

# Economic Contributions of Pacific Gas and Electric Company

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## Key Findings—Service Area Economic Impacts

### **General Operations Impacts**

- ✓ The total annual economic contributions resulting from PG&E's 2012 general operations in its Service Area amounted to approximately 71,600 jobs, \$5.8 billion of labor income, \$22.2 billion of output, and \$3.4 billion of state and local taxes.
- ✓ To put these considerable economic impact levels in context, the entire Service Area economy contains roughly 7.4 million jobs and \$1.2 trillion of output, meaning that PG&E supported around 1 percent of all employment and 2 percent of all output in the region it serves.
- ✓ The size of the total economic impact also exceeded several highly-visible industry sectors in the Service Area such as Software Publishing, Wineries, and Scientific Research and Development Services.

### **Customer Energy Efficiency Programs Impacts**

- ✓ Energy efficiency is an important part of PG&E's core business and the company invests significantly in a diverse range of programs and services designed to help its customers save energy and money.
- ✓ PG&E's customer energy efficiency programs in 2012 led to a total annual economic impact of close to 7,700 jobs, \$452.4 million of labor income, \$1.1 billion of output, and \$53.8 million of state and local tax revenue.
- ✓ Every dollar associated with PG&E's customer energy efficiency programs supported another 80 cents of output in the economy according to the multiplier effect which accounts for the full range of economic impacts resulting from program spending and the insertion of bill savings from avoided energy use back into the economy.

### **Community Investment Program Impacts**

- ✓ Through PG&E's shareholder-funded community investment program, the company supports a wide array of charitable organizations, including non-profit organizations, educational institutions, and local government entities. In addition to sustaining important programs or creating new ones to fulfill key community needs, these funds provide incremental support for the internal operations of the recipient organizations, such as capacity building, which generates economic effects.
- ✓ Altogether, the direct, indirect, and induced effects of PG&E's 2012 community investments led to a total economic impact in the Service Area of close to 420 jobs, \$18.4 million of labor income, \$38.9 million of output, and \$2.3 million of state and local tax generation.
- ✓ For every dollar PG&E invested in charitable contributions to support efforts focused on education, environmental stewardship, and economic and community vitality, the Service Area economy saw another 90 cents of output derived through indirect and induced effects. This means that PG&E's direct community investments were nearly doubled in economic output in the Service Area.

## Introduction

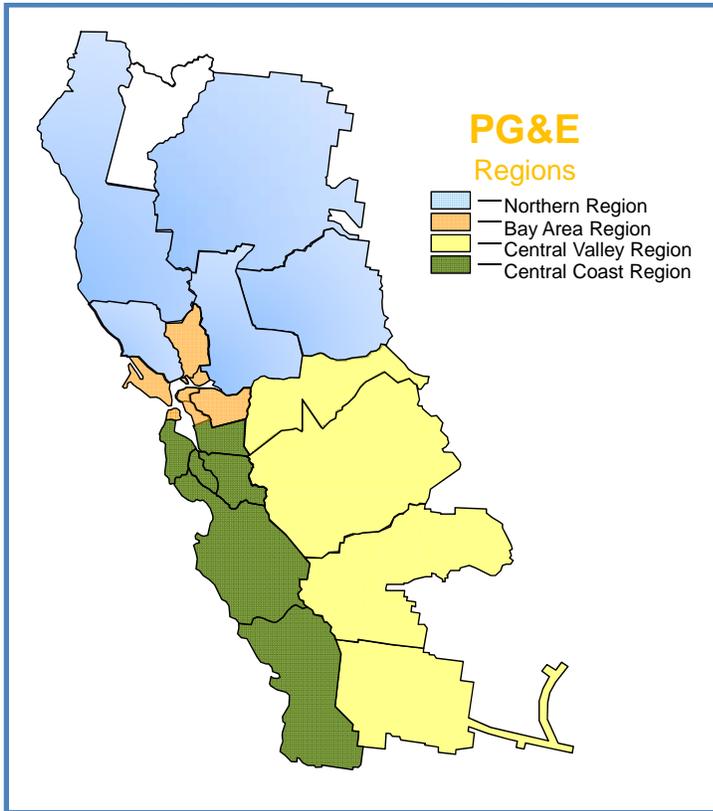
Pacific Gas and Electric Company (PG&E) provides electric and natural gas service to roughly 15 million people within its 70,000-square-mile Service Area throughout Northern and Central California.

PG&E engaged the Center for Strategic Economic Research (CSER) to estimate the economic contributions of PG&E in 2012, accounting for both its direct economic activities as well as the multiplier or “ripple” effect where additional activities were supported by the company’s demand for goods and services and worker spending in the economy. CSER utilized the IMPLAN model, a widely-used economic analysis system, to estimate the full range of economic impacts based on background information provided directly by PG&E. The economic contributions of three distinct PG&E activities were measured to estimate the range of economic impacts associated with the company:

1. **General Operations**—all activities, including capital investments and operations and maintenance expenses, associated with PG&E’s energy supply, electric and natural gas transmission and distribution, customer care, and corporate and administrative services
2. **Customer Energy Efficiency Programs**—activities related to administering PG&E’s customer energy efficiency programs, providing incentives for residential and commercial customers’ energy efficiency projects, and offering energy audits and other technical support as well as customer bill savings directly resulting from energy efficiency measures
3. **Community Investment Program**—activities related to PG&E’s shareholder-funded community investment program, which consists of contributions to charitable organizations in the areas of education, environmental stewardship, and economic and community vitality

This report summarizes the results of the economic impact analysis for each of the three distinct PG&E activities. The discussions of economic impacts throughout the report primarily focus on the PG&E Service Area, but information is also provided for the statewide economic impacts as well as those in each of the four major Regions that comprise PG&E’s Service Area: Bay Area, Central Coast, Central Valley, and Northern (shown in Figure 1 on the following page).

**FIGURE 1—PG&E SERVICE AREA AND REGIONS MAP**



Source: PG&E

<b>BAY AREA REGION</b>	
Population: 3.3 million Energy Usage: 17 billion kWhs, 3.2 billion therms Square Miles: 2,149	PG&E Employees: 7,449 PG&E Infrastructure: <ul style="list-style-type: none"> <li>Electric Transmission and Distribution: 11,600 miles</li> <li>Gas Transmission and Distribution: 8,100 miles</li> </ul>
Highlights: <ul style="list-style-type: none"> <li>Well-known for San Francisco, a financial center and tourist destination, and Napa, a regarded wine producing area</li> <li>Includes PG&amp;E's corporate headquarters in downtown San Francisco</li> <li>Other PG&amp;E facilities include Gateway Generating Station and a new state-of-the-art gas operations control center in San Ramon</li> </ul>	
<b>CENTRAL COAST REGION</b>	
Population: 4.5 million Energy Usage: 29 billion kWhs, 2 billion therms Square Miles: 11,926	PG&E Employees: 5,077 PG&E Infrastructure: <ul style="list-style-type: none"> <li>Electric Transmission and Distribution: 26,200 miles</li> <li>Gas Transmission and Distribution: 12,300 miles</li> </ul>
Highlights: <ul style="list-style-type: none"> <li>Large wine and agriculture producing region and popular tourist destination</li> <li>Encompasses Silicon Valley and a number of renowned universities</li> <li>Includes PG&amp;E's Diablo Canyon Power Plant</li> </ul>	

## INTRODUCTION

CENTRAL VALLEY REGION	
Population: 3.6 million Energy Usage: 25 billion kWhs, 1.4 billion therms Square Miles: 25,835	PG&E Employees: 4,036 PG&E Infrastructure: <ul style="list-style-type: none"> <li>• Electric Transmission and Distribution: 43,300 miles</li> <li>• Gas Transmission and Distribution: 11,300 miles</li> </ul>
Highlights: <ul style="list-style-type: none"> <li>• Encompasses California's fertile Central Valley and parts of the southern Sierra Nevada Mountains</li> <li>• Economic drivers include agriculture, government facilities, oil production and tourism</li> <li>• Includes significant PG&amp;E hydroelectric generation facilities</li> </ul>	
NORTHERN REGION	
Population: 3.9 million Energy Usage: 15 billion kWhs, 1.7 billion therms Square Miles: 31,604	PG&E Employees: 4,788 PG&E Infrastructure: <ul style="list-style-type: none"> <li>• Electric Transmission and Distribution: 40,300 miles</li> <li>• Gas Transmission and Distribution: 14,300 miles</li> </ul>
Highlights: <ul style="list-style-type: none"> <li>• Includes Sacramento, California's capital, and numerous state and national parks and forests</li> <li>• Tourism and ski recreation along the Sierra Nevada mountain range and wine and other agriculture in the west and south</li> <li>• Includes significant PG&amp;E hydroelectric generation facilities</li> <li>• Other PG&amp;E facilities include two natural gas power plants: Humboldt Bay Generating Station and Colusa Generating Station</li> </ul>	

### DEFINING KEY TERMS AND CONCEPTS

There are three key effects that make up the full economic impact, all of which are covered by this report. They include:

1. **Direct Effect**—Refers to the economic activities directly associated with PG&E's general operations, customer energy efficiency programs, and community investment program. For PG&E's general operations, the direct impact consists of the market value of the goods and services provided by PG&E, measured by revenue. Direct impacts also include PG&E's base workforce and the associated salaries and wages for these employees and other short-term workers.
2. **Indirect Effect**—Refers to the second-order economic activities of industries that respond to the supplier demand generated by the direct economic activities. These industries supply goods and services to PG&E and the establishments associated with the energy efficiency programs and community investment program funding. For PG&E's general operations, the indirect impact includes the company's capital investments and operations and maintenance expenditures. Examples of industries that experience indirect effects include engineering, construction, vehicle fuel, cable and wiring, office supplies, legal services, industrial motors, electronic equipment, and control systems
3. **Induced Effect**—Refers to the economic activities generated by spending from workers supported by the direct and indirect economic activities. As those workers use their income on typical household consumption, additional economic activity is created. For example, workers use their paychecks for retail purchases, housing, medical services, banking, and insurance.

*The sum of direct, indirect, and induced effects represents the total gross economic impact.*

The direct, indirect, and induced effects can be measured in several different ways. The following economic factors are used in this report and, as distinct measures, should not be combined to estimate total economic impact.

- **Employment**—Refers to the number of jobs supported.
- **Labor Income**—Refers to the dollars paid as salaries/wages and benefits to workers.
- **Output**—Refers to the market value of goods produced or services provided, frequently reflected as total revenue or sales in businesses.
- **Tax Generation**—Refers to state and local taxes and fees generated including sales, property, income, and several other categories.

## General Operations Economic Impacts

In 2012, PG&E’s general operations—activities related to the company’s energy supply, electric and natural gas transmission and distribution, customer care, and corporate and administrative services—generated close to \$14.8 billion of revenue. In doing so, the company supported a headcount employment level of over 21,000 people and compensated those employees and other short-term workers approximately \$3.2 billion.

Simply accounting for this level of economic activity placed PG&E among the largest companies in the state and in line with entire industry sectors in the Service Area such as Data Processing, Semiconductor and Related Device Manufacturing, and Accounting Services.\*

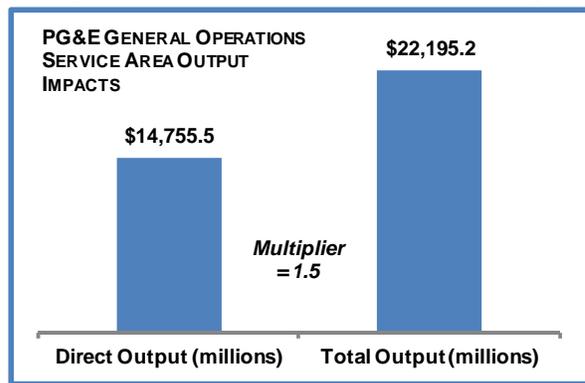
This direct economic activity also created a significant multiplier effect as suppliers of goods and services respond to the demand from PG&E and a wide range of establishments benefit from company employees spending their income throughout the economy. As shown in Figure 2 (on the next page), the total annual economic contributions resulting from PG&E’s 2012 general operations in its Service Area amounted to approximately 71,600 jobs, \$5.8 billion of labor income, \$22.2 billion of output, and \$3.4 billion of state and local taxes.

**PG&E 2012 GENERAL OPERATIONS  
TOTAL SERVICE AREA ECONOMIC  
IMPACTS:**

EMPLOYMENT = 71,582  
 LABOR INCOME = \$5.8 BILLION  
 OUTPUT = \$22.2 BILLION  
 STATE & LOCAL TAXES = \$3.4 BILLION

To put these considerable economic impact levels in context, the entire Service Area economy contains roughly 7.4 million jobs and \$1.2 trillion of output, meaning that PG&E supported around 1 percent of all employment and 2 percent of all output in the region it serves. Moreover, the size of the total economic impact also exceeded several highly-visible industry sectors in the Service Area like Software Publishing, Wineries, and Scientific Research and Development Services.

PG&E’s economic impacts reflected fairly robust multipliers that show an increase of 2.4 jobs for every direct job supported by PG&E’s general operations and an additional 50 cents of output for every dollar of revenue directly generated by the company.† This multiplier effect spread through nearly every industry sector in the Service Area economy with the Retail Trade, Health Care & Social Assistance, Real Estate & Rental, Manufacturing, and Finance & Insurance sectors seeing the largest total impacts. These effects are influenced by the fact that PG&E is a high-value utility company



\* The 2012 *Fortune 500* list shows PG&E as the 17<sup>th</sup> largest company in California based on revenue. California Employment Development Department analysis of company records from the Infogroup database alongside PG&E’s headcount employment reveals that PG&E is among the 30 largest employers in the state.

† Capital investments include upgrades to PG&E’s natural gas pipelines, electric power lines, generation facilities, and other key infrastructure. If capital investments were removed from the general operations analysis, the multiplier effect would be lower and show an additional 1.5 jobs and 30 cents of output for every job or dollar of output directly supported by PG&E.

## GENERAL OPERATIONS ECONOMIC IMPACTS

with notable amounts of operating expenses, capital investment, and labor income that circulate through the Service Area economy.

**FIGURE 2—PG&E GENERAL OPERATIONS ECONOMIC IMPACTS, 2012**

<i>Area / Impact</i>	<i>Direct</i>	<i>Indirect</i>	<i>Induced</i>	<i>Total</i>
<b><u>Service Area</u></b>				
Employment	21,350	24,019	26,213	71,582
Labor Income	\$3,207,844,005	\$1,343,004,935	\$1,246,186,759	\$5,797,035,699
Output	\$14,755,451,724	\$3,675,693,119	\$3,764,016,431	\$22,195,161,274
State & Local Tax Generation				\$3,424,920,906
<b><u>California</u></b>				
Employment	21,350	27,794	32,556	81,700
Labor Income	\$3,207,844,005	\$1,719,487,081	\$1,617,375,208	\$6,544,706,293
Output	\$14,755,451,724	\$4,842,328,528	\$4,774,122,709	\$24,371,902,961
State & Local Tax Generation				\$3,795,042,251
<b><u>Bay Area Region</u></b>				
Employment	7,449	4,159	5,654	17,262
Labor Income	\$1,188,726,164	\$304,717,882	\$336,730,633	\$1,830,174,679
Output	\$3,115,559,809	\$697,919,992	\$858,361,462	\$4,671,841,263
State & Local Tax Generation				\$714,497,677
<b><u>Central Coast Region</u></b>				
Employment	5,077	6,712	5,036	16,825
Labor Income	\$750,721,747	\$422,354,893	\$263,263,949	\$1,436,340,588
Output	\$4,932,860,301	\$997,845,440	\$701,924,476	\$6,632,630,216
State & Local Tax Generation				\$987,618,777
<b><u>Central Valley Region</u></b>				
Employment	4,036	5,298	4,710	14,044
Labor Income	\$558,153,671	\$246,784,539	\$194,941,698	\$999,879,909
Output	\$3,836,580,063	\$680,407,136	\$618,117,673	\$5,135,104,871
State & Local Tax Generation				\$701,161,772
<b><u>Northern Region</u></b>				
Employment	4,788	4,775	5,284	14,848
Labor Income	\$710,242,424	\$226,844,436	\$215,365,836	\$1,152,452,696
Output	\$2,870,451,551	\$595,258,764	\$672,707,990	\$4,138,418,305
State & Local Tax Generation				\$557,777,816

Center for Strategic Economic Research, February 2014

Data Source: IMPLAN 2011 Coefficients based on CSER analysis of PG&E information

Notes: Difference due to rounding.

The sum of the regional impacts do not equate to the Service Area total since spending and supplier relationships between regions are only captured at the Service Area level, leading to slightly larger economic impacts at the Service Area level.

Total economic impacts increased slightly when expanded out to the entire state due to the larger economy's ability to capture more spending and support incremental supplier activity. At the statewide level, the economic impacts associated with PG&E's general operations increased to approximately 81,700 jobs, \$6.5 billion of labor income, \$24.4 billion of output, and \$3.8 billion of revenue to state and local government coffers. Every one job that PG&E's operations

**GENERAL OPERATIONS ECONOMIC IMPACTS**

supported created 2.8 jobs more in the California economy and each dollar of revenue the company generated led to 70 cents of additional output in the state.

At the PG&E regional level, economic contributions varied based on the level of company activity and the size and structure of the economy. PG&E supported the most direct employment within the Bay Area Region due to the location of its headquarters facility. Total economic impacts in the Bay Area Region equated to approximately 17,300 jobs, \$1.8 billion of labor income, \$4.7 billion of output, and \$714 million of state and local tax generation. These regional economic impacts are significant, capturing over 1.0 percent of all jobs in the Bay Area Region economy and approximately 1.5 percent of all output.

**PG&E 2012 GENERAL OPERATIONS TOTAL  
ECONOMIC IMPACT CONTRIBUTIONS**

Region	Share of All Regional Employment	Share of All Regional Output
Bay Area	1.2%	1.5%
Central Coast	0.5%	1.0%
Central Valley	0.8%	2.0%
Northern	0.7%	1.4%

PG&E created the greatest direct output value in the Central Coast Region both as a result of the size of the market area as well as the location of its Diablo Canyon Power Plant. In the Central Coast Region, PG&E’s general operations generated a total economic impact of around 16,800 jobs, \$1.4 billion of labor income, \$6.6 billion of output, and \$988 million of state and local taxes. PG&E’s general operations in the Central Valley Region supported total economic impacts of roughly 14,000 jobs, \$1.0 billion of labor income, \$5.1 billion of output, and \$701 million of state and local tax generation. Similar to the Bay Area Region, PG&E made a considerable economic contribution to the Central Valley Region with total regional economic impacts equating to about one percent of all jobs and two percent of all output in the market. Within the Northern Region, PG&E created a total economic impact of about 14,800 jobs, \$1.2 billion of labor income, \$4.1 billion of output, and \$558 million of state and local tax revenue.

It is important to note that the sum of the regional impacts do not equate to the Service Area total because spending and supplier relationships between regions are only captured at the Service Area level, leading to slightly larger economic impacts at the Service Area level.

## Customer Energy Efficiency Programs Economic Impacts

Energy efficiency is an important part of PG&E’s core business and the company offers a diverse range of programs and services designed to help its customers save energy and money. Through the largest energy efficiency funding of any utility in the nation, PG&E’s extensive programs span efforts to directly educate and incentivize customers to purchase energy efficient products to innovative partnerships with organizations that provide technical support and increase the adoption of energy efficiency measures by homes and businesses.

In addition to reducing greenhouse gas emissions and energy demand, PG&E’s customer energy efficiency programs also generate two kinds of economic effects:

- First, administering the programs and investing in customer energy efficiency projects such as property improvements, equipment upgrades, and energy usage reporting directly supports economic activity within industries that provide related services and produce or sell associated products.
- Second, energy cost savings realized through implementing energy efficiency measures reduce operating costs and increase industry output for commercial customers and free up disposable income for residential customers that can be used for additional consumption activities. In fact, PG&E estimates show residential and commercial bill savings of close to \$167.4 million in 2012.

Both of these direct economic activities, depicted in the economic effects image below, also create a ripple effect in the economy as the spending is re-circulated through indirect and induced activities.

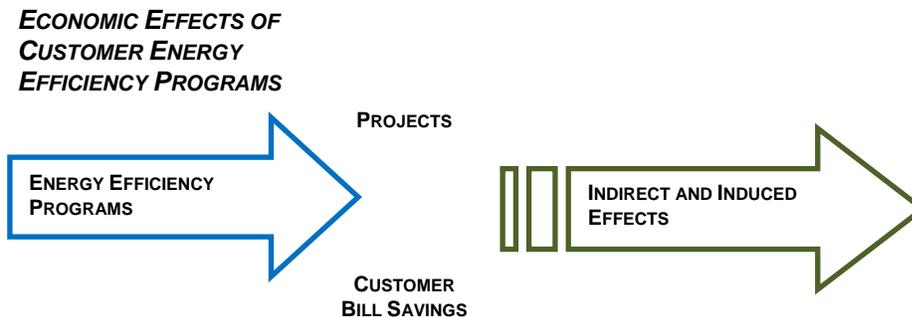


Figure 3 (on page 9) demonstrates that PG&E’s customer energy efficiency programs directly supported approximately 4,600 jobs and an associated \$289.2 million of labor income in 2012. This employment count includes PG&E workers in addition to jobs within external entities supported by spending throughout the economy associated with customer energy efficiency projects and bill savings. The programs also supported about \$583.0 million of output in the

## CUSTOMER ENERGY EFFICIENCY PROGRAMS ECONOMIC IMPACTS

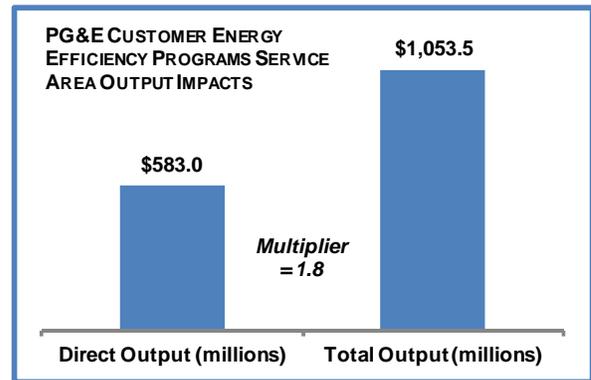
Service Area through program administration, project investments, and commercial and residential bill savings from avoided energy use.

Indirect and induced effects added around 3,100 jobs, \$163.2 million of labor income, and \$470.5 million of output in the Service Area leading to a total annual economic impact of close to 7,700 jobs, \$452.4 million of labor income, and \$1.1 billion of output. The direct, indirect, and induced activities in the Service Area also generated roughly \$53.8 million of state and local tax revenue.

**PG&E 2012 CUSTOMER ENERGY EFFICIENCY PROGRAMS TOTAL SERVICE AREA ECONOMIC IMPACTS:**

EMPLOYMENT = 7,688  
 LABOR INCOME = \$452.4 MILLION  
 OUTPUT = \$1.1 BILLION  
 STATE & LOCAL TAXES = \$53.8 MILLION

Every dollar associated with PG&E's customer energy efficiency programs supported another 80 cents of output in the economy according to the multiplier effect which accounts for the full range of economic impacts resulting from program spending and the insertion of bill savings back into the economy.<sup>‡</sup>



<sup>‡</sup> An estimate of return on investment can be created by isolating the spending related to program administration and project incentives and dividing the total output impact (which also includes the effects from cost savings) by that amount. This calculation reveals that for every \$1.00 of PG&E investment in its customer energy efficiency programs, another \$1.50 was generated in the Service Area economy or a return on investment of 2.5.

## CUSTOMER ENERGY EFFICIENCY PROGRAMS ECONOMIC IMPACTS

**FIGURE 3—PG&E CUSTOMER ENERGY EFFICIENCY PROGRAMS ECONOMIC IMPACTS, 2012**

<i>Area / Impact</i>	<i>Direct</i>	<i>Indirect</i>	<i>Induced</i>	<i>Total</i>
<u>Service Area</u>				
Employment	4,560	1,116	2,013	7,688
Labor Income	\$289,225,702	\$63,404,701	\$99,801,111	\$452,431,514
Output	\$583,030,403	\$184,772,187	\$285,736,620	\$1,053,539,210
State & Local Tax Generation				\$53,811,189
<u>California</u>				
Employment	4,783	1,364	2,507	8,654
Labor Income	\$305,790,453	\$81,777,800	\$129,408,185	\$516,976,438
Output	\$619,327,434	\$241,026,889	\$366,878,685	\$1,227,233,009
State & Local Tax Generation				\$62,396,118
<u>Bay Area Region</u>				
Employment	992	191	345	1,528
Labor Income	\$78,843,106	\$13,032,682	\$20,460,293	\$112,336,082
Output	\$142,172,970	\$31,580,762	\$50,467,876	\$224,221,606
State & Local Tax Generation				\$11,611,745
<u>Central Coast Region</u>				
Employment	1,304	280	465	2,049
Labor Income	\$95,206,361	\$17,810,662	\$25,920,453	\$138,937,474
Output	\$178,456,926	\$44,099,462	\$66,403,135	\$288,959,522
State & Local Tax Generation				\$14,964,172
<u>Central Valley Region</u>				
Employment	1,005	215	390	1,610
Labor Income	\$53,198,700	\$10,260,072	\$16,604,362	\$80,063,135
Output	\$119,761,265	\$31,209,715	\$50,254,301	\$201,225,282
State & Local Tax Generation				\$9,961,778
<u>Northern Region</u>				
Employment	858	201	346	1,405
Labor Income	\$48,458,107	\$9,558,867	\$14,746,283	\$72,763,256
Output	\$102,827,150	\$25,798,647	\$43,261,603	\$171,887,401
State & Local Tax Generation				\$9,371,037

Center for Strategic Economic Research, February 2014

Data Source: IMPLAN 2011 Coefficients based on CSER analysis of PG&E information

Notes: Difference due to rounding.

The sum of the regional impacts do not equate to the Service Area total since spending and supplier relationships between regions are only captured at the Service Area level, leading to slightly larger economic impacts at the Service Area level.

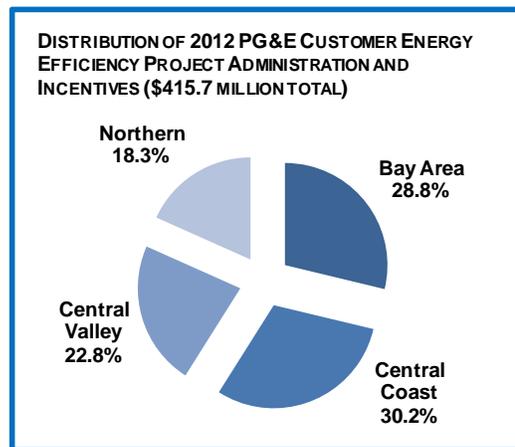
The statewide economy was able to capture a somewhat greater level of project investments and re-circulated residential and commercial spending from avoided energy costs, making the direct effects of PG&E's customer energy efficiency programs approximately 6 percent larger, on average, than when measurement was confined to the Service Area boundaries. Within the California economy, the direct economic activities associated with the customer energy efficiency programs in 2012 reflected nearly 4,800 jobs, \$305.8 million of labor income, and \$619.3 million of output.

## CUSTOMER ENERGY EFFICIENCY PROGRAMS ECONOMIC IMPACTS

Total economic impacts were about 15 percent larger, on average, at the statewide level compared to the Service Area. PG&E contributed roughly 8,700 jobs, \$517.0 million of labor income, and \$1.2 billion of output to the California economy with fiscal impacts reaching \$62.4 million as a result of the direct, indirect, and induced effects associated with the company's 2012 customer energy efficiency programs.

Almost one-third of all the spending associated with administering PG&E's customer energy efficiency programs and investing in projects fell within the Central Coast Region in 2012. The total economic impacts resulting from projects and cost savings in the Central Coast Region equated to about 2,000 jobs, \$138.9 million of labor income, \$289.0 million of output, and \$15.0 million of state and local tax generation.

Twenty-nine percent of customer energy efficiency project spending was allocated to the Bay Area Region in 2012 where a total economic impact of approximately 1,500 jobs, \$112.3 million of labor income, \$224.2 million of output, and \$11.6 million of state and local taxes was created.



The Central Valley and Northern Regions received a combined 41 percent of customer energy efficiency project spending in 2012, and they both saw notable economic impacts generated through this spending as well as the additional residential spending and commercial output due to bill savings. The total economic impact in the Central Valley Region was estimated at roughly 1,600 jobs, \$80.1 million of labor income, \$201.2 million of output, and \$10 million of state and local tax revenue. In the Northern Region, the total economic impact associated with PG&E's customer energy efficiency programs reached about 1,400 jobs, \$72.8 million of labor income, \$171.9 million of output, and \$9.4 million of state and local taxes.

## Community Investment Program Economic Impacts

Each year, PG&E supports a wide array of charitable organizations, including non-profit organizations, educational institutions, and local government entities. In 2012, through its shareholder-funded community investment program, PG&E provided a total of \$23.2 million in charitable contributions to support efforts focused on education, environmental stewardship, and economic and community vitality. Of this total, nearly \$21.7 million, or 93 percent, was directed to organizations in California with the remainder allocated to locations outside the state.

This funding not only helped create and sustain valuable programs and services within the communities that the recipients serve, but it also made a contribution to the economy through the jobs and spending associated with the funded organizations themselves.

The funds allocated by PG&E’s community investment program provided incremental support for internal programs and operations across the wide range of recipient organizations, such as capacity building, which generated direct economic effects within the Service Area. Thus, while “direct” in nature, the economic impacts relate to the recipient organizations, not PG&E.

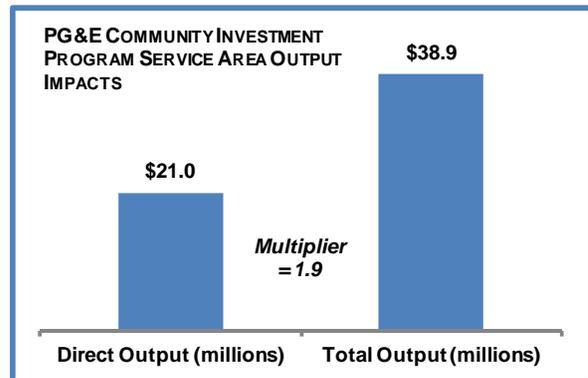
Importantly, the economic impacts did not end with these direct effects—a multiplier effect was also generated in the economy as a result of linkages that exist between funded activities, suppliers of goods and services (indirect effects), and employee spending (induced effects).

As illustrated in Figure 4 (on the following page), accounting for the direct, indirect, and induced effects of the community investment program funding in the Service Area showed a total economic impact of close to 420 jobs, \$18.4 million of labor income, \$38.9 million of output, and \$2.3 million of state and local tax generation.

**PG&E 2012 COMMUNITY INVESTMENT PROGRAM TOTAL SERVICE AREA ECONOMIC IMPACTS:**

EMPLOYMENT = 419  
 LABOR INCOME = \$18.4 MILLION  
 OUTPUT = \$38.9 MILLION  
 STATE & LOCAL TAXES = \$2.3 MILLION

For every dollar PG&E invested in education, environmental stewardship, and economic and community vitality programs, the Service Area economy saw another 90 cents of output derived through indirect and induced effects. This means that PG&E’s direct community investments were nearly doubled in economic output in the Service Area.



In terms of employment, for every job generated at the recipient organizations as a result of PG&E funding, an additional 0.4 job was supported within the Service Area due to the demand for suppliers of goods and services and employee consumption activities.

**COMMUNITY INVESTMENT PROGRAM ECONOMIC IMPACTS**

**FIGURE 4—PG&E COMMUNITY  
INVESTMENT PROGRAM ECONOMIC IMPACTS, 2012**

<i>Area / Impact</i>	<i>Direct</i>	<i>Indirect</i>	<i>Induced</i>	<i>Total</i>
<u>Service Area</u>				
Employment	300	42	77	419
Labor Income	\$12,232,217	\$2,389,848	\$3,793,065	\$18,415,130
Output	\$20,976,066	\$7,173,375	\$10,785,231	\$38,934,672
State & Local Tax Generation				\$2,295,247
<u>California</u>				
Employment	301	49	98	448
Labor Income	\$12,709,498	\$2,948,087	\$5,066,290	\$20,723,876
Output	\$21,680,928	\$8,619,038	\$14,312,561	\$44,612,527
State & Local Tax Generation				\$2,624,190
<u>Bay Area Region</u>				
Employment	140	17	27	183
Labor Income	\$6,721,347	\$1,280,103	\$1,632,652	\$9,634,101
Output	\$10,880,303	\$3,367,878	\$4,036,808	\$18,284,989
State & Local Tax Generation				\$1,028,983
<u>Central Coast Region</u>				
Employment	42	6	9	57
Labor Income	\$1,672,563	\$335,119	\$487,594	\$2,495,276
Output	\$2,970,284	\$1,025,270	\$1,323,163	\$5,318,717
State & Local Tax Generation				\$334,570
<u>Central Valley Region</u>				
Employment	55	8	16	79
Labor Income	\$1,720,236	\$342,627	\$628,459	\$2,691,322
Output	\$3,354,183	\$1,399,996	\$2,197,960	\$6,952,139
State & Local Tax Generation				\$392,556
<u>Northern Region</u>				
Employment	64	9	15	87
Labor Income	\$2,118,071	\$397,412	\$673,433	\$3,188,916
Output	\$3,771,296	\$1,333,453	\$2,047,668	\$7,152,417
State & Local Tax Generation				\$421,633

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Data Source: IMPLAN 2011 Coefficients based on CSER analysis of PG&E information

Notes: Difference due to rounding.

The sum of the regional impacts do not equate to the Service Area total since spending and supplier relationships between regions are only captured at the Service Area level, leading to slightly larger economic impacts at the Service Area level.

The economic impacts increased when measured within California due both to additional funding provided to non-profit organizations, educational institutions, and government entities in areas of the state outside the Service Area as well as the larger economy's ability to capture indirect and induced activities. Statewide economic impacts totaled almost 450 jobs, \$20.7 million of labor income, and \$44.6 million of output. The direct, indirect, and induced effects also created a fiscal impact estimated at about \$2.6 million of state and local tax revenue.

## COMMUNITY INVESTMENT PROGRAM ECONOMIC IMPACTS

Total employment impacts at the regional level ranged from approximately 57 jobs in the Central Coast Region to 180 jobs in the Bay Area Region. In terms of output, regional impacts spanned between \$5.3 million in the Central Coast Region to \$18.3 million in the Bay Area Region. This directly reflects the distribution of funding across the regions in the Service Area. While creating an economic impact is not among the key objectives of the community investment program, the funding certainly provides a supplemental effect by contributing to the regional economy in areas with organizations receiving PG&E funding in 2012.

## Technical Notes

CSER utilized the IMPLAN input-output model (2011 Coefficients) to conduct the economic impact analysis and calibrated the model to reflect the Service Area, four PG&E regions within the Service Area, and California economies as well as specific PG&E activities based on information provided directly by the company for the year 2012.<sup>§</sup> The analysis accounted for direct spending leakages out of the geographic areas as well as captured indirect and induced effects.

Some minor adjustments were made to the data provided by PG&E in order to account for elements such as isolating the disposable income portion of customer energy efficiency cost savings and separating direct capital investments and operations and maintenance expenditures from the labor overhead component of these expenses. For some variables, CSER also allocated miscellaneous or unassigned categories across geographic areas based on approaches created in collaboration with PG&E staff.

CSER also used the model-derived tax impact analysis to estimate the aggregated state and local fiscal impacts associated with the direct, indirect, and induced economic effects; a partial accounting of direct taxes were provided by PG&E and were used as a reference check for model calculations.

PG&E-provided background data and analysis parameters for the study are shown in Figure 5 below, which groups the information into the separate general operations, customer energy efficiency, and community investment components. Due to some overlap in the background data, the three segments of this report should not be added together to estimate total economic impact.

**FIGURE 5—PG&E BACKGROUND DATA, 2012**

<i>Factor</i>	<i>Service Area</i>	<i>Bay Area Region</i>	<i>Central Coast Region</i>	<i>Central Valley Region</i>	<i>Northern Region</i>
Headcount Employment [1]	21,350	7,449	5,077	4,036	4,788
Labor Income	\$3,207,844,005	\$1,188,726,164	\$750,721,747	\$558,153,671	\$710,242,424
Revenue [2]	\$14,755,451,724	\$3,115,559,809	\$4,932,860,301	\$3,836,580,063	\$2,870,451,551
Operations & Maintenance Expenses [3]	\$2,708,058,522	\$719,665,114	\$794,421,543	\$570,991,430	\$622,980,436
Capital Expenses [3]	\$3,710,044,591	\$755,133,590	\$1,121,430,960	\$1,092,248,087	\$741,231,953
Customer Energy Efficiency Project Administration & Incentives	\$415,677,389	\$119,555,718	\$125,409,872	\$94,657,179	\$76,054,619
Customer Energy Efficiency Residential Cost Savings	\$40,751,742	\$9,258,220	\$14,244,541	\$7,278,807	\$9,970,174
Customer Energy Efficiency Commercial Cost Savings	\$126,601,273	\$31,025,045	\$39,075,759	\$36,216,441	\$20,284,028
Community Investment Program Funding [4], [5]	\$20,976,066	\$10,880,303	\$2,970,284	\$3,354,183	\$3,771,296

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Data Source: PG&E

Notes:

[1] Headcount employment line item captures the company's base workforce.

[2] Revenue line item reflects customer billing and includes payments collected on behalf of third-party energy providers. The Revenue line item does not include additional miscellaneous revenues reflected in PG&E's Annual Report to Shareholders.

[3] Operations and Maintenance and Capital Expense line items do not include labor component of expenditures.

[4] PG&E's total community investments amounted to \$23.2 million in 2012, including \$700,000 allocated elsewhere in California for an in-state total of \$21.7 million.

[5] Bay Area Region community investments include investments in PG&E's headquarters city of San Francisco which totaled approximately 30 percent of PG&E's total community investments, which is in line with comparator companies.

<sup>§</sup> The measurement period includes spending related to the San Bruno accident, which could reflect spending levels above the long-term annual average for the company.