

FY 2006 Environmental Indicators

<u>Total Energy</u>	Total	Per Square Foot	(3) Per Capita	(4) % Renewable	\$ Cost
Total Utility Bill					\$2,649,973.69
<u>Electricity (kwh)</u>					
General Use	19,724,810	13.23	10,715.64	0.00%	\$1,059,131.34
<u>Natural Gas (therms)</u>					
Heating	1,492,498	1.00	810.81	0.00%	\$1,576,556.29
<u>20% Biodiesel (gallons)</u>					
(1) Heating	7,502	0.01	4.08	20.00%	\$14,286.06
<u>Diesel (gallons)</u>					
Vehicles/landscaping equipment	1,709			5.00%	
<u>Gasoline (Gallons)</u>					
Total Gasoline	29,816			10.00%	
Facilities Management	12,137				
(2) Other	17,679				

(1) This figure represents gallons purchased in FY 2006 which may include usage from prior year

(2) This figure does not include rental cars, mileage reimbursement, sports travel in non-college owned vehicles, air travel, or faculty/staff and student personal usage

(3) Per capita figures were calculated with population figures and multipliers indicated in table at bottom of worksheet

(4) This is the percentage of biofuel (ethanol and biodiesel), the percentage that is actually renewable is debatable.

<u>Air(CO2/GHG Emissions)</u>	CO ₂ (lbs.)	Per Capita
(5) Total	55,872,406	30,353.07
Emissions from gasoline	584,095	317.31
Emissions from diesel	206,142	111.99
Emissions from burning of natural gas	17,999,526	9,778.37
Emissions from electricity production(Alliant)	37,082,643	20,145.40

(5) Quantities used were from "Total Energy" table above, therefore the same caveats apply. Conversions used are in table at bottom of worksheet.

<u>Water Consumption</u>	Total	Per Capita
	6,297,300	94,696.24

<u>Waste and Recycling</u>	Total(tons)	Per Capita
Total Waste Landfilled	1,020	0.55
Waste landfilled(FM Pick-up)	338	0.18
(6)Waste landfilled(City Pick-up)	0	0.00
Waste landfilled(contractors)	682	0.37
Total Waste Recycled	807	0.44
(7)Waste recycled(FM Pick-up)	135	0.07

⁽⁷⁾ Waste recycled(City Pick-up)	0	0.00
Waste recycled(construction)	672	0.37
Hazardous Waste Production		
Lab waste (pounds)	476	
Motor Oil (gallons)	275	
<i>(6) Estimated from periodic samplings at the Rosenfield Center</i>		
<i>(7) Estimated from RecycleMania</i>		

Lacking construction waste for Science F

Food	Total	Per Capita
Organic		
Local	5.80%	
Food Composted	0	0.00

Land	Total (Acres)	%
Campus Acreage	131	
⁽¹²⁾ Total Impervious Surface (Including buildings, parking lots, sidewalks, etc.)	30	24.0%
Building Area	16	13.0%
Green Space	97	76.0%
Native Plantings (acres)	6	4.6%
		per acre
Herbicide	45 gallons	0.46
(active ingredient)	618 pounds	6.37
Fungicide (active ingredient)	8 gallons	0.08
Insecticide (active ingredient)	450 pounds	4.64
Inorganic Fertilizer (Nitrogen)	7190 pounds	74.12
(Phosphorus)	1243 pounds	12.81
<i>(12) These are estimates using a 1998 aerial photo, we will be receiving a 2006 aerial photo in a couple of weeks)</i>		

Transportation	
College owned vehicles	53
Carpool	12
FM	29
other	12
Average fuel efficiency(mpg)	18
Carpool	23
FM	16
Other	18
Non-college owned vehicles on campus	1,130
⁽⁸⁾ Faculty/staff	759 permits
⁽⁹⁾ Students	371 permits

(8) Former faculty/staff may not have been deleted

(9) Off campus students may not have registered

Built Environment	Total	%
Gross Square Footage	1,491,011	
HVAC&R system control (digital) (% of total HVAC sys)		essentially 100%
Ecological design in buildings (# Certified,# Leed Equivalent)	1,3	2.61%
% new interior renovations that are LEED certified	0	0.00%

Education
Students participating in environmental/sustainability curriculum (total # of classes)

Groundwater/Stormwater	
⁽¹⁰⁾ Total rainfall on campus (gallons)	114,046,800
⁽¹¹⁾ Total runoff from campus(gallons)	37,008,965
Percentage Re-used	0
<i>(10) Assuming an average precipitation of 35 inches</i>	
<i>(11) Estimated from landcover acreages</i>	

Population Estimates	Total	Multiplier	
full times students on campus	1235	1.00	1235
FT Staff and Non-Residential Students	719	0.75	539.25
PT staff and students	133	0.50	66.5
			1840.75

CO₂ Conversions used for calculations

Electricity	1.88lbs. CO ₂ /kwh (for Iowa)
Natural Gas	therms=100,000Btu's
	1therm=about 1 Ccf
	12.06 lbs. CO ₂ /Ccf
Gasoline	19.59 lbs. CO ₂ /gal
Diesel	22.38 lbs. CO ₂ /gal

Building

