

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Santa Barbara, CA 93106 United States

sustainability.ucsb.edu

805-893-8367

jill.richardson@vcadmin.ucsb.edu

Contact: Jill Richardson

Industry Type: Education - University

NAIC Code:

SIC Code:

Description: University of California Santa Barbara is a 1,055 acre campus with many types of buildings such as administration, light and heavy research, as well as campus housing, residence halls, and off-campus reserves.

Primary Calculation Methodologies: We use the default factors in CARROT.

Organizational structure disclosure: Department within UCSB.

Legend	
Blue	= required
Orange	= optional

VERIFIED EMISSIONS INFORMATION

Reporting Year: **2008**
 Reporting Scope: **CA**
 Reporting Protocol: General Reporting Protocol, Version 3.1, (January 2009)
 Reporting Boundaries: Management Control - Operational Criteria
 Direct Baseline Year:
 Indirect Baseline Year:

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	1,406.11	1,392.31	0.12	0.04	0.00	0.00	0.00	metric ton
Stationary Combustion	18,864.38	18,815.95	1.77	0.04	0.00	0.00	0.00	metric ton
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	29.76	0.00	0.00	0.00	0.02	0.00	0.00	metric ton
TOTAL DIRECT	20,300.24	20,208.25	1.89	0.07	0.02	0.00	0.00	metric ton

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	31,315.35	31,179.92	1.30	0.35	metric ton
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	31,315.35	31,179.92	1.30	0.35	metric ton

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

De Minimis Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Arbor - Chilled Displays	1.75	0.00	0.00	0.00	0.00	0.00	0.00	metric ton
Bio II - Chiller	471.74	0.00	0.00	0.00	0.36	0.00	0.00	metric ton
Bren - Freezer	4.78	0.00	0.00	0.00	0.00	0.00	0.00	metric ton
Fire Extinguishers - Clean Agent	0.31	0.31	0.00	0.00	0.00	0.00	0.00	metric ton
Fleet Vehicles A/C	5.90	0.00	0.00	0.00	0.00	0.00	0.00	metric ton
Gas Cylinders	0.69	0.67	0.00	0.00	0.00	0.00	0.00	metric ton
LSB - Freezer	2.62	0.00	0.00	0.00	0.00	0.00	0.00	metric ton
MSRB - Cold Rooms	4.90	0.00	0.00	0.00	0.00	0.00	0.00	metric ton
TOTAL DEMINIMIS	492.68	0.98	0.00	0.00	0.37	0.00	0.00	metric ton
Percentage of Total Inventory:	0.95 %							

Movement Report*

Factor	Details	Amount (CO2e)	Unit
Other	<p>In 2008, 14 buildings/structures came online adding additional square footage and increasing energy use:</p> <p>San Clemente Village (13 buildings) - 383,975 GSF San Clemente Parking Structure - 257,196 GSF</p> <p>Total = 641,171 GSF</p> <p>It is difficult to calculate the affected amount as it is part of the one campus electrical meter, and the structure was not fully occupied until September. The moderate changes will show up in the overall numbers for the campus.</p>	0.00	metric ton
Other	<p>In 2007, one off-campus building, Santa Catalina Residential Hall, was excluded from the indirect emissions calculations, but included in the 2008 report. It is a small percentage of the overall indirect emissions, but a significant difference in off-campus electrical use from 2007 to 2008.</p>	144.00	metric ton

*The Movement Report documents changes in the members inventory. This data is not verified but must be completed by the member to help track changes in emissions over time.

VERIFICATION INFORMATION

Verification Company: SCS Engineers

Verifier Name: Cassandra B. Drotman

Lead Verifier Name: Raymond H. Huff, R.E.A.

Basis of Verification Opinion: The University of California, Santa Barbara (UCSB) submitted their 2008 greenhouse gas (GHG) emission inventory report to SCS Engineers (SCS) for verification. SCS reviewed the emission inventory against the Registry's General Reporting Protocol (Version 3.1, January 2009), following the procedures outlined in the Registry's General Verification Protocol (Version 3.0, August 2008).

On December 16, 2009, SCS issued a verification report to UCSB documenting verification activities as well as material/immaterial misstatements in the GHG inventory. No material misstatements were identified. SCS uploaded a completed verification opinion and verification activities checklist to CCAR on December 16, 2009.

Based on the information provided, SCS is able to verify UCSB's 2008 annual emissions report without qualification.

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Date Submitted:
12/16/09 01:20 pm

Verifier Comments:

OPTIONAL INFORMATION

Information in this section is voluntarily provided by the participant for public information, but is not required and thus, not verified under California Registry protocols.

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Biogenic - Mobile	0.77	0.75	0.00	0.00	0.00	0.00	0.00	metric ton
Employee Commuting and Business Travel	32,639.00	32,639.00	0.00	0.00	0.00	0.00	0.00	metric ton
TOTAL OPTIONAL	32,639.77	32,639.75	0.00	0.00	0.00	0.00	0.00	metric ton

Emissions Efficiency metric:

Emissions Management Programs:

Emissions Reduction Projects:

Emissions Reduction Goals:

REFERENCE DOCUMENTS

Title	Author	Document Status	Publish Date
Verification Activity Log	SCS Engineers	Private	12/16/2009 12:00:00AM

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

FACILITY INFORMATION

Facility Name: **Airline Travel**
 Facility ID:
 ReportingYear: 2008
 Facility Address: Santa Barbara, CA 93106, United States
 Facility PO Box:
 Facility Contact Person: Jill Richardson
 Facility Contact Phone: 805-893-8367
 Facility Contact Email: jill.richardson@vcdadmin.ucsb.edu
 Facility Description:
 SIC Code:
 NAIC Code:
 Industry Type: Education - University

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Stationary Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
TOTAL DIRECT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	0.00	0.00	0.00	0.00	-
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	0.00	0.00	0.00	0.00	-

De Minimis Detail	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
-------------------	------	-----	-----	-----	-------	-------	-----	------

Percentage of Total Inventory:

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Employee Commuting and Busir	32,639.00	32,639.00	0.00	0.00	0.00	0.00	0.00	metric ton
TOTAL OPTIONAL	32,639.00	32,639.00	0.00	0.00	0.00	0.00	0.00	metric ton

Facility Emission Reduction Goals: Increase the amount of teleconferencing on campus to reduce the number of flights needed by faculty and staff.

Environmental Programs/Policies:

Other Public Information:

Primary Calculation Methodologies: Calculated by converting amount spent on airline travel across campus multiplied by average cents per mile to give miles traveled.

Equity Share: 100.00

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Source	Emission Category	Calc Method	Fuel Name	Fuel/Mileage	Emission Factor	Fract. Oxid.	GHG	Amount	Unit	Methodol./ Source	General Info
Airplanes	Employee Commuting and Business Travel	Pre-Calc					CO2	32,639.00	metric ton	Used the amount of dollars spent on airline travel multiplied by the average cents per passenger mile (corrected by 20% for taxes/fees). Then used CleanAir CoolPlanet calculator (which uses miles) to convert to kgCO2, then MTCO2.	

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

FACILITY INFORMATION

Facility Name: **Diesel Emergency Generators**
 Facility ID:
 ReportingYear: 2008
 Facility Address: Santa Barbara, CA 93106, United States
 Facility PO Box:
 Facility Contact Person: Jill Richardson
 Facility Contact Phone: 805-893-8367
 Facility Contact Email: jill.richardson@vcdadmin.ucsb.edu
 Facility Description:
 SIC Code:
 NAIC Code:
 Industry Type:

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Stationary Combustion	91.45	90.89	0.01	0.00	0.00	0.00	0.00	metric ton
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
TOTAL DIRECT	91.45	90.89	0.01	0.00	0.00	0.00	0.00	metric ton

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	0.00	0.00	0.00	0.00	-
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	0.00	0.00	0.00	0.00	-

De Minimis Detail	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
-------------------	------	-----	-----	-----	-------	-------	-----	------

Percentage of Total Inventory:

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
TOTAL OPTIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

Facility Emission Reduction Goals:
Environmental Programs/Policies:
Other Public Information:
Primary Calculation Methodologies:
 Equity Share: 100.00

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Source	Emission Category	Calc Method	Fuel Name	Fuel/Mileage	Emission Factor	Fract. Oxid.	GHG	Amount	Unit	Methodol./Source	General Info
Diesel Emergency Generators	Stationary Combustion	CARROT	Distillate Fuel Oil (#1, 2 & 4)	8955 gallon	10.15 kg/gallon	100	CO2	90.89	metric ton		
Diesel Emergency Generators	Stationary Combustion	CARROT	Distillate Fuel	8955 gallon	0.00 kg/gallon		CH4	0.01	metric ton		
Diesel Emergency Generators	Stationary Combustion	CARROT	Distillate Fuel	8955 gallon	0.00 kg/gallon		N2O	0.00	metric ton		

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

FACILITY INFORMATION

Facility Name: **Gas Cylinders - Laboratories**

Facility ID:

ReportingYear: 2008

Facility Address: Santa Barbara, CA 93106, United States

Facility PO Box:

Facility Contact Person: Jill Richardson

Facility Contact Phone: 805-893-8367

Facility Contact Email: jill.richardson@vcadmin.ucsb.edu

Facility Description: Laboratories across campus use gas cylinders for experiments, etc. The department of Environmental Health & Safety monitor their use and replacement.

SIC Code:

NAIC Code:

Industry Type:

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Stationary Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
TOTAL DIRECT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	0.00	0.00	0.00	0.00	-
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	0.00	0.00	0.00	0.00	-

De Minimis Detail	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Fire Extinguishers - Clean Agent	0.31	0.31	0.00	0.00	0.00	0.00	0.00	metric ton
Gas Cylinders	0.69	0.67	0.00	0.00	0.00	0.00	0.00	metric ton
TOTAL DEMINIMIS	0.99	0.98	0.00	0.00	0.00	0.00	0.00	metric ton
Percentage of Total Inventory:	100.00%							

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
TOTAL OPTIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

Facility Emission Reduction Goals:

Environmental Programs/Policies:

Other Public Information:

Primary Calculation Methodologies:

Equity Share: 100.00

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Source	Emission Category	Calc Method	Fuel Name	Fuel/Mileage	Emission Factor	Fract. Oxid.	GHG	Amount	Unit	Methodol./Source	General Info
Fire Extinguishers - Clean Agent	Fugitive Emissions	Pre-Calc					CO2	0.31	metric ton	We have approximately 150 clean agent fire extinguishers on campus, half (75) of which are serviced (discharged/recharged) annually. A conservative estimate on the size of the canisters are 9 pounds of material per extinguisher.	
Gas Cylinders	Fugitive Emissions	Pre-Calc					CO2	0.67	metric ton	The is an estimation of fugitive emissions based on volume of CO2 purchased in 2008 - it is probably an overly conservative estimate of the actual fugitive emissions. 12,709 ft3 CO2 = 1.87kg/m3	
Gas Cylinders	Fugitive Emissions	Pre-Calc					CH4	0.00	metric ton	The is an estimation of fugitive emissions based on volume of CH4 purchased in 2008 - it is probably an overly conservative estimate of the actual fugitive emissions. 30.5 ft3 CH4 = .68kg/m3	

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

FACILITY INFORMATION

Facility Name: **Main Campus and Auxiliary Electricity Usage**
 Facility ID:
 ReportingYear: 2008
 Facility Address: Santa Barbara, CA 93106, United States
 Facility PO Box:
 Facility Contact Person: Jill Richardson
 Facility Contact Phone: 805-893-8367
 Facility Contact Email: jill.richardson@vcdadmin.ucsb.edu
 Facility Description:
 SIC Code:
 NAIC Code:
 Industry Type:

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Stationary Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
TOTAL DIRECT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	29,787.18	29,658.36	1.24	0.33	metric ton
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	29,787.18	29,658.36	1.24	0.33	metric ton

De Minimis Detail	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
-------------------	------	-----	-----	-----	-------	-------	-----	------

Percentage of Total Inventory:

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
TOTAL OPTIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

Facility Emission Reduction Goals:
Environmental Programs/Policies:
Other Public Information:
Primary Calculation Methodologies:
 Equity Share: 100.00

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

FACILITY INFORMATION

Facility Name: **Main Campus and Auxiliary Natural Gas Usage**
 Facility ID:
 ReportingYear: 2008
 Facility Address: Santa Barbara, CA 93106, United States
 Facility PO Box:
 Facility Contact Person: Jill Richardson
 Facility Contact Phone: 805.893.8367
 Facility Contact Email: jill.richardson@vcadmin.ucsb.edu
 Facility Description:
 SIC Code:
 NAIC Code:
 Industry Type:

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Stationary Combustion	17,165.47	17,121.58	1.61	0.03	0.00	0.00	0.00	0.00 metric ton
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
TOTAL DIRECT	17,165.47	17,121.58	1.61	0.03	0.00	0.00	0.00	0.00 metric ton

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	0.00	0.00	0.00	0.00	-
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	0.00	0.00	0.00	0.00	-

De Minimis Detail	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
-------------------	------	-----	-----	-----	-------	-------	-----	------

Percentage of Total Inventory:

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
TOTAL OPTIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

Facility Emission Reduction Goals:
Environmental Programs/Policies:
Other Public Information:
Primary Calculation Methodologies:
 Equity Share: 100.00

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Source	Emission Category	Calc Method	Fuel Name	Fuel/Mileage	Emission Factor	Fract. Oxid.	GHG	Amount	Unit	Methodol./Source	General Info
	Stationary Combustion	CARROT	Natural Gas	3226834 therm	5.31 kg/therm	100	CO2	17,121.58	metric ton		
	Stationary Combustion	CARROT		3226834 therm	0.00 kg/therm		CH4	1.61	metric ton		
	Stationary Combustion	CARROT		3226834 therm	0.00 kg/therm		N2O	0.03	metric ton		

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

FACILITY INFORMATION

Facility Name: **Marine Vessels**
 Facility ID:
 ReportingYear: 2008
 Facility Address: Santa Barbara, CA 93106, United States
 Facility PO Box:
 Facility Contact Person: Jill Richardson
 Facility Contact Phone: (805) 893-8367
 Facility Contact Email: jill.richardson@vadmin.ucsb.edu
 Facility Description:
 SIC Code:
 NAIC Code:
 Industry Type:

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	122.90	121.77	0.01	0.00	0.00	0.00	0.00	metric ton
Stationary Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
TOTAL DIRECT	122.90	121.77	0.01	0.00	0.00	0.00	0.00	metric ton

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	0.00	0.00	0.00	0.00	-
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	0.00	0.00	0.00	0.00	-

De Minimis Detail	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
-------------------	------	-----	-----	-----	-------	-------	-----	------

Percentage of Total Inventory:

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
TOTAL OPTIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

Facility Emission Reduction Goals:
Environmental Programs/Policies:
Other Public Information:
Primary Calculation Methodologies:
 Equity Share: 100.00

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Source	Emission Category	Calc Method	Fuel Name	Fuel/ Mileage	Emission Factor	Fract. GHG Oxid.	Amount	Unit	Methodol./ Source	General Info
Gas Consumption	Mobile Combustion	CARROT	Motor Gasoline	13822 gallon	8.81 kg/gallon	CO2	121.77	metric ton		
Gas Consumption	Mobile Combustion	CARROT		13822 gallon	0.64 g/gallon	CH4	0.01	metric ton		
Gas Consumption	Mobile Combustion	CARROT		13822 gallon	0.22 g/gallon	N2O	0.00	metric ton		

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

FACILITY INFORMATION

Facility Name **Off Campus Housing & Reserves Electricity Usage**
 Facility ID
 ReportingYear 2008
 Facility Address Santa Barbara, CA 93106, United States
 Facility PO Box
 Facility Contact Person Jill Richardson
 Facility Contact Phone 805-893-8367
 Facility Contact Email jill.richardson@vcadmin.ucsb.edu
 Facility Description
 SIC Code
 NAIC Code
 Industry Type

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Stationary Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
TOTAL DIRECT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	1,528.17	1,521.56	0.06	0.02	metric ton
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	1,528.17	1,521.56	0.06	0.02	metric ton

De Minimis Detail	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
-------------------	------	-----	-----	-----	-------	-------	-----	------

Percentage of Total Inventory:

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
TOTAL OPTIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

Facility Emission Reduction Goals:
Environmental Programs/Policies:
Other Public Information:
Primary Calculation Methodologies:
 Equity Share: 100.00

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Source	Emission Category	Calc Method	Fuel Name	Fuel/ Mileage	Emission Factor	Fract. GHG Oxid.	GHG	Amount	Unit	Methodol./ Source	General Info
	Purchased Electricity	CARROT		4632522 KWh	0.72 lb/KWh		CO2	1,521.56	metric ton		
	Purchased Electricity	CARROT		4633 MWh	0.03 lb/MWh		CH4	0.06	metric ton		
	Purchased Electricity	CARROT		4633 MWh	0.01 lb/MWh		N2O	0.02	metric ton		

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

FACILITY INFORMATION

Facility Name: **Off-Campus Housing & Reserves Natural Gas Usage**
 Facility ID:
 ReportingYear: 2008
 Facility Address: Santa Barbara, CA 93106, United States
 Facility PO Box:
 Facility Contact Person: Jill Richardson
 Facility Contact Phone: 805-893-8367
 Facility Contact Email: jill.richardson@vcdadmin.ucsb.edu
 Facility Description:
 SIC Code:
 NAIC Code:
 Industry Type:

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Stationary Combustion	1,559.62	1,555.63	0.15	0.00	0.00	0.00	0.00	metric ton
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
TOTAL DIRECT	1,559.62	1,555.63	0.15	0.00	0.00	0.00	0.00	metric ton

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	0.00	0.00	0.00	0.00	-
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	0.00	0.00	0.00	0.00	-

De Minimis Detail	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
-------------------	------	-----	-----	-----	-------	-------	-----	------

Percentage of Total Inventory:

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
TOTAL OPTIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

Facility Emission Reduction Goals:

Environmental Programs/Policies:

Other Public Information:

Primary Calculation Methodologies:

Equity Share: 100.00

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Source	Emission Category	Calc Method	Fuel Name	Fuel/Mileage	Emission Factor	Fract. Oxid.	GHG	Amount	Unit	Methodol./ Source	General Info
	Stationary Combustion	CARROT	Natural Gas	293183 therm	5.31 kg/therm	100	CO2	1,555.63	metric ton	The amount of natural gas used to calculate stationary combustion was the usage amount from the gas bill minus the amount of NG used to power Housing vehicles, which will be calculated in mobile combustion.	
	Stationary Combustion	CARROT		293183 therm	0.00 kg/therm		CH4	0.15	metric ton		
	Stationary Combustion	CARROT		293183 therm	0.00 kg/therm		N2O	0.00	metric ton		

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

FACILITY INFORMATION

Facility Name	Other Stationary Sources
Facility ID	
ReportingYear	2008
Facility Address	Santa Barbara, CA 93106, United States
Facility PO Box	
Facility Contact Person	Jill Richardson
Facility Contact Phone	805-893-8367
Facility Contact Email	jill.richardson@vcdadmin.ucsb.edu
Facility Description	
SIC Code	
NAIC Code	
Industry Type	

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Stationary Combustion	47.84	47.84	0.00	0.00	0.00	0.00	0.00	metric ton
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
TOTAL DIRECT	47.84	47.84	0.00	0.00	0.00	0.00	0.00	metric ton

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	0.00	0.00	0.00	0.00	-
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	0.00	0.00	0.00	0.00	-

De Minimis Detail	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
-------------------	------	-----	-----	-----	-------	-------	-----	------

Percentage of Total Inventory:

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
TOTAL OPTIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

Facility Emission Reduction Goals:
Environmental Programs/Policies:
Other Public Information:
Primary Calculation Methodologies:
Equity Share: 100.00

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Source	Emission Category	Calc Method	Fuel Name	Fuel/Mileage	Emission Factor	Fract. Oxid.	GHG	Amount	Unit	Methodol./Source	General Info
Acetylene Torches	Stationary Combustion	CARROT	Acetylene	228 ft3	0.10 kg/ft3	100	CO2	0.02	metric ton		
Ammunition	Stationary Combustion	Pre-Calc					CO2	0.00	metric ton		
Ammunition	Stationary Combustion	Pre-Calc					CH4	0.00	metric ton		
Propane - Reserves	Stationary Combustion	CARROT	Propane	8330 gallon	5.74 kg/gallon	100	CO2	47.82	metric ton		

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

FACILITY INFORMATION

Facility Name	Refrigerants
Facility ID	
ReportingYear	2008
Facility Address	Santa Barbara, CA 93106, United States
Facility PO Box	
Facility Contact Person	Jill Richardson
Facility Contact Phone	805-893-8367
Facility Contact Email	jill.richardson@vcdadmin.ucsb.edu
Facility Description	
SIC Code	
NAIC Code	
Industry Type	

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Stationary Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	29.76	0.00	0.00	0.00	0.02	0.00	0.00	metric ton
TOTAL DIRECT	29.76	0.00	0.00	0.00	0.02	0.00	0.00	metric ton

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	0.00	0.00	0.00	0.00	-
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	0.00	0.00	0.00	0.00	-

De Minimis Detail	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Arbor - Chilled Displays	1.75	0.00	0.00	0.00	0.00	0.00	0.00	metric ton
Bio II - Chiller	471.74	0.00	0.00	0.00	0.36	0.00	0.00	metric ton
Bren - Freezer	4.78	0.00	0.00	0.00	0.00	0.00	0.00	metric ton
Fleet Vehicles A/C	5.90	0.00	0.00	0.00	0.00	0.00	0.00	metric ton
LSB - Freezer	2.62	0.00	0.00	0.00	0.00	0.00	0.00	metric ton
MSRB - Cold Rooms	4.90	0.00	0.00	0.00	0.00	0.00	0.00	metric ton
TOTAL DEMINIMIS	491.69	0.00	0.00	0.00	0.37	0.00	0.00	metric ton
Percentage of Total Inventory:	94.29%							

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
TOTAL OPTIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

Facility Emission Reduction Goals:
Environmental Programs/Policies:
Other Public Information:
Primary Calculation Methodologies:
Equity Share: 100.00

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Source	Emission Category	Calc Method	Fuel Name	Fuel/Mileage	Emission Factor	Fract. Oxid.	GHG	Amount	Unit	Methodol./Source	General Info
Arbor - Chilled Displays	Fugitive Emissions	Pre-Calc					HFC-125	0.00	metric ton		
Arbor - Chilled Displays	Fugitive Emissions	Pre-Calc					HFC-134a	0.00	metric ton		
Arbor - Chilled Displays	Fugitive Emissions	Pre-Calc					HFC-143a	0.00	metric ton		
Bio II - Chiller	Fugitive Emissions	Pre-Calc					HFC-134a	0.36	metric ton		
Bren - Freezer	Fugitive Emissions	Pre-Calc					HFC-125	0.00	metric ton		
Bren - Freezer	Fugitive Emissions	Pre-Calc					HFC-134a	0.00	metric ton		
Bren - Freezer	Fugitive Emissions	Pre-Calc					HFC-143a	0.00	metric ton		
De La Guerra - Chiller	Fugitive Emissions	Pre-Calc					HFC-152a	0.00	metric ton		
Fleet Vehicles A/C	Fugitive Emissions	Pre-Calc					HFC-134a	0.00	metric ton		
LSB - Freezer	Fugitive Emissions	Pre-Calc					HFC-125	0.00	metric ton		
LSB - Freezer	Fugitive Emissions	Pre-Calc					HFC-134a	0.00	metric ton		
LSB - Freezer	Fugitive Emissions	Pre-Calc					HFC-143a	0.00	metric ton		
MSRB - Cold Rooms	Fugitive Emissions	Pre-Calc					HFC-125	0.00	metric ton		
MSRB - Cold Rooms	Fugitive Emissions	Pre-Calc					HFC-134a	0.00	metric ton		
MSRB - Cold Rooms	Fugitive Emissions	Pre-Calc					HFC-143a	0.00	metric ton		
Ortega - Chiller	Fugitive Emissions	Pre-Calc					HFC-152a	0.00	metric ton		
PSNB - Chiller	Fugitive Emissions	Pre-Calc					HFC-134a	0.01	metric ton		

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

FACILITY INFORMATION

Facility Name: **Transportation Fuel Usage**
 Facility ID:
 ReportingYear: 2008
 Facility Address: Santa Barbara, CA 93106, United States
 Facility PO Box:
 Facility Contact Person: Jill Richardson
 Facility Contact Phone: 805 893-8367
 Facility Contact Email: jill.richardson@vcdadmin.ucsb.edu
 Facility Description:
 SIC Code:
 NAIC Code:
 Industry Type:

Direct Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Mobile Combustion	1,283.21	1,270.54	0.11	0.03	0.00	0.00	0.00	metric ton
Stationary Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Process Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
TOTAL DIRECT	1,283.21	1,270.54	0.11	0.03	0.00	0.00	0.00	metric ton

* HFCs and PFCs are classes of greenhouse gases that include many compounds. These columns may reflect the total emissions of multiple HFC and PFC compounds, each of which has a unique Global Warming Potential (GWP). Emissions of each gas are first multiplied by their respective GWP and then summed in the total CO2-equivalent column.

Indirect Emissions	CO2e	CO2	CH4	N2O	Unit
Purchased Electricity	0.00	0.00	0.00	0.00	-
Purchased Steam	0.00	0.00	0.00	0.00	-
Purchased Heating and Cooling	0.00	0.00	0.00	0.00	-
TOTAL INDIRECT	0.00	0.00	0.00	0.00	-

De Minimis Detail	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
-------------------	------	-----	-----	-----	-------	-------	-----	------

Percentage of Total Inventory:

Optional Emissions	CO2e	CO2	CH4	N2O	HFCs*	PFCs*	SF6	Unit
Biogenic - Mobile	0.77	0.75	0.00	0.00	0.00	0.00	0.00	metric ton
TOTAL OPTIONAL	0.77	0.75	0.00	0.00	0.00	0.00	0.00	metric ton

Facility Emission Reduction Goals:
Environmental Programs/Policies:
Other Public Information:
Primary Calculation Methodologies:
 Equity Share: 100.00

Total Emissions Summary Report

University of California, Santa Barbara

(Emissions from California operations)



Report Generated On: 01/14/2010 01:20 pm PT

Report Revision #: 3

Source	Emission Category	Calc Method	Fuel Name	Fuel/ Mileage	Emission Factor	Fract. GHG Oxid.	Amount	Unit	Methodol./ Source	General Info
Biodiesel	Biogenic - Mobile	Pre-Calc				CO2	0.75	metric ton	79.4 gallons of biodiesel (in the form of B10), used in 2008 = 751 kg	
Biodiesel	Biogenic - Mobile	Pre-Calc				CH4	0.00	metric ton	79.4 gallons, estimated mpg on trucks = 15 mpg	1191 miles traveled, conversion factor CH4 = .06 g/mile
Biodiesel	Biogenic - Mobile	Pre-Calc				N2O	0.00	metric ton	79.4 gallons, estimated mpg on trucks = 15 mpg	1191 miles traveled, conversion factor N2O = .05 g/mile
CNG Vehicles	Mobile Combustion	Pre-Calc				CO2	25.00	metric ton		
CNG Vehicles	Mobile Combustion	Pre-Calc				CH4	0.04	metric ton		
CNG Vehicles	Mobile Combustion	Pre-Calc				N2O	0.00	metric ton		
Diesel Fuel (DF2)	Mobile Combustion	CARROT	Diesel	5593 gallon	10.15 kg/gallon	CO2	56.77	metric ton		
Diesel Fuel (DF2)	Mobile Combustion	CARROT		5593 gallon	0.58 g/gallon	CH4	0.00	metric ton		
Diesel Fuel (DF2)	Mobile Combustion	CARROT		5593 gallon	0.26 g/gallon	N2O	0.00	metric ton		
Unleaded Gas	Mobile Combustion	CARROT	Motor Gasoline	133374 gallon	8.81 kg/gallon	CO2	1,175.02	metric ton		
Unleaded Gas	Mobile Combustion	CARROT		133374 gallon	0.50 g/gallon	CH4	0.07	metric ton		
Unleaded Gas	Mobile Combustion	CARROT		133374 gallon	0.22 g/gallon	N2O	0.03	metric ton		
Unleaded Gas - Rental Fleet	Mobile Combustion	CARROT	Motor Gasoline	1560 gallon	8.81 kg/gallon	CO2	13.74	metric ton		
Unleaded Gas - Rental Fleet	Mobile Combustion	CARROT		1560 gallon	0.50 g/gallon	CH4	0.00	metric ton		
Unleaded Gas - Rental Fleet	Mobile Combustion	CARROT		1560 gallon	0.22 g/gallon	N2O	0.00	metric ton		