## **Greenhouse Gas Data for Local Government Strategic Energy Management**

Pacific Gas and Electric Company (PG&E) serves more than 40 counties and 240 cities. Our goal is to provide every city and county with their energy usage data for the purpose of completing greenhouse gas (GHG) inventories which is the first crucial step toward managing GHG emissions. In order to maximize its ability to serve all of its municipal customers, PG&E worked with ICLEI - Local Governments for Sustainability (ICLEI)<sup>1</sup> to develop the two standardized reports described below. These reports were designed to provide local governments with the data they will need to develop their GHG inventories and climate action plans.

# Energy Management Planning

"Detailed" GHG Report ("detailed city account data") "Aggregate" GHG Report

("community-wide data") This report contains the aggregated electricity and natural gas use of a city or county, and the  $CO_2$  emissions (in metric tonnes) associated with that city or county's energy use. The data for both cities and counties is further divided into Residential, Commercial

<sup>1</sup> ICLEI is an international association that provides technical consulting, training, and information services to local governments to support their implementation of sustainable development at the local level. ICLEI has been working very closely with the state of California to develop GHG management processes.



# **PG&E and ICLEI** have developed two standardized reports to help local governments manage and report their GHG

emissions associated

with their electricity

and natural gas use.



### Local Government Resources Fact Sheet

# **Data for Managing** Greenhouse Gases



This report contains the detailed electricity and natural gas use of a city's facilities and its associated CO<sub>2</sub> emissions. Each service agreement for every city account that PG&E has on record for a particular city is identified (e.g. City Hall, library, fire station, irrigation pump, traffic signal, etc.)

and Industrial categories. There is also a category for emission reductions from enrolled ClimateSmart customers for both Electricity and Natural Gas.

Examples of the two reports appear at the end of this fact sheet.

### For what years are reports available?

These reports will be used to estimate GHG emissions associated with energy use. GHG emissions associated with electricity generation vary by energy utility and by time depending on what energy sources are available.

As a charter member of the California Climate Action Registry, PG&E was the first investor-owned utility in California to complete a third-party-verified inventory of our carbon dioxide  $(CO_2)$  emissions in 2002. PG&E provides its customers with electricity that has among the lowest rates of GHG emissions in the nation. In fact, PG&E's independently verified CO<sub>2</sub> emissions rate is at least 50 percent below the national average among utilities. Because of PG&E's clean generation profile, these rates are significantly below the national and the state average emission rates, so it is critical that they be used for accurate emission estimation.PG&E and ICLEI have developed two standardized reports to help local governments manage and report their GHG emissions associated with their electricity and natural gas use.



PG&E provides GHG data reports to local governments for those years that we have a verified emission rate. Data prior to 2003 is not provided because there are no verified emission rates to calculate the GHG emissions associated with a local government's electricity use prior to 2003.

### Who can request reports?

A data request must come from a city or county staff member. It can be requested on behalf of a consultant, non-profit or any other third party. But if someone other than city or county staff requests the data, PG&E needs written authorization (email is fine) from city or county staff in order to start preparing the report. A lead time of two weeks is requested.

### How to request reports?

### All data requests should be sent to GHGDataRequests@pge.com

The sender will receive an immediate notification that their request has been accepted in the GHG group mailbox.

The sender will receive a second email with the name of the individual who will be responsible for sending the data. That individual will be the main point of contact for any questions regarding the status of the request.

### Sample email request for detailed/aggregate reports:

I am writing to request the 2005 (insert detailed report or aggregate report) for My Town. As part of this request, I give permission to PG&E to release the data and future annual municipal facility data to ICLEI (or other consultant) for subsequent community green house gas emission inventories.

Please send the data to me, City Employee, at cemployee@mytown.ca.us and to Consultant Name at name@consultant.org. City Employee Title My Town

### Sample of Aggregate Data

RATE DATA ANALYSIS: DR3712 GAS AND ELECTRIC GHG SUMMARY FOR INCORPORATED CITIES AND UNINCORPORATED PORTIONS OF HOME COUNTY

СІТҮ	YEAR	CATEGORY	RES ELEC AVG (KWH)	RES ELEC USE (KWH)	RES ELEC GHG (metric tonnes)	RES ELEC CLIM (lbs)	COM ELEC AVG (KWH)	COM ELEC USE (KWH)	RES ELEC GHG (metric tonnes)	RES ELEC CLIM (lbs)	IND ELEC AVG (KWH)	IND ELEC USE (KWH)	IND ELEC GHG (metric tonnes)	IND ELEC CLIM (lbs)	IND ELEC 1515	DA KWH
City A	2006	(3) COUNTY					1,143	83,058	17							
City A	2006	NONCOUNTY	649	534,396	7,350		24,610	104,396	8,710						FAIL	ZZZZZ
City B	2006	(3) COUNTY					1,507	342,193	71							
City B	2006	NONCOUNTY	619	652,931	2,617		15,085	982,718	3,100							ZZZZZ
City C	2006	(3) COUNTY					16,258	597,273	1,571							
City C	2006	NONCOUNTY	965	877,514	36,792		20,957	873,480	35,344						FAIL	ZZZZZ
UNINC HOME CO.	2006	(3) COUNTY	609	12,605	3		3,202	911,783	602							
UNINC HOME CO.	2006	NONCOUNTY	2,552	563,867	26,799		14,080	133,523	43,464		15,384	384,609	1,527		FAIL	ZZZZZ
			RES GAS	RES GAS	RES GAS GHG	RES GAS	СОМ	сом	RES GAS	RES GAS	IND GAS	IND GAS	IND GAS GHG	IND GAS	IND	
CITY	YEAR	CATEGORY	AVG (THM)	USE (THM)	(metric tonnes)	CLIM (lbs)	GAS AVG (THM)	GAS USE (THM)	GHG (metric tonnes)	CLIM (lbs)	AVG (THM)	USE (THM)	(metric tonnes)	CLIM (lbs)	GAS 1515	
City A	<b>YEAR</b> 2006	CATEGORY (3) COUNTY	AVG	USE	(metric	CLIM	AVG	USE	(metric	CLIM	AVG	USE	(metric	CLIM	GAS	
			AVG	USE	(metric	CLIM	AVG	USE	(metric	CLIM	AVG	USE	(metric	CLIM	GAS	
City A	2006	(3) COUNTY	AVG (THM)	USE (THM)	(metric tonnes)	CLIM	AVG (THM)	USE (THM)	(metric tonnes)	CLIM	AVG	USE	(metric	CLIM	GAS 1515	
City A City A	2006 2006	(3) COUNTY NONCOUNTY	AVG (THM)	USE (THM)	(metric tonnes)	CLIM	<b>AVG</b> (THM) 2,499	USE (THM) 441,271	(metric tonnes) 12,956	CLIM	AVG	USE	(metric	CLIM	GAS 1515	
City A City A City B	2006 2006 2006	<ul><li>(3) COUNTY</li><li>NONCOUNTY</li><li>(3) COUNTY</li></ul>	AVG (THM) 46	USE (THM) 543,096	(metric tonnes) 13,496	CLIM	<b>AVG</b> (THM) 2,499 90	<b>USE</b> (THM) 441,271 5,372	(metric tonnes) 12,956 29	CLIM	AVG	USE	(metric	CLIM	GAS 1515	
City A City A City B City B	2006 2006 2006 2006	<ul><li>(3) COUNTY</li><li>NONCOUNTY</li><li>(3) COUNTY</li><li>NONCOUNTY</li></ul>	<b>AVG</b> (THM) 46 56	USE (THM) 543,096 986,646	(metric tonnes) 13,496	CLIM	<b>AVG</b> (THM) 2,499 90 885	<b>USE</b> (THM) 441,271 5,372 590,680	(metric tonnes) 12,956 29 3,135	CLIM	AVG	USE	(metric	CLIM	GAS 1515	
City A City A City B City B City C	2006 2006 2006 2006 2006	<ul><li>(3) COUNTY</li><li>NONCOUNTY</li><li>(3) COUNTY</li><li>NONCOUNTY</li><li>(3) COUNTY</li></ul>	AVG (THM) 46 56 10	USE (THM) 543,096 986,646 122	(metric tonnes) 13,496 5,236 1	CLIM	AVG (THM) 2,499 90 885 606	USE (THM) 441,271 5,372 590,680 190,574	(metric tonnes) 12,956 29 3,135 1,011	CLIM	AVG	USE (THM)	(metric tonnes)	CLIM	GAS 1515 FAIL	

Sample of Detailed Data														
RATE DATA ANALYSIS: DR3728 2005 CITY DETAIL GHG DATA FOR MY TOWN														
CUSTOMER NAME	(TOT) CITY NAME	ACCOUNT ID	SERVICE AGREEMENT ID	PREMISE TYPE	BUSINESS ACTIVITY		SERVICE CITY	SERVICE ZIP		RATE SCHEDULE	KWH	ELEC REVENUE		GAS REVENUE
CITY OF MY TOWN	MY TOWN	1234	1	COM OR IND	TRAFFIC SIGNAL	11 EAST HWY	MY TOWN	90000	(4) CITY	TC1 - TRAFFIC CONTROL SERVICE	678	706		
CITY OF MY TOWN	MY TOWN	1234	2	COM OR IND	SEWAGE PUMP STATION	123 INDUS- TRIAL	MY TOWN	90000	(4) CITY	A1 - SMALL GERNERAL SERVICE	347	2,074		
CITY OF MY TOWN	MY TOWN	2345	3	COM OR IND	POLICE DEPT	123 MAIN ST	MY TOWN	90000	(4) CITY	E19SV - MEDIUM GERNERAL DEMAND METERED TOU SERVICE	248	5,107		
CITY OF MY TOWN	MY TOWN	2345	4	COM OR IND	BUILDING PERMITS DEPT	123 MAIN ST	MY TOWN	90000	(4) CITY	GNRI - GAS SERVICE TO SMALL COMM CUSTOMERS			318	22,330
CITY OF MY TOWN	MY TOWN	3456	6	STREET LIGHT SITE		22 BABE RUTH PKWY	MY TOWN	90000	(4) CITY	LS2 - CUSTOMER OWNED STREET AND HIGHWAY LIGHTING	731	7,032		
CITY OF MY TOWN	UNINC MY TOWN	3456	7	COM OR IND	NATURAL GAS VEHICLE	123 INDUS- TRIAL	NEIGH- BORING CITY	90000	(4) CITY	GN3V2 - EXPERI- MENTAL COMPRESSED NATURAL GAS SALES			624	9,524
											2,004	14,919	942	31,854

STREET LIGHT DATA NOTE: In general, street lights are not metered, and PG&E has historically relied on cities and counties to provide inventories of street lights owned by the city or county in order to correctly bill for the energy used by street lights. PG&E is in the process of conducting inventories of street lights throughout our service territory to update our records. PG&E meets with city/county representatives before we begin an inventory and continue to communicate with them during the inventory process to keep them up to date on the process. After the inventory is complete, PG&E will adjust the city/county bill to reflect the calculated energy used by existing street lights. For those cities and counties that had an inventory in 2004 or 2005, the street light data provided for 2005 may reflect billing adjustments over a period of three years, and therefore, might be higher than that for a typical year. PG&E recommends that the city/county street light facility managers revie the street light data in this report. If there are any questions about street light data, please contact PG&E at 1-800-743-5000

### Greenhouse Gas (CO2 only) Emission Rates for Electricity

• 2003: KWh x (0.620 lbs/kWh / 2,204.6 lbs/metric tonne) • 2004: KWh x (0.566 lbs/kWh / 2,204.6 lbs/metric tonne)

• 2005: KWh x (0.489 lbs/kWh / 2,204.6 lbs/metric tonne)

Greenhouse Gas (CO<sub>2</sub> only) Emission Rates for Gas

• All Years (2003-2007): Therms x (11.7 lbs/therm / 2,204.6 lbs/metric tonne)

• 2006: KWh x (0.456 lbs/kWh / 2,204.6 lbs/metric tonne)

• 2007: KWh x (0.63567 lbs/kWh / 2,204.6 lbs/metric tonne)