

GHG Report for Richland College

Submitted on September 15, 2010; last updated on September 25, 2010

Summary Statistics

Making fair comparisons between higher education institutions is always challenging due to the rich diversity of higher education. The unverified nature of the information in this database and unavailability of unbiased normalization metrics means such comparisons are even more difficult. Users should therefore approach direct institution to institution comparisons with caution and recognize that all comparisons between institutions are inherently biased.

	Total	Per Full-Time Enrollment	Per 1000 Square Feet	% Offset
Gross emissions (Scopes 1 + 2)	7,729 metric tons of CO ₂ e	0.6 metric tons of CO ₂ e	10.1 metric tons of CO ₂ e	0%
Gross emissions (Scopes 1 + 2 + 3)	30,377 metric tons of CO ₂ e	2.5 metric tons of CO ₂ e	39.9 metric tons of CO ₂ e	0%
Net emissions	30,366 metric tons of CO ₂ e	2.5 metric tons of CO ₂ e	39.8 metric tons of CO ₂ e	N/A

Emissions Inventory Methodology and Boundaries

Start date of the 12-month period covered in this report	September 1, 2010
Consolidation methodology used to determine organizational boundaries	Operational control approach
If any institution-owned, leased, or operated buildings or other holdings that should fall within the organizational boundaries are omitted, briefly explain why.	
n/a	
Emissions calculation tool used	Clean Air-Cool Planet
Please describe why this tool was selected.	

To maintain consistency with prior years' inventories.

Please describe the source(s) of the emissions coefficients used.

CA-CP Campus Carbon Calculator's default emissions coefficients.

Which version of IPCC's list of global warming potentials did you use?

Third Assessment Report

Who primarily conducted this emissions inventory?

Sustainability office staff

Please describe the process of conducting the inventory.

The process was conducted under the auspices of the Richland College Office of Sustainable Community Building and included the following actions and participants:

1. Operating Budget, Energy Budget, and Air Travel Budget figures were provided by Business/Financial Services staff, using internal records.
2. Figures for building space, natural gas and electricity use, college fleet fuel use, solid waste, and refrigerant use were provided by Facilities Services staff, using internal records.
3. Figures for numbers of students, faculty, and staff were generated by the Office of Planning and Research for Institutional Effectiveness using IPEDS data and internal records.

Please describe any emissions sources that were classified as *de minimis* and explain how a determination of the significance of these emissions was made.

We classified commuting for students enrolled exclusively in distance learning courses as *de minimis*. While we understand that some distance learning students occasionally come to campus, they do not commute with the weekly frequency of our on campus full and part time students. Thus we subtracted the 6,707 students enrolled exclusively in distance learning courses this year from our student totals in the CA-CP calculator. However, those students are accounted for in the population data reported in the Normalization and Contextual Data section of this report.

Please describe any data limitations related to this submission and any major assumptions made in response to these limitations.

In this report, we were able to eliminate the limitations/assumptions concerning air travel mileage and fleet fuel consumption calculations made in previous reports. Limitations in this report include:

1. Our use of zip codes and internet-based MapQuest program to calculate estimated miles traveled to/from campus by students, faculty, and staff.
2. Absence of reliable data on which to base our student/faculty/staff commuter trip frequency figures and transportation mode percentages.

Related assumptions include:

1. In the absence of more specific residence location data (e.g., GIS-generated) to use in calculating commuting distances, the use of zip code center points generates reasonably accurate average locations for students, faculty, and staff residing in those areas.
2. Regarding commuter trips: 1) FT students 4 days/wk; 2) PT and non-credit students 2

days/wk; 3) FT faculty and staff 5 days/wk; 4) PT and non-credit faculty 2 days/wk; 5) PT staff 3 days/wk; and 6) All groups 1 round-trip/day. (The challenge for accuracy will be that, for example, a given non-credit student who takes one class which might meet a total of one time is counted the same as one n-c student who takes multiple classes meeting more frequently per week throughout the year.)

3. Regarding transportation mode used by faculty and staff (based on results of faculty/staff survey): non-shared automobile 90%; shared automobile 5%; bus 3%; bicycle/scooter/foot/other 2%.

4. Regarding transportation mode used by students (based on results of student survey): non-shared automobile 65%; shared automobile 16%; bus 13%; bicycle/scooter/foot/other 6%.

5. Regarding light rail transportation mode: aggregated with bus mode because the mass transit system in our locale combines bus and light rail. The distance between the two closest light rail lines and our campus requires commuters to bus from the stations to campus.

Emissions Data

Emissions from the following sources (in metric tons of CO₂e)

Scope 1 Emissions	
Stationary Combustion	484.0 metric tons of CO ₂ e
Mobile Combustion	78.0 metric tons of CO ₂ e
Process Emissions	0.0 metric tons of CO ₂ e
Fugitive Emissions	71.0 metric tons of CO ₂ e
Total Scope 1 emissions	633.0 metric tons of CO₂e
Scope 2 Emissions	
Purchased Electricity	7,096.0 metric tons of CO ₂ e
Purchased Heating	0.0 metric tons of CO ₂ e
Purchased Cooling	0.0 metric tons of CO ₂ e
Purchased Steam	0.0 metric tons of CO ₂ e
Total Scope 2 emissions	7,096.0 metric tons of CO₂e
Scope 3 Emissions	
Commuting	21,808.0 metric tons of CO ₂ e
Air Travel	604.0 metric tons of CO ₂ e
Solid Waste	236.0 metric tons of CO ₂ e
Total Scope 3 emissions	22,648.0 metric tons of CO₂e
Biogenic Emissions	
Biogenic Emissions from Stationary Combustion	<i>No information provided</i>
Biogenic Emissions from Mobile Combustion	<i>No information provided</i>

Mitigation Data

Carbon Offsets	
Carbon offsets purchased	0.0 metric tons of CO ₂ e
Offset verification program(s)	<i>No information provided</i>
Description of offsets purchased (including vendor, project source, etc.)	
<i>No information provided</i>	
Renewable Energy Certificates (RECs)	
Total RECs purchased	0 kWh
Percent of total electricity consumption mitigated through the purchase of RECs	None %
Emissions reductions due to the purchase of RECs	<i>No information provided</i>
REC verification program(s)	<i>No information provided</i>
Description of RECs purchased (including vendor, project source, etc.)	
<i>No information provided</i>	
Sequestration and Carbon Storage	
Sequestration due to land owned by the institution	10.0 metric tons of CO ₂ e
Description of how sequestration was calculated	
<p>Richland has a unique on-campus Urban Tree Farm, where an average of 35,000 container-grown trees (1-4 in diameter) are prepared for planting in public spaces in the Dallas area. The figure of 10 metric tons of CO₂e was arrived at by assuming 13 pounds of CO₂ sequestered per year by a mature tree and that each of our trees sequesters 5% of that, or 0.65 pounds.</p>	
Carbon storage due to composting	1.0 metric tons of CO ₂ e

Normalization and Contextual Data

Building Space	
Gross square feet of building space	762,117.0 sq ft
Net assignable square feet of laboratory space	0.0 sq ft
Net assignable square feet of health care space	0.0 sq ft
Net assignable square feet of residential space	0.0 sq ft
Population	
Total Student Enrollment (FTE)	11956.0
Residential Students	<i>No information provided</i>

Full-time Commuter Students	10396
Part-time Commuter Students	16199
Non-Credit Students	10934
Full-time Faculty	160
Part-time Faculty	845
Full-time Staff	832
Part-time Staff	466
Other Contextual Data	
Endowment Size	<i>No information provided</i>
Heating Degree Days	1981
Cooling Degree Days	2958
Please describe any circumstances specific to your institution that provide context for understanding your greenhouse gas emissions this year.	
<i>No information provided</i>	

Auditing and Verification

These emissions data have not been audited, verified, or peer-reviewed.