

2008 GHG Report for Richland College

Submitted on Sep 15, 2008, last updated on Sep 15, 2008

Summary Statistics

Making fair comparisons between 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):	8,216 metric tons of CO ₂ e	0.9 metric tons of CO ₂ e	13 metric tons of CO ₂ e	0.1%
Gross emissions (Scopes 1+2+3):	23,983 metric tons of CO ₂ e	2.7 metric tons of CO ₂ e	37.9 metric tons of CO ₂ e	0%
Net emissions:	23,973 metric tons of CO ₂ e	2.7 metric tons of CO ₂ e	37.9 metric tons of CO ₂ e	N/A

Emissions Inventory Methodology and Boundaries

Start date of the 12-month period covered in this report:	09/01/2005
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:	It was considered to be the one that would best meet our needs.
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?	Students and facilities/research/sustainability office staff and executive leadership

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

Refrigerant leakage from sources outside the college's refrigerant management system—i.e., refrigerators in food services, the staff lounge, and some offices—have been identified as *de minimis*. This factor, coupled with the fact that Richland College is a non-residential campus, results in emissions in this category well under 5% of our total emissions.

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

While we expect to eliminate or reduce these limitations/assumptions in subsequent 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.
3. Derivation of air travel mileage from a percentage of travel expenses rather than tracking actual travel mileage.
4. Incomplete data regarding quantities of college-owned vehicle mobile-source fuels used.

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 students, faculty, and staff: non-shared automobile – 92%; shared automobile – 5%; bus – 2%; bicycle/scooter/foot/other – 1%.
4. Regarding faculty/staff and student air travel: 1) air travel represents 70% of travel expenses; and 2) each dollar spent on air travel represents 2.8 miles of travel.
5. Regarding quantities of college-vehicle mobile source fuel: 1) of the \$25,821 spent, 70% was for gasoline and 30% for diesel fuel; and 2) prices per gallon were \$2.43 for gasoline and \$2.56 for diesel (per DOE's Energy Information Administration averages for March, 2006).

Emissions Data

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

Scope 1 Emissions

Stationary Combustion:	788
Mobile Combustion:	97
Process Emissions:	0
Fugitive Emissions:	191
Total Scope 1 emissions:	1,076

Scope 2 Emissions

Purchased Electricity:	7,140
Purchased Heating:	0
Purchased Cooling:	0
Purchased Steam:	0
Total Scope 2 emissions:	7,140

Scope 3 Emissions

Commuting:	15,421
Air Travel:	256
Solid Waste:	90
Total Scope 3 emissions:	15,767

Mitigation Data

Carbon Offsets

Carbon offsets purchased (metric tons of CO ₂ e):	0
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 (kWh):	0
Percent of total electricity consumption mitigated through the purchase of RECs:	<i>No information provided.</i>
Emissions reductions from REC purchases (metric tons of CO ₂ e):	<i>No information provided.</i>
REC verification program(s)	
Description of RECs purchased (including vendor, project source, etc.):	<i>No information provided.</i>

Sequestration

Sequestration due to forests owned by the institution (metric tons of CO₂e): 10

Please briefly describe how sequestration was calculated

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.

Normalization and Contextual Data

Building Space

Gross square feet of building space:	633,027
Net assignable square feet of laboratory space:	<i>No information provided.</i>
Net assignable square feet of health care space:	<i>No information provided.</i>
Net assignable square feet of residential space:	<i>No information provided.</i>

Population

Total Student Enrollment (FTE):	9,015
Residential Students:	0
Full-time Commuter Students:	7,859
Part-time Commuter Students:	17,754
Non-Credit Students:	12,814
Full-time Faculty:	139
Part-time Faculty:	1,077
Full-time Staff:	395
Part-time Staff:	222

Other Contextual Data

Endowment size:	\$0
-----------------	-----

Please describe any circumstances specific to your institution that provide context for understanding your greenhouse gas emissions this year:

Please note that referring to students in two categories only (residential and commuter) ignores the fastest growing segment of our enrollment (exclusive distance learning students) who neither reside on campus nor commute to/from campus. We have, therefore, included ALL our students in the COMMUTER categories above; however, we have not included these exclusive distance learning students in the zip code data and therefore do not reflect any commuting travel for them in emissions data item #20.

Supporting Documentation

Completed inventory narrative: *No information provided.*

Completed inventory calculator: [Download \(RLC's Carbon Calculator.xls\)](#)

Auditing and Verification

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

Please briefly describe this verification, if any:

No information provided.