

# Greenhouse Gas Inventory Summary Report

**CONTENTS:**

Introduction 1  
 The ACUPCC Commitment 1  
 The Inventory Process 2  
 2010 GHG Emissions 2  
 The GHG Inventory Initiative 3  
 Next Steps 3  
 Acknowledgments 3  
 The Campus Sustainability Task Force 4  
 About CSULB 4



## Introduction

On May 13, 2010, the CSULB Academic Senate passed a resolution to establish a campus-wide task force on sustainability whose main charge was to implement the American Colleges and University Presidents Climate Commitment.

On June 24, 2010, President F. King Alexander signed and endorsed the resolution. Consisting of 23 members, The Campus Sustainability Task Force was established shortly thereafter to develop and implement campus sustainability initiatives and to meet the goals of the ACUPCC.

Co-chaired by the Vice President of Administration and Finance and two faculty members, The Campus Sustainability Task Force established nine sub-committees consisting of



faculty, students, staff, and administrators to implement sustainability initiatives within the following focus areas:

- Greenhouse Gas Inventory and Climate Action Planning
- Academics
- Interdisciplinary Research and Grants
- Communication, Outreach and Metrics
- Physical Planning and Operations
- Green IT
- Sustainable Transportation
- Auxiliaries and Dining
- Environmentally Responsible Purchasing.

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## The Commitment

As a signatory of the American Colleges and University Presidents Climate Commitment, CSULB is committing to develop a comprehensive plan to achieve climate neutrality

as soon as possible.

The plan includes establishing a campus committee, developing a greenhouse gas inventory, and creating a climate action plan. While the comprehensive plan

is being developed, a commitment to take two or more tangible actions to reduce greenhouse gases must be implemented. For further details on these commitments, go to: [www.acupcc.org](http://www.acupcc.org)



## The Inventory Process

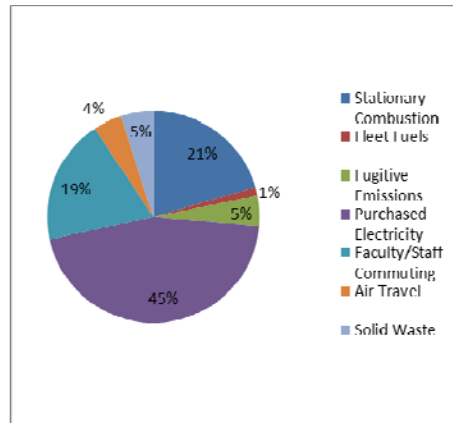
On January 15, 2013, CSULB submitted its first greenhouse gas inventory report to the ACUPCC.

CSULB's GHG inventory process began in the fall of 2010 and continued into 2011 with a group of 7 student volunteers from the Conservation Biology (BIO 459/559) class. The student volunteers were part of a service learning class in which their volunteer work counted

towards service learning hours. The inventory work primary involved identifying sources of data, gathering the data and compiling it for entry into the Clean Air Cool Planet GHG calculator. Working with the Energy and Sustainability Manager from the office of Physical Planning and Facilities Management, the volunteers were assigned and instructed to

gather the raw data for GHG sources from all areas of CSULB operations including auxiliary operations. In the fall of 2012 and with assistance from a student volunteer from Engineering 3021 class, all previously gathered data was compiled, formatted, and verified for accuracy for final entry into the CA/CP GHG calculator.

## 2010 Greenhouse Gas Emissions



| GHG Source                      | MTCO <sub>2e</sub> |
|---------------------------------|--------------------|
| Stationary Combustion           | 6049               |
| Fleet Fuels                     | 386                |
| Fugitive Emissions              | 1359               |
| Purchased Electricity           | 13343              |
| Faculty/Staff Commuting         | 5629               |
| Air Travel                      | 1273               |
| Solid Waste                     | 1477               |
| <b>Total 2010 GHG Emissions</b> | <b>29516</b>       |

(In Metric Tons of CO<sub>2</sub> Equivalent)

## What's Behind the Numbers

For the 2010 reporting year, the largest source of greenhouse gas emission was from the purchase of electricity to power the campus. The second largest emission source was from stationary combustion mainly from on-site combustion of

natural gas to heat the campus. The third largest emission source was from faculty and staff commuting or from transportation sources. The remaining sources of greenhouse gas emissions in order of magnitude are from

fugitive sources or refrigerant leaks, solid landfill waste, and emissions from business and athletics related air travel and lastly, emissions from the consumption of fuels for fleet transportation.

## The Greenhouse Gas Inventory Initiative

This GHG emissions inventory report is CSULB's initial attempt to quantify global warming emissions sources from its operations based on best available data. The objective and goal of the initiative was to deliver a comprehensive emissions inventory for the purpose of a) meeting the reporting requirements of the ACUPCC and b) establishing an emission baseline to which we can compare future emission reduction efforts and track

our progress over time towards our goal of climate neutrality. The secondary goal was to learn from this initial effort so we can continue to improve the efficiency of the data gathering as well as accuracy of the data in future reports. A significant footnote to the 2010 report is the absence of emissions data from student commuting. CSULB acknowledges that this missing piece of information is significant

and must be addressed in future reports. A transportation demand management plan and study currently underway will directly address this shortfall starting with the development of an all-inclusive transportation survey for faculty, staff and students. The survey will be conducted over the spring of 2013 and results from this annual survey will provide the needed data for a comprehensive greenhouse gas inventory.

## Next Steps

The next commitment to the ACUPCC is the creation of a Climate Action Plan.

Now that we have an idea of the sources and the quantities of our greenhouse gas emissions, the next challenge for CSULB is to develop a plan on how to reduce these emissions to

levels of climate neutrality. The climate plan will identify what level of emissions we will strive to reduce down to and specify the target date in which we aim to reach this goal.

CSULB's Climate Action Plan is due to the ACUPCC on January 15,

2014. Just as the GHG Inventory process required collaboration from all areas of the campus, the CAP will require the same if not even higher level of effort.

A working group will be convened in the spring of 2013 to start developing the campus Climate Action Plan.



## Acknowledgments

The campus Sustainability Task Force would like to acknowledge and thank the following people who contributed their time and effort to the development of the 2010 greenhouse gas inventory report:

Kourtney Siess, Student  
 Jason Okabayashi, Student  
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 Jessica Person, Student  
 Christina Ngeam, Student  
 Ethan Kaiser-Klimist, Student  
 Cindy Masner, Sr. Associate Athletic Director, Athletics  
 Carol Monson, Accounts Payable Manager, Financial Mgt.  
 Zeke Bonilla, Facilities Manager, Foundation

## The Campus Sustainability Task Force

The Campus Sustainability Task Force is the primary organization on campus that has been charged of developing campus sustainability initiatives to meet the goals of the American Colleges and University Presidents Climate Commitment.

### Members:

|                     |                                                          |                                  |
|---------------------|----------------------------------------------------------|----------------------------------|
| Mary Stephens       | Vice President, Administration and Finance               | Co-chair                         |
| Paul Laris          | Director, Geography and Environmental Science and Policy | Co-chair                         |
| Reza Toossi         | Professor, Mechanical and Aerospace Engineering          | Co-chair                         |
| Tracey Mayfield     | Associate Dean, Library                                  | Representing Academic Technology |
| Zed Mason           | Associate VP, Research and External Support              |                                  |
| David Salazar       | Associate Vice President, PPFM                           |                                  |
| Paul Wingco         | Energy and Sustainability Manager                        |                                  |
|                     | General Manager, Parking and Transportation              | Vacant                           |
| Laurinda Fuller     | Director of Purchasing & Financial Services              |                                  |
| Carol Roberts-Corb  | Director, Housing and Residential Life                   | Representing DSS                 |
| Jeanette Schelin    | Director, Japanese Gardens                               | Representing URD                 |
| Don Penrod          | General Manager, 49er Shops                              |                                  |
| Brian Nowlin        | Chief Operating Officer, CSULB Foundation                |                                  |
| Dave Edwards        | Associate Executive Director, Associated Students Inc.   | Representing DSS                 |
| John Haberstroh     | President, Associated Students Inc.                      | Student                          |
| Ryan Kosanke        | Instructional Support Technician, Design                 | Rep for Staff Council            |
| Dean Toji           | Assistant Professor, Asian & Asian American Studies      |                                  |
| Walter F. Baber     | Associate Professor, Environmental Science and Policy    |                                  |
| Wesley Woelfel      | Assistant Professor, Design                              |                                  |
| Christine Whitcraft | Assistant Professor, Biology                             |                                  |
| Katherine James     | Professor, Recreation and Leisure Studies                | Alternate Faculty                |
| Alben Phung         | Conservation Commissioner, Associated Students           | Alternate Student                |

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## About CSULB

A diverse, student-centered, globally engaged public university, California State University, Long Beach (CSULB) is committed to providing undergraduate and graduate educational opportunities through superior teaching, research, creative activity and service for the people of California and the world. With its values of Educational Opportunity, Excellence, Diversity, Integrity and Service, CSULB's core academic purpose is to graduate students with highly-valued degrees. CSULB envisions changing lives by expanding educational opportunities, championing creativity and preparing leaders for a changing world.