

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?		X	WE ARE DOING ONE RIGHT NOW
12. ... began efforts to reduce carbon emissions?	X		WE HAVE BEGUN TO SERIOUSLY ADDRESS THIS WITH, EG, BIODIESEL VEHICLES, LOWER WATTAGE LIGHTS, LIGHTS ON TIMERS, ETC
13. ... made a commitment to carbon neutrality?		X	NOT YET
<i>Does your campus...</i>			
14. ...use energy-efficient technology?	X		ALL OF THE NEW BUILDINGS ARE MUCH MORE ENERGY EFFICIENT, BOTH FOR HEATING/COOLING AND LIGHTING, AND THE OLDER BUILDINGS ARE SLOWLY BEING MADE MORE ENERGY EFFICIENT, EG, THIS SUMMER MORE INSULATION WAS ADDED TO THE ROOF OF AN OLDER BUILDING BEFORE REROOFING IT
15. ...install equipment such as vendor misors, motion sensors or compact florescent bulbs to replace incandescent light bulbs?	X		CFL'S, MOTION SENSORS ON INDOOR LIGHTING, MORE EFFICIENT OUTDOOR LIGHTING
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?	X		YES, EG, WALK TO WORK PROGRAM OF HELPING FACULTY BUY HOMES CLOSE TO CAMPUS, BUT WE COULD DO MUCH MORE
17. ... purchase electric power from renewable sources or purchase renewable energy credits?		X	THIS IS NOT YET POSSIBLE SINCE OUR ELECTRICITY COMES FROM THE HOLLAND BOARD OF PUBLIC WORKS (COAL PLANT) AND WE DO NOT HAVE THE OPTION OF CHOOSING RENEWABLE ENERGY
18. ... install or plan to install alternative sources of power?	X		WIND POWER IS SERIOUSLY BEING EXPLORED AT THE MOMENT, AS WELL AS GEOTHERMAL
19. ... invest in renewable energy technology that will benefit non-campus communities?		X	

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?	X		WE ARE DOING MORE OF THIS, THOUGH WE CAN DO STILL MORE
21. ... participate in farm-to-school programs and food production on campus?		X	NO, THOUGH THE COLLEGE IS SERIOUSLY CONSIDERING RUNNING A LOCAL FARM THAT WOULD BE DONATED TO THE COLLEGE
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	X		EG, ORGANIC AND FAIR-TRADE COFFEE IN THE ON-CAMPUS CAFE
23. ... support organic food production on campus?		X	
24. ...encourage the use of reusable dishware in dining halls?	X		IT IS ALMOST ALL REUSABLE
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?	X		SWITCHED TO THESE IN THE LAST 2 YEARS
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	X		WE HAVE RECEPTACLES FOR SOME THINGS IN SOME BUILDINGS, BUT ARE NOT AS COMPREHENSIVE OR CONSISTENT AS WE SHOULD BE
27. ... encourage recycling of office materials by faculty, staff, and students?	X		THERE ARE RECYCLING CONTAINERS FOR PAPER IN EVERY FACULTY AND STAFF OFFICE. WE ALSO RECYCLE PHONE BOOKS, PRINTER CARTIDGES, AND THE LIKE
28. .... compost landscaping waste?			I DON'T KNOW ABOUT THIS.
29. ... recycle landscape waste into mulch for use on campus?			I THINK SO, BUT DON'T KNOW FOR SURE.
<i>Has your campus...</i>			
30. ... implemented a composting program for dining hall waste?		X	
31. ...administered a recycling program for dining hall recyclables?		X	

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?		X	WE USE GREEN BUILDING CRITERIA, BUT THERE IS NO FORMAL POLICY THAT I KNOW OF
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?		X	NOT YET
34. ... require all new buildings to be LEED certified?		X	
35. ... incorporate green building standards into specific new building projects?	X		WE HAVE FOLLOWED LEED CRITERIA IN THE BUILDING OF NEW BUILDINGS, BUT HAVE NOT YET GONE ALL THE WAY TO HAVING A BUILDING LEED CERTIFIED
36. ... renovate existing buildings in accordance with green standards?	X		
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?	X		THIS HAS BEEN DONE IN ALL RENOVATED BUILDINGS

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?		X	
39. ... provide transportation or access to public transportation systems around campus or to local destinations?	X		THERE ARE SHUTTLE VANS FOR STUDENTS TO USE AT NIGHT
40. ... create incentives for the campus community to carpool or to use public transportation?	X		THERE IS CARPOOLING FOR STUDENT TRIPS HOME AT VARIOUS BREAKS AND HOLLAND NOW HAS AN IMPROVING PUBLIC TRANSPORTATION SYSTEM OF BUSES
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	X		WE HAVE BIKE RACKS BUT NOT REPAIR SERVICES
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?	X		THE CAMPUS IS VERY WALKABLE AND BIKABLE AND WE HAVE JUST CLOSED A COUPLE STREETS. WE COULD USE MORE BIKE RACKS.
43. ... create parking policies to encourage the use of alternative modes of transportation?	X		THERE IS A PARKING FEE OF \$225 PER VEHICLE FOR STUDENTS LIVING ON CAMPUS AND A FEE OF \$75 FOR COMMUTING STUDENTS

## LUTHER COLLEGE

### ADMINISTRATION:

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?	X		The president has signed the ACUPCC, and our school just passed our newest strategic plan, which has sustainability as one of three focus areas.
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?	X		President is charter signatory of ACUPCC
3. ... assigned and/or hired staff to oversee sustainability programs and policies?	X		There is a campus sustainability intern who is beginning work for the second year.
4. ... supported the sustainability staff in terms of funding?	X		The intern is a paid, full-time employee.
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)		X	
6. ... formed an active advisory council to guide on issues of campus sustainability?	X		The Campus Sustainability Council convened for the first time this spring.
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?	X		Not to a great extent, but the council has student representatives.
8. ... support student environmental organizations?	X		Again, not huge support, but they don't undermine the environmental group's efforts.
9. ... maintain a center or office dedicated to achieving campus sustainability goals?		X	
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?		X	

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?	X		Last year we completed our first inventory, for 5 years back.
12. ... began efforts to reduce carbon emissions?	X		We have done feasibility studies on wind, solar and biomass energies, and have done some efficiency upgrades that greatly reduced our electricity usage.
13. ... made a commitment to carbon neutrality?	X		The ACUPCC.
<i>Does your campus...</i>			
14. ...use energy-efficient technology?	X		Our HVAC systems were upgraded a few years ago to use more efficient technology, and the lighting in our athletic building was replaced with efficient bulbs.
15. ...install equipment such as vendor misors, motion sensors or compact fluorescent bulbs to replace incandescent light bulbs?		X	
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?	X		We hold an annual month-long energy conservation competition for students, with prizes for the winners.
17. ... purchase electric power from renewable sources or purchase renewable energy credits?	X		We are going to be purchasing RECs from a small wind farm nearby.
18. ... install or plan to install alternative sources of power?	X		We are trying (hard!) to make financial sense of installing a wind turbine. We are also looking closely at biomass, and maybe a small solar array.
19. ... invest in renewable energy technology that will benefit non-campus communities?		X	

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?	X		Our purchases so far have been rather informal, and amount to far less than 1% of our overall food budget. We are beginning to develop a local foods program and have a goal of 5% local foods within this next year.
21. ... participate in farm-to-school programs and food production on campus?	X		We have a student-run garden that is about 5 years old, and our plan is to continue increasing its size every year.
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	X		We serve all fair-trade coffee, and are trying to purchase more organic and sustainable options.
23. ... support organic food production on campus?	X		See above about garden
24. ...encourage the use of reusable dishware in dining halls?	X		There are no disposable items in our cafeteria, and our cafes offer a small discount for using reusable mugs for hot drinks.
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?		X	
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	X		We have two
27. ... encourage recycling of office materials by faculty, staff, and students?	X		Every faculty/staff office has a recycling bin. Also, all residence halls have a recycling location, most have bins on every floor.
28. .... compost landscaping waste?			
29. ... recycle landscape waste into mulch for use on campus?			
<i>Has your campus...</i>			
30. ... implemented a composting program for dining hall waste?	X		We compost scraps from salad prep in our kitchens, and also provide compost bins for students to compost leftover food.
31. ...administered a recycling program for dining hall recyclables?		X	

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?		X	
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?	X		We are building a new science building and will be seeking LEED Silver certification
34. ... require all new buildings to be LEED certified?		X	
35. ... incorporate green building standards into specific new building projects?		X	
36. ... renovate existing buildings in accordance with green standards?		X	
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?		X	

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?	X		We have purchased 7 all electric vehicles for the maintenance, dining services and security fleets. We also run our diesel maintenance vehicles on biodiesel from our cafeteria's waste oil.
39. ... provide transportation or access to public transportation systems around campus or to local destinations?		X	
40. ... create incentives for the campus community to carpool or to use public transportation?		X	
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	X		We just established a bike share program, with 5 bikes for free check-out for the day. Many bike racks on campus as well.
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?	X		We are in the process of removing some roads through the middle of campus to create a center green and improving pedestrian conditions.
43. ... create parking policies to encourage the use of alternative modes of transportation?			

## MACALESTER COLLEGE

### ADMINISTRATION:

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?	X		We have sustainability staff and are following through with the President's Climate Commitment.
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?	X		We have signed the Talloires Declaration and the President's Climate Commitment.
3. ... assigned and/or hired staff to oversee sustainability programs and policies?	X		We recently hired a sustainability manager.
4. ... supported the sustainability staff in terms of funding?	X		Our sustainability manager has a budget, which was initiated by the senior class gift of '08.
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)	X		We have a student Sustainable Purchasing Intern and have begun
6. ... formed an active advisory council to guide on issues of campus sustainability?	X		We have had different sustainability-related councils and will have a central Sustainability Committee
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?	X		Students have been the driving force in a lot of sustainability projects and are active on Sustainability Committees.
8. ... support student environmental organizations?	X		Our group, MacCARES, maintains a close and supportive relationship with the administration.
9. ... maintain a center or office dedicated to achieving campus sustainability goals?	X		We recently created a Sustainability Office to house our manager and the students who work with her.
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?	X		Our Sustainability website just went online recently.

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?	X		The Environmental Studies Senior Class Seminar did a GHG Emissions Audit in Spring 2008.
12. ... began efforts to reduce carbon emissions?	X		I mean, we do a lot of things to
13. ... made a commitment to carbon neutrality?	X		The President's Climate Commitment is a commitment to carbon neutrality.
<i>Does your campus...</i>			
14. ...use energy-efficient technology?	X		We have made switches to efficient lighting, installed low-flow water faucets, and done pilot projects to test other possible technology.
15. ...install equipment such as vendor misors, motion sensors or compact fluorescent bulbs to replace incandescent light bulbs?	X		Yes, we install CFLs where possible.
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?		X	
17. ... purchase electric power from renewable sources or purchase renewable energy credits?		X	
18. ... install or plan to install alternative sources of power?	X		We have a small urban wind turbine.
19. ... invest in renewable energy technology that will benefit non-campus communities?		X	

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?	X		Our cafeteria makes efforts to promote and purchase local food.
21. ... participate in farm-to-school programs and food production on campus?	X		Our student-run garden grows fresh food and sells it to the cafeteria.
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	X		We primarily sell organic, fair-trade coffee, but also seek other organic and fair-trade goods.
23. ... support organic food production on campus?	X		Our garden is organic!
24. ...encourage the use of reusable dishware in dining halls?	X		We don't really use disposable dishware in the dining halls (although we do use them in the off-hours café)
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?		X	
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	X		We have a comprehensive recycling program that expands across campus.
27. ... encourage recycling of office materials by faculty, staff, and students?	X		See above.
28. .... compost landscaping waste?	X		Our landscaping waste is collected and hauled off-campus to be composted.
29. ... recycle landscape waste into mulch for use on campus?		X	
<i>Has your campus...</i>			
30. ... implemented a composting program for dining hall waste?		X	
31. ...administered a recycling program for dining hall recyclables?	N/A		We don't use recyclable materials in our dining hall – they are mostly just reusable dishes.

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?		X	We don't have a set of green building criteria yet but we have moved in the direction of green building for all our recent projects...
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?	X		We are building one of the first LEED Platinum buildings in Minnesota.
34. ... require all new buildings to be LEED certified?		X	We don't have a requirement because we don't know if it's necessary to get the certification if we're going to follow green building principles anyway – LEED Certification costs a lot of money...
35. ... incorporate green building standards into specific new building projects?	X		For our new buildings we now hire a sustainability consultant and seek out green building practices wherever possible.
36. ... renovate existing buildings in accordance with green standards?		X	
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?	X		We have an EcoHouse in which we model such technologies, and if they are effective we spread them around campus.

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?		X	
39. ... provide transportation or access to public transportation systems around campus or to local destinations?	X		Our campus is small enough to walk across easily, but we do provide shuttle bus services or buses to local events.
40. ... create incentives for the campus community to carpool or to use public transportation?	X		We subsidize ½ price bus passes for students, staff and faculty at Macalester.
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	X		We have bike racks and a student-run bike share program.
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?	X		Our campus is tiny and there are very few roads through it – so, by default it is a pedestrian-friendly campus.
43. ... create parking policies to encourage the use of alternative modes of transportation?		X	

## MORAVIAN COLLEGE

### ADMINISTRATION:

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?	Y		
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?	Y		Talloires
3. ... assigned and/or hired staff to oversee sustainability programs and policies?	Y		Chair of Sustainability Committee (starting 2008-09)
4. ... supported the sustainability staff in terms of funding?		N	
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)	Y		Dining operation (Food, disposables, packaging) and cleaning, grounds & maintenance related
6. ... formed an active advisory council to guide on issues of campus sustainability?	Y		Campus Sustainability Committee
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?	Y		Dining Committee, CSC Committee, EH&S committee
8. ... support student environmental organizations?	Y		
9. ... maintain a center or office dedicated to achieving campus sustainability goals?		N	
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?		N	

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?	Y		In process
12. ... began efforts to reduce carbon emissions?	Y		
13. ... made a commitment to carbon neutrality?		N	
<i>Does your campus...</i>			
14. ...use energy-efficient technology?	Y		Energy management system
15. ...install equipment such as vendor misors, motion sensors or compact florescent bulbs to replace incandescent light bulbs?	Y		Fluorescents – in progress
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?		N	
17. ... purchase electric power from renewable sources or purchase renewable energy credits?		N	
18. ... install or plan to install alternative sources of power?		N	
19. ... invest in renewable energy technology that will benefit non-campus communities?		N	

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?	Y		limited
21. ... participate in farm-to-school programs and food production on campus?		N	
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	Y		
23. ... support organic food production on campus?		N	
24. ...encourage the use of reusable dishware in dining halls?	Y		
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?	Y		
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	Y		
27. ... encourage recycling of office materials by faculty, staff, and students?	Y		
28. .... compost landscaping waste?	Y		City recycling center (community use)
29. ... recycle landscape waste into mulch for use on campus?		N	City recycling center (community use)
<i>Has your campus...</i>			
30. ... implemented a composting program for dining hall waste?		N	
31. ...administered a recycling program for dining hall recyclables?	Y		Plastic, glass, cardboard, and aluminum containers

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?		N	
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?		N	
34. ... require all new buildings to be LEED certified?		N	
35. ... incorporate green building standards into specific new building projects?	Y		Energy efficient HVAC, low volatile materials, materials from renewable sources, etc., water conservation
36. ... renovate existing buildings in accordance with green standards?	Y		
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?	Y		Partial

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?		N	
39. ... provide transportation or access to public transportation systems around campus or to local destinations?		N	
40. ... create incentives for the campus community to carpool or to use public transportation?		N	
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	Y		Have ranks, establishing bike loop and sharing program
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?	Y		
43. ... create parking policies to encourage the use of alternative modes of transportation?	Y		Substantially raised parking fees for students, and tightened restrictions eliminating the use of cars to commute between our North and South Campus (must shuttle, bike, or walk)

## SOUTHWESTERN UNIVERSITY

### ADMINISTRATION:

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?	X		President signed the Talloires Declaration Spring 2007 and a Talloires Committee was set up Fall 2007. The new buildings on campus will also be LEED certified.
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?	X		Talloires Declaration, Spring 2007
3. ... assigned and/or hired staff to oversee sustainability programs and policies?	X		A former student worked as a Sustainability Coordinator for the spring of 2008, but we don't have the funds to hire anyone for Fall 2009.
4. ... supported the sustainability staff in terms of funding?		X	
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)	X		A few isolated departments purchase green products, but no central purchasing. Custodial staff is phasing in use of all green cleaning products. Used mostly in the academic buildings and in the newer buildings. Eventually the only thing that is used on campus.
6. ... formed an active advisory council to guide on issues of campus sustainability?	X		After the Talloires Declaration was signed, a Talloires Committee was created, which consists of students, faculty, and staff. However, the committee lacks financial resources to make big changes.
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?	X		It is possible, but the students have to take real initiative to get involved. Students are represented on the Talloires committee, and we are planning on opening up some of the meetings to try to pull in more student input.
8. ... support student environmental organizations?	X		SEAK (Students for Environmental Activism and Knowledge) has been active, and it is supported like any other student organization.
9. ... maintain a center or office dedicated to achieving campus sustainability goals?		X	
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?		X	

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?		X	
12. ... began efforts to reduce carbon emissions?	X		We are currently building that will be LEED certified, which will be important for energy conservation. We are also in the process of negotiating with our energy provider to make it possible for us to buy wind energy.
13. ... made a commitment to carbon neutrality?		X	
<i>Does your campus...</i>			
14. ...use energy-efficient technology?	X		Our goal is that all new appliances will be Energy-Star rated. We also have an Energy Management System in that digitally controls HVAC in many of the buildings.
15. ...install equipment such as vendor misors, motion sensors or compact florescent bulbs to replace incandescent light bulbs?	X		We use CFL's but not vendor misors.
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?	X		In April 2008, SEAK hosted our first annual campus energy challenge that involved a lot of fun events and prizes, and a few of the residence halls reduced their energy and water use significantly.
17. ... purchase electric power from renewable sources or purchase renewable energy credits?		X	We are currently in negotiations with the city to allow us to purchase wind energy.
18. ... install or plan to install alternative sources of power?		X	
19. ... invest in renewable energy technology that will benefit non-campus communities?		X	

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?		X	A few random items are locally grown, but it is not really intentional.
21. ... participate in farm-to-school programs and food production on campus?		X	
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?		X	
23. ... support organic food production on campus?	X		A group recently began a vegetable garden. We are still working on institutionalizing the project.
24. ...encourage the use of reusable dishware in dining halls?	X		Most of the eat-in dishes are reusable.
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?		X	
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	X		
27. ... encourage recycling of office materials by faculty, staff, and students?	X		Currently there is a widely-used recycling program implemented in residence halls, but there is not a full-scale recycling system in academic and administrative buildings. A few buildings have centrally located paper and aluminum collection sites, but other buildings don't have anything. We are developing a plan for recycling in those buildings, which we hope to implement in the fall, but lack of funding might delay that.
28. .... compost landscaping waste?		X	
29. ... recycle landscape waste into mulch for use on campus?	X		The new program involves recycling all landscape waste into mulch, but has not yet been fully implemented.
<i>Has your campus...</i>			
30. ... implemented a composting program for dining hall waste?		X	
31. ...administered a recycling program for dining hall recyclables?		X	

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?	X		It is in the master plan to pursue green building techniques in all new buildings.
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?	X		We are currently building our first building that will be LEED certified.
34. ... require all new buildings to be LEED certified?		X	
35. ... incorporate green building standards into specific new building projects?	X		All of our new buildings use locally-quarried stone and energy/water conservation concepts.
36. ... renovate existing buildings in accordance with green standards?	X		We used low VOC paints, digital HVAC controls, carpet with recycled content, and electric motion detectors on the lights in all offices in the most recent renovation. These techniques will also be incorporated into future renovations.
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?	X		A few buildings have waterless urinals, and all residence halls have low-flow shower heads.

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?	X		95% of the golf carts are electric, but all cars and trucks run on gasoline.
39. ... provide transportation or access to public transportation systems around campus or to local destinations?		X	
40. ... create incentives for the campus community to carpool or to use public transportation?		X	
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	X		Bike racks are fairly easy to find on campus. Our Pirate Bike program provides free bikes for campus use, but only on campus.
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?	X		All parking lots and street are on the exterior of campus, so that the interior is strictly pedestrian/ biking.
43. ... create parking policies to encourage the use of alternative modes of transportation?		X	

## ST. LAWRENCE UNIVERSITY

## ADMINISTRATION:

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?	X		May 2006 Environmental Resolution-sustainability made a core University Value. March 2007 signed ACUPCC
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?	X		March 2007 signed the ACUPCC
3. ... assigned and/or hired staff to oversee sustainability programs and policies?	X		May 2007 hired sustainability coordinator
4. ...supported the sustainability staff in terms of funding?	X		We don't have a budget with a specific amount of money, but have not had issues getting money yet.
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)		X	Not formally, we are getting there and have made it such that only Energy Star products can be purchased
6. ... formed an active advisory council to guide on issues of campus sustainability?	X		Conservation Council is a tripartite committee that has existed since the 80s
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?	X		Both through the Conservation Council and through grass roots activism
8. ... support student environmental organizations?	X		Occasionally attending meetings and events hosted by the organizations
9. ... maintain a center or office dedicated to achieving campus sustainability goals?		X	We are working toward an office but at this time sustainability is couple with regional economic development
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?	X		<a href="http://www.stlawu.edu/green">www.stlawu.edu/green</a>

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?	X		The sustainability coordinator had help from a student who put many hours into the inventory as part of his thesis
12. ... began efforts to reduce carbon emissions?	X		We have begun energy audits of campus buildings, started working with an ESCO, purchase RECs for 15% of our electricity and have been intensely investigating a biomass heating system
13. ... made a commitment to carbon neutrality?	X		The sustainability coordinator is currently working on the Climate Action Plan to explain how and when we expect to achieve climate neutrality
<i>Does your campus...</i>			
14. ...use energy-efficient technology?	X		In some cases, appliances must be Energy Star, however we still have lots of inefficient appliances etc around
15. ...install equipment such as vendor misors, motion sensors or compact florescent bulbs to replace incandescent light bulbs?	X		We installed vending misers and they broke our machines so we removed a few machines deemed unnecessary and developed a summer-shut down schedule, we are working to install motion sensors in all common areas where they are currently not located, our exit signs are LED or are being switched to LED and our lights are all Fluorescent or changing (we also have a program to change student lights to CFLs)
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?		X	Not exactly although the sustainability coordinator does work with the village and county governments on sustainability issues (for example the University and the village are joining efforts to compost starting in August)
17. ... purchase electric power from renewable sources or purchase renewable energy credits?	X		15% of our electricity is in RECs, both NY hydro and national wind
18. ... install or plan to install alternative sources of power?	X		Currently we are investigating a biomass boiler to replace natural gas/oil on campus, we are planning on solar and geothermal for a new student residence we are building
19. ... invest in renewable energy technology that will benefit non-campus communities?		X	However our current plan is to create an offset program where we retrofit homes of community members and claim the carbon savings as our own

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?	X		Between 7-12% local food, we grow many of our own herbs in raised beds outside the dining hall, one student is working our campus farm this summer and many students work on local areas farms throughout the year (including as requirements of their classes)
21. ... participate in farm-to-school programs and food production on campus?	X		We have been part of farm to school since around 2004 and are investigating on campus food production
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	X		Our campus store has an organic section and local foods are also sold there
23. ... support organic food production on campus?	X		But again, this summer is the first try at doing this and it is at a very small scale, the herb garden is organic
24. ...encourage the use of reusable dishware in dining halls?	X		Our main dining hall is washable dishes, our take away locations are compostable plates, napkins and take away containers (unfortunately they are made from reed, sugar cane and bamboo-China produced), we give discounts for brining your own mug. Our dining hall no longer provides trays.
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?	X		Compostable plates, napkins and take away containers (unfortunately they are made from reed, sugar cane and bamboo-China produced)
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	X		We also provide receptacles for CFLs, cell phones and e-waste. Some e-waste is returned for a profit that goes to benefit habitat for humanity
27. ... encourage recycling of office materials by faculty, staff, and students?		X	
28. .... compost landscaping waste?	X		We are creating a partnership with the village starting in August to extend our impacts
29. ... recycle landscape waste into mulch for use on campus?	X		Although we still buy in mulch, top soil and compost as well
<i>Has your campus...</i>			
30. ... implemented a composting program for dining hall waste?		X	Although there are housing that have individual compost bins for their food wastes and our intention is to include food in our composting efforts in the next year
31. ...administered a recycling program for dining hall recyclables?	X		We recycle about 26% of our waste stream

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?		X	Although we are trying hard to source material locally, especially wood and stone
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?	X		We have a LEED Gold certified Science building
34. ... require all new buildings to be LEED certified?	X		LEED Silver minimum
35. ... incorporate green building standards into specific new building projects?	X		LEED Silver minimum
36. ... renovate existing buildings in accordance with green standards?	X		Although we have no formal policy we are also aiming for LEED Silver certification for the current renovation of two buildings
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?		X	We haven't in the past, but given the results of some recent energy audits we are considering it

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?		X	
39. ... provide transportation or access to public transportation systems around campus or to local destinations?		X	There is very limited (4 buses) local transportation
40. ... create incentives for the campus community to carpool or to use public transportation?		X	Although we are in the process of launching an electronic ride matching program, ready for this fall
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	X		Any person with a SLU ID can rent a bike just like a book
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?		X	We have a 'walking campus' but it seems there are still too many cars
43. ... create parking policies to encourage the use of alternative modes of transportation?		X	Although we have been talking about parking spots for carpoolers that are closer to buildings

**SUSQUEHANNA UNIVERSITY**

**ADMINISTRATION:**

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?		✓	
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?		✓	
3. ... assigned and/or hired staff to oversee sustainability programs and policies?		✓	
4. ...supported the sustainability staff in terms of funding?		✓	
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)		✓	Facilities Mgmt. will kick off its green cleaning program in the next 2 months.
6. ... formed an active advisory council to guide on issues of campus sustainability?		✓	
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?		✓	
8. ... support student environmental organizations?	✓		
9. ... maintain a center or office dedicated to achieving campus sustainability goals?		✓	
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?		✓	In progress. New SU website will have a sustainability "megapage"

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?	✓		
12. ... began efforts to reduce carbon emissions?	✓		We have build 4 new res. Halls and are completing 3 more. All are geothermal. We have also placed a significant number of motion detector light switches and CFL bulbs around campus.
13. ... made a commitment to carbon neutrality?		✓	
<i>Does your campus...</i>			
14. ...use energy-efficient technology?	✓		Low power ballasts, motion sensors, energy star equipment
15. ...install equipment such as vendor misors, motion sensors or compact florescent bulbs to replace incandescent light bulbs?	✓		We have been installing motion sensors around campus as well as CFL's
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?		✓	
17. ... purchase electric power from renewable sources or purchase renewable energy credits?		✓	We may do this for the new science building
18. ... install or plan to install alternative sources of power?		✓	There is a possibility of a solar array through the Solar Scholars program
19. ... invest in renewable energy technology that will benefit non-campus communities?		✓	

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?	✓		We can and will do much more of this. We are only scratching the surface.
21. ... participate in farm-to-school programs and food production on campus?		✓	
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	✓		Again, we offer some of these choices, particularly fair trade coffee at Java City, but we have much more work to do.
23. ... support organic food production on campus?		✓	There are some preliminary plans to do this at the Yoder farm.
24. ...encourage the use of reusable dishware in dining halls?	✓		
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?	✓		Java City?
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	✓		
27. ... encourage recycling of office materials by faculty, staff, and students?	✓		
28. .... compost landscaping waste?	✓		We compost clippings and use them as a topsoil amendment
29. ... recycle landscape waste into mulch for use on campus?		✓	See above.
<i>Has your campus...</i>			
30. ... implemented a composting program for dining hall waste?		✓	
31. ...administered a recycling program for dining hall recyclables?		✓	

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?		✓	
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?	✓		Science and West Village
34. ... require all new buildings to be LEED certified?		✓	
35. ... incorporate green building standards into specific new building projects?	✓		Science and West Village
36. ... renovate existing buildings in accordance with green standards?		✓	Fisher is in the works.
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?	✓		Almost all of our fixtures are low-flow including all residence hall shower heads

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?	✓		Most utility vehicles are electric
39. ... provide transportation or access to public transportation systems around campus or to local destinations?		✓	
40. ... create incentives for the campus community to carpool or to use public transportation?	✓		Ride share website is hosted on IT webpage
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	✓		Bike racks, yes, sharing and repairs, no.
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?	✓		
43. ... create parking policies to encourage the use of alternative modes of transportation?		✓	Planned for West Village and Science

**URSINUS COLLEGE**

**ADMINISTRATION:**

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?	X		Signing the President's Climate Commitment, and an openness and support for on-campus environmental initiatives.
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?	X		Signed the President's Climate Commitment
3. ... assigned and/or hired staff to oversee sustainability programs and policies?	X		The ENV Staff is involved in many sustainability programs
4. ... supported the sustainability staff in terms of funding?	X		Usually with adequate funds
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)	X		Often considers environmental impact when making purchases, although not necessarily a priority
6. ... formed an active advisory council to guide on issues of campus sustainability?		X	
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?	X		Usually through involvement in student run organizations
8. ... support student environmental organizations?	X		Listens to Ideas and provides funds
9. ... maintain a center or office dedicated to achieving campus sustainability goals?		X	
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?	X		It is basically the ENV webpage

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?	X		
12. ... began efforts to reduce carbon emissions?	X		
13. ... made a commitment to carbon neutrality?	X		President's Climate Commitment
<i>Does your campus...</i>			
14. ...use energy-efficient technology?	X		In some occasions
15. ...install equipment such as vendor misors, motion sensors or compact fluorescent bulbs to replace incandescent light bulbs?	X		CFL's
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?		X	
17. ... purchase electric power from renewable sources or purchase renewable energy credits?	X		Some of our power is from renewable resources. Most is from Nuclear
18. ... install or plan to install alternative sources of power?	X		Especially as a part of the President's Climate Commitment
19. ... invest in renewable energy technology that will benefit non-campus communities?	X		Only in that we purchase most of our power from renewable resources ourselves

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?	X		Some of it
21. ... participate in farm-to-school programs and food production on campus?	X		Have a student-run organic farm
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	X		Organic food is an option in the cafeteria
23. ... support organic food production on campus?	X		Organic Farm
24. ...encourage the use of reusable dishware in dining halls?	X		Makes it the most available dishware
26. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?	X		In the snack area
27. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	X		Although not necessarily very well advertised.
28. ... encourage recycling of office materials by faculty, staff, and students?	X		Not very efficiently, mostly just offers it to those who want it and in main offices
29. .... compost landscaping waste?		X	
30. ... recycle landscape waste into mulch for use on campus?		X	
<i>Has your campus...</i>			
31. ... implemented a composting program for dining hall waste?		X	Not yet, although much work is currently being done
32. ...administered a recycling program for dining hall recyclables?		X	Nothing different from the typical school recycling system

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
33. ... commit through a formal policy to the use of green building criteria in all construction and renovation?		X	
34. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?	X		We usually commit to building green and getting certified whenever possible
35. ... require all new buildings to be LEED certified?		X	
36. ... incorporate green building standards into specific new building projects?	X		Whenever possible
37. ... renovate existing buildings in accordance with green standards?	X		Also whenever possible
38. ... install various retrofits such as low-flow plumbing equipment to conserve water?		X	

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
39. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?		X	
40. ... provide transportation or access to public transportation systems around campus or to local destinations?		X	
41. ... create incentives for the campus community to carpool or to use public transportation?		X	
42. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?	X		Offers bike racks, but not too many
43. ...plan and implement a pedestrian friendly and/or bike friendly campus?	X		Very pedestrian friendly
44. ... create parking policies to encourage the use of alternative modes of transportation?		X	

**WASHINGTON & JEFFERSON COLLEGE**

**ADMINISTRATION:**

<i>Has the administration...</i>	YES	NO	IF YES, EXPLAIN
1. ... made a commitment to campus sustainability?	X		Signed the Presidents Commitment in May 2008
2. ... endorsed local, national, or international agreements (such as the Talloires Declaration, or the Presidents Climate Commitment)?	X		
3. ... assigned and/or hired staff to oversee sustainability programs and policies?		X	Formed committee. Hire pending on incoming finances and success of program for this upcoming year
4. ...supported the sustainability staff in terms of funding?	X		
5. ... prioritized purchasing of green products (such as reusable materials, eco-friendly cleaning products, etc)			Has considered it thus far and will continue to take it into account
6. ... formed an active advisory council to guide on issues of campus sustainability?	X		Has held one meeting and is a good representation of college
<i>Does the administration...</i>			
7. ... make possible for students to be involved in the decision making process on sustainability issues?	X		Will continue to work on gaining student support
8. ... support student environmental organizations?	X		Are working on getting a stronger club on campus
9. ... maintain a center or office dedicated to achieving campus sustainability goals?			
10. ... offer a school website to facilitate involvement in campus sustainability initiatives?			

**CLIMATE CHANGE & ENERGY:**

<i>Has your campus...</i>	YES	NO	IF YES, EXPLAIN
11. ... completed a carbon emissions inventory?			
12. ... began efforts to reduce carbon emissions?			
13. ... made a commitment to carbon neutrality?			
<i>Does your campus...</i>			
14. ...use energy-efficient technology?			
15. ...install equipment such as vendor misors, motion sensors or compact fluorescent bulbs to replace incandescent light bulbs?			
16. ... facilitate programs that provide incentives for members of the community to reduce energy use?			
17. ... purchase electric power from renewable sources or purchase renewable energy credits?			
18. ... install or plan to install alternative sources of power?			
19. ... invest in renewable energy technology that will benefit non-campus communities?			

**FOOD & RECYCLING:**

<i>Does your campus...</i>	YES	NO	IF YES, EXPLAIN
20. ... purchase food from local farmers and producers?	X		Will continue to promote this
21. ... participate in farm-to-school programs and food production on campus?			
22. ... make available organic, fair-trade, or other sustainably produced foods in the menu, at cafes, or in stores?	X		Will continue to promote this
23. ... support organic food production on campus?			
24. ...encourage the use of reusable dishware in dining halls?	X		No one-way plastic or paper ware is used in main dining hall. Only for take out – will try to find alternatives
25. ...offer to-go containers made from recycled, biodegradable, or eco-friendly materials?	X		Use of some greenware products – for cold products
26. ...provide recycling receptacles for items such as paper, printer cartridges, and batteries?	X		
27. ... encourage recycling of office materials by faculty, staff, and students?	X		
28. .... compost landscaping waste?			
29. ... recycle landscape waste into mulch for use on campus?			
<i>Has your campus...</i>			
30. ... implemented a composting program for dining hall waste?			
31. ...administered a recycling program for dining hall recyclables?			

**GREEN BUILDING:**

Does your campus...	YES	NO	IF YES, EXPLAIN
32. ... commit through a formal policy to the use of green building criteria in all construction and renovation?			The upcoming building, to be complete in 2010, will be category silver
33. ... seek certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system?			
34. ... require all new buildings to be LEED certified?			
35. ... incorporate green building standards into specific new building projects?			
36. ... renovate existing buildings in accordance with green standards?			
37. ... install various retrofits such as low-flow plumbing equipment to conserve water?			Will try and work on this for the upcoming years

**TRANSPORTATION:**

Does your campus...	YES	NO	IF YES, EXPLAIN
38. ...maintain vehicle fleets or a campus shuttle running on clean burning fuels or electricity?			
39. ... provide transportation or access to public transportation systems around campus or to local destinations?	X		2ce a week a shuttle runs to local shops and on Fridays and Saturdays 3 times a night, we have a shuttle run into Pittsburgh with 4 pick up times
40. ... create incentives for the campus community to carpool or to use public transportation?			
41. ... encourage bike use by providing bike racks and offer repair services and bicycle rentals or sharing?			
42. ...plan and implement a pedestrian friendly and/or bike friendly campus?	X		Very pedestrian friendly, because it is so small, working on getting bike racks installed
43. ... create parking policies to encourage the use of alternative modes of transportation?			