# Using California Registry Software for Climate Leaders Reporting

Climate Leaders Partner Meeting May 5, 2005



# California Climate Action Registry



- Established as a business initiative
- Nonprofit organization created by state legislation
  - Board represents business, government, NGOs
  - State stands behind data
  - Designed for "regulatory quality" data
  - Voluntary
- Annual entity-wide (CA or US) emissions inventory

# **Baseline Protection**



The State "commits to <u>use its best efforts</u> to ensure that organizations that establish greenhouse gas emissions baselines and register emissions results... receive appropriate consideration under any future <u>international</u>, <u>federal</u>, <u>or state</u> regulatory scheme."

# Three Step Process



- Inventory according to the Registry protocols
  - CO<sub>2</sub> first 3 years, then all 6 Kyoto gases
  - Direct stationary, mobile, process and fugitive emissions
  - Indirect emissions from electricity and steam
  - Does not include emissions from product use
- Certify emissions inventory results using Registry-approved certifiers
- Report aggregated data publicly





- General Reporting Protocol
  - An operational handbook based on WRI/WBCSD guidelines
- Certification Protocol
  - Goal: Low cost, transparent certification that can hold value over time

• CARROT: Climate Action Registry Reporting Online Tool

# What are the benefits to Climate Leaders Partners?



- State of California offers recognition for early action
  - Mitigate potential regulatory risk
  - Participate in trading
- Access to the CARROT software
- Build your environmental reputation in California
- Protection from shareholder resolutions
- Use the "Climate Action Leader" logo



# Selected Registry Members



# **Energy**

Calpine Corporation
BP
Pacific Gas and Electric
L.A. Dept. of Water & Power
Sempra Energy Utilities
Southern California Edison
PacifiCorp

# **Services**

SAIC First Environment

# Healthcare

Guidant Catholic Healthcare West

# Mining

Rio Tinto Borax

# Manufacturing

Eastman Kodak Anderson Lithograph Bentley Prince Street Clif Bar

# **Telecommunications**

SBC QUALCOMM

# Government

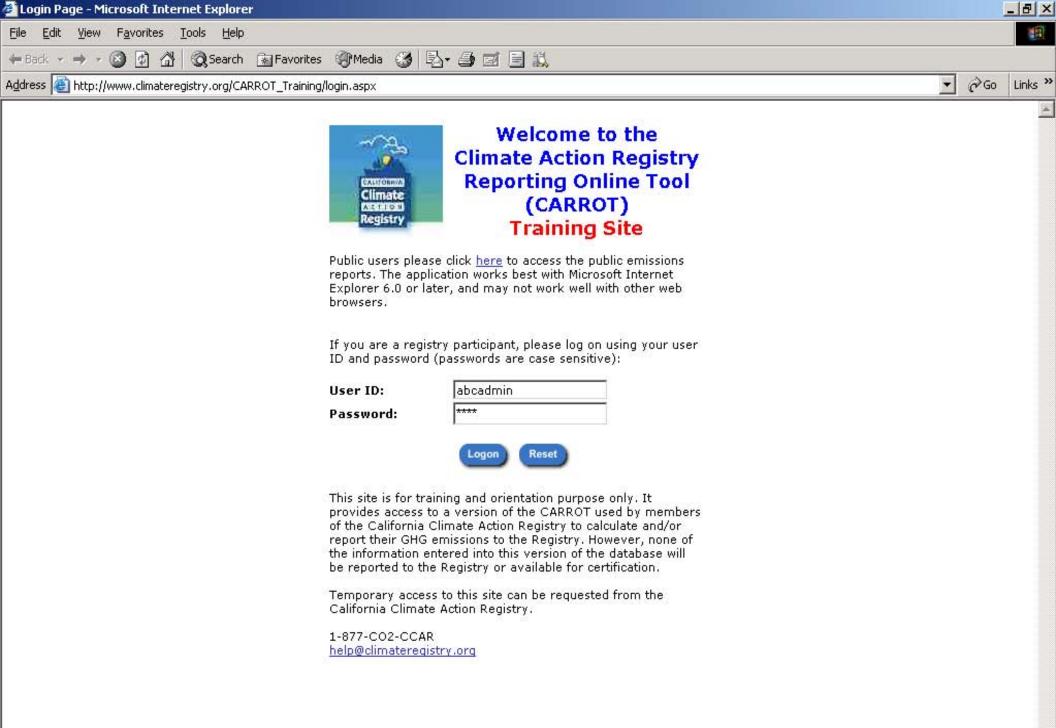
California Public Utilities Commission City of Los Angeles South Coast AQMD

# Non-Profit Organizations

Natural Resources Defense Council Union of Concerned Scientists



# **CARROT** Demonstration





# Climate Action Registry Reporting Online Tool 🌈



Help Contact Us Log Out

User ID: ABCadmin

Mair

Entity ' User Information Management

User Facilities

Emission Data Optional Reporting

Reports

### Summary

Year: 2004 <u>▼</u>

Entity Status: Initiated
Scope: CA and US

evel: Facility

Revision Number: 001

Delete current reporting year

Create a new reporting year

Create a new reporting year using the current reporting year as template

### ► Main

- Entity Information
   Entity Information
   Entity Info (Continued)
- User Management
- Facilities
- Emissions Data
   Entity Emissions Summary
   Facility Emissions Summary
- Facility Emissions Detail
  Optional Reporting
  Emission Performance
  Emission Documents
- Reports

### Tips:

Click the image 6 besides the items to get more information on the corresponding operation.

# **ABC Manufacturing**

### Entity Emissions Summary (CO2 Equivalent)

	Stationary	Mobile	Process	Fugitive	Indirect	Total	Unit
California	115,570	88		295	395	116,348	metric ton
US (Excluding CA)	40,000					40,000	metric ton
International (Excluding US)	7,242				100,000	107,242	metric ton
Total	162,812	88		295	100,395	263,590	metric ton

### Facility Status Summary

Facility Status	Number of Facilities		
Total	6	Check	
Pending	6	Check	

Create your annual emissions report

Submit your annual emissions report for certification ?

Revise annual emissions report @

Create certification check list @



Leve

or the 'Reset' button to cancel

the changes.

# Climate Action Registry Reporting Online Tool 🦸



Help Contact Us Log Out

					<u></u>	User ID	: ABCadmin
		Mail	intity User ormation Management	Facilities	Emission Data	Optional Reporting	Reports
Summ	ary		AB	C Manufac	cturing		
: y Status: e: l: sion Number: ain ntity Informa Entity Info (Co	nation ontinued)	Entity Name: Address: City: Country:	ress of the participatir	ng entity	Identifier: PO Box: State/Province: ZIP/Postal Code:	1001045 Nevada 89109	
ser Manageme acilities missions Data Entity Emissio Facility Emissi Facility Emissi ptional Reporti	ns Summary ons Summary ons Detail	NAIC Code: SIC Code:	32-Manufacturing				V
Emission Perfo	ormance	Contact Persor					
Emission Docu eports s:	<u>uments</u>	Contact Nam ■ Phone: ■ EMail:	909-555-1234 admin@abc.com		⊕ Title:		
Fields with red required fields.			ar (Direct Emissions): ar (Indirect Emissions		<u> </u>		
names are privare not display oublic reports.	rate fields and ed in the	Entity descript Small manufact	ion: urer of bowling balls, fine	china and g	aming equipment		<u> </u>

Entity website: |www.abcmanufacturing.com



# Climate Action Registry Reporting Online Tool 🍎



Help Contact Us Log Out User ID: ABCadmin

Main	Entity Information	User Management	Facilities	Emission Data	Optional Reporting	Reports
------	-----------------------	--------------------	------------	------------------	-----------------------	---------

### Summary

CA and US

Facility

Revision Number:

- Main
- Entity Information Entity Information Entity Info (Continued)
- User Management
- Facilities
- Emissions Data **Entity Emissions Summary** Facility Emissions Summary Facility Emissions Detail
- . Optional Reporting **Emission Performance Emission Documents**
- Reports

### Tips:

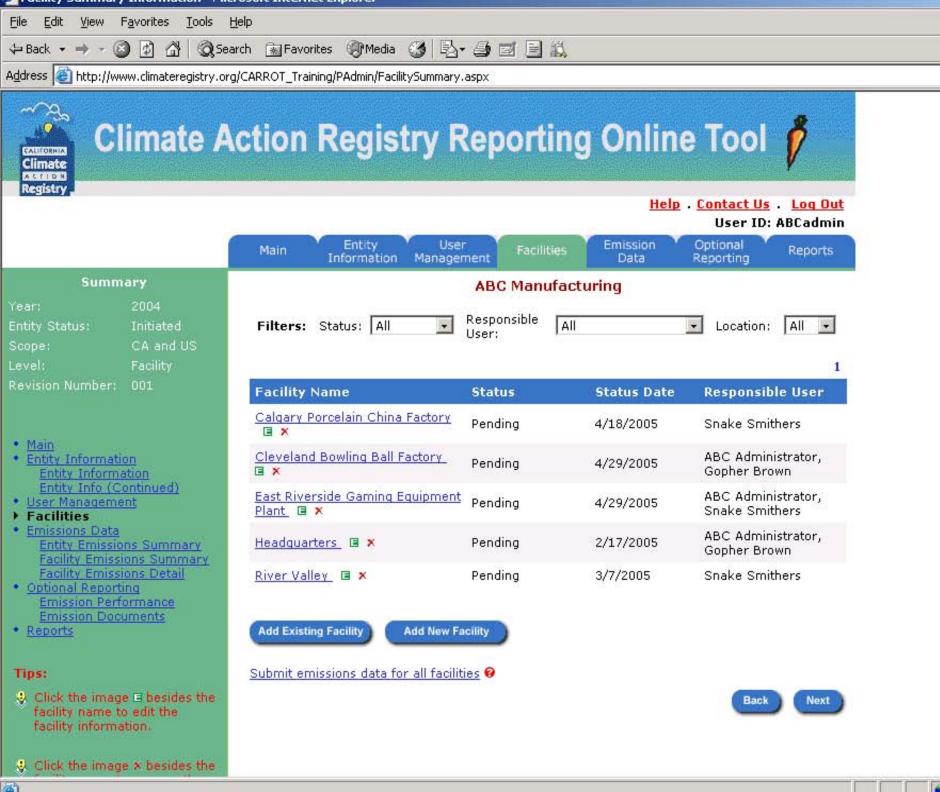
- Click the User Name hyperlinks to edit individual user information.
- Click the image (x) beside. each user's name to delete the user.
- Click the 'Help' hyperlink on. the menu bar to bring up the user manual.

# **ABC Manufacturing**

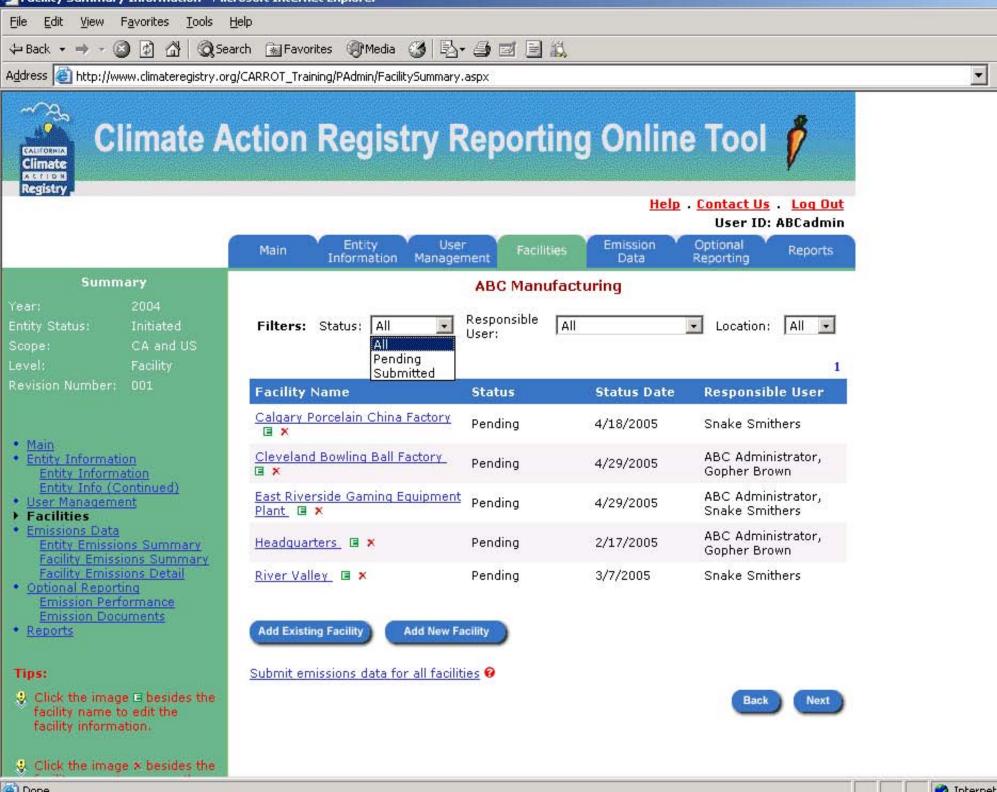
Filters: User Type:	All	v	Name: All	v
	Certifier User			1
User Name	Reviewer		Phone	E-Mail
ABC Administrator ×	Administra ABCadmin		909-555- 1234	admin@abc.com
ABC Certifier ×	ABCcert	Certifier	909-555- 1111	certifier@certifier.com
Gopher Brown ×	gopher	User	909-111- 1111	gopher@abc.com
Skunk Perkins ×	Skunk	Reviewer	213-891- 6922	skunk@consultant.com
Snake Smithers ×	snake	User	702-555- 1212	snake@abc.com
Spider Jones ×	spider	User	213-202- 4444	spider@abc.com

Add New User

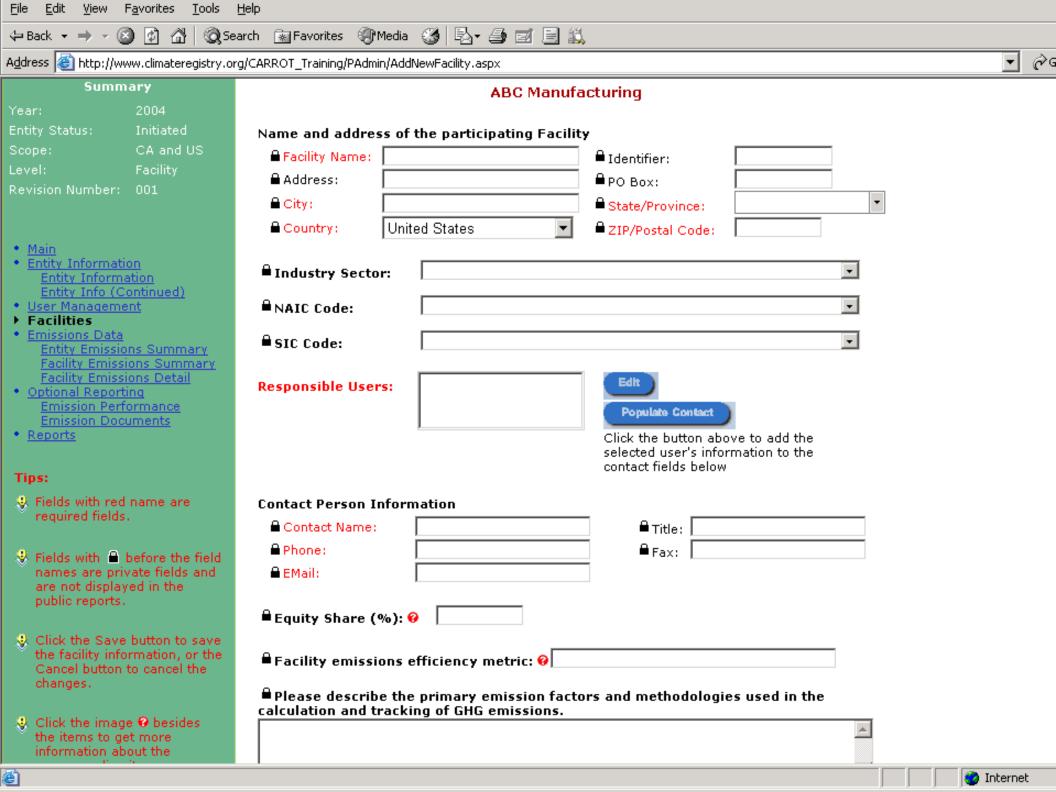
Next

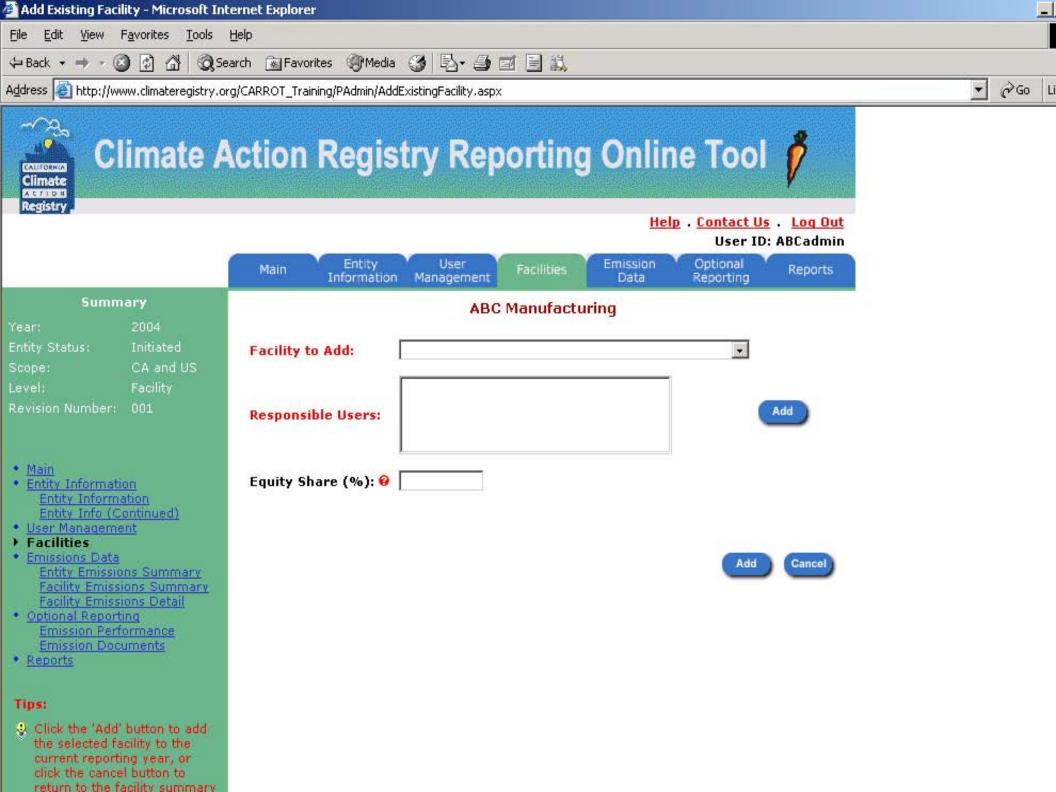


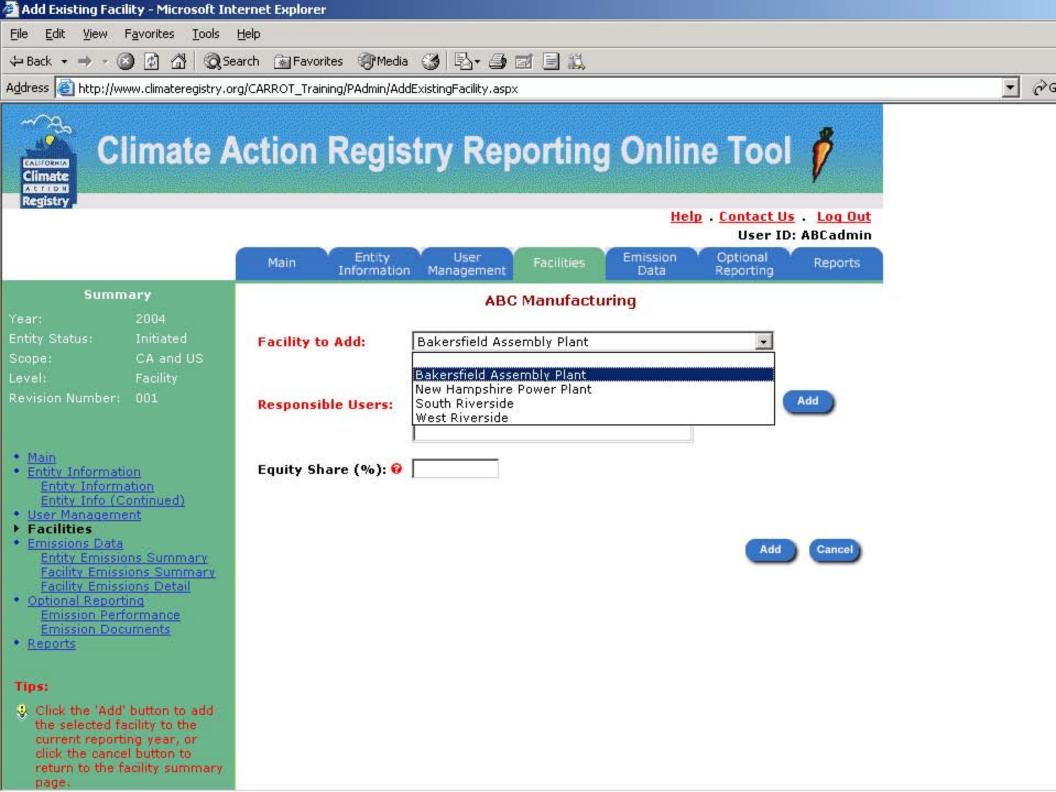
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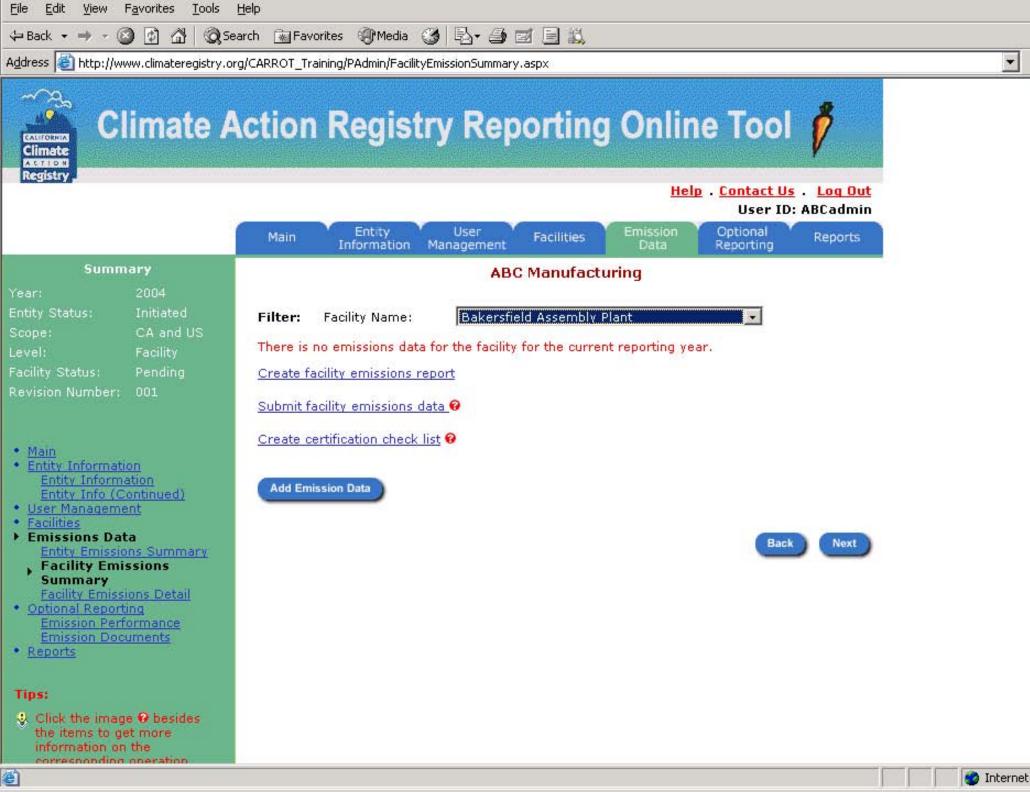


€ GO

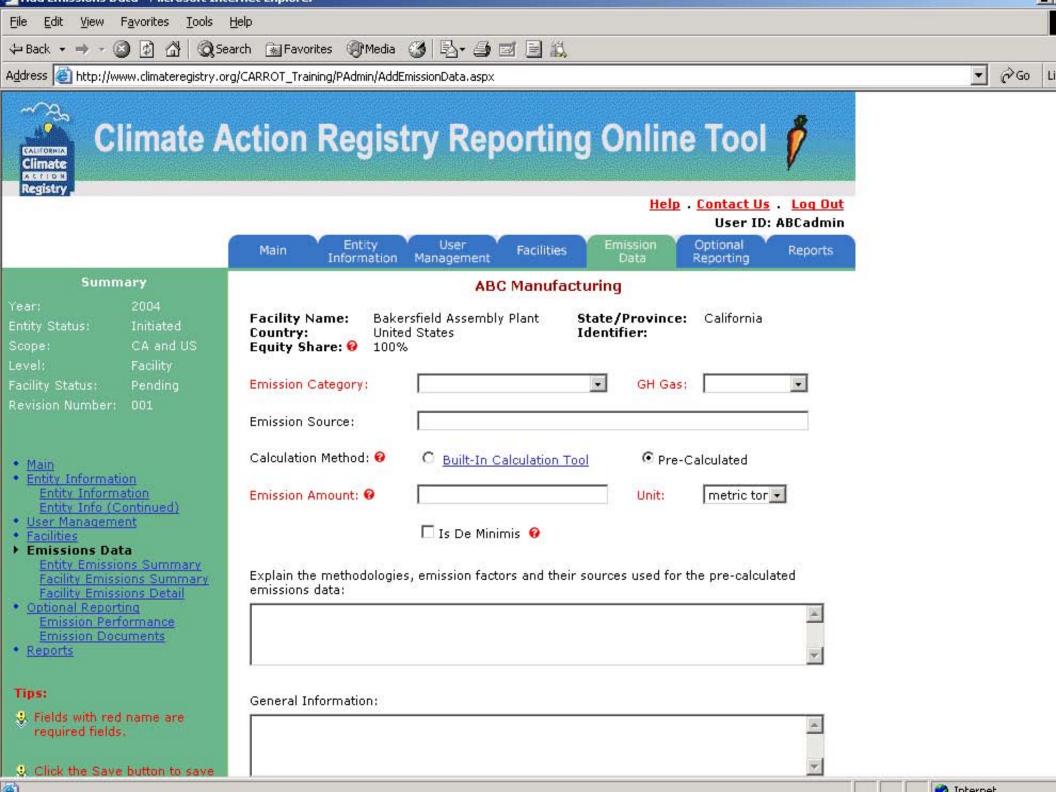


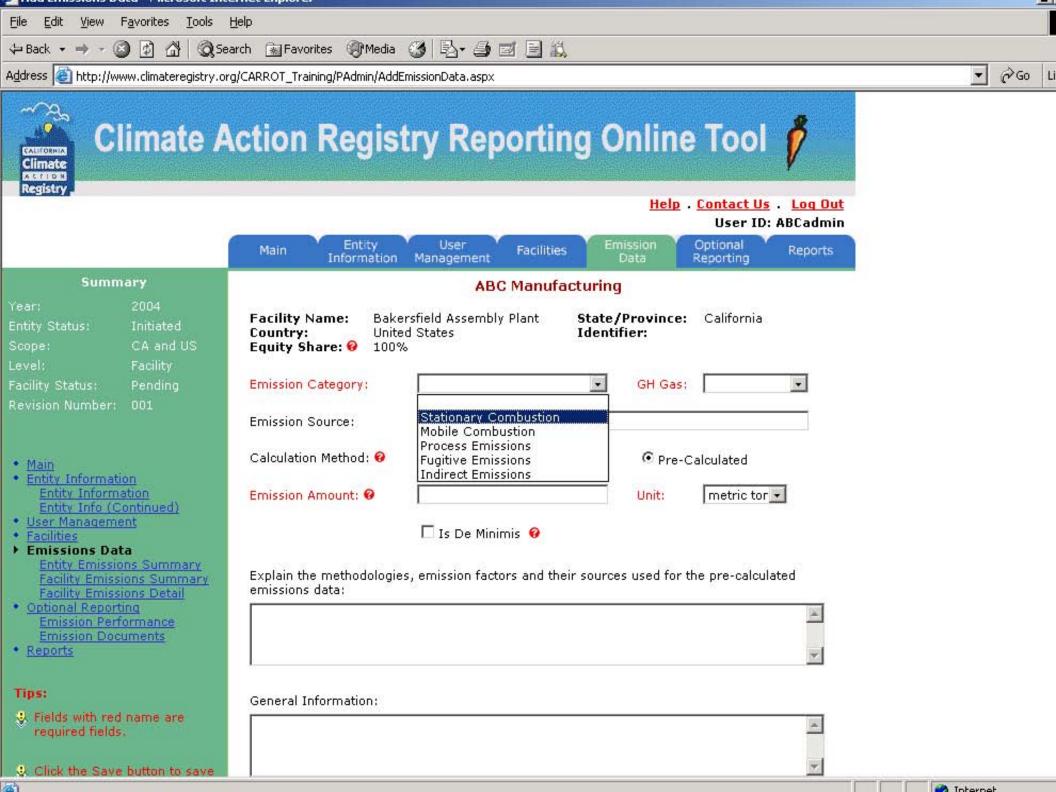


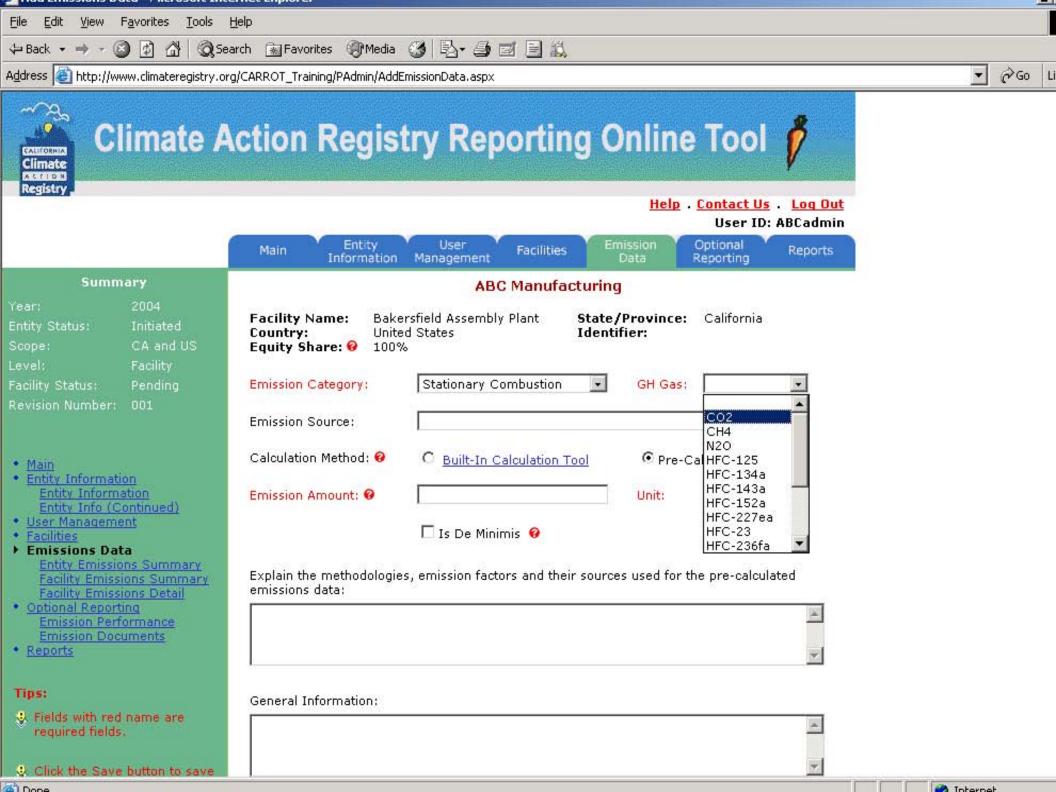


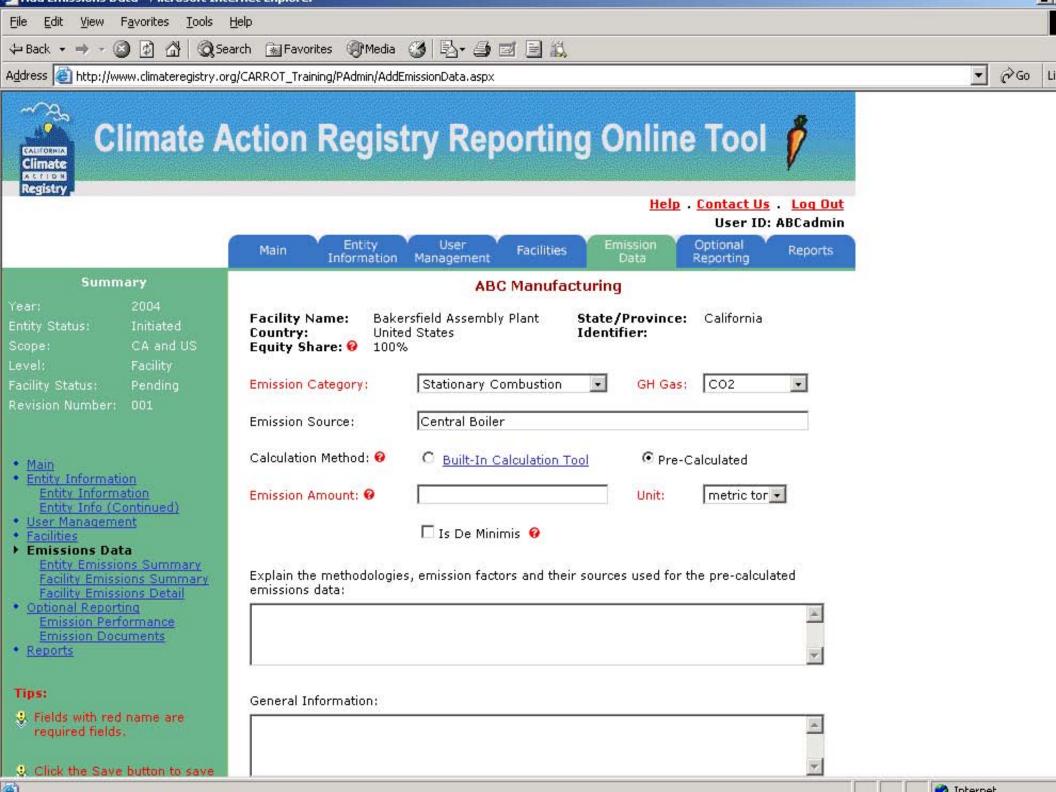


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# CARROT Calculation Tool - Microsoft Internet Explorer

# **CARROT Calculation Tool**

Emission Category: Stationary Combustion GH Gas: CO2

Step 1: Enter Annual Fuel Consumption

Fuel Consumption Amount: 1000000 Unit:

**MMBtu** 



**Emission Category:** Stationary Combustion GH Gas: CO2

# Step 2: Select Emission Factor Source

- C Use the emission factor and fraction of carbon oxidized recommended in the California General Reporting Protocol
- C Use the emission factor and fraction of carbon oxidized from other sources.







Emission Category: Stationary Combustion GH Gas: CO2

# Step 3: Select Fuel Type

Fuel Type:







Emission Category: Stationary Combustion GH Gas: CO2

# Step 4: Emission Factor from CARROT database

Emission Factor: Unit: kg/MMBtu 52.785







Emission Category: Stationary Combustion **GH Gas:** CO2

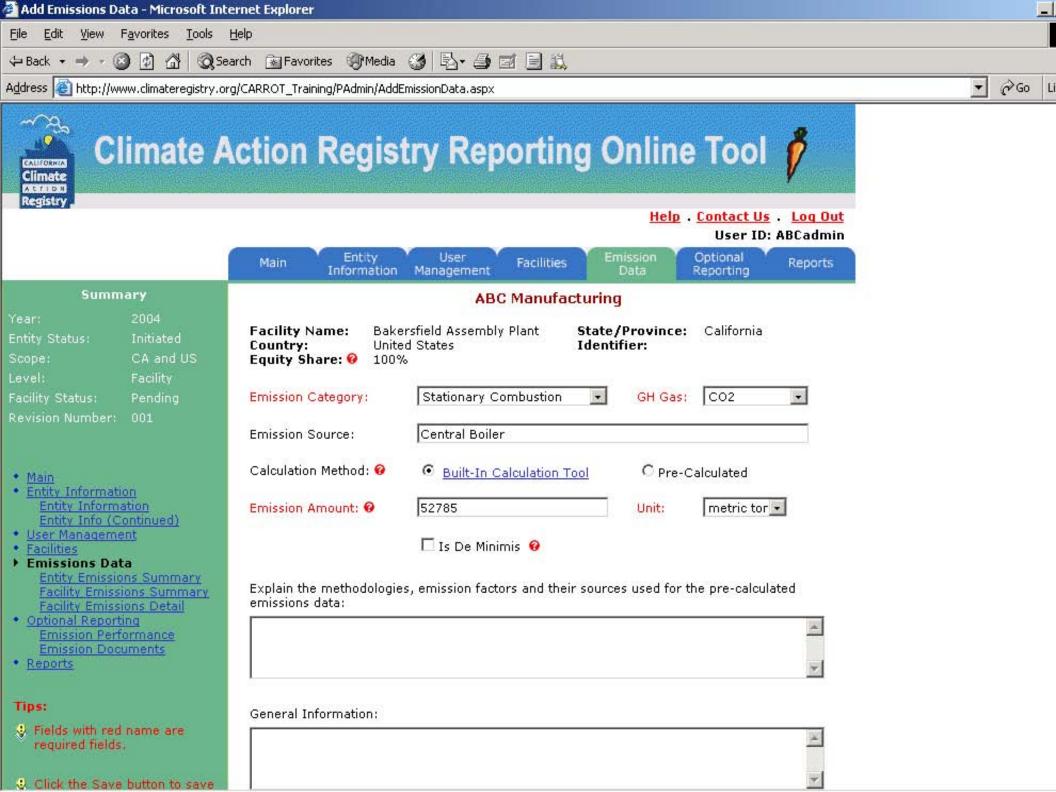
Step 5: Calculated Emission Amount

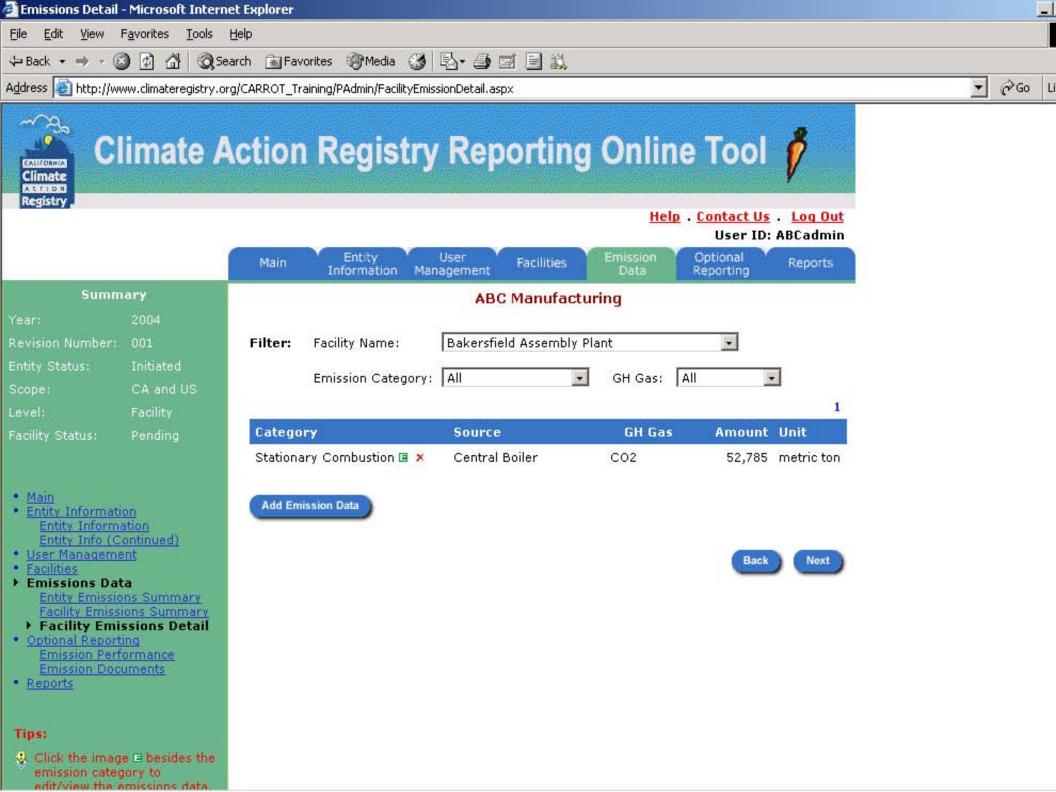
**Emission Amount:** Unit: metric ton 52785

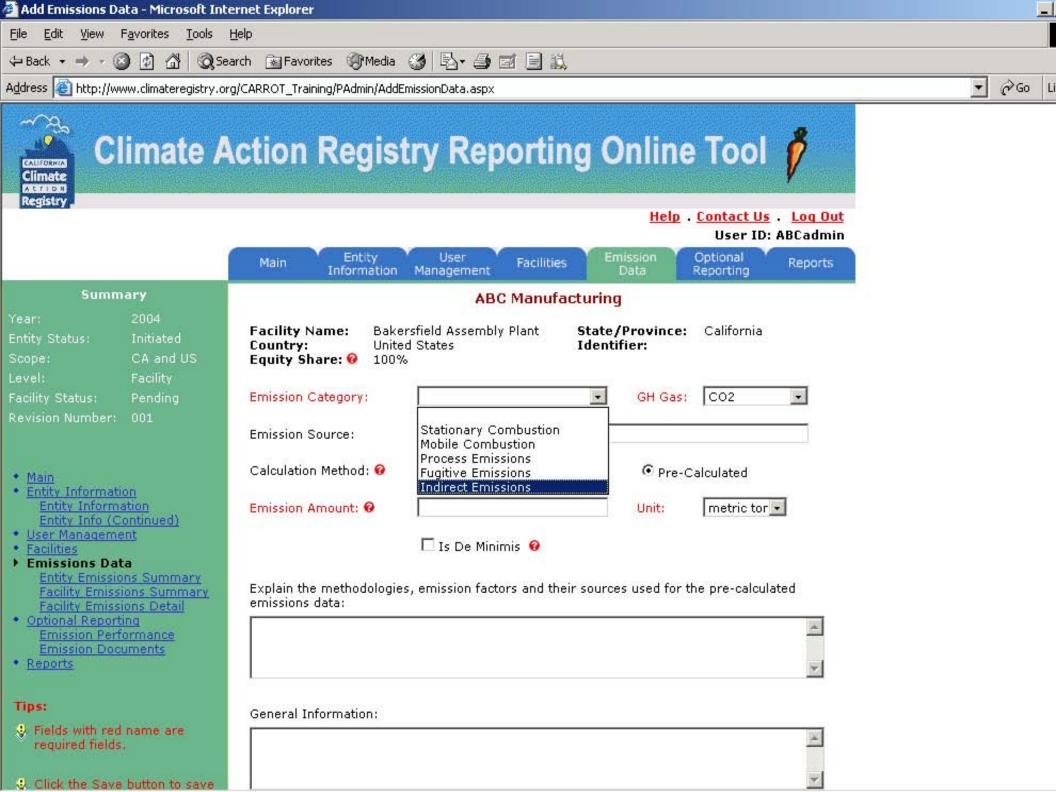
To use the calculated emission amount, click the OK button. To discard the results, click the Close button.

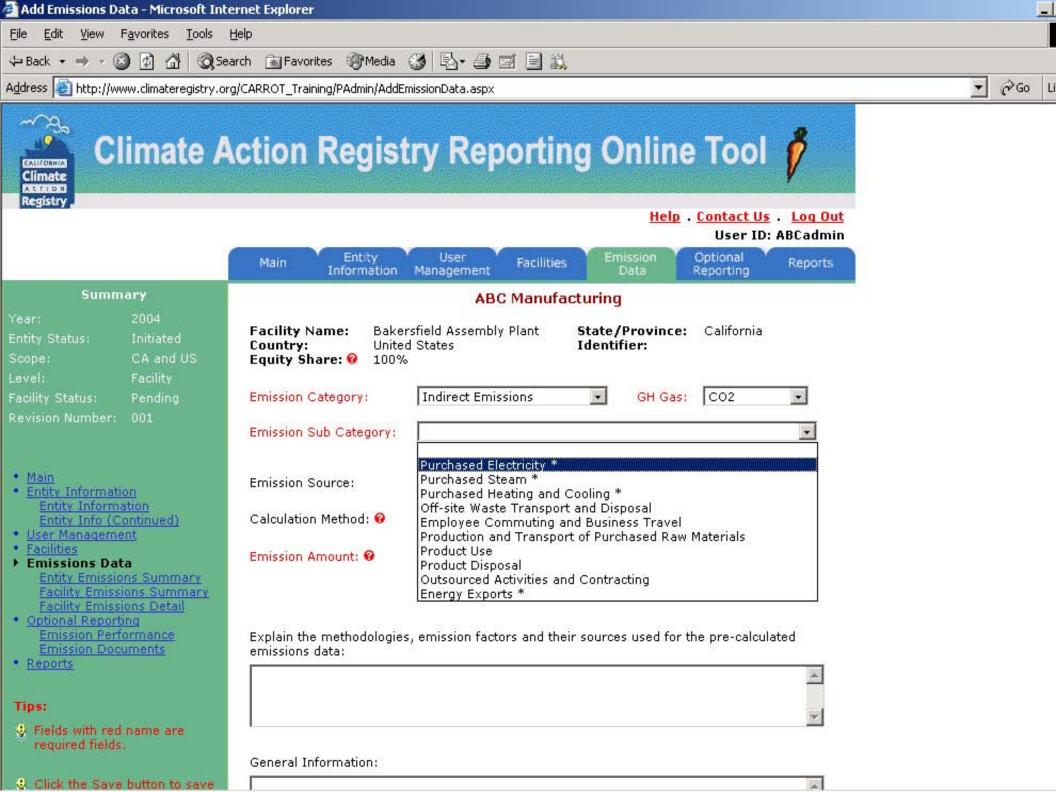


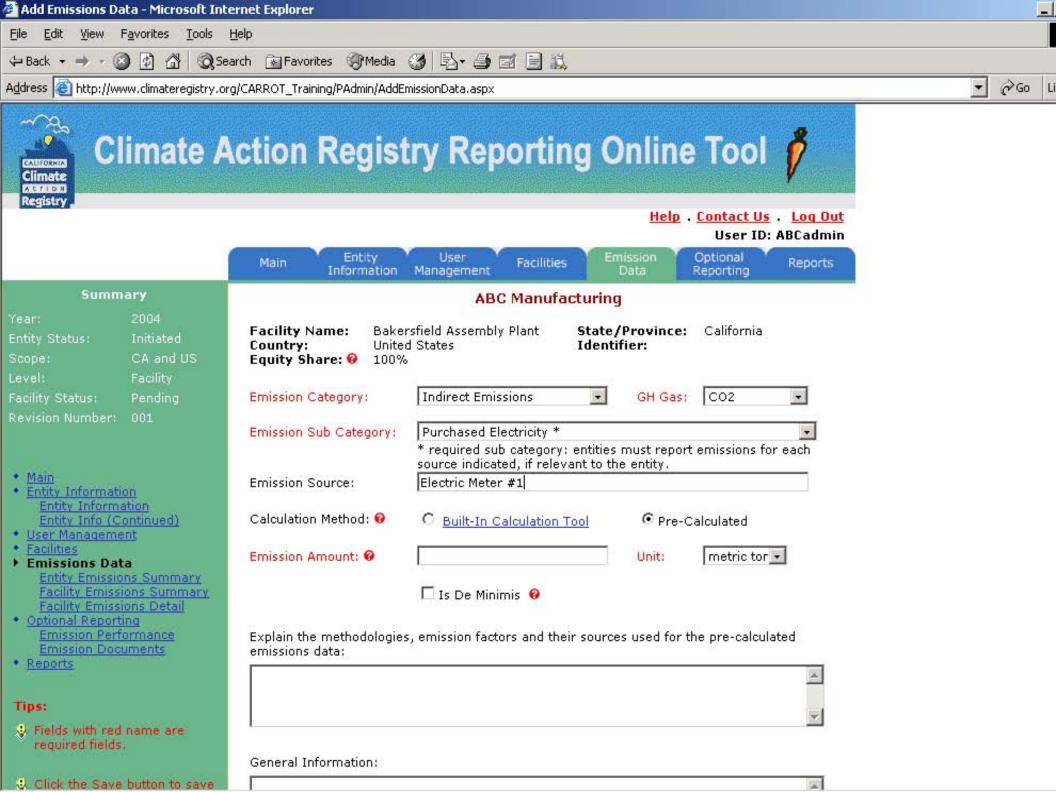


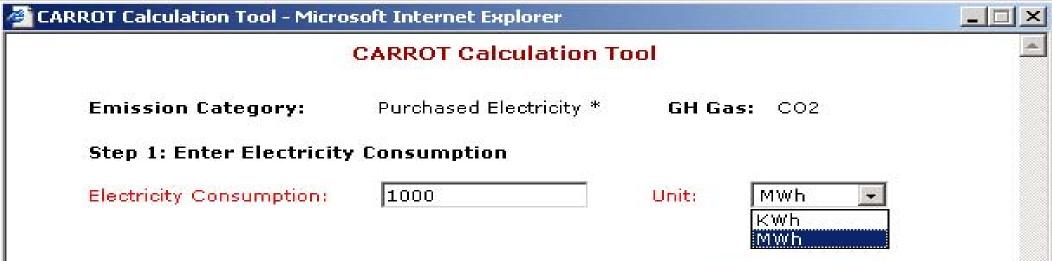






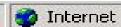














Emission Category: Purchased Electricity \* GH Gas: CO2

# Step 2: Select Emission Factor Source

- C Use the emission factor recommended in the California General Reporting Protocol
- O Use the emission factor from other sources









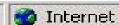


Emission Category: Purchased Electricity \* GH Gas: CO2

# Step 3: Select An eGRID Subregion Where The Electricity Is Purchased

Subregion:





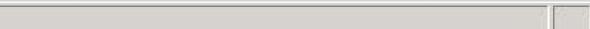


Emission Category: Purchased Electricity \* GH Gas: CO2

# Step 4: Emission Factor from CARROT database

Emission Factor: 804.54 Unit: lb/MWh

Back Close Next





# **CARROT Calculation Tool**

Emission Category: Purchased Electricity \* GH Gas: CO2

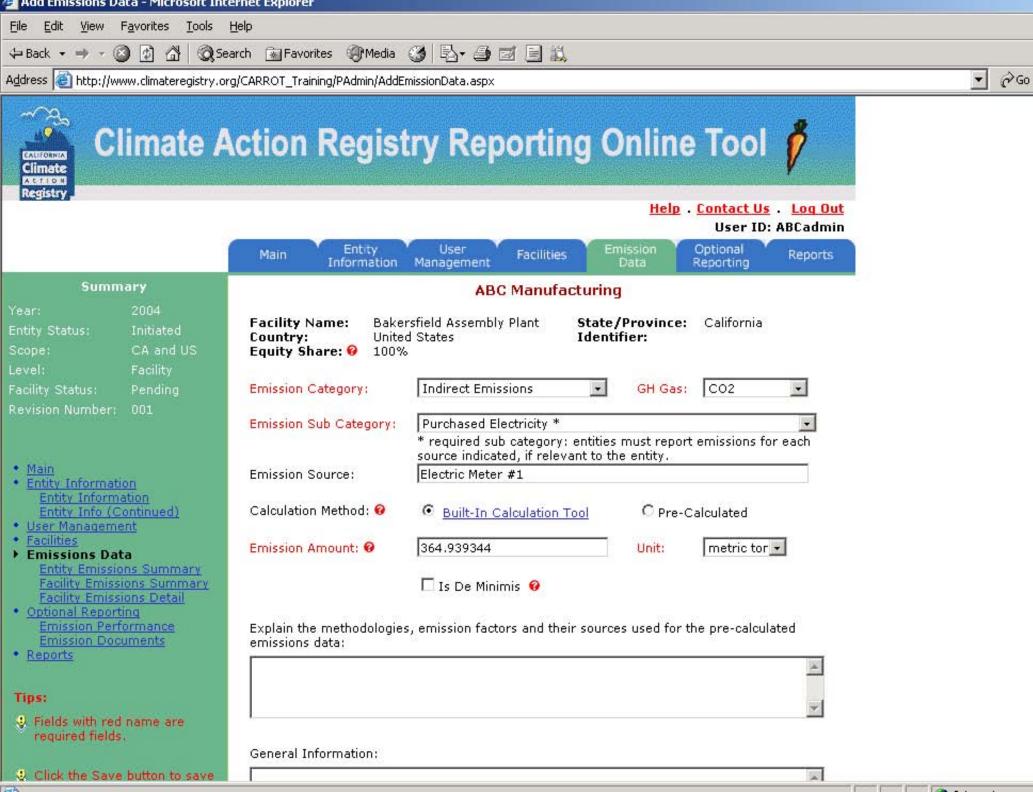
Step 5: Calculated Emission Amount

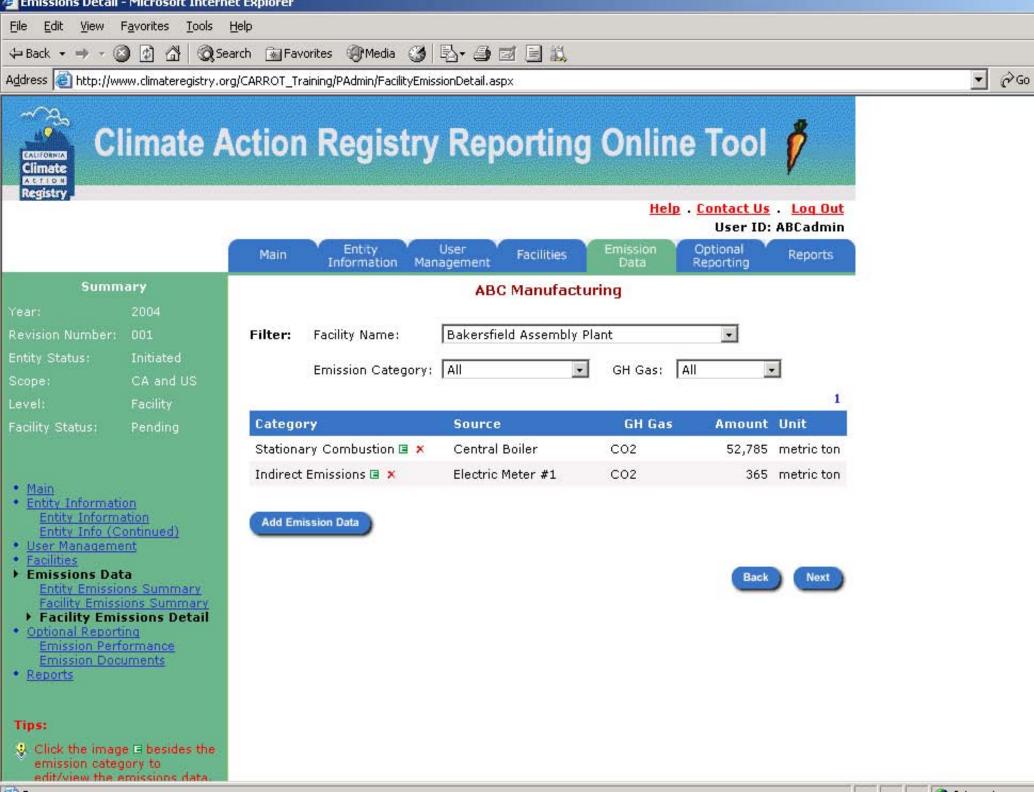
Emission Amount: 364.939344 Unit: metric ton

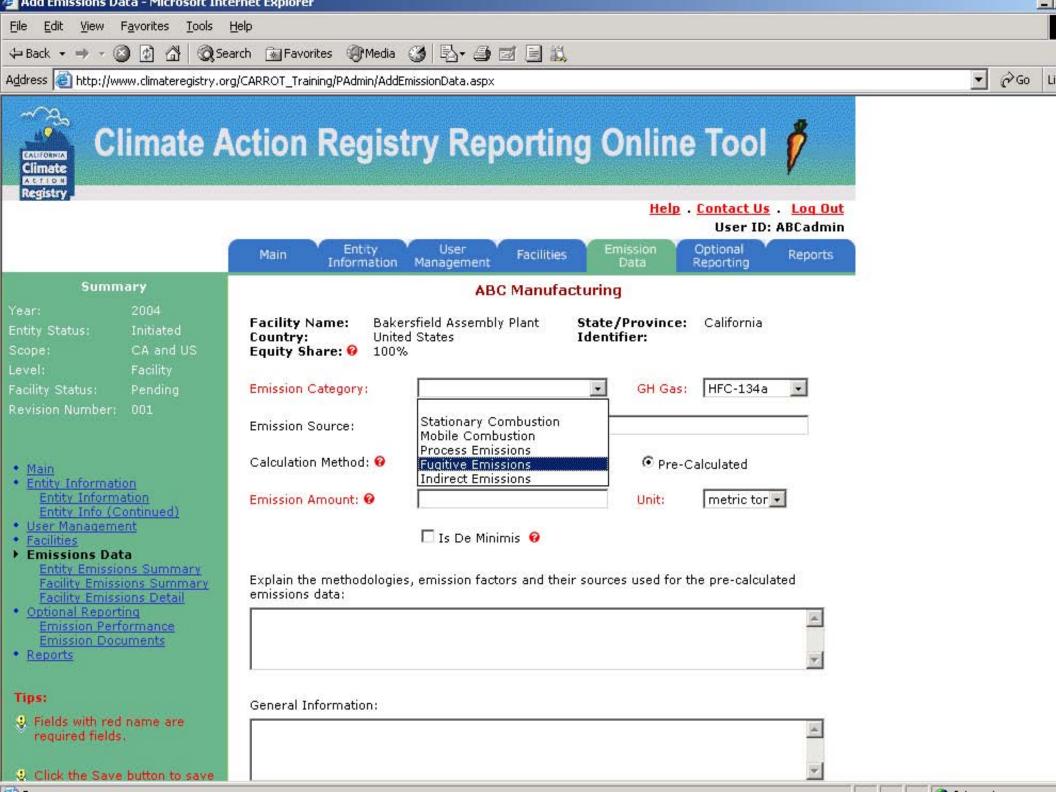
To use the calculated emission amount, click the OK button. To discard the results, click the Close button.

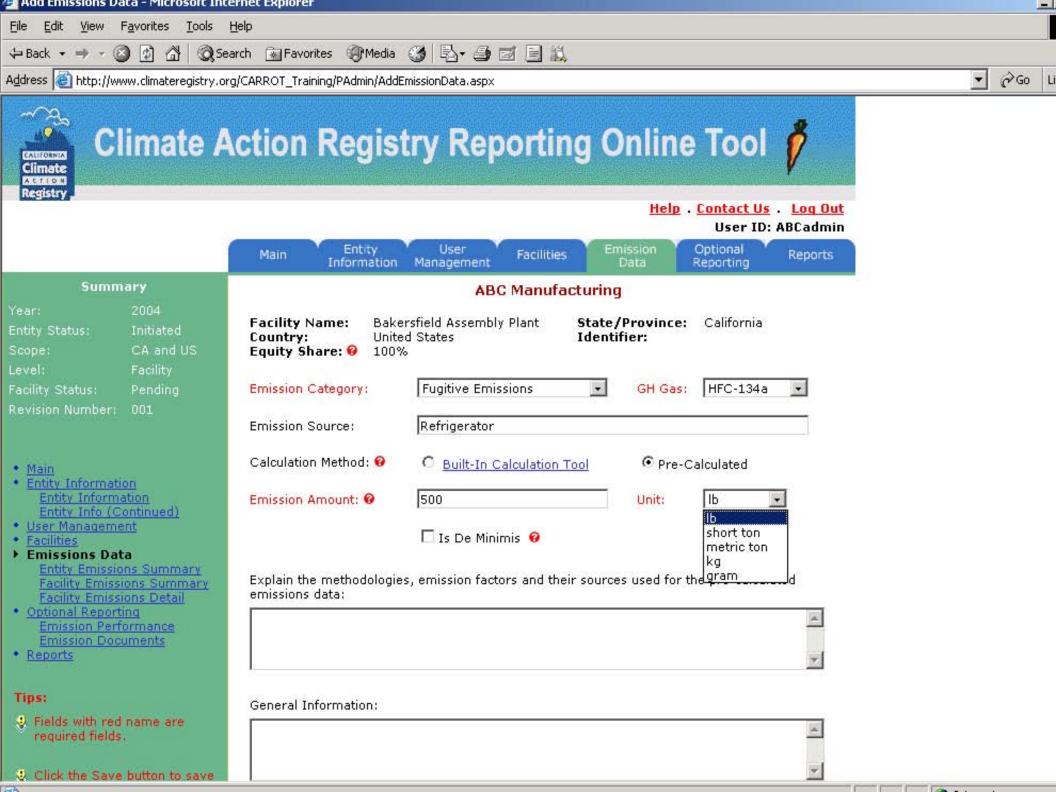


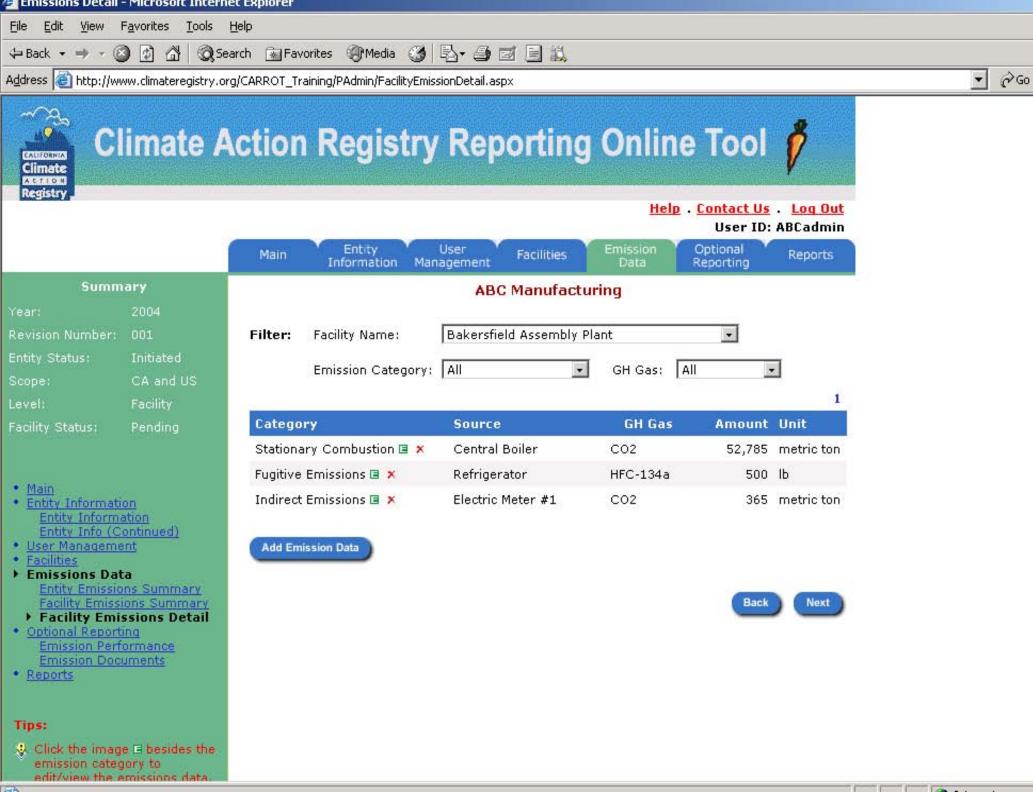


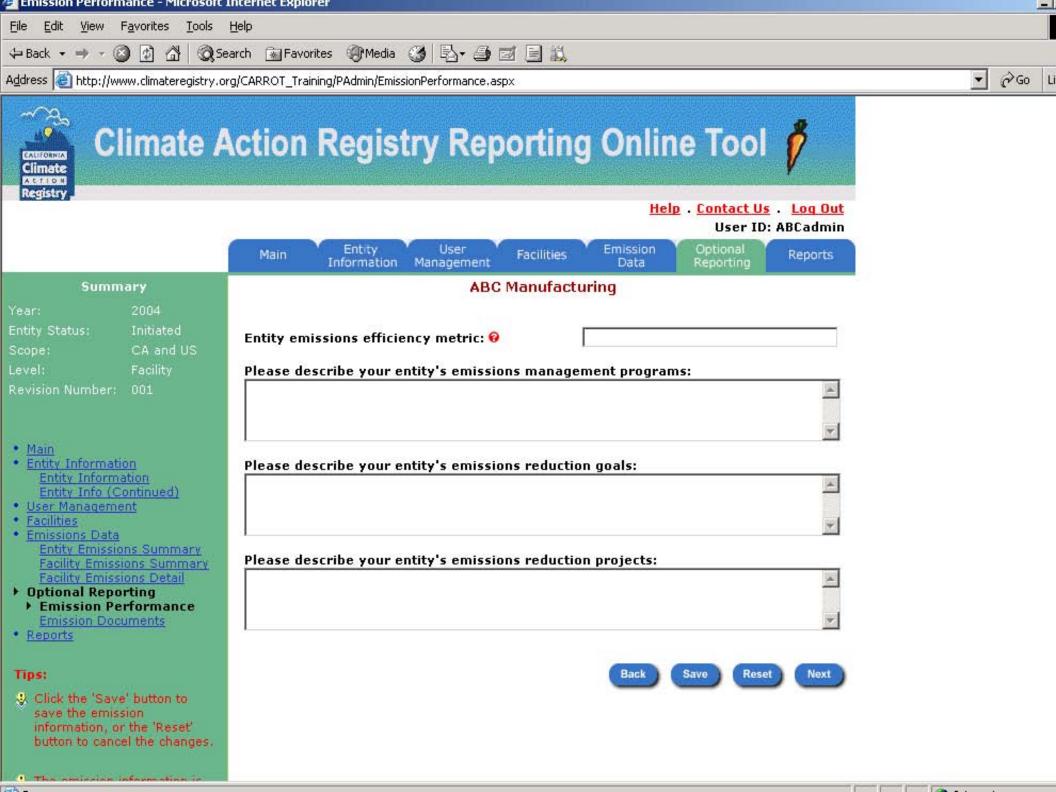


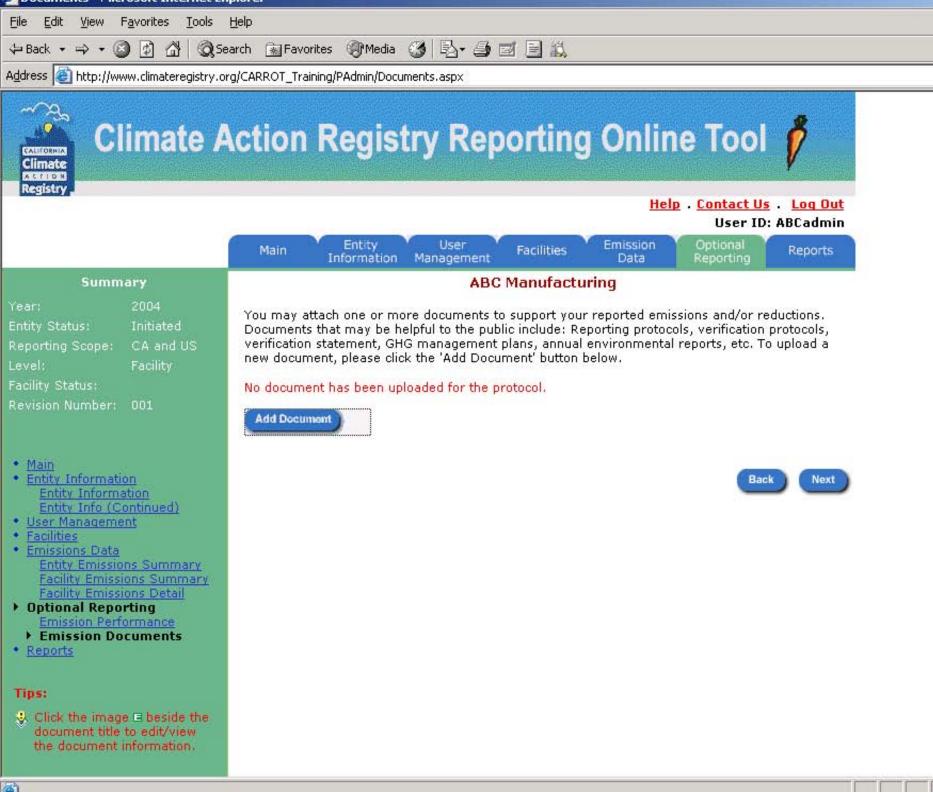




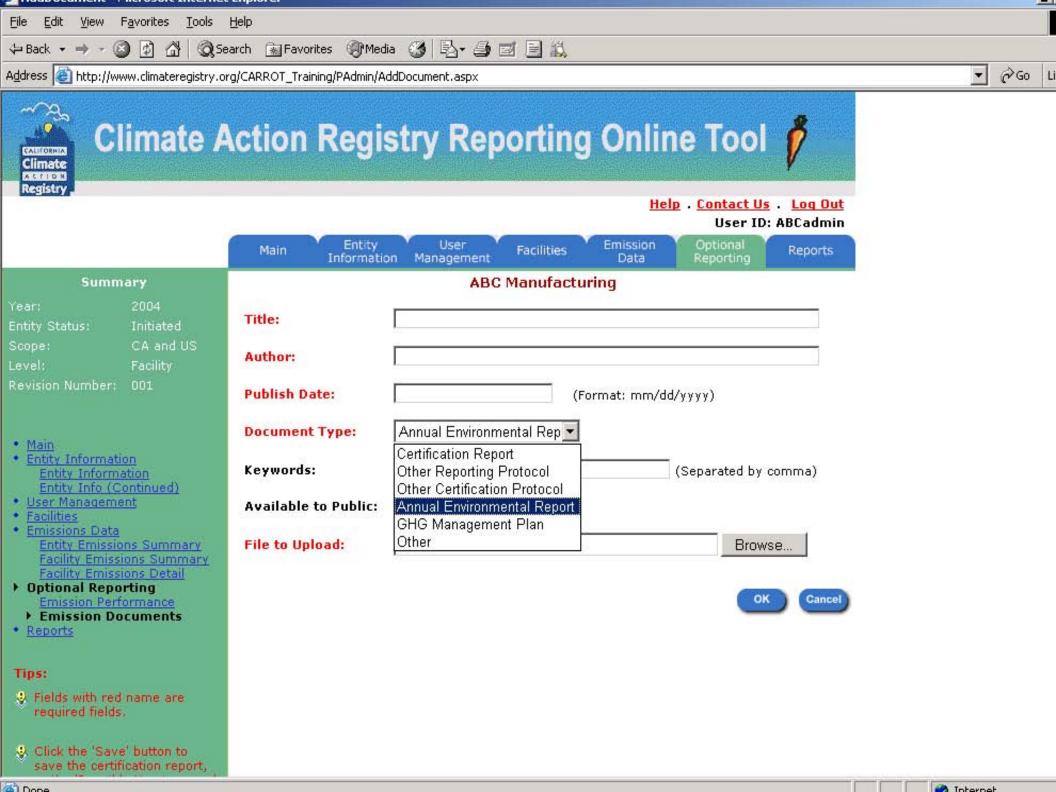


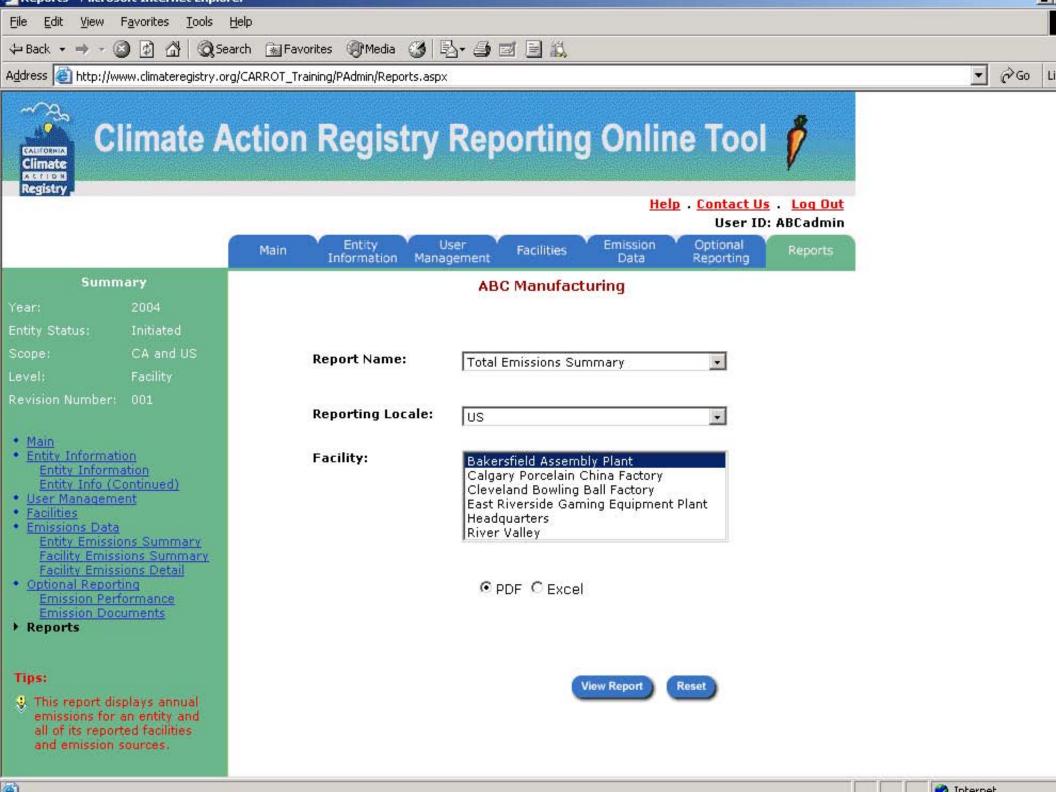


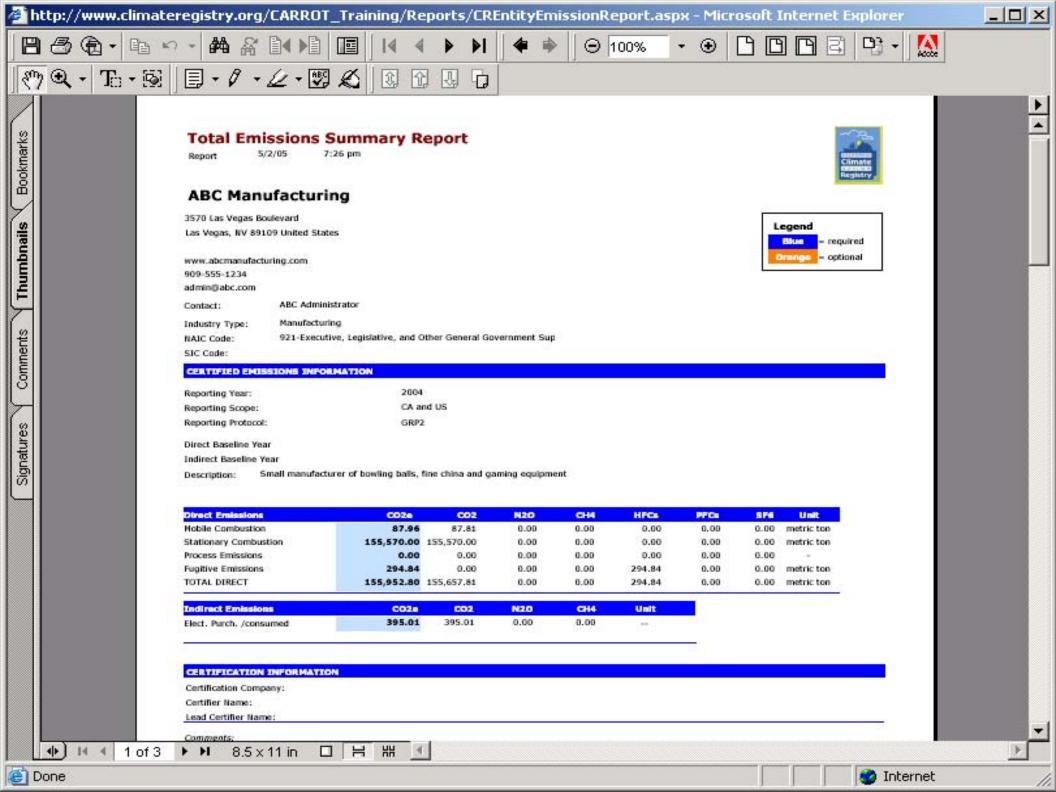


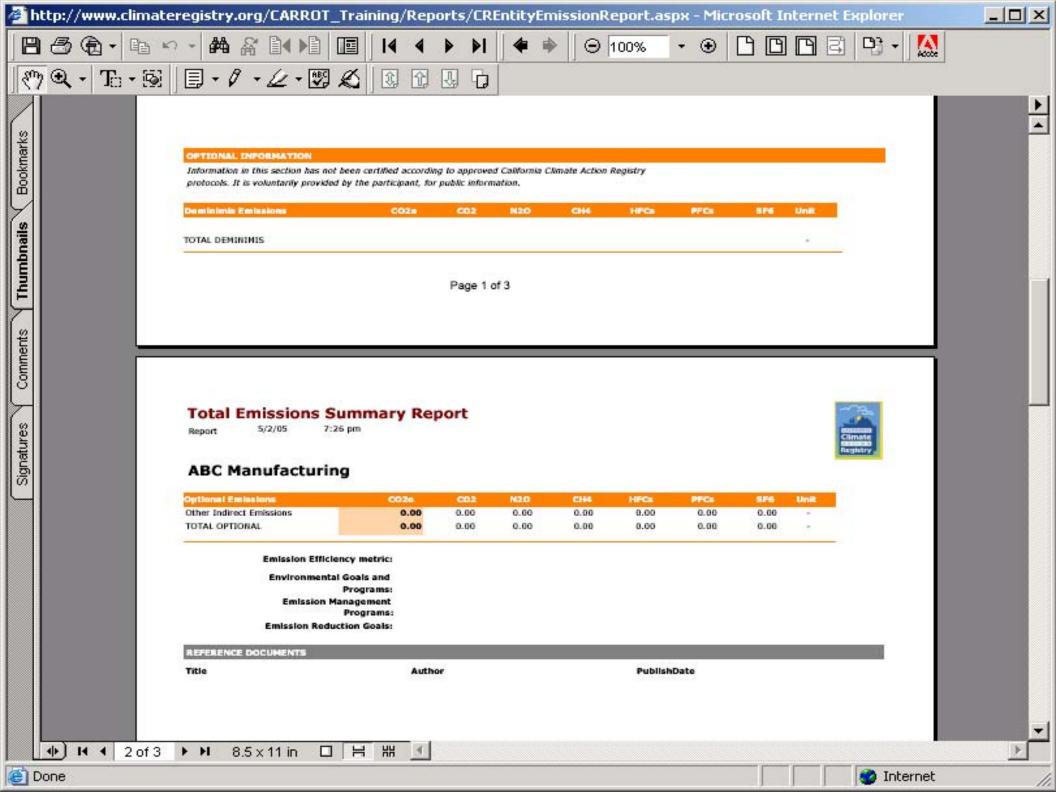


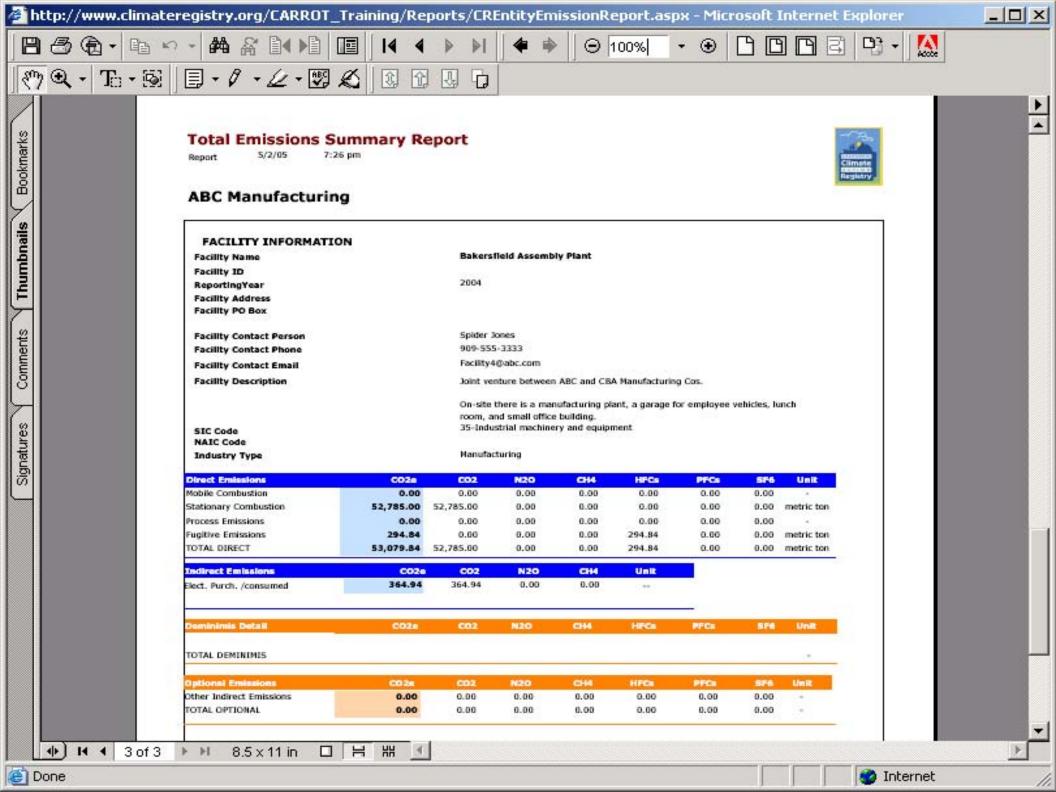
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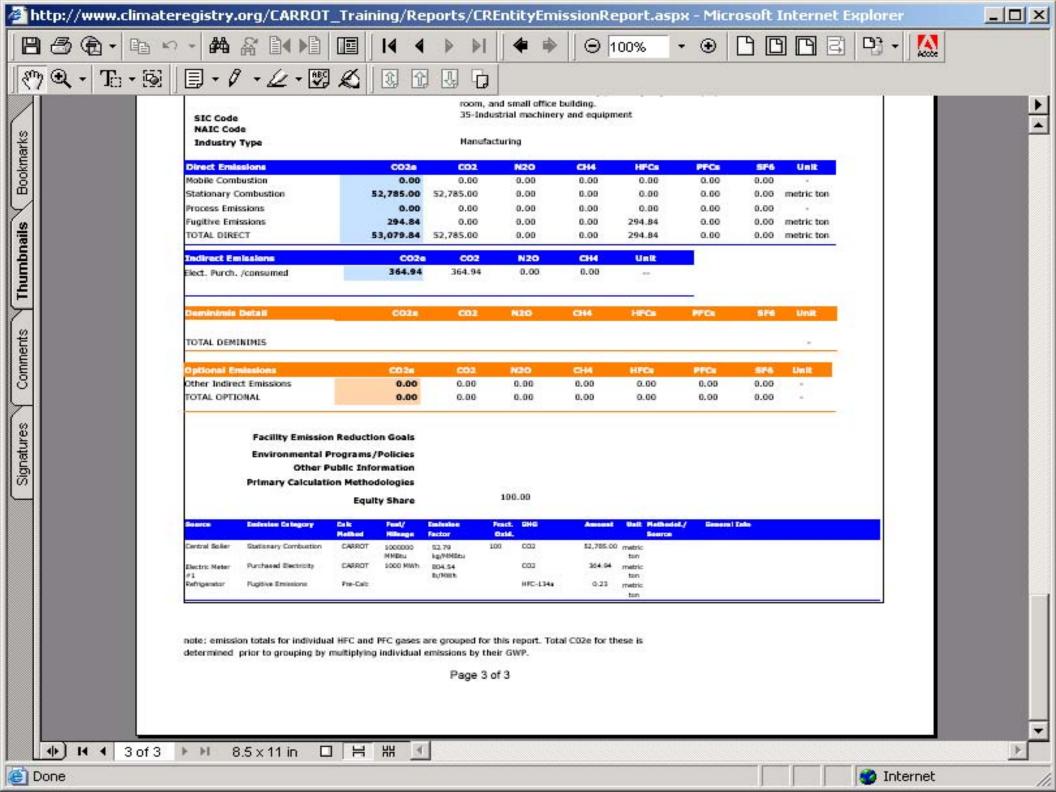


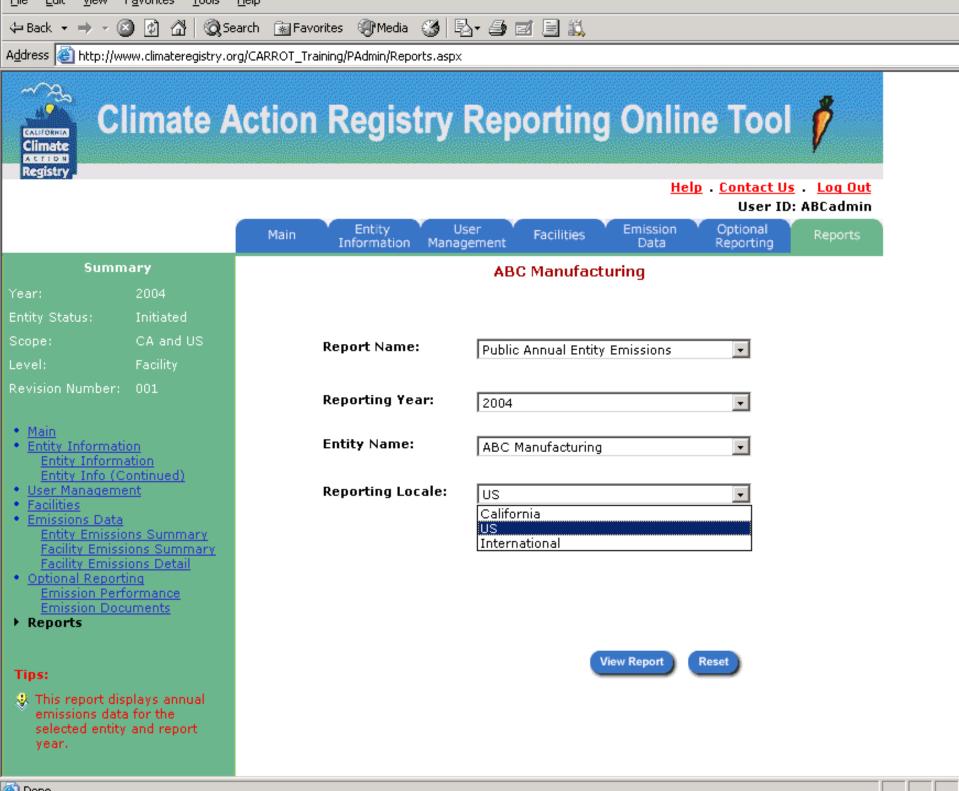




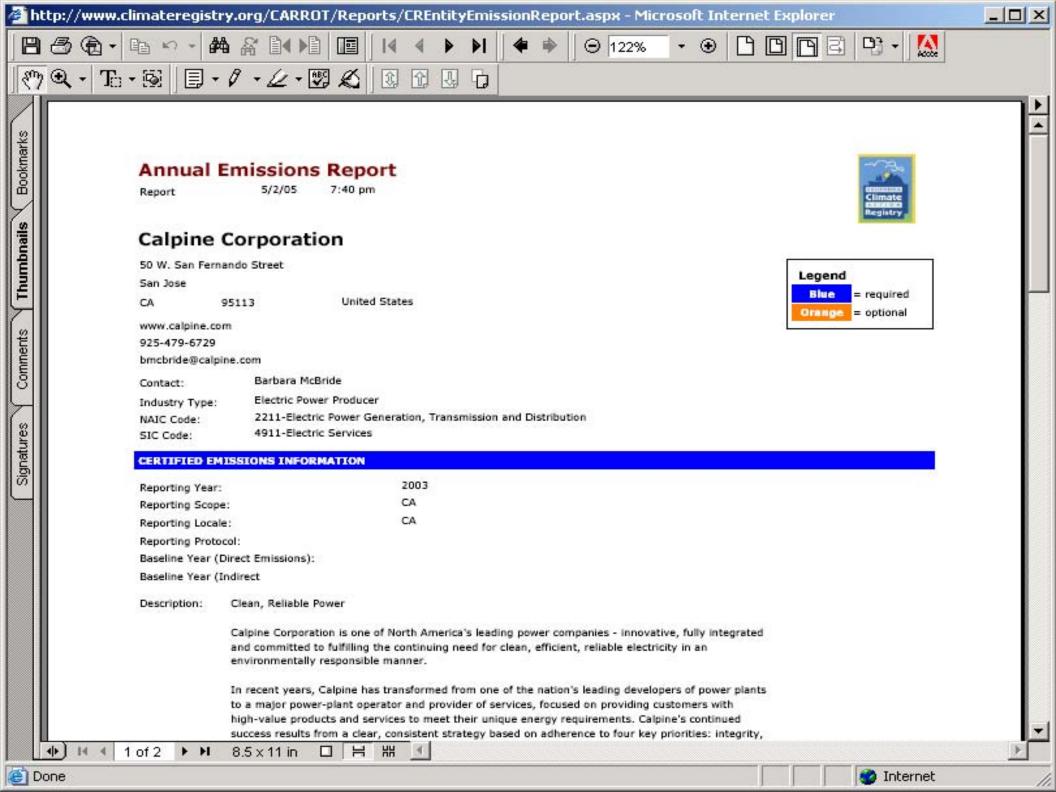


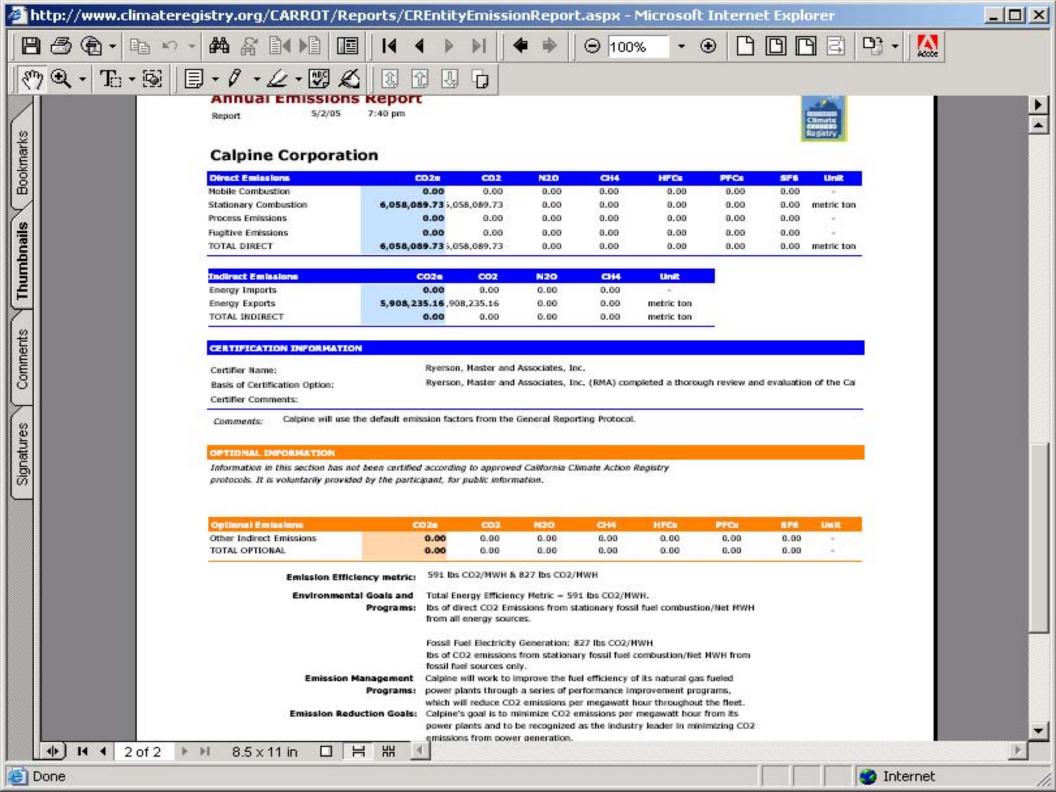


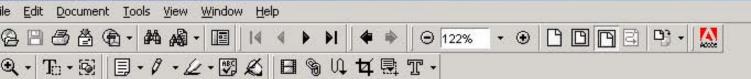




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### ANNUAL GHG INVENTORY SUMMARY AND GOAL TRACKING



### **Partner Information**

Partner Name CH2M HILL 2

Reporting Year 2004 Baseline Year 1993

Inventory Contact Person Lisa Grice Title 1231931'2323

Address 3 Hutton Center Dr. Suite 200

Santa Ana, California 92607 United States

Phone 714-429-2000

EMail Inelowet@ch2m.com

Fax 1234243

KEY

Required

Optional

BLUE

### ANNUAL GHG INVENTORY SUMMARY AND GOAL TRACKING

CH2M HILL 2

### Corporate Inventory - U.S.

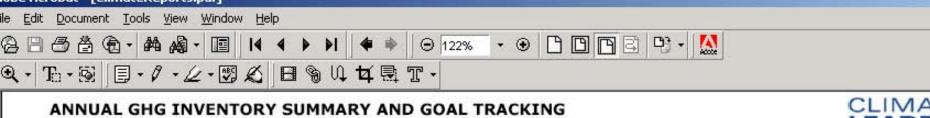
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Direct Emissions	Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Stationary Combustion	1,134	0	0	0	30,000	0	0	12,000	50,104	76,000	242,014	180
Mobile Combustion	0	0	11,500	0	0	1,296,050	0	0	17,032	154,224	25,300	0
Fugitive HFC only in(CO2E)	0	2,875	0	0	0	0	0	0	0	0	0	1,175
Process Emissions	0	296,000	0	6,500,000	0	0	0	0	0	0	0	0
Total Fugitive (Minus HFC)	0	2,875	0	0	0	0	0	0	0	0	0	0
Total Direct Emissions:	1,134	301,750	11,500	6,500,000	30,000	1,296,050	0	12,000	67,136	230,224	267,314	1,355

Indirect Emissions	Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Purchased and used Electricity	0	0	0	0	0	0	0	6,279,700	0	6	0	0
Purchased and used Steam	0	0	0	0	0	0	0	11,500	0	0	0	0
Purchased Heating and Cooling	0	0	0	0	0	0	0	0	0	0	0	0
Total Indirect Emissions:	0	0	0	0	0	o	0	6,291,200	o	6	0	0

Optional Emissions	Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Other Indirect Emissions	0	0	0	0	0	0	0	0	0	0	0	0
Total Optional Emissions:	0	0	0	0	0	0	0	0	0	0	0	0



CH2M HILL 2



Total US Emissions	Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Total US Emissions:	1,134	301,750	11,500	6,500,000	30,000	1,296,050	0	6,303,200	67,136	230,230	267,314	1,355

## Corporate Inventory - Non U.S.

Direct Emissions	Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Stationary Combustion	43	0	0	0	0	0	0	0	0	0	0	781
Mobile Combustion	0	0	0	0	0	0	0	0	0	0	0	41
Fugitive HFC only in(CO2E)	0	0	0	0	0	0	0	0	0	0	0	0
Process Emissions	0	0	0	0	0	0	0	0	0	0	0	0
Total Fugitive (Minus HFC)	0	0	o	0	0	0	0	0	0	0	0	0
Total Direct Emissions:	43	0	0	0	0	0	0	0	0	0	0	822

Indirect Emissions	Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Purchased and used Electricity	41	0	0	0	0	0	0	0	0	0	0	0
Purchased and used Steam	0	0	0	0	0	0	0	0	0	0	0	13,509
Purchased Heating and Cooling	0	0	0	0	0	0	0	0	0	0	0	0
Total Indirect Emissions:	41	0	0	0	0	0	0	0	0	0	0	13,509

Optional Emissions	Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Other Indirect Emissions	0	0	0	0	0	0	0	0	0	0	0	0
Total Optional Emissions:	0	0	0	0	0	0	0	0	0	0	0	0

Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
84	0	0	0	0	0	0	0	0	0	0	14,330
В	ase Yr 84	ase Yr Year 2 84 0	ase Yr Year 2 Year 3 84 0 0	ase Yr Year 2 Year 3 Year 4 84 0 0 0	ase Yr Year 2 Year 3 Year 4 Year 5 84 0 0 0 0	ase Yr Year 2 Year 3 Year 4 Year 5 Year 6 84 0 0 0 0 0 0	ase Yr Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 84 0 0 0 0 0 0 0	ase Yr Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 84 0 0 0 0 0 0 0 0	ase Yr Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 84 0 0 0 0 0 0 0 0 0	ase Yr Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 84 0 0 0 0 0 0 0 0 0 0	ase Yr Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Year 11 84 0 0 0 0 0 0 0 0 0

### Corporate Inventory - Total ( U.S. and Non-U.S. )

Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
1,134	0	0	0	30,000	0	0	12,000	50,104	76,000	242,014	180
0	0	11,500	0	0	1,296,050	0	0	17,032	154,224	25,300	. 0
0	2,875	0	0	0	0	0	0	0	0	0	1,175
0	296,000	0	6,500,000	0	0	0	o	0	0	0	0
0	2,875	0	0	0	0	0	0	0	0	0	0
1,134	301,750	11,500	6,500,000	30,000	1,296,050	0	12,000	67,136	230,224	267,314	1,355
	1,134 0 0 0 0	1,134 0 0 0 0 2,875 0 296,000 0 2,875	1,134 0 0 0 0 11,500 0 2,875 0 0 296,000 0 0 2,875 0	1,134 0 0 0 0 0 0 11,500 0 0 2,875 0 0 0 296,000 0 6,500,000 0 2,875 0 0	1,134 0 0 0 30,000 0 0 11,500 0 0 0 2,875 0 0 0 0 296,000 0 6,500,000 0 0 2,875 0 0 0	1,134 0 0 0 30,000 0 0 0 11,500 0 0 1,296,050 0 2,875 0 0 0 0 0 296,000 0 6,500,000 0 0 0 2,875 0 0 0 0	1,134 0 0 0 30,000 0 0 0 0 11,500 0 0 1,296,050 0 0 2,875 0 0 0 0 0 0 0 296,000 0 6,500,000 0 0 0 0 2,875 0 0 0 0 0 0	1,134 0 0 0 30,000 0 0 12,000 0 0 11,500 0 0 1,296,050 0 0 0 2,875 0 0 0 0 0 0 0 0 296,000 0 6,500,000 0 0 0 0 0 2,875 0 0 0 0 0 0	1,134     0     0     0     30,000     0     0     12,000     50,104       0     0     11,500     0     0     1,296,050     0     0     0     17,032       0     2,875     0     0     0     0     0     0     0     0       0     2,875     0     0     0     0     0     0     0     0       0     2,875     0     0     0     0     0     0     0     0	1,134     0     0     0     30,000     0     12,000     50,104     76,000       0     0     11,500     0     0     1,296,050     0     0     17,032     154,224       0     2,875     0     0     0     0     0     0     0     0       0     296,000     0     6,500,000     0     0     0     0     0     0       0     2,875     0     0     0     0     0     0     0     0	1,134     0     0     0     30,000     0     12,000     50,104     76,000     242,014       0     0     11,500     0     0     1,296,050     0     0     17,032     154,224     25,300       0     2,875     0     0     0     0     0     0     0     0     0       0     296,000     0     6,500,000     0     0     0     0     0     0     0     0       0     2,875     0     0     0     0     0     0     0     0     0

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### ANNUAL GHG INVENTORY SUMMARY AND GOAL TRACKING

CH2M HILL 2



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Indirect Emissions	Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 1
Purchased and used Electricity	0	0	0	0	0	0	0	6,279,700	0	6	0	)(
Purchased and used Steam	0	0	0	0	0	0	0	11,500	0	0	0	C
Purchased Heating and Cooling	0	0	0	0	0	0	0	0	0	0	0	
Total Indirect Emissions:	0	0	0	0	0	0	0	6,291,200	0	6	0	C
Optional Emissions	Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 1
Other Indirect Emissions	0	0	0	0	0	0	0	0	0	0	0	
Total Ontional Emissions:		0		0	0		0			0		

Total US & Non-US Emissions	Base Yr	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Total US & Non-US Emissions:	1,134	301,750	11,500	6,500,000	30,000	1,296,050	0	6,303,200	67,136	230,230	267,314	1,355



# Climate Action Registry Reporting Online Tool 🌈



Help Contact Us Log Out

User ID: ABCadmin

Mair

Entity ' User Information Management

User Facilities

Emission Data Optional Reporting

Reports

### Summary

Year: 2004 <u>▼</u>

Entity Status: Initiated
Scope: CA and US

evel: Facility

Revision Number: 001

Delete current reporting year

Create a new reporting year

Create a new reporting year using the current reporting year as template

### ▶ Main

- Entity Information
   Entity Information
   Entity Info (Continued)
- User Management
- Facilities
- Emissions Data
   Entity Emissions Summary
   Facility Emissions Summary
- Facility Emissions Detail
  Optional Reporting
  Emission Performance
  Emission Documents
- Reports

#### Tips:

Click the image 6 besides the items to get more information on the corresponding operation.

### **ABC Manufacturing**

### Entity Emissions Summary (CO2 Equivalent)

	Stationary	Mobile	Process	Fugitive	Indirect	Total	Unit
California	115,570	88		295	395	116,348	metric ton
US (Excluding CA)	40,000					40,000	metric ton
International (Excluding US)	7,242				100,000	107,242	metric ton
Total	162,812	88		295	100,395	263,590	metric ton

### Facility Status Summary

Facility Status	Number of Facilities	
Total	6	Check
Pending	6	Check

Create your annual emissions report

Submit your annual emissions report for certification ?

Revise annual emissions report @

Create certification check list @

# **Contact Information**



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