

REPORTING GREENHOUSE GAS EMISSIONS

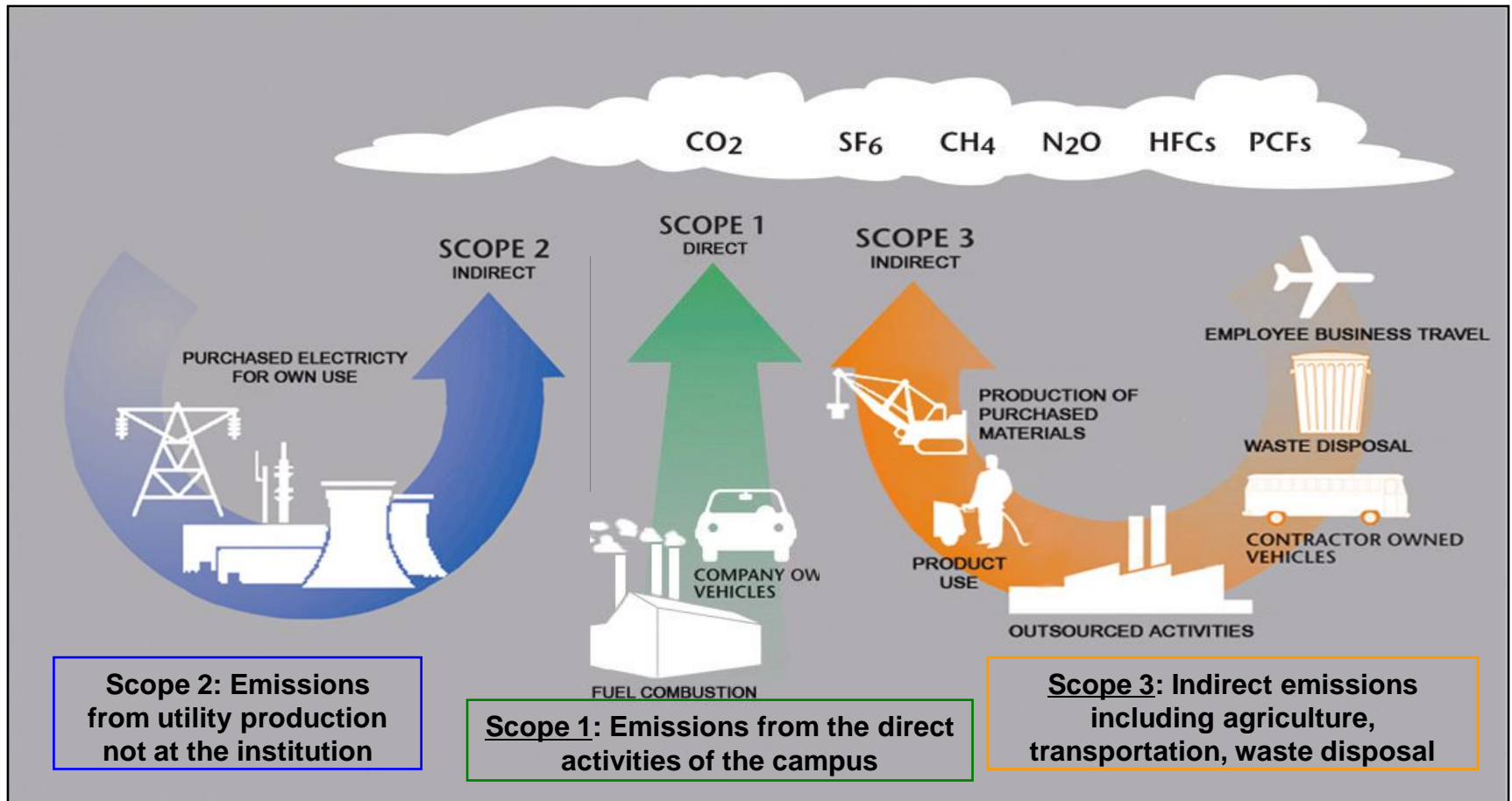
Vermont Campus Sustainability Network

January 27, 2009

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GHG Inventories: a recap

- Three categories of emissions: Scope 1, 2, and 3



Campus Carbon Calculation

- Popular tool: Clean Air-Cool Planet Campus Carbon Calculator



Scope 1 (direct):

- Heating fuel use
- Fleet fuel use
- Refrigerants
- Agriculture

Scope 2 (indirect):

- Purchased Electricity Use

Scope 3 (indirect):

- Commuting fuel use*
- Waste
- Air travel
- Market mechanisms, Offsets

- Other options exist, based off of other GHG protocols

Where to report?

- **American College Presidents Commitment on Climate Change (ACUPCC)**
- ACUPCC Requirements:
 - Immediate *short-term actions* to reduce greenhouse gas emissions (GHG)
 - Complete an *emissions inventory*
 - Completed September, 2008
 - Create a *climate action plan*; set date and milestones for climate neutrality
 - Due September, 2009
 - Integrate sustainability into educational experience
 - Make action plan, inventory and all progress reports publicly accessible.

ACUPCC System

The screenshot shows the ACUPCC Reporting System interface. At the top, there is a navigation bar with the ACUPCC logo and the text "AMERICAN COLLEGE & UNIVERSITY PRESIDENTS CLIMATE COMMITMENT". To the right, there are login fields for "E-Mail Address:" and "Password:" with a "Log In" button and a link for "Forgot your password?". Below this is a dark green header with "ACUPCC Reporting System" and the "AASHE" logo.

The main content area is titled "Reporting Institutions" and includes a search form with the following fields:

- Institution Name:
- Carnegie Classification:
- State or Province:
- Search Reporting Institutions:

Below the search form is a pagination control: "Pages (12): 1 2 3 4 5 Last »".

The main data is presented in a table with the following columns: Institution Name, Implementation Profile, Tangible Actions (?), GHG Reports, and Climate Plan. The table lists several institutions with their respective report statuses and due dates.

Institution Name	Implementation Profile	Tangible Actions ?	GHG Reports	Climate Plan
Adams State College	Received	1 2 3 4 5 6 7	Due 5/15/09	Due 5/15/10
Agnes Scott College	Received	1 2 3 4 5 6 7	2008	Due 9/15/09
Alaska Pacific University	Received	1 2 3 4 5 6 7	Due 9/15/08	Due 9/15/09
Albion College	Received	1 2 3 4 5 6 7	2008	Due 9/15/09
Alfred University	Due 7/15/08	1 2 3 4 5 6 7	Due 5/15/09	Due 5/15/10
Allegheny College	Received	1 2 3 4 5 6 7	2007	Due 9/15/09
Alliant International University	Due 11/15/07	1 2 3 4 5 6 7	Due 9/15/08	Due 9/15/09
American Public University System	Received	1 2 3 4 5 6 7	2008	Due 9/15/09
American University	Received	1 2 3 4 5 6 7	Due 5/15/09	Due 5/15/10

ACUPCC, Institutional Report

ACUPCC Reports - 2007 GHG Report for University of Vermont - Mozilla Firefox

http://acupcc.aashe.org/ghg-report.php?id=281

AMERICAN COLLEGE & UNIVERSITY PRESIDENTS CLIMATE COMMITMENT

ACUPCC Reporting System

2007 GHG Report for University of Vermont

Submitted on September 12, 2008; last updated on November 26, 2008

Summary Statistics

Making fair comparisons between higher education institutions is always challenging due to the rich diversity of higher education. The unverifiable 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)	43,484 metric tons of CO ₂ e	4 metric tons of CO ₂ e	9.1 metric tons of CO ₂ e	0%
Gross emissions (Scopes 1 + 2 + 3)	50,018 metric tons of CO ₂ e	4.6 metric tons of CO ₂ e	10.5 metric tons of CO ₂ e	0%
Net emissions	50,018 metric tons of CO ₂ e	4.6 metric tons of CO ₂ e	10.5 metric tons of CO ₂ e	N/A

Emissions Inventory Methodology and Boundaries

Start date of the 12-month period covered in this report	July 1, 2006
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.

UVM has several external properties, including the Jericho Research Forest and Morgan Horse Farm. The utilities for these facilities are not managed by the UVM physical plant and consequently there is no reporting

Five Data Sections:

- 1) Summary Statistics
- 2) Inventory Methods and Boundaries
 - Qualitative information about the institution and the inventory process
- 3) Emissions Data
- 4) Mitigation Data
- 5) Normative and Contextual Data

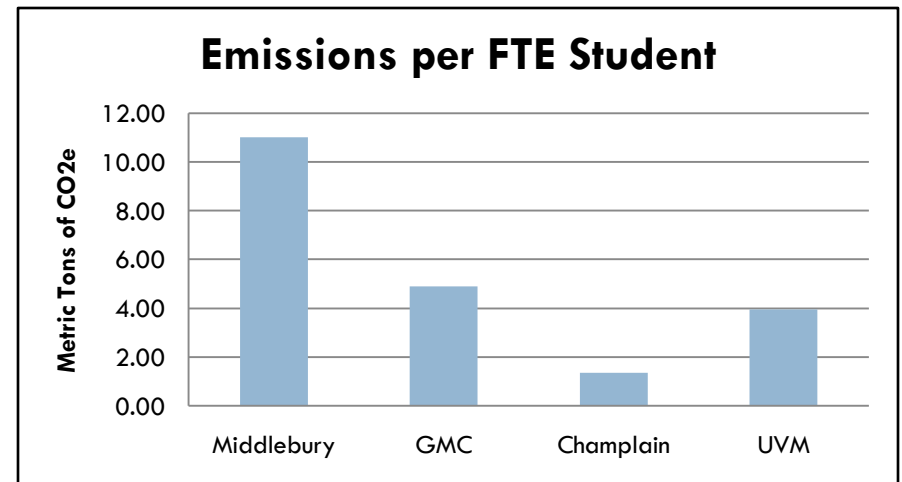
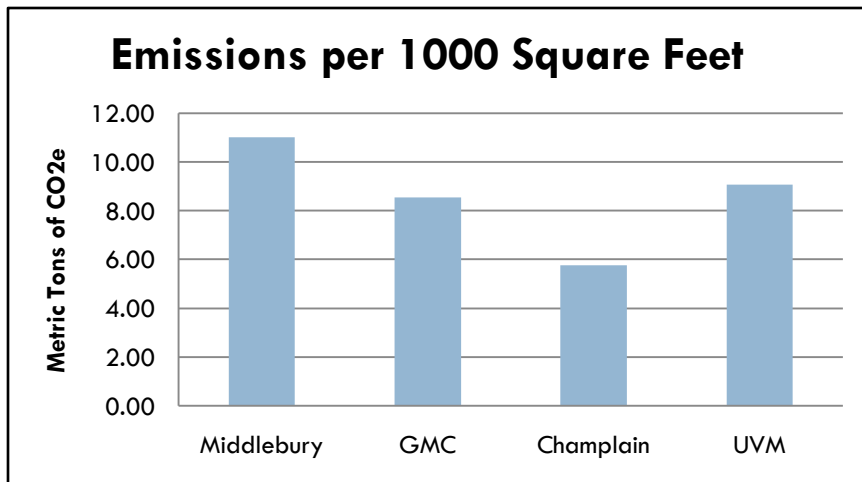
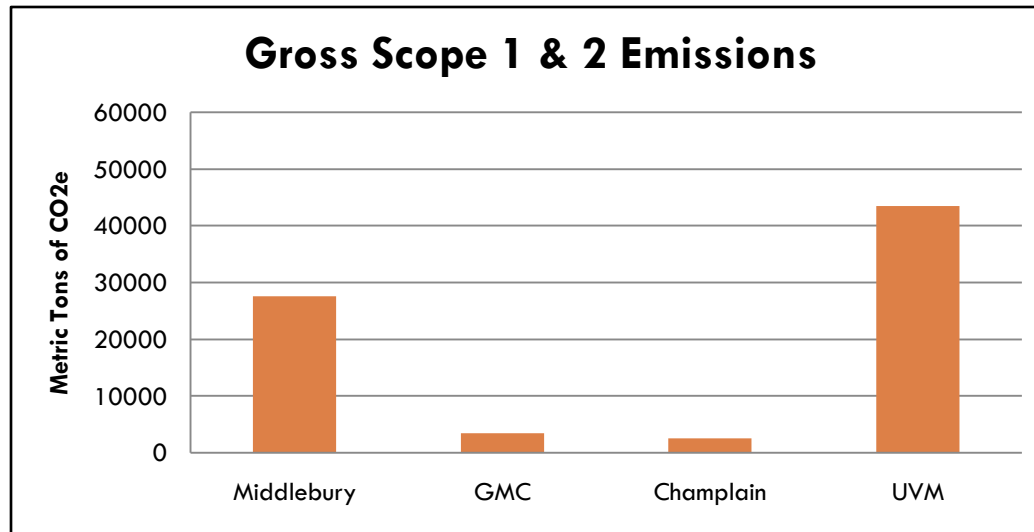
Two supporting sections

- 1) Supporting documentation
- 2) Auditing/Verification

Exercise in data mining

- Publically available data
- ACUPCC Reports:
 - University of Vermont
 - Green Mountain College
 - Middlebury College
- From website
 - Champlain College

Data Comparison Between Schools

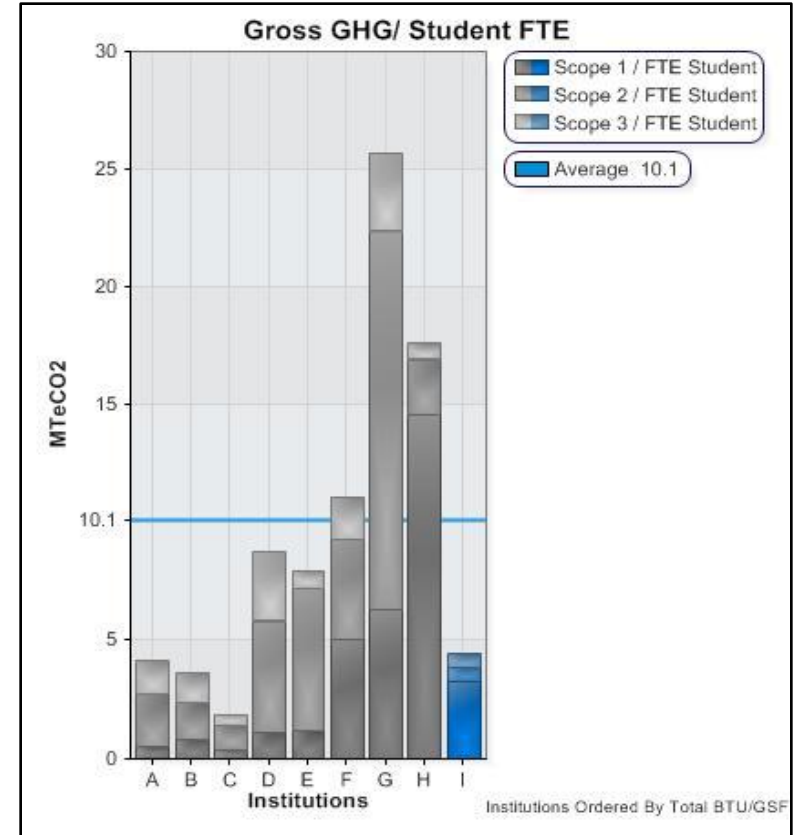
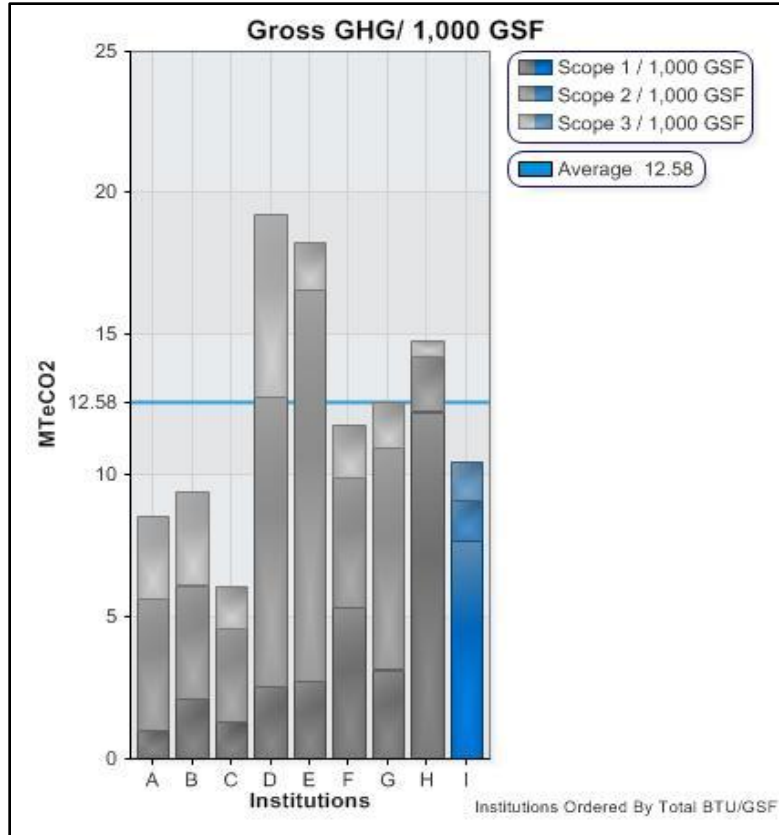


Institutional Differences

- Middlebury College did not use CA-CP, inventory based on WRI protocol, more in-depth
- University of Vermont has 500+ labs, cannot access data for air travel
- Burlington Electric Department uses very low emissions energy sources, benefits to Champlain and UVM
- Etc...

Better Benchmarking?

- Inter-institutional comparison with *similar* institutions through Sightlines.
- Example: Institutions with comparable square footage (2.5 – 5 million)



Collective Reporting

- May be valuable to collectively report GHG data for Vermont Institutions
- Vermont Campus Sustainability Network is a good venue for collective reporting
- Better assessment of impact, both from emissions and financial perspectives
- Could be a basis for more efficient, effective action
- Seems like we have a good start already

Resources

- ACUPCC reporting site: <http://acupcc.aashe.org/>
- Practical Guide to Reducing the Campus Carbon Footprint:
<http://appa.org/files/PDFs/FINAL09APPASustainabilityGuide.pdf>
- National Wildlife Federation Climate Action Plan Guidelines:
<http://www.nwf.org/campusecology/resources/HTML/climateactionplanning.cfm>