



## Corporate Responsibility and Sustainability Report 2015

Explore the report at: [www.pgecorp.com/sustainability](http://www.pgecorp.com/sustainability)

# Together, Building a Better California



# Message from the Chairman and CEO

To Our Stakeholders:

For PG&E, “Together, Building a Better California” is not just a slogan. It’s the very core of our mission, and the scale by which we measure our success. We know that the millions of people who do business with our company count on us for far more than the delivery of utility services. They, along with every citizen of the state we call home, also expect PG&E to help improve their quality of life, the economic vitality of their communities, and the prospect for a better future fueled by clean, safe, reliable and affordable energy.

This report documents the progress we’ve made toward these goals in the most recent leg of a sustainability journey we first began decades ago in partnership with policy makers, environmental leaders and customers. Our work together has made PG&E one of the nation’s cleanest energy providers and instilled in us a deep commitment to confronting issues from clean air to climate change.

At the same time, our sustainability agenda has evolved to encompass other important values as well. In recent years, for example, we have sharpened our focus on driving improvements to public safety and economic development, and we have sought new opportunities to partner with community-based organizations, educational institutions and emergency responders to serve the interests of our customers and communities at a local level.

We’ve come to appreciate that these objectives are closely related. Providing clean, reliable, safe and affordable energy also means building a better California for the generations whose tomorrow will turn on how well we navigate the challenges of today. Our state’s economic prosperity hinges on our ability to protect the integrity of our environment and create the workforce of tomorrow, while taking bold steps to curb reliance on fossil fuels and develop the technologies—and energy solutions—of the future. PG&E, with its scale and scope, is uniquely able to identify, explore and demonstrate the viability of new approaches and ways to get there, while helping to solve problems both big and small, local and global.

California’s drought offers a timely example. Water and energy are closely linked. Saving energy saves water, and vice versa. So much so that PG&E’s energy efficiency programs helped households and businesses save 1.8 billion gallons of water in 2014. The same is true for clean air. Our work to green the transportation system by pioneering new plug-in electric vehicles and building a charging-station network will play an integral part in meeting local air quality goals and the state’s greenhouse gas targets.

We also want to provide our customers with more choice in their energy sources, and more control over their energy use. We are excited by the prospect of helping consumers reap the benefits of a “Grid of Things” that interconnects and enhances the power of a whole range of innovative new energy technologies, from rooftop solar to electric vehicles. And we look forward to forging partnerships with new players and other industries to develop equally ambitious ideas at the frontier of innovation.

On some fronts, the past year saw areas where our performance fell short of the mark. While PG&E has made enormous strides in strengthening our safety culture, there is more still to do. Likewise, while we are committed to meeting the highest ethical standards, we found that certain interactions between individuals at PG&E and our regulators failed that test. In response, we took swift and decisive action to tighten compliance and prevent such serious violations from happening again.

We continue to build on all our efforts to ensure transparency and accountability as we collaborate in constructing the clean energy future we all aspire to achieve. The chance to create new value for our customers, while also positioning California to tap the promise of a low-carbon economy, is a task we are eager to tackle, and one that is consistent with PG&E’s historic strengths.

As part of that effort, we invite you to share your feedback on this year’s report and results. On behalf of all our employees throughout Northern and Central California, we welcome your contributions and thank you for your engagement in the sustainability of our enterprise.

Sincerely,

Tony Earley  
Chairman, CEO and President  
PG&E Corporation



# Sustainability

For PG&E, sustainability means meeting the needs of today in a way that creates a better tomorrow. We want the actions we take and decisions we make to enable a better quality of life for our customers, communities and the planet. As a company with a mission rooted in public service, we have a distinct role to play in keeping our communities safe and vibrant, being a catalyst and advocate for clean energy innovation and a low-carbon economy, advancing economic growth and opportunity, and driving solutions to local and global environmental challenges. That's how, together, we will build a better California and a more sustainable future for us all.

# Videos



Message from  
the Chief  
Sustainability  
Officer



Building a Grid  
of Things™  
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Collaborating  
on emergency  
preparedness  
Napa  
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Promoting  
local economic  
development  
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Partnering on  
electric vehicles  
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## Our Approach

The unique role we have as a provider of gas and electricity—essential services—throughout Northern and Central California means we confront choices every day with environmental, social and economic dimensions. The decisions we make impact our employees, communities, customers, shareholders and the planet. Sustainability is the frame through which we balance these dimensions so that we can deliver on our obligation to provide safe, reliable, affordable and clean energy—today and into the future.

Our integrated approach to sustainability is guided by five overarching goals: public and employee safety, delighting customers, engaging employees, rewarding shareholders and leading on the environment. Our ultimate measure of success is being a company that our customers trust, like and want to do business with and that can serve as a model for others in our industry, and beyond.

## Governance

The Compliance and Public Policy Committee of PG&E Corporation's Board of Directors has primary oversight of corporate sustainability issues, such as environmental compliance and leadership, climate change, community investments, diversity and inclusion, and workforce development. This oversight includes an annual review of PG&E's sustainability practices and performance. Other committees of the PG&E Corporation Board and the full PG&E Corporation and Pacific Gas and Electric Company Boards address other components of PG&E's sustainability commitment, such as public and employee safety, investments to build a smarter grid and the pathways to increase our deliveries of clean energy.

Within management, PG&E's Chief Sustainability Officer is responsible for spearheading PG&E's corporate sustainability initiatives, reporting and engagement. This is done in coordination with other members of senior management responsible for functions such as supply chain management, environmental compliance and customer energy solutions.

Employee-led initiatives throughout the business are also helping to integrate corporate sustainability priorities into our work. For example, our volunteer Grassroots Green Network actively engages employees to help reduce facility energy use, water use and waste, while our Employee Resource Groups (ERGs) provide an important link to diverse communities through volunteer service, mentoring and scholarship awards.

## Strategy and Integration

PG&E's sustainability commitment is well-aligned with—and mutually supported by—a number of California regulatory and public policy priorities. From support for energy efficiency and supplier diversity to a wide range of environmental measures, such as greenhouse gas reduction targets, California and its utilities work together to advance a broad sustainability agenda.

Within PG&E, we continue to strengthen our multiyear strategic planning process to drive continuous improvement across our business. We use a rigorous integrated planning process designed to identify compliance obligations and key risks; formulate clear multiyear goals and strategies; align resources; and ensure integration, consistency and continuity in our plans. The process focuses first on our risks, which leads to a long-term strategy to mitigate these risks and identify our critical objectives, and then matches our strategies with resource planning.

Understanding the needs and expectations of our stakeholders is crucial to this process. To help guide our sustainability journey and support our commitment to continuous improvement, PG&E recently established an external Sustainability Advisory Council comprised of recognized leaders across sustainability issues for our company and industry.

Our materiality assessment, published in 2014, also continues to inform our sustainability strategy and broader enterprise-wide strategic planning process.

## Creating Incentives

PG&E's Short-Term Incentive Plan (STIP) reinforces PG&E's sustainability commitment by rewarding eligible employees for achieving specific goals that are crucial to our success. In 2014, we continued to tie compensation closely to safety with public and workforce safety measures determining 40 percent of management's annual at-risk performance-based pay. In 2015, we increased this share to 50 percent. Safety continues to be the single largest driver for annual at-risk performance-based pay, with financial performance and customer service each representing an additional 25 percent.

### SHORT-TERM INCENTIVE PLAN—PERFORMANCE MEASURES

Measure	2014 Weight	2015 Weight
Safety <sup>1</sup>	40%	50%
Customer <sup>2</sup>	35%	25%
Financial <sup>3</sup>	25%	25%

<sup>1</sup> Based on four subcomponents: nuclear operations safety, electric operations safety, gas operations safety, and employee safety.

<sup>2</sup> Based on two subcomponents in 2015: customer satisfaction and average duration of electricity outages. In 2014, this category also included gas operations metrics, some of which were moved to the Safety category in 2015.

<sup>3</sup> Based on PG&E Corporation's earnings from operations.

For more details on the specific measures and targets for our 2014 and 2015 STIP, as well as our 2014 results, please see page 38 of the 2015 PG&E Corporation and Pacific Gas and Electric Company Joint Proxy Statement.

## Measuring and Communicating Our Progress

Holding ourselves accountable and reporting on our performance with transparency is essential and has been a hallmark of our approach since we began producing a formal corporate environmental report in the 1990s.

In this report, we share our progress on the Key Sustainability Indicators for which we set annual targets. We also share data on our performance across a wide range of environmental, social and economic measures. By reporting on a broad set of metrics and issues, the report illuminates where we are doing well, as well as where we have opportunities to strengthen our performance.



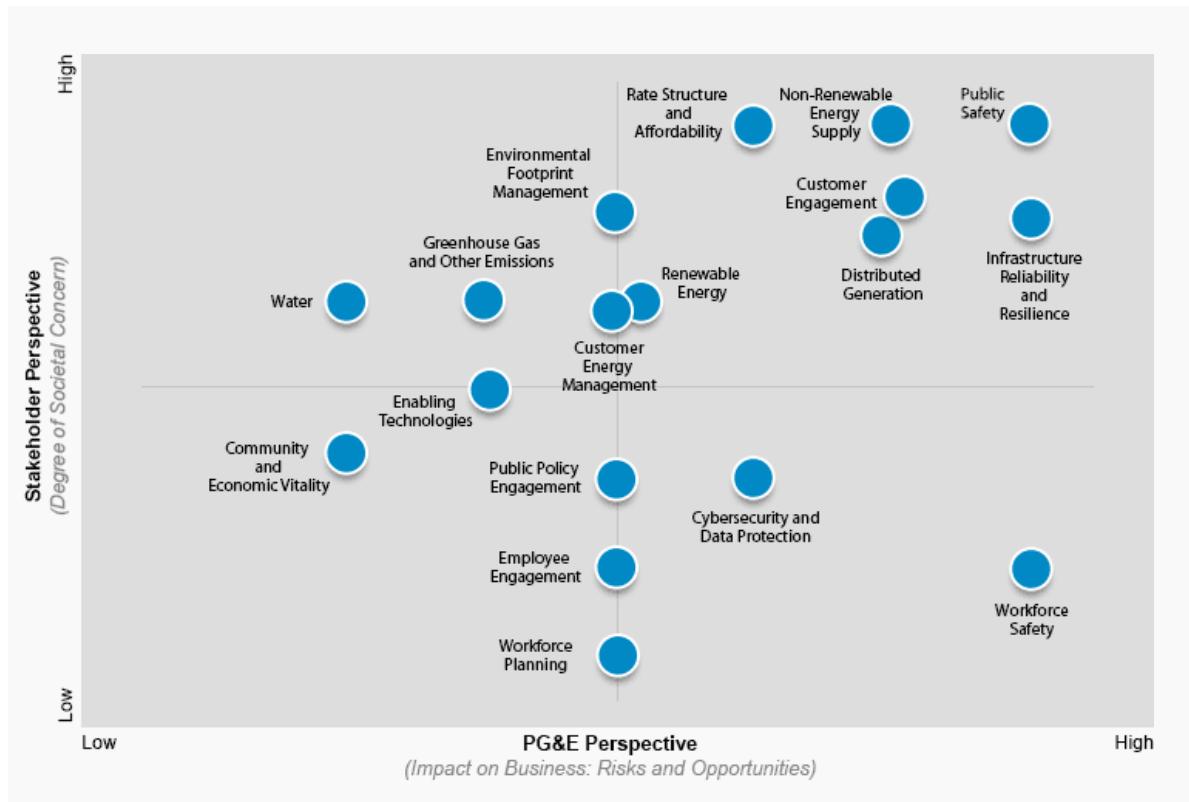
## Materiality

PG&E published its first materiality assessment for corporate sustainability in 2014—a strategic project to help us identify topics that are material to the long-term sustainability of our business. Conducted in coordination with PG&E’s strategic planning process, the materiality assessment engaged our stakeholders, identified opportunities and risks, and sharpened our corporate sustainability strategy and reporting.

While we continue to engage our stakeholders on these issues, we recognize that PG&E’s materiality matrix captured a snapshot in time. Because our operating climate continues to evolve, we are assessing options for refreshing the assessment.

## PG&E's Materiality Matrix

PG&E's materiality assessment, conducted during 2013 and 2014, identified 18 issues. Every issue is material to PG&E's long-term sustainability, regardless of its placement on the matrix.



## What We Learned

Our materiality assessment provided important, actionable insights into our stakeholders' priorities and our own business risks and opportunities. We continue to integrate these insights into our work. For example, we structured this report to highlight our strategy and performance on the issues deemed most material in the assessment. For more information on how our materiality matrix was developed, please see our 2014 Corporate Responsibility and Sustainability Report.

Key insights of the materiality assessment included:

- **Reinforced our focus on the basics of our business.** The assessment showed that safety, reliability, affordability and customer engagement are top priorities both for PG&E and our external stakeholders—and continue to be “foundational” issues.
- **Showed interconnections among issues.** For example, the assessment illustrated that enabling technologies—such as those related to the smart grid, energy storage, electric vehicles and customer energy usage data—present many opportunities for PG&E and are connected to issues ranging from customer engagement to renewable energy. This interconnectivity continues to provide insight into how we might approach issues in a more integrated way.

### Defining a “Material” Issue

A material corporate sustainability issue is one that has the potential to impact PG&E's long-term sustainability, based on the perspectives of internal and external stakeholders. This is different from, but related to, financial materiality, which is a threshold for influencing the economic decisions of investors. Material corporate sustainability issues are not limited to issues that could have a significant financial impact on the organization.

- **Highlighted the importance of emerging issues.** The assessment identified a number of emerging issues, including infrastructure resilience and adapting to the effects of climate change. PG&E continues to make progress in understanding and addressing this issue with our stakeholders. For example, in 2015, we joined a new public-private partnership on climate resilience and participated in a climate change adaptation workshop co-hosted by the California Public Utilities Commission and the California Energy Commission.
- **Underscored the importance of water and drought response.** In our assessment, water's importance to PG&E was notable in its interconnections to other material issues, such as the reliability of our energy supply, including our extensive hydroelectric system. As California faces the worst drought in modern history, we continue to work vigorously to conserve water in our operations and at our facilities, engage our employees to reduce water use and help our customers do the same at work and at home.

## Definitions of Material Issues

### **Community and Economic Vitality**

Contributions to local communities through business assets (e.g. job creation through supplier diversity) and civic engagement (e.g. philanthropy, disaster relief).

### **Cybersecurity and Data Protection**

Effectively protecting customer data, computer systems, grid infrastructure, and facilities.

### **Customer Energy Management**

Customer actions to engage in energy management solutions, including energy efficiency, demand response, and electric vehicle deployment.

### **Customer Engagement**

Company actions to engage with customers regarding energy management (including energy efficiency), bills, safety, and overall company plans.

### **Distributed Generation**

Distributed generation of power among customers and suppliers, and the associated rates, transmission, and impacts on the utility business model.

### **Employee Engagement**

Effective dialogue with employees and transparency around business goals and operations, labor relations, and diversity and inclusion.

### **Enabling Technologies**

Technologies that enable energy transformation including smart grid, energy storage, and electric vehicles, as well as tools for customer engagement and energy management.

### **Environmental Footprint Management**

Effective management of the company's environmental, supply chain, energy supply, facilities, and other operational impacts related to pollution, waste management, land use and habitat protection, and biodiversity.

### **GHG and Other Emissions**

The reduction and management of air emissions including greenhouse gases, nitrogen oxides, sulfur oxides, and particulate emissions.

### **Infrastructure Reliability and Resilience**

Managing and investing in reliable gas and electric infrastructure to provide consistent energy supply, balancing customer and investor interests, and preparing for earthquakes, wildfires, and future climate change impacts.

### **Non-Renewable Energy Supply**

The company's management and choices related to the portfolio of non-renewable sources used for energy supply, including large hydroelectric, natural gas, and nuclear energy.

### **Public Policy Engagement**

Ensuring alignment of public policy advocacy with company values, as well as transparency around advocacy.

### **Public Safety**

Safe operations, accident prevention, and company management of the impacts of energy generation, transmission, and distribution on long-term public safety.

### **Rate Structure and Affordability**

The ability of customers to afford services, and the fairness and transparency of rates.

### **Renewable Energy**

The investments, infrastructure, and integration of renewable energy into the grid.

### **Water**

Maintaining water quality and availability through company operations and ensuring the short- and long-term availability of water for other uses.

### **Workforce Planning**

Maintaining a workforce with the required size and skill profile amidst generational shifts.

### **Workforce Safety**

Ensuring the safety of PG&E employees and contractors.



## Engaging Stakeholders

Delivering safe, reliable, affordable and clean gas and electric service to our customers is PG&E's fundamental role as a utility. To meet this objective, we actively engage with an array of stakeholders, including customers, communities, employees, suppliers and investors—working to better understand their needs, keep them informed of our progress and problem-solve together for success.

### Our Approach

Recognizing the diversity among our stakeholders, PG&E is focused on localizing our presence and strategies in the communities we are privileged to serve. This includes formally empowering our teams to work more effectively together at the local level and better incorporating local needs and concerns into our operating decisions. We have built local cross-functional leadership teams who meet regularly to address local issues. The teams are led by local managers and include representatives from across the business.

**STEP UP AND  
POWER DOWN**

Among many examples of our engagement, we have launched Step Up and Power Down, an exciting community initiative to inspire customers and employees to make simple changes to reduce energy waste at home and at work. San Francisco and San Jose have joined with PG&E to encourage energy efficiency in their cities, with a chance to earn up to \$2 million in funds for local businesses to reinvest in sustainability programs. PG&E is also partnering with the cities of Redwood City, San Carlos and Woodland to help residents make their homes more energy efficient.

Because PG&E is regulated by numerous federal, state, regional and local government agencies, we also engage through the regulatory process in numerous multi-stakeholder public processes convened by the California Public Utilities Commission, the Federal Energy Regulatory Commission, the Nuclear Regulatory Commission and other regulatory agencies.

The chart below highlights some of our channels of engagement with stakeholder groups and how we are working to meet their expectations of PG&E.

<b>Customers</b>	<b>Selected Channels of Engagement</b>
<ul style="list-style-type: none"> <li>■ 5.3 million electric accounts</li> <li>■ 4.4 million natural gas accounts</li> </ul>	<ul style="list-style-type: none"> <li>■ Channel of choice for communication: text, email or phone</li> <li>■ Customer satisfaction surveys, an online community called Customer Voice, in-language focus groups and other research</li> <li>■ Online energy management and bill pay options</li> <li>■ Self-service capabilities like reconnecting service via Interactive Voice Response technology</li> <li>■ Social media platforms</li> <li>■ Communications in multiple languages and formats</li> <li>■ Customer Advisory Council focused on diversity outreach and engagement</li> <li>■ Open houses on key projects</li> <li>■ Customer account and service representatives</li> <li>■ Customer call centers and local offices</li> </ul>
<b>Communities</b>	<b>Selected Channels of Engagement</b>
<ul style="list-style-type: none"> <li>■ Emergency first responders</li> <li>■ Community organizations</li> <li>■ Environmental organizations</li> <li>■ Economic development organizations</li> </ul>	<ul style="list-style-type: none"> <li>■ Local public safety teams</li> <li>■ Workshops, training and practice drills with local emergency agencies and first responders</li> <li>■ Community Advisory Council with leaders representing diverse constituencies we serve</li> <li>■ Participation in coalitions and networks, such as Ceres, California Environmental Dialogue and the Silicon Valley Leadership Group</li> <li>■ Active participation of officers and other employees on nonprofit boards</li> <li>■ Employee volunteers</li> <li>■ Meetings, conferences and community events</li> <li>■ Support for local programs through community investments</li> <li>■ Economic Development Leadership Roundtables</li> </ul>
<b>Employees</b>	<b>Selected Channels of Engagement</b>
<ul style="list-style-type: none"> <li>■ Current employees</li> <li>■ Prospective employees</li> <li>■ Retirees</li> <li>■ Labor unions</li> </ul>	<ul style="list-style-type: none"> <li>■ Biennial employee engagement survey</li> <li>■ Employee Resource Groups</li> <li>■ Awards recognizing employee leadership on safety, diversity, volunteering, innovation and the environment</li> <li>■ Mentoring program</li> <li>■ Workforce recruiting and training programs</li> <li>■ Employee and retiree newsletters</li> <li>■ Training and skills development</li> <li>■ Labor and management joint engagement on key topics</li> <li>■ Here to Help Hotline for any employee who encounters a stakeholder with a grievance</li> </ul>

<b>Investors</b>	<b>Selected Channels of Engagement</b>
<p>As of December 31, 2014:</p> <ul style="list-style-type: none"> <li>■ Approximately 86 percent of PG&amp;E Corporation shares were held by institutional investors</li> <li>■ The top 10 institutional investors owned approximately 49 percent of our stock</li> </ul>	<ul style="list-style-type: none"> <li>■ Quarterly earnings calls and news releases</li> <li>■ One-on-one meetings and industry conferences</li> <li>■ Required disclosures</li> <li>■ Discussions with institutional investors regarding corporate governance</li> <li>■ Engagement with socially responsible investors</li> </ul>
<b>Suppliers</b>	<b>Selected Channels of Engagement</b>
<ul style="list-style-type: none"> <li>■ Diverse suppliers (women-, minority-, service-disabled-veteran- and LGBT-owned businesses)</li> <li>■ Local suppliers</li> <li>■ Small suppliers</li> <li>■ Non-diverse prime suppliers</li> </ul>	<ul style="list-style-type: none"> <li>■ Supplier Diversity Program with specific spending targets</li> <li>■ Workshops and capacity-building training that support safe, cyber-secure, green and thriving diverse suppliers</li> <li>■ Technical assistance and training programs for suppliers, many in conjunction with community organizations</li> <li>■ Annual Supplier Diversity and Sustainability Achievement Awards</li> <li>■ Supplier Sustainability Program</li> <li>■ Engagement with the Electric Utility Industry Sustainable Supply Chain Alliance and the California Utilities Diversity Council</li> <li>■ Facilitating supplier mentoring relationships</li> <li>■ Engagement with local and national diverse business organizations</li> </ul>

## Example: Responding to Feedback

Our stakeholder engagement efforts also include actively working with Ceres, a leading nonprofit that works with companies to address sustainability challenges. Since 2006, we have invited Ceres to facilitate a dialogue with a group of our stakeholders on steps we can take to improve our disclosure and performance and realize our goals. The discussion has included thought leaders from different stakeholder constituencies, such as labor union representatives, customers, investors, environmental and community groups, and suppliers.

In its review of our 2014 Corporate Responsibility and Sustainability Report, Ceres cited numerous examples of continuous improvement, such as the inclusion of our materiality matrix and report sections that better align with material issues. Ceres also shared several high-level recommendations, drawing upon its long history of engagement with PG&E and our stakeholders.

For example, Ceres recommended that we more explicitly address the evolution of the utility business model and our CEO's vision for the future of our industry. In this report, we highlight our vision for the future of the grid—we call it the Grid of Things™—in our Message from the Chairman and CEO and reinforce this vision with examples throughout the report. Ceres also recommended that we disclose customer satisfaction performance alongside our discussion of customer engagement strategies, which we do in the Engaging Customers section.

# Key Sustainability Indicators

In our Corporate Responsibility and Sustainability Report, we share our progress on a set of Key Sustainability Indicators for which we set annual targets. We also share data on our performance across additional environmental, social and economic measures.

Business	Metric	2014 Target	2014 Result	Meets Target	
				target met or exceeded ✓	target not met —
<b>GAS OPERATIONS</b>					
<b>Strength-Tested Transmission Pipeline</b> (miles)	183	190	✓	74.2	
<b>Transmission Pipeline Replacement</b> (miles)	31	23	—	10.7	
<b>Valves Automated</b> (valves)	75	74	—	27	
<b>Retrofitted Transmission Pipeline</b> (miles)	67	72	✓	54.6	
<b>Gas Asset Mapping Duration<sup>1</sup></b> (average number of days)	32	29	✓	30	
<b>Gas Dig-Ins<sup>2</sup></b> (dig-ins per 1,000 Underground Service Alert tickets)	2.60	2.42	✓	2.06	
<b>ELECTRIC OPERATIONS</b>					
<b>System Average Interruption Frequency Index</b> (average number of outages per customer)	1.029	0.967	✓	0.957	
<b>System Average Interruption Duration Index</b> (average duration of outages per customer in minutes)	115.0	110.2	✓	106.6	
<b>Customer Average Interruption Duration Index</b> (average restoration time per outage in minutes)	111.8	114.0	—	111.4	
<b>NUCLEAR OPERATIONS</b>					
<b>Unit 1 Performance Indicator<sup>3</sup></b>	94.00	84.22	—	94.20	
<b>Unit 2 Performance Indicator<sup>3</sup></b>	88.00	84.43	—	94.20	
<b>COMPLIANCE AND RISK MANAGEMENT</b>					
Employees Completing Annual Compliance and Ethics Training	99.8%	99.8%	✓	99.8%	
Management Employees Completing Annual Code of Conduct Training	99.8%	99.8%	✓	99.8%	

<sup>1</sup> Time required for gas asset information to be entered into PG&E's gas mapping system after construction is completed. This metric will not appear as a future Key Sustainability Indicator due to the achievement of long-term goals and completion of work commitments.

<sup>2</sup> Total number of third party dig-ins—damage from a third party resulting in repair or replacement of an underground facility.

<sup>3</sup> Refers to 12 performance indicators for nuclear power generation reported to the Institute of Nuclear Power Operations and compared to industry benchmarks.

Metric	2014 Target	2014 Result	Meets Target	2015 Target	target met or exceeded ✓
					target not met —
<b>Safety</b>					
<b>PUBLIC SAFETY</b>					
<b>Leak Repair Performance<sup>1</sup></b> (number at year-end)	500 or fewer	120	✓	100 or fewer	
<b>Gas Emergency Response<sup>2</sup></b> (minutes)	21.00	19.95	✓	21.00	
<b>Transmission &amp; Distribution Wires Down<sup>3</sup></b> (number of instances)	2,400	2,615	—	2,540	
<b>Electric Emergency Response<sup>4</sup></b> (percentage within 60 minutes)	93.6%	94.1%	✓	95.0%	
<b>WORKPLACE SAFETY</b>					
<b>Lost Workday Case Rate<sup>5</sup></b>	0.271	0.376	—	0.330	
<b>Serious Preventable Motor Vehicle Incident Rate<sup>6</sup></b>	0.22	0.27	—	0.24	

<sup>1</sup> Number of grade 2 and 2+ leaks open at year-end. Grade 2 and 2+ leaks are minor and non-hazardous.

<sup>2</sup> Average response time that a Gas Service Representative or a qualified first responder takes to respond to the site of an immediate response gas emergency order.

<sup>3</sup> Number of instances where an electric transmission or primary distribution conductor is broken and falls from its intended position to rest on the ground or a foreign object (e.g., trees, vehicles, fences or other structures).

<sup>4</sup> Percentage of time PG&E personnel are on-site within 60 minutes after receiving a 911 electric-related call, with on-site defined as arriving at the premises where the 911 agency personnel are standing by.

<sup>5</sup> Number of Lost Workday cases incurred per 200,000 hours worked. A Lost Workday case is a current year OSHA Recordable incident that has resulted in at least one lost workday.

<sup>6</sup> Measures only those incidents considered to be serious, rather than all incidents that were otherwise preventable.

## Customers

Metric	2014 Target	2014 Result	Meets Target	2015 Target
<b>CUSTOMER SATISFACTION</b>				
<b>Customer Satisfaction Score<sup>1</sup></b>	75.7	76.5	✓	77.2
<b>Gas and Electric Meter Billing Accuracy<sup>2</sup></b> (percentage of bills)	99.77%	99.79%	✓	99.75%
<b>ENERGY AFFORDABILITY</b>				
<b>Energy Savings Assistance Program</b> (number of homes weatherized)	122,296	123,546	✓	100,000
<b>California Alternative Rates for Energy</b> (number of eligible customers enrolled)	1,418,000	1,413,334	—	1,390,000
<b>CUSTOMER ENERGY EFFICIENCY<sup>3</sup></b>				
Electricity Saved (GWh)	832	1,084	✓	980.5
Natural Gas Saved (million therms)	20.9	29.6	✓	15.4
Generation Capacity Avoided (MW)	132	197	✓	154

<sup>1</sup> Overall satisfaction of customers with the products and services offered by PG&E, as measured through a quarterly survey. Each year, we benchmark our survey with customers of best-in-class performing utilities from J.D. Power's Customer Satisfaction Index. This helps us set our goal each year, as we aim to achieve top quartile performance in customer satisfaction.

<sup>2</sup> Refers to the percentage of bills that are not adjusted after being mailed to the customer. Each year, a very small percentage of bills must be estimated, largely due to intermittent connectivity (similar to a cell phone temporarily losing its connection).

<sup>3</sup> Data refers to annual energy savings or the first-year impacts associated with installed customer energy efficiency projects. Targets are based on mandated energy efficiency savings as agreed upon with the CPUC.

Metric	2014 Target	2014 Result	Meets Target	2015 Target	target met or exceeded ✓
					target not met —
<b>Employees</b>					
<b>EMPLOYEE ENGAGEMENT</b>					
Employee Engagement Index <sup>1,2</sup>	75	70	—	—	
Employee Volunteer Hours	50,000	75,000	✓	79,000	
Employee Giving Campaign Pledges/Donations (\$ million)	\$6.8	\$7.3	✓	\$7.7	
<b>EMPLOYEE DEVELOPMENT</b>					
Training Effectiveness <sup>3</sup>	4.11	4.29	✓	4.31	
<b>DIVERSITY AND INCLUSION</b>					
Diversity and Inclusion Index <sup>2,4</sup>	75	70	—	—	
<b>HEALTH AND WELLNESS</b>					
Workforce Unavailable Due to Health <sup>5</sup>	8.0%	7.7%	✓	7.5%	
<sup>1</sup> Percentage of favorable responses to questions on employee survey that measure employee engagement.					
<sup>2</sup> There is no 2015 target because PG&E's employee survey is fielded every two years, a best practice among companies, to allow more time to execute on action plans to address issues identified in the survey.					
<sup>3</sup> Measures the effectiveness of PG&E's internal training program on a five point scale through client surveys on predictive data from employees on their ability to use training on the job.					
<sup>4</sup> Percentage of favorable responses to questions on employee survey that are indicative of an environment where diversity is valued and inclusion is practiced.					
<sup>5</sup> Percentage of full-time employees unavailable for work either due to long-term or short-term health reasons.					
<b>Economic Vitality</b>					
<b>WORKFORCE DEVELOPMENT</b>					
PowerPathway Graduates Hired into Industry Jobs (percentage)	82%	82%	✓	82%	
<b>ENERGY EFFICIENCY WORKFORCE EDUCATION AND TRAINING</b>					
<b>Pacific Energy Center</b>					
Number of training sessions	150	193	✓	150	
Number of consultations	140	149	✓	140	
<b>Energy Training Center</b>					
Number of training sessions	124	117	—	124	
Number of consultations	40	67	✓	40	
<b>Food Service Technology Center</b>					
Number of seminars	30	47	✓	30	
Number of consultations	1,000	1,016	✓	1,000	
<b>SUPPLIER DIVERSITY</b>					
Spending on Certified Diverse Suppliers (percentage)	40.0%	40.9%	✓	41.0%	
<b>COMMUNITY INVESTMENTS</b>					
Charitable Contributions (percentage of pre-tax earnings from operations)	1.1%	1.3%	✓	1.1%	

Metric	2014 Target	2014 Result	Meets Target	2015 Target	target met or exceeded ✓
					target not met —
<b>Environment</b>					
Agency Inspections Without a Written Enforcement Action	90%	93%	✓	90%	
<b>COMPLIANCE</b>					
Additional Energy Use Reduction <sup>1</sup>	3.5%	8.1%	✓	2.5%	
Additional Water Use Reduction <sup>2</sup>	1.6%	13%	✓	4.5%	
Waste Diversion Rate <sup>3</sup>	80%	81%	✓	80%	
<b>BUILDINGS AND OPERATIONS</b>					
"Bird-Safe" Utility Pole Retrofits	2,000	2,089	✓	2,000	
<b>NATURAL RESOURCE STEWARDSHIP</b>					
Renewable Portfolio Standard (average percentage of renewable energy delivered to customers, 2014 to 2016)	23%	27%	✓	Average of 23% over 2014 to 2016 period	
<b>CLEAN ENERGY</b>					
Supplier Environmental Performance Standards <sup>4</sup>	60%	72%	✓	65%	
<b>SUPPLIER SUSTAINABILITY</b>					

<sup>1</sup> Energy use is measured in MMBtus and the 167 sites include offices and service yards.

<sup>2</sup> Water use is measured in gallons and the 132 sites include offices and service yards.

<sup>3</sup> The waste metric measures the diversion rate in the final quarter of each year and includes all non-hazardous municipal waste at 115 office facilities and service yards.

<sup>4</sup> Represents the percentage of top-tier suppliers that achieve a score of three or higher on a five-point scale relative to key elements of PG&E's Supplier Environmental Performance Standards, using supplier responses to an annual survey conducted by the Electric Utility Industry Sustainable Supply Chain Alliance.



# Recognition

## Recognition for Corporate Sustainability

PG&E is honored to have earned local, national and international recognition for our commitment to corporate sustainability in 2014, including leadership related to the environment, community involvement, diversity and operations.

### Local Recognition

- **American Civil Engineering Society (Sacramento Section)**—Environmental Engineering Project of the Year
- **Coastal San Luis Resource Conservation District**—Conservationist of the Year Award
- **Cupertino Chamber of Commerce**—Service Teamwork Achievement Recognition Award
- **San Mateo Police Activities League**—Corporate Citizen of the Year

### Corporate Sustainability and Community Engagement

- **American Red Cross Bay Area**—Philanthropic CEO of the Year Award (awarded to PG&E Corporation Chairman, CEO and President Tony Earley)
- **Civic 50**—America's Most Community-Minded Companies
- **Committee Encouraging Corporate Philanthropy**—Excellence Award
- **Dow Jones Sustainability North America Index**
- **Edison Electric Institute**—Distinguished Leadership Award (awarded to PG&E Corporation Chairman, CEO and President Tony Earley)
- **San Francisco Business Times**—Top Bay Area Corporate Philanthropists
- **Solar Electric Power Association**—Utility Solar Rankings
- **Trucost**—Decoupling Leader, Natural Capital Leaders Index

## Diversity

- **Women's Business Enterprise National Council**—Top Corporations for Women's Business Enterprises
- **DiversityInc**—Top Utility
- **DiversityBusiness.com**—Top 50 Organizations for Multicultural Business Opportunities
- **HispanicBusiness Inc.**—Leaders in Supplier Diversity
- **LATINA Style Magazine**—LATINA Style 50
- **U.S. Hispanic Chamber of Commerce**—Million Dollar Club
- **Human Rights Campaign**—100 percent rating on Corporate Equality Index
- **G.I. Jobs Magazine**—Top 100 Military-Friendly Employer

## Innovation and Operations

- **InformationWeek**—Elite 100
- **International Lineman's Rodeo**—Top Team
- **SAP SE**—Top Innovation Award for Asset Management
- **Combined Cycle Journal**—Best Practices Award for Chemistry

## Employee Champions

In 2014, PG&E recognized a number of employees with our highest honors for their commitment to environmental leadership, diversity, community involvement and safety. The winners were honored at a ceremony, and each finalist received a \$5,000 charitable contribution to direct to the nonprofit organization of his or her choice. Additionally, in 2015 we launched the Margaret Mooney Award for Innovation, which will acknowledge individuals or teams who apply creative solutions that help PG&E deliver safe, reliable, affordable and clean energy to customers.

### Shermer L. Sibley Safety and Health Award

This award recognizes PG&E organizations for their outstanding contributions toward public and workplace safety and was awarded to the:

- **Gas Transmission and Distribution Operations team** for creating the "Super Crew" concept to help find and fix gas leaks faster, reducing required leak management task timelines.
- **Environmental Remediation Contractor Safety and Compliance Program team** for proactively working to improve safety for PG&E's contractors.
- **Diablo Canyon Power Plant team** for putting safety first every day, which adds up to more than 17 million work hours over four years without a lost-time accident.

### Richard A. Clarke Environmental Leadership Award

This award honors PG&E individuals and teams who demonstrate stewardship of the environment and was awarded to the:

- **American River Parkway Pollinator Partnership Project team**, which worked with public and private constituents in Sacramento to help create a safe habitat for essential pollinators like bees, butterflies and bats beneath PG&E's electric transmission lines.
- **Hunters Point Power Plant Project team**, which developed innovative cleanup strategies for the dismantling of PG&E's former Hunters Point Power Plant that reduced the plant's carbon footprint and implemented best practices for sustainability and stakeholder engagement.
- **Pipeline Safety Enhancement Plan Strength Testing team**, which worked to mitigate drought conditions in California while conducting hydrostatic safety tests on PG&E's pipelines.

## **President's Diversity Champion Award**

This award distinguishes PG&E employees who are committed to diversity and inclusion and was given to:

- **Emily Behr**, the longest-tenured board member for the Women's Network Employee Resource Group and a mentor to employees applying for PG&E's MBA Fellows program, of which she is an alumna.
- **Susan Randall-Nelson**, a 33-year PG&E employee who works extensively with the Northern California chapter of the American Association of Blacks in Energy, helps lead the Legacy Employee Resource Group and is a member of numerous other Employee Resource Groups.
- **Elizabeth Liedel**, who spearheads the PrideNetwork Employee Resource Group's "I'm an Ally" engagement strategy, working to educate and engage allies for PG&E's LGBT community and promote visibility of allies to create a more inclusive workspace.

## **Frederick W. Mielke, Jr. Award for Outstanding Community Service**

This award distinguishes PG&E employees who demonstrate outstanding community service and was awarded to:

- **James "J.T." Haas**, who has volunteered since 1984 with the nonprofit Transitions—Mental Health Association, a group in San Luis Obispo that provides work, housing and life skills support to teens and adults struggling with mental illness, as well as resources for their families.
- **Joel Hart**, who volunteers with the East Bay-based Junior Center of Art & Science, which provides art and science classes, offers workshops and exhibits, and supports K-12 art and science curriculum in more than 300 classrooms.
- **Gelberg Rodriguez**, who leads the Richmond United Soccer Club, with more than 400 soccer players in the Richmond area.



## Business

At PG&E, our aim is to provide safe, reliable, affordable and clean energy to our nearly 16 million customers. With an eye to the future, we are making significant investments in our gas and electric systems to modernize our infrastructure and deliver on this promise. We are adding more clean and renewable sources to our energy mix, strengthening the safety and reliability of our system, and building a smarter, more resilient grid that will provide the backbone for our customers' evolving energy-related needs. We call it the Grid of Things™, and it is our vision for a platform that will enable an increasingly sustainable future for California.

# Highlights

- Hired a Chief Ethics and Compliance Officer, as part of our commitment to achieve a best-in-class ethics and compliance program.
- Completed substantial work across our natural gas system, including decommissioning all known cast-iron pipe in our system and replacing it with stronger, more resilient and seismically sound pipe.
- Delivered record electric reliability for the sixth straight year, as customers experienced the fewest service interruptions in PG&E's history.
- Led the way as the nation's top utility for rooftop solar installations—and continued to plan for a future grid that can integrate even more solar and renewable energy, electric vehicles, and batteries distributed across the system
- Made continued investments in solar, wind and other renewable energy resources—delivering an electric power mix comprised of 27 percent eligible renewable energy under California's Renewable Portfolio Standard.
- Maintained the nation's largest investor-owned hydroelectric system—with a focus on working collaboratively to manage these resources during California's drought.
- Continued to safely operate the Diablo Canyon Power Plant, a vital energy resource for the state and a significant economic engine for the Central Coast.
- Supported public policies that promote clean energy, workforce development, grid innovation and infrastructure investment within California and the nation.

## Key Sustainability Indicators

### 19.9 minutes

Average response time to gas odor reports, top decile performance among natural gas utilities

### 0.97 interruptions

Average number of power interruptions per customer, the fewest in PG&E's history

## Our Materiality Matrix



Consistent with best practice, PG&E published a materiality assessment for corporate sustainability in 2014—a strategic project to identify issues that are material to the long-term sustainability of our business. Conducted in coordination with PG&E's strategic planning process, the materiality assessment was designed to engage stakeholders, identify opportunities and risks, and sharpen our corporate sustainability strategy and reporting.

The matrix to the left presents the results—highlighting issues covered in this section of the report.



# PG&E Overview

PG&E Corporation is an energy-based holding company whose primary operating subsidiary is Pacific Gas and Electric Company, an investor-owned public utility that delivers some of the nation's cleanest energy. Throughout this report, when we refer to "PG&E," we are discussing all of PG&E Corporation and its subsidiaries, including Pacific Gas and Electric Company.

## Headquarters Location

San Francisco, California

## Service Area

70,000 square miles in Northern and Central California

## Service Area Population

Nearly 16 million people

## Customer Accounts (as of December 31, 2014)

5.3 million electric distribution accounts:

- 4.6 million residential
- 0.7 million commercial, industrial and other

4.4 million natural gas distribution accounts:

- 4.2 million residential
- 0.2 million commercial and industrial

## Employees

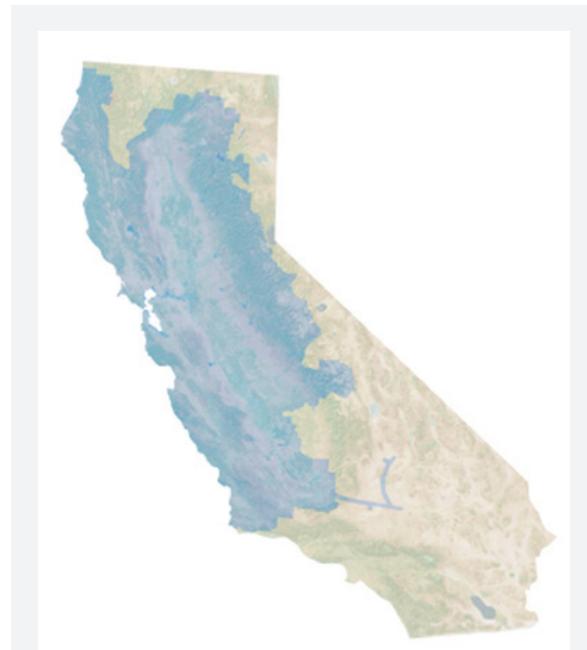
22,581 regular employees (as of December 31, 2014)

Approximately 13,649 employees are covered by collective bargaining agreements with three labor unions:

- International Brotherhood of Electrical Workers (IBEW), Local 1245, AFL-CIO
- Engineers and Scientists of California/International Federation of Professional and Technical Engineers (ESC/IFPTE), Local 20, AFL-CIO and CLC
- Service Employees International Union (SEIU), Local 24/7

## System

- 7,684 MW of owned hydroelectric, nuclear, natural gas, solar and fuel cell generation
- Approximately 141,700 circuit miles of electric distribution lines (about 20 percent underground and 80 percent overhead) and approximately 18,100 circuit miles of electric transmission lines
- Approximately 42,500 miles of gas distribution pipelines, 6,700 miles of backbone and local gas transmission pipelines, and various gas storage facilities



Based in San Francisco, PG&E delivers some of the nation's cleanest energy to nearly 16 million people in Northern and Central California.

## NET OPERATING CAPACITY OF OWNED GENERATION FACILITIES<sup>1</sup>

Facility	Net Operating Capacity (MW)
<b>Fossil Fuel-Fired Plants</b>	
Colusa Generating Station <sup>2</sup>	657
Gateway Generating Station <sup>2</sup>	580
Humboldt Bay Generating Station <sup>2</sup>	163
Fuel Cell Facilities	3
<b>Other Plants</b>	
Diablo Canyon Power Plant <sup>3</sup>	2,240
Hydroelectric Facilities	3,889
Solar Photovoltaic Facilities	152
<b>Total</b>	<b>7,684</b>

<sup>1</sup> As of December 31, 2014

<sup>2</sup> Natural gas power plant

<sup>3</sup> Nuclear power plant

## GENERAL UTILITY PRODUCTION STATISTICS

	2012	2013	2014
<b>Total Electricity Generated (GWh net)</b>	<b>131,671</b>	<b>31,547</b>	<b>28,929</b>
<i>Fossil Fuel-Fired Plants (GWh net)</i>	6,309	6,109	6,096
Colusa Generating Station (GWh net)	2,697	2,536	2,485
Gateway Generating Station (GWh net)	3,172	3,182	3,242
Humboldt Bay Generating Station (GWh net)	417	373	350
Fuel Cell Facilities	23	18	20
<i>Other Plants (GWh net)</i>			
Diablo Canyon Power Plant (GWh net)	17,728	18,041	17,039
Hydroelectric Facilities (GWh net)	7,469	7,119	5,458
Solar Photovoltaic Facilities (GWh net)	166	279	337
<b>Electricity Purchased (GWh)</b>	<b>48,978</b>	<b>49,837</b>	<b>51,679</b>
<b>Other Electric Supplies (GWh)<sup>2</sup></b>	<b>1,238</b>	<b>177</b>	<b>0</b>
<b>Retail Electricity Sales (GWh)<sup>3</sup></b>	<b>76,205</b>	<b>75,705</b>	<b>74,547</b>

<sup>1</sup> Net of electricity used to operate plants.

<sup>2</sup> Represents energy purchased by the California Department of Water Resources (DWR) from various energy suppliers for the benefit of the Utility's customers.

<sup>3</sup> Excludes sales to direct access and community choice customers, and sales to railroads and railways.

## NATURAL GAS THROUGHPUT

	2012	2013	2014
Total Natural Gas Throughput (million cubic feet or MMcf) <sup>1</sup>	944,575	951,601	914,033

<sup>1</sup> Includes interdepartmental natural gas sales for the purpose of electric generation but excludes other interdepartmental natural gas sales.

## Financial Performance

The financial information below is derived from PG&E Corporation's Consolidated Financial Statements, which include the accounts of PG&E Corporation, the Utility and other wholly owned and controlled subsidiaries.

### **FINANCIAL HIGHLIGHTS—PG&E CORPORATION (unaudited, in millions, except share and per share amounts)**

	<b>2013</b>	<b>2014</b>
<b>Operating Revenues</b>	<b>\$15,598</b>	<b>\$17,090</b>
<b>Income Available for Common Shareholders</b>		
Earnings from operations <sup>1</sup>	1,210	1,648
Items impacting comparability <sup>2,3,4</sup>	(396)	(212)
<b>Reported Consolidated Income Available for Common Shareholders</b>	<b>814</b>	<b>1,436</b>
<b>Income Per Common Share, Diluted</b>		
Earnings from operations <sup>1</sup>	2.72	3.50
Items impacting comparability <sup>2,3,4</sup>	(0.89)	(0.44)
<b>Reported Consolidated Net Earnings Per Common Share, Diluted</b>	<b>1.83</b>	<b>3.06</b>
<b>Dividends Declared Per Common Share</b>	<b>1.82</b>	<b>1.82</b>
<b>Total Assets at December 31,</b>	<b>\$55,605</b>	<b>\$60,127</b>
<b>Number of Common Shares Outstanding at December 31,</b>	<b>456,670,424</b>	<b>475,913,404</b>

<sup>1</sup> "Earnings from operations" is not calculated in accordance with GAAP and excludes items impacting comparability as described in Note (2) below.

<sup>2</sup> "Items impacting comparability" are those items that management believes do not reflect the normal course of operations.

<sup>3</sup> PG&E Corporation's earnings from operations for 2014 and 2013 exclude net pre-tax costs of \$356 million and \$645 million, respectively, in connection with natural gas matters that are not recoverable through rates, as shown in the table below. These amounts included pipeline-related costs to perform work in accordance with the Utility's Pipeline Safety Enhancement Plan (PSEP), to remove encroachments from the Utility's transmission pipeline rights-of-way, and to complete other activities associated with safety improvements to the Utility's natural gas system. These amounts also included charges for disallowed PSEP capital expenditures and fines related to natural gas enforcement matters. In 2013, costs included increases to the accrual for third-party claims related to the San Bruno accident. In 2014, the Utility's liability for third-party claims related to the San Bruno accident was reduced to reflect the settlement of all outstanding third-party claims. Costs in both years were partially offset by insurance recoveries.

	<b>2013</b>	<b>2014</b>
Pipeline-related expenses	\$387	\$347
Disallowance capital expenditures	\$196	\$116
Accrued fines	\$22	\$12
Third-party claims	\$110	(\$7)
Insurance recoveries	(\$70)	(\$112)
<b>Total natural gas matters (pre-tax)</b>	<b>\$645</b>	<b>\$356</b>
<b>Total natural gas matters (after tax)</b>	<b>\$392</b>	<b>\$216</b>

<sup>4</sup> PG&E Corporation's earnings from operations for 2014 and 2013 also exclude whole house water replacement program costs associated with the Utility's natural gas compressor station located near Hinkley, California. The program was discontinued in 2014.

For more information, see PG&E Corporation's and Pacific Gas and Electric Company's 2014 Joint Annual Report to Shareholders or Annual Report on Form 10-K for year ending December 31, 2014, which has been filed with the U.S. Securities and Exchange Commission.



# Compliance and Risk Management

At PG&E, we are committed to complying with both the letter and the spirit of the law and our own Code of Conduct at all times. That is, and must be, the standard for our behavior individually and as a company. In 2014, we acknowledged that we had fallen short of this standard. As a result, we have made significant changes to strengthen our ethics and compliance program and performance. We also continue to enhance our approach to managing risk throughout our business—from seismic activity and wildfires to incidents where third-party workers “dig in” and damage buried natural gas pipelines.

## Our Approach

Compliance and risk at PG&E are managed on three levels:

### Enterprise-Wide

Within senior leadership, ethics and compliance are managed by a Chief Ethics and Compliance Officer, a position created in 2015 as part of our commitment to achieve a best-in-class ethics and compliance program. The position reports to the PG&E Corporation CEO and has additional reporting responsibility to the Audit Committees of the Board of Directors, and the Compliance and Public Policy Committee of PG&E Corporation.

The new position is responsible for:

- Building a best-in-class ethics and compliance program and overseeing its implementation
- Overseeing company-wide programs for compliance reporting and related investigatory processes, and improving processes for prevention, detection and investigation of any potential non-compliant activities
- Strengthening ethics and compliance-related training

PG&E focuses on monitoring and managing three broad categories of risk across the business:

- **Enterprise and Operational Risk.** This encompasses risks that could have a potentially catastrophic impact on public and employee safety, reliability, the environment, customer trust or PG&E's financial condition, as well as other risks that arise from our operations.
- **Compliance Risk.** This includes all programs designed to help ensure that PG&E complies with both the spirit and the letter of all applicable legal and regulatory requirements.
- **Market and Credit Risk.** This includes PG&E's exposure to risks associated with PG&E's energy portfolio, including trading in energy commodities, financial hedging and counterparty risk.

- Reinforcing PG&E's ethics and compliance culture, as well as the company's compliance management system
- Identifying areas of ethics and compliance risk, and developing preventive and corrective action plans

PG&E's Chief Risk and Audit Officer is responsible for overseeing the company's enterprise and operational risk management, internal audit, market and credit risk management, and insurance functions. The officer functionally reports to the Audit Committees of the PG&E Corporation and Utility Boards, and facilitates and is a voting member of PG&E Corporation Risk Policy Committee and the Utility Risk Management Committee, which include a subset of senior officers of PG&E Corporation and Pacific Gas and Electric Company.

Enterprise-wide Risk and Compliance teams are responsible for guiding the risk management process, including incorporating risk management into PG&E's strategic planning process. On an annual basis, PG&E's senior executives from every line of business hold a two-day discussion to review and assess our plans to manage compliance and risk, including the identification of top risks and compliance obligations for each line of business. This meeting provides the foundation for PG&E's structured strategy and resource allocation discussions. Further, the PG&E Internal Auditing department provides independent objective verification regarding the adequacy of processes and controls to manage business risk, and provides control advisory services throughout PG&E.

PG&E maintains codes of conduct for the following:

- Employees
- Boards of Directors
- Contractors, Consultants and Suppliers

Further, PG&E maintains a Chairman's Ethics Council—comprised of management and union-represented employees at multiple levels—which helps raise and address issues relating to business ethics and conduct at PG&E. The Council meets several times throughout the year, including one meeting that is open to all employees.

## **Boards of Directors**

The PG&E Corporation and Pacific Gas and Electric Company Boards and their committees have specific oversight responsibility for risk and compliance management in their respective areas:

Entity	Risk Oversight Responsibilities
Boards	<ul style="list-style-type: none"> <li>■ Evaluate risks associated with major investments and strategic initiatives (with assistance from the Finance Committee<sup>1</sup>)</li> <li>■ Oversee the implementation and effectiveness of overall legal compliance and ethics programs (with assistance from the Audit Committees and the Compliance and Public Policy Committee)</li> </ul>
Compliance and Public Policy Committee <sup>1</sup>	<ul style="list-style-type: none"> <li>■ Assist the Boards of Directors and their respective Audit Committees in fulfilling the Boards' oversight responsibility for compliance with legal and regulatory requirements</li> <li>■ Coordinate the compliance-related oversight work of the various committees of the Boards</li> <li>■ Advise and assist the Boards with respect to public policy and corporate sustainability issues which could affect significantly the interests of customers, shareholders or employees</li> </ul>
Audit Committees	<ul style="list-style-type: none"> <li>■ Discuss the guidelines and policies that govern the processes for assessing and managing major risks</li> <li>■ Allocate to other Board committees the specific responsibility to oversee identified enterprise risks</li> <li>■ Consider risk issues associated with overall financial reporting and disclosure processes</li> <li>■ Discuss programs to monitor compliance with laws, regulations, policies and programs</li> </ul>
Finance Committee <sup>1</sup>	<ul style="list-style-type: none"> <li>■ Discuss risk exposures related to energy procurement, including energy commodities and derivatives, and other enterprise risks, as assigned by the Audit Committees</li> </ul>
Nuclear, Operations and Safety Committee <sup>1</sup>	<ul style="list-style-type: none"> <li>■ Advise and assist the Boards of Directors with respect to the oversight and review of compliance issues and risk management practices related to the Utility's nuclear, generation, gas and electric transmission, and gas and electric distribution operations and facilities</li> <li>■ Oversee other enterprise risks, as assigned by the Audit Committees</li> </ul>
Compensation Committee <sup>1</sup>	<ul style="list-style-type: none"> <li>■ Oversee potential risks arising from compensation policies and practices</li> </ul>

<sup>1</sup> Refers to committees of the PG&E Corporation Board of Directors.

For a full description of Board committee oversight responsibilities, please see the webpages of the Board of Directors of PG&E Corporation and Pacific Gas and Electric Company, as well as our 2015 Joint Proxy Statement.

## Lines of Business

Each line of business within PG&E has its own risk and compliance committee, which reviews all relevant risks, approves risk analyses and mitigation strategies, and tracks mitigation progress. Each committee is led by a senior officer and includes an expert risk manager and a Compliance Champion who helps implement the risk management process and establish appropriate compliance controls within the line of business.

## 2014 Milestones

In 2014, PG&E notified the California Public Utilities Commission (CPUC) that an extensive internal review of nearly five years of emails between the company and officials at the Commission had identified a number of instances in which PG&E believed these interactions violated the CPUC's rules governing communications with the state regulator. Subsequent reviews resulted in additional reports of communications that PG&E believed violated CPUC rules.

PG&E has taken numerous actions as part of its effort to achieve the highest level of ethics and compliance possible. Specific examples include:

- **Took definitive action to strengthen regulatory compliance.** Three officers are no longer employed by the company; a new senior vice president of regulatory affairs was named; and we engaged special counsel to assist in developing a best-in-class regulatory compliance model.
- **Created a new position of Chief Ethics and Compliance Officer.** The new officer, who was hired in early 2015, has a mandate to establish a best-in-class corporate ethics program. The position reports to the CEO of PG&E Corporation, the Audit Committees of the Boards of Directors, and the Compliance and Public Policy Committee of PG&E Corporation.
- **Re-established the Public Policy Committee of the PG&E Corporation Board as the Compliance and Public Policy Committee.** The Committee's responsibilities include assisting the Boards and their respective Audit Committees in fulfilling the Boards' oversight responsibility for compliance with legal and regulatory requirements.
- **Placed renewed emphasis on regulatory compliance.** With the assistance of special counsel, we have placed a particular focus on complying with rules and laws governing how PG&E employees communicate with regulatory officials. We overhauled the rules of engagement with Commissioners and staff at the CPUC, and for reporting and monitoring ex parte communications. We have also developed and deployed new training, including web-based and instructor-led courses, on interacting with the CPUC.

In addition, we continue to incorporate a risk and compliance session in our enterprise-wide strategic planning process. Broadly, this process enables PG&E to assess risks and compliance obligations, set a strategy to address them and then allocate resources to successfully implement our strategy. Each line of business follows a rigorous process to assess the likelihood and impact of various enterprise, operational and compliance risks. The results of these assessments are calibrated across the enterprise, objectively applying the same criteria to all areas of operational focus. Final plans for each line of business include metrics to monitor compliance performance in an ongoing way, and top risks are assessed, managed and monitored. These plans form the basis of PG&E's deployment of resources—leading to our ultimate goal of employing risk-informed budget allocation.

*"We want all of our customers and their families to know that PG&E is absolutely committed to doing the right thing and acting in a transparent and ethical manner that upholds both the letter and spirit of the law and the company's own Code of Conduct at all times."*

— Tony Earley, Chairman of the Board,  
Chief Executive Officer and President of  
PG&E Corporation

## Measuring Progress

PG&E mandates annual ethics and compliance training for all employees, and requires that management employees annually certify that they have read, understand and will comply with our Employee Code of Conduct (union-represented employees receive electronic reminders or briefings from supervisors about the code).

In 2014, more than 99 percent of employees completed our annual compliance and ethics training, which is typically conducted in small groups to stimulate discussion and share experiences. (Each year, and for a variety of reasons, a statistically small number of PG&E's employees are unable to attend a training session.) Supervisors also led conduct-related briefings with their work groups throughout the year.

### COMPLIANCE AND CONDUCT TRAINING

	2012	2013	2014
Compliance and Ethics Training	99.7%	99.9%	99.8%
Code of Conduct Training	99.3%	99.9%	99.8%

We also continued to operate our Compliance and Ethics Helpline for employees. The volume of Helpline calls we received in 2014 was roughly 2.4 calls per 100 employees, falling within the normal range of 0.3 to 8.2 calls per 100 employees according to a benchmark report prepared by NAVEX Global. While we saw a call volume similar to prior years, we saw a 37 percent increase in calls requesting guidance. This indicates that more employees are turning to the Helpline for advice before taking actions that might be in conflict with PG&E's policies and procedures or the law.

## Looking Ahead

PG&E is committed to achieving a best-in-class ethics and compliance program, and to continuing to employ risk-based decision-making in our integrated planning process and regulatory approach. We will drive continuous improvement by:

- Improving processes for prevention, detection and investigation of any potential non-compliant activities;
- Strengthening ethics and compliance-related training, and reinforcing PG&E's ethics and compliance culture and compliance management system;
- Identifying areas of ethics and compliance risk, and developing preventive and corrective action plans;
- Improving analytical rigor associated with the assessment and monitoring of risk within each business area;
- Maintaining a strengthened governance process to oversee risk management activities and progress; and
- Incorporating risk more fully into PG&E's annual strategic planning process and future General Rate Case filings.

### All-Employee Meeting with the Chairman's Ethics Council



(Photo by Alma de le Melena Cox)

The Chairman's Ethics Council is designed to help raise and address issues relating to business ethics and conduct at PG&E. According to leaders in the ethics field, the concept of inviting all employees to participate in a "real-time" ethics discussion is rare.



## Gas Operations

PG&E is working harder than ever to deliver on our promise to be the safest and most reliable natural gas provider in the country. To accomplish this, we have been conducting extensive safety testing, replacing and upgrading vast amounts of pipeline, and utilizing the latest in innovative inspection, monitoring and control technologies. While we have made major strides as a company, we have more work to do. We are intent on delivering a 21st-century gas system that fully meets the needs and expectations of our customers for safe, reliable and affordable service.

### Our Approach

As the owner and operator of one of the largest natural gas systems in the United States, PG&E is responsible for an integrated transmission, storage and distribution system that consists of approximately 42,500 miles of distribution pipeline, 6,700 miles of backbone and local transmission pipeline, and various gas storage facilities. The system also includes eight natural gas compressor stations that receive and move natural gas through our pipelines.

Our approach to managing this system begins with ensuring that public and employee safety is the primary driver for all of our decisions and actions. This applies to field work, operating and maintaining our assets, and office work supporting the execution of operations, maintenance and construction activities. Across our service area, our employees are working together to apply Gas Safety Excellence, our safety management system, to every aspect of our operations.

In May 2014, PG&E became one of the first utilities in the world to achieve PAS 55-1: 2008 and ISO 55001: 2014 certifications for best-in-class asset management. These certifications were awarded by an internationally recognized, independent auditor and demonstrate the growing strength of our safety culture, our rigorous approach to asset management and our unwavering commitment to Gas Safety Excellence.

# 2014 Milestones

## Gas Transmission System

PG&E's Pipeline Safety Enhancement Plan, which we largely completed in 2014, served as the centerpiece of a multi-year commitment to modernize our natural gas system. It was one of the most comprehensive gas transmission modernization programs in the United States. Since the program began in 2011, PG&E achieved the following results through 2014:

- Validated safe operating pressure by strength-testing or locating strength-test records for nearly 850 miles of gas transmission pipeline
- Replaced 127 miles of gas transmission pipeline
- Automated more than 200 valves, enabling remote-control shutoff of gas in an emergency
- Retrofitted more than 200 miles of gas transmission lines to accommodate in-line inspection tools or "smart pigs" that are used to inspect the internal condition of pipelines

## Gas Distribution System

The safety and reliability of PG&E's gas distribution system has been enhanced with improvements in leak response and repair, the deployment of new tools and technologies, and an overhaul of our approach to records and information management.

We expanded our use of the world's most advanced leak detection instrument, Picarro Surveyor™, which is 1,000 times more sensitive than normal leak detection devices. Other highlights from 2014 include:

- Improved our average response time to gas odor reports to an average of 19.9 minutes, which represents the top decile for gas utilities nationally
- Repaired more than 58,000 trace leaks at customer gas meters
- Reduced the leak backlog of minor, non-hazardous workable leaks to an all-time low of 120 from about 12,200 in 2010

PG&E is improving the quality of, and access to, our gas distribution records with the use of a Geographical Information System (GIS). This tool is designed to map, reconcile and analyze data and events that take place on PG&E assets. It is being deployed in concert with specialized employee training on how to use the centralized system.

## Embedding Public Safety into our Operating System

PG&E incorporates public safety metrics and targets into our operational goals and plans. We believe that tracking and reporting on these measures is essential to driving progress. Examples of work and accomplishments that this approach drove in 2014 include the following:

- **Decommissioned all known cast-iron pipe.** We decommissioned more than 835 miles of remaining cast-iron pipe in our system, replacing it with modern plastic pipe, which is more flexible and reliable during earthquakes, and newer steel pipe.
- **Responded effectively to the Napa Earthquake.** When the 6.0 earthquake hit Napa County in August 2014, we immediately responded and conducted leak surveys on thousands of miles of the gas system pipelines, replaced or repaired distribution and transmission gas pipelines where necessary, and provided door-to-door customer service to more than 6,000 customers.



By the end of 2015, PG&E will have 10 vehicles equipped with the Picarro Surveyor technology.

## PG&E Adopts Mars Rover Technology for Gas-Leak Detection Tool



Technology currently used on Mars is now part of PG&E's comprehensive suite of gas-leak detection tools. The laser-based technology was originally designed to find methane, a possible sign of life on Mars. NASA's Jet Propulsion Laboratory and PG&E collaborated to adapt the technology to find gas leaks due to the device's superior sensitivity to methane, a major component of natural gas. The technology helps guide PG&E crews using a tablet interface to identify possible leak locations, fast-tracking their ability to repair leaks.

■ **Proposed opening a state-of-the-art training facility.** Located outside of Sacramento, this facility will provide teams with a best in-class training environment, teach enhanced safety protocols and use the latest technologies. It will also have a significant positive economic impact on the community and region.

■ **Used new tools and technology.** We deployed more than 30 new, innovative gas safety tools. Examples include our leak detection technology pioneered with NASA's Jet Propulsion Lab and a miniature pipeline casing robot inspector that allows visual inspection of pipelines without the need for costly construction digs. Other technological upgrades include providing gas construction crews with real-time access to detailed maps of our underground gas system and becoming the first utility to use Picarro's car-mounted natural gas-leak detection device.

## Measuring Progress

As one important measure of progress, we have completed 10 of the 12 recommendations made by the National Transportation Safety Board (NTSB) in its report on the San Bruno accident. The two remaining recommendations are in an “open-acceptable” status, according to the NTSB, showing that the company’s progress is appropriate and acceptable, pending completion.

In 2014, we accomplished an unprecedented amount of work on our gas transmission system to virtually complete our Pipeline Safety Enhancement Plan. Going forward, significant work will continue through a holistic risk assessment and resulting proposal in our 2015 to 2017 Gas Transmission and Storage rate case filing. Additional results from last year compared with 2010 show that we are making progress on our gas distribution system as we continue to focus on becoming the safest, most reliable gas company in the country.

### GAS DISTRIBUTION SYSTEM PROGRESS

	2010	2014
<b>Gas Odor Response Times<sup>1</sup></b>		
Average response time (minutes)	33.3	19.9
<b>Gas Pipeline Safety</b>		
Distribution main pipeline replacement (miles)	23	100
Leak repair performance (number at year-end) <sup>2</sup>	12,203	120

<sup>1</sup> Average response time that a Gas Service Representative or a qualified first responder takes to respond to the site of an immediate response gas emergency order.

<sup>2</sup> Number of grade 2 and 2+ leaks open at year-end. Grade 2 and 2+ leaks are minor and non-hazardous.

## Looking Ahead

PG&E has provided state regulators with a comprehensive proposal to continue maintaining and modernizing our gas transmission pipelines and extensive storage facilities. The plan, which covers 2015 to 2017 activities, expands on PG&E's current program to comprehensively test, inspect and upgrade the safety of our gas infrastructure. The detailed filing identifies risks, sets clear priorities and describes the work that needs to be done to modernize our system and meet some of the strictest safety standards in the nation. It also encompassed programs within the Pipeline Safety Enhancement Plan.

PG&E's proposal includes detailed plans to:

- Replace vintage pipelines that could be at risk from land movements
- Continue testing pipelines to verify safe operating pressures
- Continue and expand corrosion control to avoid underground leaks
- Install more automated and remotely-operated safety valves to quickly turn off gas in case of an emergency
- Inspect the interior of more pipelines utilizing in-line inspection technologies to detect and repair hidden flaws
- Strengthen levee and water crossings
- Maintain underground gas storage facilities that help meet demand on cold days
- Modernize infrastructure control systems, databases and risk analysis programs

Another emerging focus for PG&E is reducing process and fugitive natural gas emissions from our pipelines. PG&E is a member of the Natural Gas Downstream Initiative, which aims to reduce methane leaks by encouraging investments in infrastructure, modernizing gas systems and using next-generation technologies. On the research side, a study issued by Washington State University and Environmental Defense Fund found a significant reduction in methane emissions from natural gas distribution lines. Reasons for the reduction—including upgrades at metering and regulating stations, improvements in leak detection, and maintenance and replacement of older pipeline materials—are current areas of focus at PG&E.



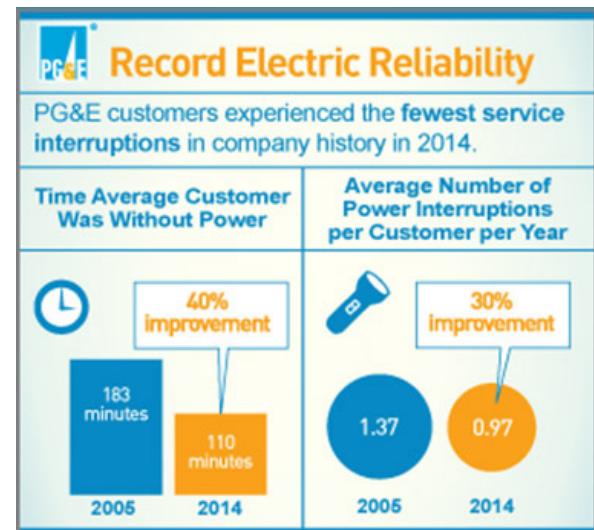
## Electric Operations

Reliable service is crucial to our communities, our economy and our quality of life. It is becoming even more important in our increasingly digital world. That's why we've been making substantial investments to improve the reliability of our electric service by strengthening our infrastructure and incorporating the latest smart grid technology. Our record-setting results over the past six years are keeping the lights on for customers and helping to power California's economy.

### Our Approach

Our work is driven by a multiyear strategic plan that builds on lessons learned and progress made, so we can continue to improve across public safety, workforce safety, compliance, emergency preparedness, reliability, customer satisfaction and efficiency. Fundamental to our approach is a sharp focus on continuous improvement, benchmarking our performance with other electric utility companies and identifying and adopting best practices.

To improve reliability, we are focused on maintaining and replacing aging equipment, making targeted asset upgrades and using new technology to monitor and restore power. With the state's continued drought, we also continue to work with state and local agencies to help reduce the risk of wildfires through enhanced inspection of vegetation along power lines and improving access for firefighters.



Another continued focus of our operations is preventing downed electric wires. We are approaching this work in several ways: conducting infrared inspections of distribution lines, replacing splices and conductors, and dispatching engineers to inspect downed wires to identify the cause and actions to prevent a recurrence. Because vegetation can account for wires down, we are also working to identify, prune or remove trees that are most likely to fall during a storm.

## 2014 Milestones

PG&E continues to integrate a wide range of advanced communications and control technologies throughout our electric grid to help enhance the resiliency of the system and restore power outages more quickly.

Highlights from 2014 included:

- **Invested in our system.** Throughout the year, PG&E upgraded our electric system with a multitude of local reliability projects. These ranged from a transmission project in Bakersfield to upgrading power lines in Paradise in Butte County and substantial work on a substation in King City to improve system reliability and capacity.
- **Installed advanced automation technology on power lines throughout our service area.** This technology, now installed on nearly 600 electric distribution circuits, can automatically “self-heal” the grid by rerouting the flow of electricity around a damaged power line, often restoring power to the majority of impacted customers within minutes. These systems have been installed on nearly 20 percent of PG&E’s electrical distribution circuits and have helped the company avoid more than 60 million customer outage minutes since the program began in 2012.
- **Leveraged SmartMeter™ technology.** SmartMeters play an important role in PG&E’s response to power outages. We receive SmartMeter data within seconds of an outage to help employees quickly determine the scope and level of response needed. They also help identify the location of an outage to reduce the amount of time it takes for restoration crews to arrive on scene.
- **Building new distribution control centers.** PG&E is constructing state-of-the-art electric distribution control centers that will manage our more than 140,000 miles of electric distribution lines. These facilities will be the nerve centers of the grid that deliver energy to individual homes and businesses. The first control center opened in Fresno in late 2014 and is equipped with systems that support today’s current smart grid technology, with the capability to support future upgrades as well. We recently opened a second facility in Concord and plan to open a third facility in 2016.

### Magazine features PG&E’s Smart Grid Lab



T&D World Magazine, a utility industry trade publication, featured PG&E’s Smart Grid Lab and the cutting-edge research our employees perform on behalf of customers. The work being done at the lab, combined with our experience as an early adopter of the smart grid, provides PG&E customers with enhanced safety and reliability, more insight into energy use and improved customer service.



PG&E’s San Ramon Technology Center houses a variety of technical labs and specialized equipment, much of it dedicated to testing smart grid technologies. This includes a distribution test yard that can be configured to accept a wide variety of equipment to test before field deployment.

### Upgrades help build a stronger and more resilient system



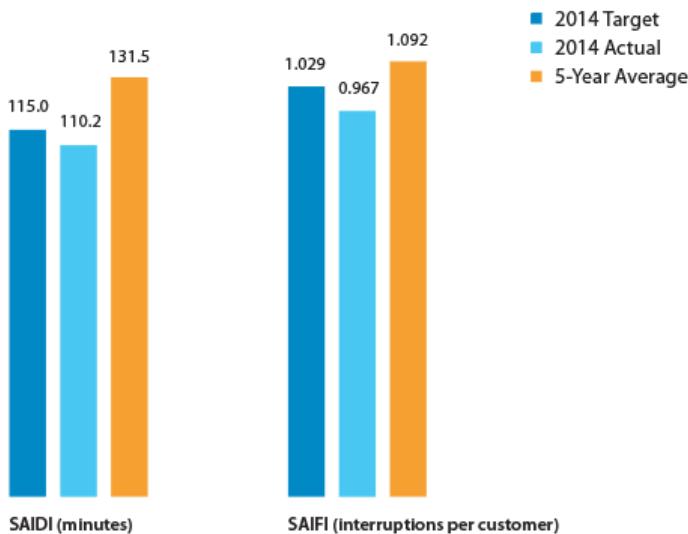
(Photo by James Green)

Work to construct a new 230-kilovolt power line and expand two substations in San Francisco is an example of the type of investments PG&E is making to provide safe and reliable service while also strengthening the resiliency of our system for natural disasters. The project is part of PG&E’s five-year plan to invest \$1.2 billion in San Francisco’s electric and gas infrastructure to provide safe and reliable service for customers.

# Measuring Progress

In 2014, our customers experienced the fewest service interruptions in PG&E's history as we delivered record electric reliability to customers for the sixth straight year.

The average time a PG&E customer was without power (SAIDI) was 110.2 minutes, a 5.6 percent improvement over the prior year. The average number of power interruptions per customer (SAIFI) dropped to 0.967, 9.4 percent less than 2013.



## Benchmarking PG&E's Reliability Performance<sup>1</sup>

<sup>1</sup> Beginning in 2012, in an effort to help ensure consistency with industry standards, PG&E included both planned and unplanned outages in setting targets and measuring performance for reliability; previously, planned outages were not included.

## Looking Ahead

Customers expect us to develop, build and maintain a grid that allows them to take full advantage of the many new energy technologies that we are seeing today—and in a way that gives them maximum flexibility, maximum choice in how they use energy and, ultimately, maximum value.

Our vision for this type of grid is the Grid of Things™—in other words, a “plug-and-play” platform that allows energy technologies to be interconnected with each other and integrated into the larger grid. Just like the internet maximizes the benefits of the billions of things connected to it, the grid will do the same for customers’ energy technologies.

Among other elements, the grid will interact with rooftop solar, battery storage and consumer mobile applications. It will be increasingly efficient and automated with the addition of new technology. It will also give utilities greater visibility into operations to improve reliability, and will balance renewable energy sources with conventional sources such as natural gas and nuclear energy.

PG&E already has a number of projects and investments underway, including smart grid infrastructure modernization. A foundational component is the network of nearly 10 million electric and gas SmartMeter™ devices installed across our service area. The electric meters provide near real-time energy usage data to utilities and customers through digital communications.

PG&E and other electric utilities use standard measures for electric reliability:

- System Average Interruption Duration Index (SAIDI) measures the number of minutes over the year that the average customer is without power.
- System Average Interruption Frequency Index (SAIFI) measures the system-wide frequency of power interruptions per customer.

## Technology demonstration and deployment

In 2014, PG&E launched 17 pilots as part of the Electric Program Investment Charge (EPIC) program, which enables PG&E to work with the other California investor-owned utilities and the California Energy Commission to develop smart grid technology demonstration and deployment programs. Through the program, PG&E is demonstrating technology across three areas: renewables and distributed energy resource integration; grid modernization and optimization; and customer service and enablement.

EPIC projects include:

- Demonstrating energy storage technologies for enhanced market operations
- Integrating and analyzing large data sets to optimize asset risk management
- Piloting an EV submetering program that would provide customers greater insight into their energy use
- Shaping grid operations and visibility

They also enable PG&E to better detect areas affected by outages and to determine whether service has been restored, resulting in faster and more accurate service restoration.

Building this future requires that utilities are ever mindful of threats to cybersecurity as more operational and customer data becomes digital. Another key is to diligently test and pilot new technologies on a small scale before deploying them more broadly. Doing so will help ensure that investments are beneficial for our customers and also advance California's energy policy goals.

To that end, PG&E's San Ramon Technology Center houses a variety of technical labs and a wide array of specialized equipment, much of it dedicated to testing smart grid technologies. At the site, employees have researched and tested electric vehicle chargers, various battery storage technologies, wireless Home Area Networks (which link to SmartMeter™ devices), home energy displays and smart thermostats.

PG&E also continues to work on a series of pilot projects to demonstrate technologies that could be used to increase reliability, reduce costs and the environmental impacts of electric system operation, and more effectively integrate distributed renewable generation on PG&E's distribution system.

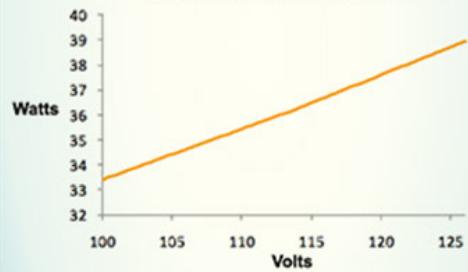
Together, these and other steps will help PG&E prepare for the future by making the grid smarter, more flexible and more resilient—while continuing to ensure the safety, reliability and affordability that our customers count on.

## PG&E pilot project takes smart grid technology to the next level

### Controlling Voltage, Conserving Energy

Power consumption of many devices, such as the compact fluorescent light (CFL) shown here, goes up with voltage. By better controlling line voltages, PG&E hopes to conserve energy throughout its system.

Real Power Consumption  
Compact Fluorescent Light (CFL) 42W



Source: Pacific Northwest National Laboratory

PG&E is leading work on a multiyear smart grid pilot project around voltage optimization. The project incorporates sensing, communications and computing to more tightly control the voltage delivered to customers, which has the potential to further enable the growth of distributed energy resources. Reducing the delivered voltage also lowers the amount of energy that customers use without sacrificing the performance of their devices or appliances. In fact, it has the potential to reduce energy usage by 1 to 2 percent.



# Clean Energy

PG&E delivers some of the nation's cleanest energy. In fact, the carbon dioxide emissions rate from our delivered electricity is about two-thirds cleaner than the national utility average. Moving forward, we stand ready to do our part to meet California's ambitious clean energy goals, which we believe are bold, and with the right structures in place, attainable.

## Our Approach

PG&E strongly supports California's clean energy goals. California has one of the highest renewable energy mandates in the nation, and benefits from a "loading order" to prioritize energy efficiency and renewable energy in meeting customer demand.

In October 2015, California's Governor signed Senate Bill (SB) 350, which increases the state's Renewables Portfolio Standard (RPS) to 50 percent by 2030 and doubles state energy efficiency goals. The bill supports the Governor's April 2015 Executive Order, which set a new goal to reduce greenhouse gas emissions by 40 percent below 1990 levels by 2030.

PG&E fully supported SB 350 as an important step toward achieving California's aggressive climate change and clean energy goals.

PG&E has made significant contributions to the state's progress and is well on our way to meeting California's renewable energy target of 33 percent by the end of 2020 ahead of schedule. PG&E appreciates the flexibility the new law provides on banking of excess renewable energy procurement, which will provide for greater opportunities to secure the best renewable energy pricing available on the market for our customers.

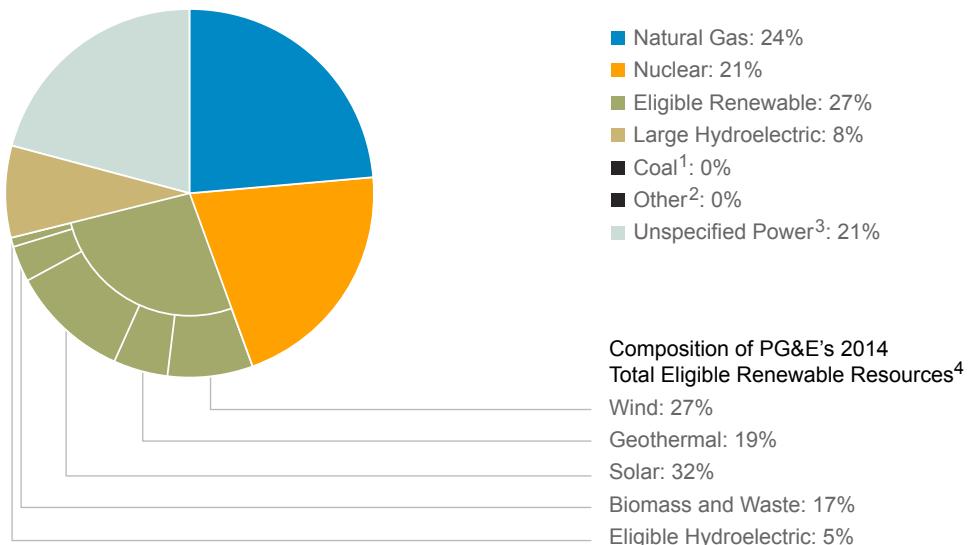
PG&E also supported the bill's challenging targets on energy efficiency and will use our full array of tools and programs to help achieve those goals. PG&E also appreciated the bill's authors for recognizing the importance of advancing discussions around electric vehicles (EVs). PG&E is committed to ongoing leadership on energy efficiency, support for rooftop solar, investments in smarter energy infrastructure and helping to enable the broader adoption of EVs.

We believe the path to achieving the state's long-range environmental goals, while continuing to grow California's economy, is through an integrated and flexible approach to achieve sustainable and future greenhouse gas emissions reductions in a way that manages costs for customers, ensures electric reliability and gas safety, and creates a model program for others to follow.

## Measuring Progress

By the end of 2014, 27 percent of the electricity we delivered to our customers came from eligible renewable resources. The chart below shows our overall electricity supply mix for 2014, which included both the energy PG&E generated and the energy PG&E purchased from third parties.

### PG&E's 2014 Electric Power Mix Delivered to Retail Customers



<sup>1</sup> Refers to electricity generated under contracts with third-parties.

<sup>2</sup> Includes diesel oil and petroleum coke (a waste byproduct of oil refining).

<sup>3</sup> Refers to electricity generated that is not traceable to specific generation sources by any auditable contract trail.

<sup>4</sup> As defined in Senate Bill 1078, which created California's Renewable Portfolio Standard, an eligible renewable resource includes geothermal facilities, hydroelectric facilities with a capacity rating of 30 MW or less, biomass, selected municipal solid waste facilities, solar facilities and wind facilities. These figures are preliminary and will not be finalized until verified by the California Energy Commission.

## Looking Ahead

PG&E will continue to rely on a wide variety of clean sources of power, including nuclear, solar, wind and hydro, to provide electricity for our customers.

Once approved by regulators, PG&E plans to make its Community Solar Choice program available to all bundled electric customers, offering them a choice to support 100 percent green energy from new small and midsize solar projects located in PG&E's service area.

As we move to a smarter grid that integrates more renewable energy sources, the interest in energy storage technologies is growing, whether in the form of batteries or other devices. This growth is driven, in part, by California's energy storage target, which requires electric utilities to purchase 1,325 MW of storage capacity by 2020.

Energy storage may be able to fulfill some of the increased need for operating flexibility; however, it is too early to tell whether and for which applications additional amounts of storage could be cost-effective. Accordingly, PG&E is exploring emerging storage technologies through a variety of pilot projects.

PG&E has deployed two battery storage systems to test the operational capabilities of energy storage on the electric grid: a 2-MW system at PG&E's Vaca Dixon substation and a 4-MW system at a customer site in San Jose. These pilots aim to provide critical real-world data on the technical and financial performance of battery energy storage to inform future decisions about how these assets can serve PG&E's customers.

PG&E is also conducting a feasibility study to demonstrate the viability of advanced, underground compressed air energy storage technology. As envisioned, the project would store large amounts of energy from resources such as intermittent renewable energy that may be generated at times when it is not needed by our customers; this excess energy would be used to power large compressors to store the energy as high-pressure air in an underground reservoir. The air would then be withdrawn to power an industrial turbine-generator set to produce electricity when demand is highest.

As new technologies emerge, policies should allow California to do what it does best: innovate. PG&E believes future greenhouse gas policy should encourage cross-sector reductions and recognize that not all sectors and businesses are starting from the same point. A framework that enables PG&E to make the right choices for our customers and operations will ensure that the company achieves the necessary reductions in the most affordable and sustainable manner.

There is much that still needs to be done, but PG&E believes that by working together, we can all build a better California and help lead the nation and the world into a cleaner energy future.



# Renewable Energy

PG&E provides some of the nation's cleanest energy, including a growing supply of renewable energy sources such as solar, wind, geothermal, small hydro and various forms of bioenergy. In fact, more than half of the electricity we deliver to our customers comes from greenhouse gas-free resources. In 2014, we reached an important milestone; we delivered 27 percent of our power from eligible renewable resources and stayed on track to meet the state's ambitious clean energy goals.

## Our Approach

We use a variety of approaches to achieve California's renewable energy goals, including using competitive solicitations to procure renewable energy from third parties and owning renewable energy projects ourselves. As we grow our clean energy portfolio, we work collaboratively with regulators, environmental organizations and other stakeholders to do so in a way that is affordable for our customers.

## California's Renewable Energy Targets

California's Governor recently signed Senate Bill (SB) 350, which increases the state's Renewables Portfolio Standard (RPS) to 50 percent by 2030. PG&E has made significant contributions to the state's progress and is well on our way to meeting California's prior renewable energy target of 33 percent by the end of 2020 ahead of schedule. PG&E supported SB 350 and the flexibility the new law provides on banking of excess renewable energy procurement, which will provide for greater opportunities to secure the best renewable energy pricing available on the market for our customers.

## 2014 Milestones

PG&E sources most of its renewable energy through contracts with third parties. In total, PG&E added eight new long-term contracts to its portfolio of renewable energy supplies in 2014 through the Renewable Auction Mechanism (RAM) program. These contracts represent more than 100 MW of renewable projects, including solar and wind. In addition to providing customers with more renewable energy, many of these projects also have a positive economic effect on surrounding communities. In 2014, a number of large projects under contract reached significant stages of completion:

- **Topaz Solar Project.** This project, built by First Solar for MidAmerican Energy Holdings, is one of the world's largest solar photovoltaic (PV) projects. It reached its full 550 MW capacity in 2014.
- **Mojave Solar.** Abengoa's 250 MW concentrating solar project completed construction in 2014. The project, which utilizes parabolic trough solar thermal technology, is located near Harper Dry Lake in San Bernardino County.
- **Ivanpah Solar Electric Generating Station.** The Ivanpah solar "power tower" plant uses fields of 170,000 heliostat mirrors focused on a central receiving tower and became operational in 2014. The 377 MW project will power 140,000 typical California homes; PG&E contracted with two of the three units for a combined capacity of 248 MW.

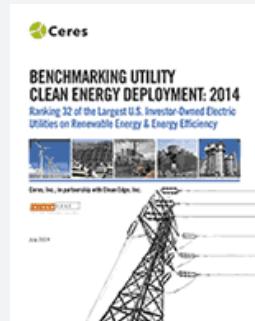
## Measuring Progress

PG&E is well on its way to meeting California's renewable energy mandate. By the end of 2014, 27 percent of the electricity we delivered to our customers came from RPS-eligible resources. California's RPS is measured by the percentage of total retail sales that come from RPS-eligible resources.

The majority of the renewable resources will come from contracts with third-party renewable energy companies. Overall, PG&E has contracted for more than 10,800 MW of RPS-eligible energy since the start of California's RPS program in 2002, including more than 6,500 MW of active contracts through 2014. Approximately 5,600 MW of these are delivering energy to PG&E, with about 900 MW under development as of December 31, 2014.

In 2014, PG&E earned recognition for a variety of renewable energy development accomplishments:

- The Solar Electric Power Association recognized PG&E for the most annual installed PV capacity for the seventh consecutive year
- The American Wind Energy Association ranked PG&E fifth among U.S. electric utilities with owned and contracted wind power on the system at the end of 2014
- Ceres ranked PG&E the top investor-owned utility in achieving energy efficiency savings and third in providing renewable energy in its report, Benchmarking Utility Clean Energy



## RENEWABLE PORTFOLIO STANDARD—ACTIVE CONTRACTS AS OF DEC 31, 2014<sup>1</sup>

Type	Number	MW	% By Count	% By Capacity
Bioenergy	12	252	11	4
Geothermal	4	287	4	4
Small Hydro	7	91	7	1
Solar PV	53	3,187	50	49
Solar Thermal	4	748	4	11
Wind	27	1,991	25	30
Total	107	6,556	100	100

<sup>1</sup> Includes new RPS procurement through the RPS, RAM, RAM for PV Program and PV RFOs. Excludes terminated and expired contracts.

PG&E also saw growth in the number of signed contracts from its Feed-In Tariff (FIT) program, which offers a standard form contract and payment for renewable projects up to 3 MW within our service area. In 2014, we executed 14 FIT contracts, representing 19 MW of RPS-eligible capacity.

## Looking Ahead

PG&E continues to participate in multiple forums to help shape sound energy policy solutions to meet the challenges California faces with respect to renewable resource development and interconnection. For example, PG&E continues to work with the CPUC as the agency implements California's RPS legislation and other renewable energy programs.

PG&E believes there is a need for more broad-based policy solutions that can optimize GHG reductions across multiple sectors. Renewable resources are just one of several ways to achieve GHG emission reductions. Energy efficiency, demand response and cap-and-trade programs will also help the state meet its GHG reduction goals. PG&E supports policy frameworks that encourage a transition to a lower-carbon future while maintaining or enhancing safe, reliable and affordable electric service.



# Hydroelectric Operations

PG&E owns and operates the nation's largest investor-owned hydroelectric system, providing a safe, reliable and clean source of energy for millions of customers. In this time of extreme drought across California, we are working more than ever to steward our water resources in a responsible manner, including strategically managing water supplies to optimize hydropower and the availability of water for fisheries and downstream users' needs.

## Our Approach

PG&E's hydroelectric system consists of 67 powerhouses, including a pumped storage facility, with a total generating capacity of nearly 4,000 MW that relies on nearly 100 reservoirs. PG&E actively manages its hydroelectric system to ensure the safety of the public and our workforce, protect wildlife habitat and sensitive species, and maintain popular recreation opportunities for the communities we serve, including campgrounds, picnic areas, boat launches, trails, fishing and whitewater flows. Hydropower also enables us to better integrate wind and solar generation into the grid.

As California experiences one of the most severe droughts on record, PG&E is working closely with water districts, first responders and regulatory agencies to help address drought impacts, including limited water deliveries, increased fire danger and environmental impacts.

## Working Collaboratively

PG&E's hydroelectric system consists of 26 federally licensed projects. During the license renewal process, we have made it a priority to work collaboratively with stakeholders, such as federal and state agencies, local community members, environmental organizations, Native American tribes, fishing interests and agricultural landholders. Together, we assess the impacts of these projects and work to reach agreement on appropriate resource management measures to include as conditions of the new licenses, such as fish and wildlife habitat protection and recreational opportunities.

### PG&E urges Congress to take action on hydropower relicensing

Hydropower makes up the largest portion of America's renewable energy resources, but the licensing process needs modernizing as delays are causing inefficiencies for utilities and can hold up environmental benefits for years, a PG&E vice president told a Congressional committee.



PG&E recommended the processes be improved to:

- Ensure environmental protections and preserve hydropower
- Achieve the benefits of relicensing sooner
- Reduce cost and improve predictability
- Enhance the collaborative process to be results- and solutions-oriented

## Investing in Safety and Reliability

Many of PG&E's dams and powerhouses have been in service for more than 75 years, and some of the water collection and transport systems date back to California's gold mining years. We inspect and maintain our entire hydroelectric system according to strict safety guidelines, ensuring structural integrity under normal and extreme conditions. We continue to make significant investments to repair and upgrade these water conveyance systems to ensure their ongoing safety and reliability. In addition, we continue to engage customers through dam safety outreach focused on populated areas immediately downstream from PG&E dams.

## 2014 Milestones

As California's drought continues to intensify, PG&E is working proactively to safely and reliably operate our hydroelectric system for the benefit of our customers.

With the near historically low levels of precipitation, we have conserved water in our reservoirs in the spring so more would be available during the hot summer months, when customer demand increases. To do so, we are continually analyzing reservoir and stream conditions and actively collaborating with regulatory agencies and other stakeholders in individual regions. Together, we are working to reduce the required water releases from our reservoirs in order to lessen the drought's impact on the environment and prolong availability of water for downstream users' needs.

PG&E's stewardship commitment also includes working to manage our hydroelectric facilities in a manner that restores and enhances habitat for fish and other wildlife. Examples of our efforts include the following:

- **Battle Creek Salmon and Steelhead Restoration Project.** In Tehama County near Mount Lassen, we continue to work with federal, state and regional agencies, conservation organizations and other groups to restore historic salmon runs along Battle Creek. This project is one of the country's largest cold water fish restoration efforts. Between 2009 and 2019, we are removing five of the eight diversion dams in the area, and retrofitting the remaining three with fish screens and ladders to allow spawning fish to travel upstream through 48 miles of streams and habitat.
- **Butte Creek.** In Butte County, PG&E's DeSabla-Centerville hydroelectric project provides a unique benefit to endangered Chinook salmon and steelhead. An 8-mile diversion canal brings colder water from the Feather River to Butte Creek, increasing spawning and holding habitat for these endangered fish. Additional efforts include work to improve water quality, install fish screens and remove barriers to fish migration.

### 30 years of operations at Helms Hydroelectric Plant



For three decades, PG&E has used water for energy storage to help balance daily variations in electric demand at our Helms Pumped Storage Project. Located more than 1,000 feet inside a solid granite mountain, the facility alternately draws water from an upper reservoir to produce electricity when demand is high and pumps it back when demand is low for reuse during the next high-demand period. This ability to quickly ramp up and down plays a key role in integrating intermittent renewable resources, such as wind and solar, onto the power grid.

## Measuring Progress

We gauge our hydroelectric performance in a number of ways, primarily through our compliance with environmental requirements for our operating licenses. Our compliance rate in 2014 was 99.0 percent, nearly matching the prior year's rate of 99.1.

PG&E also tracks key indicators of our performance related to maintaining and managing our hydroelectric system and the fish and wildlife habitats it encompasses. The benefits of these efforts are clear:

### ENVIRONMENTAL STEWARDSHIP IN OUR HYDROELECTRIC OPERATIONS—2014

Miles of stream monitored for environmental condition <sup>1</sup>	505
Acres of bird nesting territories monitored <sup>2</sup>	7,500
Acres monitored and/or treated for noxious weed control	2,821
Acres monitored for use by special-status species <sup>3</sup>	1,100

<sup>1</sup> This measure refers to miles of stream monitored for its environmental condition, such as water quality/flow, sediment management, habitat quality, fish populations and invasive species.

<sup>2</sup> Includes monitoring of bald eagle and other nesting territories at PG&E hydroelectric projects.

<sup>3</sup> Special status species include those that are listed under the federal or state Endangered Species Acts or are otherwise given a specific designation by California or a federal resource or land management agency. Monitoring studies are required under various hydroelectric licenses.

## Looking Ahead

As the drought in California reaches historic proportions, PG&E will continue to partner with policymakers, regulators, private industry and other stakeholders to manage the availability of water for hydroelectric power while minimizing fire danger and impacts to the environment and the communities we serve.

### Earning Recognition



The National Hydropower Association recognized PG&E with an Outstanding Stewards of America's Waters Award. PG&E, in partnership with California Waterfowl Association, restored 500 acres of PG&E property to wetlands. The McArthur Swamp Wildlife Habitat Improvement Project created swales and loafing islands that are flooded annually to create high-quality feeding, breeding and nesting habitat for waterfowl migrating along the Pacific Flyway



## Conventional Sources

As part of PG&E's diverse portfolio of generation resources, we safely operate several highly efficient and flexible natural-gas-fueled power plants. Investing in these cleaner conventional plants is critical as we increase the amount of renewable energy in our power mix, because it provides the operational flexibility needed to back up intermittent renewable resources such as solar and wind energy.

### Our Approach

As part of our broader effort to generate safe, reliable, affordable and environmentally responsible energy, PG&E operates three natural-gas-fired plants with emissions levels that are best-in-class and use air for cooling to minimize water use:

- Humboldt Bay Generating Station
- Colusa Generating Station
- Gateway Generating Station

Additionally, as combined-cycle power plants, the Colusa and Gateway Generating Stations play a key role in PG&E's efforts to successfully integrate more renewables into the power grid. When renewables are unable to generate power (due to clouds or less wind, for example), these two facilities can quickly pick up the load and help keep the lights on for PG&E's customers.

## 2014 Milestones

In 2014, PG&E continued the safe operation of our three natural-gas-fired plants:

- **Humboldt Bay Generating Station:** This 163-MW natural gas plant is 30 percent more efficient than the older fossil-fueled plant it replaced. It employs technology that emits significantly less SO<sub>2</sub>, NO<sub>x</sub> and CO<sub>2</sub> than the previous facility.

The plant is located in a relatively isolated section of California's north coast region and provides a significant majority of the area's electrical capacity. The plant's design—selected for the region because of its flexibility and low emissions—uses reciprocating engines that are air-cooled, reducing water use by eliminating the need for once-through cooling from Humboldt Bay.



- **Colusa Generating Station:** This 657-MW combined-cycle natural gas plant features cleaner burning turbines that allow the plant to use less fuel and emit significantly less CO<sub>2</sub> than older plants. "Dry cooling" technology allows the facility to use 97 percent less water than plants with conventional "once-through" water cooling systems.

The plant has 530 MW of base capacity and approximately 127 MW of low-cost peaking power that can be used at times when demand is high or in emergencies. In addition, the plant is designed to lower its output when power from renewable resources like wind and solar becomes available. The plant uses a zero-liquid-discharge system that recycles wastewater and further reduces its water consumption.



- **Gateway Generating Station:** This 580-MW combined-cycle natural gas plant has 530 MW of base capacity and 50 MW of low-cost peaking capability. On average, the plant yields dramatically less NO<sub>x</sub>, SO<sub>2</sub> and CO<sub>2</sub> for every megawatt-hour of power produced compared with older fossil-fueled plants. Gateway also uses dry cooling technology.



### Award-winning practices



Combined Cycle Journal, an industry trade publication, awarded PG&E with the 2014 Best Practices Award for Chemistry for its work at the Colusa and Gateway Generating Stations. PG&E's chemistry program controls water quality at the plants, which, over time, will reduce maintenance costs, keep the plants running efficiently and help PG&E integrate more renewable energy.

## Measuring Progress

In 2014, PG&E's natural gas power plants provided safe, reliable and low-cost electricity to our customers. The following performance data represents the average availability factor of our natural gas power plants.

### NATURAL GAS POWER PLANT AVAILABILITY FACTOR<sup>1</sup>

	2012	2013	2014
Gateway Generating Station	92.1%	94.4%	93.1%
Colusa Generating Station	92.9%	93.8%	87.7%
Humboldt Bay Generating Station	95.4%	95.4%	95.2%

<sup>1</sup> Refers to the proportion of hours in a year that a plant is available to generate electricity.

## Looking Ahead

PG&E's support of clean power generation technologies is part of a broad portfolio designed to meet California's growing energy demand in an environmentally responsible manner. Moving forward, we remain focused on ensuring a safe, reliable, affordable and clean supply of energy from the resources owned and operated by PG&E. As PG&E works to integrate more renewable energy, we also continue working to identify new and better ways to operate and maintain our facilities to meet this challenge.



## Nuclear Operations

For three decades, Diablo Canyon Power Plant has been a safe, clean, reliable and vital energy resource for California. The plant provides low-cost, carbon-free energy for more than three million people and plays a key role in allowing PG&E to deliver some of the nation's cleanest energy to its customers. The plant also serves as a significant economic engine for California's Central Coast—playing an essential role in the San Luis Obispo community and regional economy.

### Our Approach

We remain strongly committed to the highest levels of safety, performance and security at Diablo Canyon. The Nuclear Regulatory Commission's (NRC) 2014 assessment places Diablo Canyon among the higher performing plants in the U.S. nuclear industry. This reflects the hard work and dedication of our employees and our commitment to meeting PG&E's and the NRC's high performance expectations.

The NRC also confirmed that it will address one open item in their assessment by performing an additional inspection at the plant site later this year. Specifically, the NRC will review the corrective actions PG&E has taken regarding a change made to a previous emergency response plan. PG&E self-reported and corrected the change in 2013, and the NRC determined the public was never at risk. The additional inspection is not related to current plant performance.

### Demonstrating Earthquake, Flooding and Tsunami Safety

New and extensive analyses performed at the direction of the NRC re-confirmed that Diablo Canyon can safely withstand extreme natural events, including potential earthquakes, tsunamis and flooding. The hazard re-evaluations used the latest regulatory guidance, scientific methods and models, site-specific information and independent expertise to re-evaluate the impacts that earthquakes, large waves and flooding could have on the facility. The updated findings represent the culmination of years of study and analysis, and further confirm the safety of the plant's design.

The updated seismic assessment represents a more extensive evaluation of the seismic hazard than previously performed. Using the NRC's Senior Seismic Hazard Analysis Committee process, independent seismic experts publicly re-evaluated existing and new seismic information to re-evaluate how earthquakes could potentially impact the facility. The result is a more thorough assessment of the seismic hazard, providing additional confirmation that the plant is seismically safe.

The assessment also informs PG&E's Long-Term Seismic Program, overseen by a team of geosciences professionals who partner with independent seismic experts on an ongoing basis to evaluate regional geology and global seismic events to ensure the facility remains safe.

PG&E's flooding hazard re-evaluation determined that the plant's key safety systems and components continue to be safe from tsunamis, including those generated from underwater landslides and earthquakes.

## Used Fuel Storage

At both Diablo Canyon and a former nuclear unit at Humboldt Bay Power Plant, PG&E safely stores used fuel in on-site dry cask storage systems approved and licensed by the NRC. Diablo Canyon also safely and securely stores spent fuel in wet storage facilities. These on-site storage systems are used at nuclear power plants across the world and protect the used fuel against a range of threats, including severe weather, earthquakes and terrorism.

These two on-site interim storage solutions are federally monitored and follow industry best standards to ensure they are safe and effective. The ability to store spent fuel safely on-site, however, should not be a long-term alternative to the federal government assuming its responsibility to accept the fuel for permanent storage. To that end, PG&E will continue to advocate that the federal government meet its commitment and take charge of managing the nation's spent fuel.

## Water Management

PG&E actively manages the water used in the electric-generation process in accordance with the water discharge limit set by Diablo Canyon's Clean Water Act permit.

## 2014 Milestones

In a typical year, at least one of Diablo Canyon's two reactor units safely undergoes a planned refueling and maintenance outage. Once every five years, both units undergo a planned refueling and maintenance outage, due to their separate operating schedules. This occurred in 2014, when we completed planned outages to refuel both Unit 1 and Unit 2 and perform scheduled maintenance, including equipment upgrades, extensive safety inspections and tests, and numerous plant improvements.

PG&E also continued decommissioning the former nuclear unit at Humboldt Bay Power Plant. PG&E has completed removal of prior operational nuclear systems and equipment, as well as demolition and removal of some structures on site. Final site restoration and remediation plans have been submitted to the NRC and are in the final review and comment phase. Permits to support that work have been submitted to California agencies and are under review.

### Giving back to the local community



PG&E employees volunteer thousands of hours of their personal time each year to after-school athletic programs, environmental organizations, churches and other community organizations. In 2014, PG&E also made charitable contributions of nearly \$800,000 to more than 70 nonprofit organizations in San Luis Obispo and Santa Barbara Counties. Local PG&E employees pledged \$575,000 to nonprofit organizations through our Campaign for the Community.

Visitors can learn about the plant and a range of energy-related topics at our Energy Education Center and the Diablo Canyon website. Also, guided tours of Diablo Canyon provide an opportunity to speak directly with employees and learn how the plant provides safe, reliable, affordable and clean energy.

## Measuring Progress

Diablo Canyon consistently achieves strong performance, as gauged by the plant's capacity factor, a measure of generation reliability. In 2014, the plant's capacity factor decreased slightly, largely due to planned outages to refuel both units at the plant, which occurs every five years. In a typical year, only one of the plant's two reactor units undergoes a planned refueling and maintenance outage.

### NUCLEAR POWER PLANT PERFORMANCE

	2011	2012	2013	2014
Average Capacity Factor <sup>1</sup>	95%	90%	92%	87%

<sup>1</sup> Refers to the ratio of the actual output of the plant relative to the output if the plant had operated at full capacity for the year.

Diablo Canyon is a vital local economic engine and brings significant benefits to San Luis Obispo and Northern Santa Barbara counties. Planned refueling outages can bring almost 1,000 temporary workers to the Central Coast where they spend money on local housing, dining and shopping. In advance of the planned outage for Unit 2, PG&E held a jobs fair at our Energy Education Center in San Luis Obispo to help fill the temporary positions.

Beyond these temporary jobs, PG&E is the largest private employer in the area, with more than 1,500 workers and operations that contribute more than \$900 million to the region through the funds it directly spends and the subsequent economic activity in the community from those investments. Tax revenues from the plant, the largest property tax payer in San Luis Obispo County, help fund schools, public work projects, public safety, and health and other vital services.

## Looking Ahead

Diablo Canyon will continue to play a crucial role in California's energy supply, providing safe, reliable and greenhouse-gas-free power on a scale unmatched in our state, especially as the state transitions to more renewable energy sources, like wind and solar, whose output varies.

We will continue our efforts to ensure the safety of our operations and the facility and implement best practices so that Diablo Canyon can continue contributing to a clean energy future in California.

### Diablo Canyon desalination plant to help county fight fires



Limited water supplies as a result of four years of drought inspired a new local partnership. PG&E signed an agreement with San Luis Obispo County to provide water from Diablo Canyon's desalination facility for emergency purposes. Under the agreement, PG&E and the county are developing a feasibility study to examine what steps would be involved to connect the desalination facility to existing local water infrastructure.



## Corporate Governance

Strong corporate governance underpins our sustainability performance, helping to ensure that PG&E is managed and operated with integrity, accountability and transparency. The Corporate Governance section of our website details the policies and practices of the Boards of Directors of PG&E Corporation and Pacific Gas and Electric Company (together, the “Boards”), including governance guidelines, bylaws, disclosure standards, committee charters and codes of conduct for directors and employees.

### Our Approach

The foundation for strong corporate governance is the independence of the Boards and their fiduciary responsibilities to the companies and their respective shareholders. The companies’ Corporate Governance Guidelines promote board independence by requiring policies and practices such as the following:

- At least 75 percent of the directors of each company must be independent
- An independent lead director is elected by the Board if the Chairman of the Board is not an independent director
- Only independent directors are allowed to serve on PG&E Corporation’s standing board committees, and each company’s Audit Committee and PG&E Corporation’s Compensation Committee members also meet additional independence standards
- Executive sessions of the independent directors are held at each regularly scheduled Board meeting, without the presence of each company’s management

Board diversity also contributes to strong corporate governance, and we have practices in place to promote the development of balanced and multidisciplinary Boards. The Boards annually review director nominees and the extent to which diverse backgrounds, perspectives, skills and experiences are represented.

The Compliance and Public Policy Committee of PG&E Corporation's Board of Directors has primary oversight of compliance and ethics and corporate sustainability issues, such as environmental compliance and leadership, workforce development and climate change. This includes an annual review of PG&E's environmental performance and sustainability practices. Other committees of the PG&E Corporation Board and the full Boards address other components of PG&E's sustainability commitment, such as public and employee safety, investments made to build a smarter grid and the pathways to increase our deliveries of renewable electricity.

The PG&E Corporation and Pacific Gas and Electric Company 2015 Joint Proxy Statement includes expanded disclosure of director qualifications and the oversight role of the Boards with respect to corporate responsibility and sustainability, risk management, political contributions and management succession, among other items.

## 2014 Milestones

In 2014 and early 2015, the Boards took action on the following corporate governance matters:

- Elected Anne Shen Smith to the PG&E Corporation and Pacific Gas and Electric Company ("Utility") Boards of Directors effective February 18, 2015, and appointed her as a member of the Nuclear, Operations, and Safety Committee as well as the Compliance and Public Policy Committee.
- Improved the depth of financial expertise on each respective Audit Committee by designating one additional member as a financial expert, based on Securities and Exchange Commission (SEC) requirements. Four out of the five Audit Committee members are now designated as SEC financial experts.
- Refreshed the composition of several Board committees by appointing new chairs to the Audit, Compensation, and Compliance and Public Policy Committees, and appointing a new member to the Finance Committee.
- Selected Pay Governance LLC, a consulting firm with experience in advising regulated utilities, as the Compensation Committee's new independent executive compensation consultant.
- Added two companies (based on business model and market capitalization) to the 2015 Performance Comparator Group, bringing the total number of peers in the comparator group to 14 companies. The Performance Comparator Group is used to compare PG&E Corporation's relative total shareholder return, among other benchmarks.
- Adopted a policy on public company board service for PG&E Corporation and Utility directors. Unless otherwise approved by the Boards, a director may not serve on more than three public company boards in addition to the PG&E Corporation and Utility Boards, and a director who is the principal executive officer of a public company may not serve on more than two public company boards in addition to his or her own company board. For these purposes, the boards of PG&E Corporation and the Utility count as one board.

Additionally, at the annual shareholder meeting, PG&E shareholders overwhelmingly approved proposed executive compensation in our annual advisory "say on pay" vote.

# Measuring Progress

## Annual Meeting Voting Results

Each year at the annual meeting, shareholders are asked to vote upon various items that may be proposed by management or by other shareholders. Proposals submitted by shareholders are either withdrawn by the shareholder (usually following discussions with management and a resolution of the shareholder's concern); excluded from consideration, according to SEC guidelines; or published in the annual joint proxy statement to be voted on by shareholders at the annual meeting. A summary of the annual meeting voting results from 2012 to 2015 is provided below.

### ANNUAL MEETING VOTE SUMMARY: PG&E CORPORATION

Proxy Item	Percent In Favor <sup>1</sup>			
	2012	2013	2014	2015
Election of directors (average) <sup>2</sup>	96.1	97.9	97.6	98.2
Ratification of independent auditors <sup>2</sup>	99.3	99.0	99.2	98.5
Advisory vote on executive compensation <sup>2</sup>	80.7	96.3	89.6	94.3
Approval of long-term incentive plan <sup>2, 3</sup>	—	—	89.6	—
Independent board chairman <sup>4</sup>	—	33.4	—	45.6
Exclude sexual orientation from equal employment opportunity policy <sup>4</sup>	2.0	—	—	—

<sup>1</sup> Defined as For/(For+Against), expressed as a percentage

<sup>2</sup> Management proposal

<sup>3</sup> Defined as For/(For+Against+Abstain) as required by the New York Stock Exchange, expressed as a percentage

<sup>4</sup> Shareholder proposal

### ANNUAL MEETING VOTE SUMMARY: PACIFIC GAS AND ELECTRIC COMPANY

Proxy Item	Percent In Favor <sup>1</sup>			
	2012	2013	2014	2015
Election of directors (average) <sup>2</sup>	99.9	99.9	99.9	99.9
Ratification of independent auditors <sup>2</sup>	99.9	99.9	99.9	99.9
Advisory vote on executive compensation <sup>2</sup>	99.8	99.9	99.8	99.9

<sup>1</sup> Defined as For/(For+Against), expressed as a percentage

<sup>2</sup> Management proposal

## Corporate Governance Rankings

PG&E's corporate governance practices are evaluated by several institutional shareholder groups and corporate governance organizations, such as Institutional Shareholder Services Inc. (ISS), an independent provider of risk management and corporate governance products and services to financial market participants. We have consistently received above-average ratings, both within our industry and overall.

### ISS GOVERNANCE QUICKSCORE SUMMARY<sup>1</sup>

	Decile Rank <sup>2</sup>
Overall Governance QuickScore	1
Board Structure	2
Shareholder Rights	1
Compensation	2
Audit	10 <sup>3</sup>

<sup>1</sup> As of June 1, 2015

<sup>2</sup> A score of 1 indicates low risk; a score of 10 indicates high risk.

<sup>3</sup> The Audit sub-score reflects ISS's view of the CPUC penalty decision related to the San Bruno accident adopted on April 9, 2015.

## Looking Ahead

The Boards will continue to review PG&E's corporate governance practices in line with industry best practices and investor feedback and will amend these practices when doing so is in the best interest of the companies and their shareholders.



# Public Policy Engagement

As a regulated utility, PG&E's business is shaped considerably by public policy at the local, state, regional and national levels. We regularly engage on a wide range of public policy matters that are of importance to PG&E and our customers, knowing that the evolution of these policies plays a significant role in achieving safe, reliable, affordable and clean energy for our customers, as well as defining the structure of the market that impacts PG&E and other utilities.

## Our Approach

PG&E seeks to advance public policies that enable us to better meet the needs of our customers and employees, while adding value for our shareholders and supporting our goal of environmental leadership.

Much of our public policy work is done through coalitions. For example, we actively work with trade organizations such as the Edison Electric Institute, American Gas Association, Nuclear Energy Institute and National Hydropower Association, as well as through organizations such as the Business Council for Sustainable Energy, Center for Climate and Energy Solutions, Clean Power Plan Initiative, and Alliance to Save Energy, to advocate for responsible federal policies that support energy efficiency and clean energy.

PG&E's track record also includes taking stands on sometimes controversial policy issues when doing so is in the best interest of our business and in keeping with our values. Examples include our early and sustained support for state Assembly Bill (AB) 32, the Global Warming Solutions Act, that established California's greenhouse gas reduction targets in 2006 and our support for California's aggressive vehicle emissions standards.

### Public Policy Governance at PG&E

The Compliance and Public Policy Committee of the PG&E Corporation Board of Directors maintains oversight of public policy matters. At the senior management level, the Senior Vice President of External Affairs and Public Policy leads the development and implementation of PG&E's public policy activities.

The Compliance and Public Policy Committee reviews PG&E's political contributions program. The PG&E Corporation Board of Directors establishes management approval limits for political contributions from PG&E to candidates, measures, initiatives, political action committees and certain other organizations that may engage in political activity. These approval limits may be delegated further within PG&E. The Compliance and Public Policy Committee also directs the preparation of an annual report detailing political contributions made by PG&E during the preceding year.

PG&E Corporation and its affiliates and subsidiaries are committed to full compliance with both the letter and the spirit of all applicable federal, state, local and foreign political laws and to maintaining the highest ethical standards in the way we conduct our business.

PG&E makes corporate political contributions to:

- Candidates for state and local office
- Political action committees (PACs)
- Political parties and other organizations that engage in voter registration and similar activities that encourage citizen involvement in the political process
- Nonprofit organizations, including those formed under Section 501(c)(4) and 527 of the Internal Revenue Code

Along with civic, charitable and volunteer activities, employees can participate in PG&E's political engagement. All eligible employees may make voluntary contributions to the following political action committees (PACs): PG&E Corporation Employees EnergyPAC and Pacific Gas and Electric Company State and Local PAC. PAC contributions go directly to support candidates for elective office and political parties at both the federal and state levels, as well as other political action committees. By law, PG&E cannot use corporate funds to make contributions to federal candidates.

## Recent Highlights

Selected public policy issues at the state level include:

- **Clean energy and climate change.** PG&E fully supported SB 350 as an important step toward achieving California's aggressive climate change and clean energy goals. Signed by California's Governor, SB 350 increases the state's Renewables Portfolio Standard (RPS) to 50 percent by 2030, and doubles state energy efficiency goals. The bill supports the Governor's April Executive Order, which set a new goal to reduce greenhouse gas emissions by 40 percent below 1990 levels by 2030. We continue to engage in public policy discussions that focus on the broader goal of delivering cleaner sources of electricity.
- **Residential rate reform.** We support reform of residential electric rate structures and advocate for a simpler system of rates. Our proposal includes simplifying rates, bringing them closer to actual energy costs and supporting informed customer choice with an optional time-of-use rate.
- **Supplier diversity.** We supported AB 1678, which requires utilities to include LGBT-owned businesses in their supplier diversity programs. PG&E was the first utility to pursue these businesses for our supply chain in 2012, and we are actively working with LGBT businesses to increase their access to strategic growth opportunities.

Selected public policy issues at the federal level include:

- **New energy legislation.** We are focused on action related to electric vehicle deployment, grid innovation, making the hydro-power licensing and relicensing process more effective and efficient, pursuing methane emission reduction opportunities and implementing a responsible and workable solution for long-term storage for spent nuclear fuel.
- **Infrastructure investment.** We support efforts to spur investment in our energy infrastructure, including resiliency in the face of climate change, protection of the physical and cyber security of the system and our vision for the Grid of Things™.
- **Workforce issues.** We support workforce diversity, hiring veterans and growing leaders from within. We advocate for public policy that supports public-private partnerships such as PG&E's PowerPathway program to create a pipeline of qualified veterans and others who can become highly skilled workers for the American economy and the energy industry. We also support the Obama administration's focus on the role the private sector can play in developing the capabilities and leadership skills of their team members.
- **Small business support.** We support the Obama administration's work to assist small businesses in addressing financial challenges, including acting as one of the initial 26 companies to participate in the administration's SupplierPay pledge.

## Measuring Progress

In 2014, PG&E Corporation Employees EnergyPAC made contributions of \$544,000. PG&E contributed \$3,330,437 to state and local political candidates, ballot measures, political parties and other committees. Our annual political contributions are publicly reported on PG&E Corporation's website.

### POLITICAL CONTRIBUTIONS, 2014

#### PG&E Employees Federal PAC Contributions

U.S. House	\$219,000
U.S. Senate	\$91,000
Leadership/Other PAC	\$244,000
<b>Total</b>	<b>\$544,000</b>

#### PG&E Employees State and Local PAC Contributions

<b>Total</b>	<b>\$14,850</b>
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#### Corporate Campaign Contributions

Total California Corporate Contributions to Candidates	\$368,850
Total Corporate Contributions to Other Committees	\$2,961,587
<b>Total</b>	<b>\$3,330,437</b>

PG&E also discloses its policies and procedures regarding its lobbying activities and trade association payments, including the portions of any annual trade association membership dues over \$50,000, to the extent those dues are used for lobbying purposes.

### TRADE ASSOCIATION DUES, 2014<sup>1</sup>

#### Portion of Dues That Were Nondeductible

<b>Total</b>	<b>\$581,090</b>
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<sup>1</sup> Represents the portion of membership dues to trade associations that was nondeductible under Section 162(e)(1) of the Internal Revenue Code. Includes trade associations that received annual membership dues over \$50,000. The reported amount is based on information provided by the trade associations to PG&E Corporation and Pacific Gas and Electric Company.



## Safety

At PG&E, nothing is more important than public and workforce safety. Our safety commitment—to the public, our employees and our contractors—is the driving force behind our efforts to create a culture where safety comes before all else and is deeply ingrained into our operating strategies.

Today, five years after the tragic gas pipeline rupture in San Bruno, California, PG&E remains focused on strengthening our approach to safety. We've made substantial strides in upgrading our systems and work processes, increasing coordination with emergency officials and adopting a stronger governance structure to further embed safety in our operations. We remain focused on institutionalizing the lessons we've learned to make safety an essential part of our culture as we work toward our long-term goal of operating the safest, most reliable utility in the nation.

# Highlights

- Maintained a publicly available dashboard of public safety metrics across our operating lines of business.
- Completed mandatory Safety Leadership Workshops—attended by more than 5,000 employees—to align our leaders around PG&E's safety strategy and equip them with the tools they need to support their teams in building a safety-first climate.
- Continued to make safety performance the single largest driver for annual at-risk performance-based pay.
- Hosted more than 500 training workshops to better prepare firefighters, police, public works officials and other authorities to respond to emergencies involving electricity and natural gas.
- Partnered with local Fire Safe Councils on fire prevention efforts during California's wildfire season.
- Aided customers impacted by the Napa earthquake, mobilizing crews to safely restore electricity in just over 24 hours and using state-of-the-art leak detection vehicles to check for gas leaks.
- Conducted more than 2,100 interactive electric and gas safety demonstrations for students, youth groups, contractors, emergency personnel and customers throughout our service area.
- Implemented a contractor safety program to ensure our commitment to public and workplace safety extends to anyone performing work for PG&E.

## Key Sustainability Indicators

**94.1%**

Percentage of time PG&E personnel were on-site within 60 minutes after receiving a 911 electric-related call

**120**

Number of minor, non-hazardous workable leaks to be addressed at year-end, an all-time low

## Our Materiality Matrix



Consistent with best practice, PG&E published a materiality assessment for corporate sustainability in 2014—a strategic project to identify issues that are material to the long-term sustainability of our business. Conducted in coordination with PG&E's strategic planning process, the materiality assessment was designed to engage stakeholders, identify opportunities and risks, and sharpen our corporate sustainability strategy and reporting.

The matrix to the left presents the results—highlighting issues covered in this section of the report.



## Building a Safety-First Culture

A safety-first culture is one in which we consistently demonstrate that there is nothing more important than the safety of the public, our workforce and our contractors. We are committed to creating an environment in which safety is embraced as an unwavering value reflected in all aspects of our culture and our operations. Our work in recent years has led to real, measurable progress and we continue to pursue further opportunities to build on our results, recognizing that on safety our journey must always be one of continuous improvement.

### Safety Culture Roadmap

We continue to take concrete steps to create a culture where every employee is empowered to speak up about safety and approaches each task with a safety-first mindset.

We have used the results of a comprehensive assessment of PG&E's safety culture to create a multi-year roadmap to guide our efforts. Key elements of the roadmap include emphasizing and supporting safety leadership development at every level, focusing on reducing exposure to potential serious incidents before they occur, and training employees to observe and provide feedback to one another on safety.

### Safety Governance

We enhanced our governance structure in 2014 to create greater alignment in the way we develop and implement safety strategies—from our Chairman's Safety Council to our grassroots teams. With this new structure in place, we are focused on setting clear direction, ensuring leaders are observing field work firsthand and hearing from employees, and improving our ability to quickly remove barriers to progress.

- **Chairman's Safety Council:** guides our safety strategy and assures continuous improvement in safety performance. The Council meets regularly to review performance and address gaps and barriers. In addition to the PG&E Corporation Chairman and CEO, members include PG&E's presidents, senior PG&E officers and leaders from the IBEW and ESC labor unions.
- **Line of Business Safety Councils:** responsible for executing plans to reduce and eliminate exposure to possible safety incidents. The Councils are comprised of management, union and grassroots team members. These efforts are supported by grassroots safety teams comprised of frontline employees who share ideas, partner to come up with effective solutions and drive PG&E closer to our goal of zero injuries.
- **Enterprise Safety Working Team:** responsible for reviewing enterprise-wide plans to reduce and eliminate exposure to incidents and improve our culture. Comprised of representatives from the lines of business and safety organization, this team reviews and provides recommendations for initiatives to ensure that we are providing proactive and consistent enterprise solutions to safety challenges.

Together with our continued benchmarking to evaluate and improve the effectiveness of our safety programs, all of these steps are helping to improve our safety culture and reduce serious employee and public safety incidents.



# Public Safety

Our commitment to public safety begins with our workforce but extends much further to include operating strategies to strengthen the integrity of our electric, gas and energy supply infrastructure. We continue to increase public awareness about how to stay safe around our systems and facilities, and to build strong and effective partnerships with emergency responders to help ensure public safety.

## Our Approach

### Embedding Safety in Our Operations

We take a multifaceted approach to protect the safety of the public through our operations:

- **Gas Operations:** Since the San Bruno accident, we have significantly improved the integrity of our gas system and operations. This includes earning two international certifications for best-in-class asset management processes, decommissioning all known cast-iron pipe in our system, use of mobile leak detection technology and a new end-to-end leak management system, and embracing a corrective action program to support our safety culture.
- **Electric Operations:** Our commitment to public safety can be seen in our continued work to reduce the number of downed electric wires across our service area, use new technology to respond more quickly to equipment failures, manage vegetation along our electric lines to reduce the risk of fires, and implement an extensive program to ensure our employees have the rights skills and qualifications to perform work safely.
- **Energy Supply:** We completed advanced seismic studies at our Diablo Canyon Power Plant, confirming that the plant can safely withstand extreme natural events, including potential earthquakes, tsunamis and flooding. We also continued to inspect and maintain our hydroelectric system according to strict safety guidelines, and to enhance public safety outreach in communities around our facilities.

## Emergency Preparedness and Response

Operating in a region that regularly experiences earthquakes, wildfires and major storms, it is critical that we implement best-in-class emergency plans and procedures. PG&E's Emergency Management Advancement Program (EMAP), launched in 2013, is an enterprise-wide effort to comprehensively review and strengthen our catastrophic emergency response plans.

Led by our Emergency Preparedness and Response organization, the program is working to ensure we have:

- Clearly defined organizational structures, roles and responsibilities
- Restoration priorities that incorporate community needs to help our customers get back on their feet
- Effective logistics plans that support restoration needs
- Technology that is ready and available to support our response
- Employees who are trained and fully understand their emergency roles
- Employees who are personally prepared for emergencies and ready to respond at home and at work

## 2014 Milestones

### Increased Coordination with First Responders and Emergency Officials

Coordination and communication between PG&E and officials who are first on the scene during an emergency are critical to keeping the public and first responders safe. Our emergency response plan—which is developed, shared and tested with emergency officials—defines clear lines of responsibility for PG&E and emergency personnel. PG&E also maintains a secured First Responder website where emergency officials can access training materials and gas transmission infrastructure information and maps.

Key highlights last year included:

- **Hosted more than 500 training workshops** to better prepare firefighters, police, public works officials and other authorities to respond to emergencies involving electricity and natural gas. We also met with all of the fire departments in our service area with PG&E gas transmission or distribution facilities in their region.
- **Regularly participated in emergency-preparedness drills** to test emergency response and coordination plans. This included testing our emergency response to a simulated major earthquake in the Bay Area. Hundreds of employees participated in the two-day drill, which tested PG&E's ability to assess damage, prioritize power restoration and respond to electric and gas emergencies. As part of the drill, PG&E invited state and local first responders to evaluate our response and help make any improvements.

### Raising Public Safety Awareness

A key element of our public safety strategy includes educating the public about our systems and facilities and how to work safely around them. Last year, steps included:

- **Reminded the public to always call 811 before digging projects**, with outreach around California Arbor Week, National Safe-Digging Month and National 811 Day. We also continued our proactive work with contractors, city and county agencies, and others to reduce "dig in" incidents in which third-party workers damage buried gas and electric lines, creating hazards for the workers and the public.
- **Raised awareness about the importance of electrical safety**, including alerting people to the dangers of downed power lines, especially during storms, and reminding them to "stay away, don't touch and call 911."

### Call Before You Dig



We continue to educate homeowners and professional excavators on the importance of calling 811 before digging so that PG&E can clearly mark underground equipment, helping to prevent injuries, property damage and outages.

■ **Conducted outreach to residents and business owners immediately downstream from PG&E dams** as part of a nationwide initiative by the Federal Energy Regulatory Commission. Through written materials and open houses, we encouraged people in dam watershed areas to have an evacuation plan and taught them to recognize signs of a dam breach. PG&E has also developed plans with state and local emergency agencies to warn the public in the unlikely event of a sudden dam failure. PG&E also places informational posters in campgrounds, parks and other recreation areas in flood inundation zones.

## Building Strong Community Partnerships

We regularly work with community organizations that share our focus on electric and natural gas safety and disaster preparedness. Examples from last year include the following:

- **Continued our partnership with the Red Cross** to provide Californians with critical disaster preparedness training and emergency response resources. PG&E's \$1.1 million investment enabled the Red Cross to build safer, more resilient communities through programs such as Team Firestopper and the FEMA award-winning Ready Neighborhoods. Over the past three years, PG&E's investment has helped train, educate or engage more than 2 million people in California.
- **Provided funding to local Fire Safe Councils throughout the state.** The goal of the private, public and community partnership is to prevent fires during the traditional September-October peak of California wildfire season. The funding was for fuel reduction, emergency access and defensible-space projects by local Fire Safe Councils throughout Northern and Central California.
- **Partnered with CAL FIRE** on its "One Less Spark, One Less Wildfire" public safety campaign to minimize the frequency, size and cost of wildfires started by people. Whether it's ensuring a campfire is completely extinguished or keeping a vehicle well-maintained to prevent sparks, the campaign shows how following a few simple steps can help prevent wildfires.

## Cybersecurity

Cybersecurity is one of the most important safety challenges for the utility industry, as information technology becomes increasingly integral to our operations and customer service. The U.S. Department of Homeland Security has classified utility assets as a key resource and critical infrastructure for our national and economic security. PG&E is firmly committed to working with other utilities, other essential industries and government officials to develop and implement state-of-the-art cybersecurity strategies and best practices.

Our efforts are led by an Enterprise Technology Risk Management team, headed by Pacific Gas and Electric Company's Vice President and Chief Information Security Officer. This team of security and operations experts continuously identifies, evaluates and mitigates cybersecurity risks across the enterprise.

Identifying and evaluating cybersecurity risks revolves around understanding business processes and core enabling technologies, while providing ongoing monitoring of our infrastructure and external threat landscape. Once risks are identified and prioritized, we develop mitigation plans to ensure an acceptable level of risk exposure.

Cybersecurity training and awareness continues to be a major focus for all employees and contractors, emphasizing the critical role they play in protecting PG&E assets. All PG&E employees are required to take an annual information security and privacy awareness course, and leaders are subject to additional coursework to further integrate cybersecurity awareness into our culture.

## Interactive Safety Demonstrations



To help raise awareness about safety, PG&E conducts interactive electric and gas safety demonstrations using a traveling display that allows instructors to show potential hazards associated with gas and electric facilities. Designed for students, youth groups, contractors, emergency personnel and customers, the program enables trained PG&E gas and electric professionals to teach communities about being safe around the gas and electric services we provide. In 2014, we conducted more than 2,100 demonstrations in communities throughout our service area.

## PG&E funds new fire detection cameras



PG&E provided \$2 million in funding to local Fire Safe Councils to install 28 highly programmable remote fire sensing cameras on some of the most important wildfire lookout towers in California, located in Marin, Calaveras, Humboldt and Butte counties.

## **Physical Security**

PG&E is also increasingly focused on the physical security of our assets and infrastructure. In 2013, gunshots caused extensive damage to PG&E's Metcalf substation near San Jose. Although no one was hurt and there were no customer outages as a result, we have worked collaboratively with agencies at the federal, state and local levels to enhance the security of critical substations across our service area.

Improvements underway at various substations include the installation of new barriers at the perimeter and shielding for certain equipment. We're also removing nearby vegetation, which may provide concealment, and testing and installing various state-of-the-art security equipment designed to detect and deter a range of potential threats.

PG&E is investing heavily to increase substation security for its highest-priority facilities. We have also worked hand-in-hand with other utilities, the Edison Electric Institute and independent security experts. Many of the measures being taken are a result of this coordinated, cooperative effort. PG&E and the utility industry are committed to this kind of essential collaboration by continually sharing information and best practices to stay ahead of threats.

## **Measuring Progress**

To track our progress and promote continuous improvement, PG&E uses a set of formal public safety metrics, in addition to numerous employee safety measures. We have also taken industry-leading steps to link compensation to safety performance. In 2014, safety metrics determined 40 percent of management's annual at-risk performance-based pay—and in 2015 we increased this share to 50 percent. Safety results continue to be the single largest factor affecting annual at-risk performance-based pay, with financial performance and customer service each representing an additional 25 percent.

A number of accomplishments in 2014 demonstrated continued progress on enhancing public safety, including improvements in our average response time to gas and electric emergencies and our performance in repairing gas leaks.

## **Looking Ahead**

PG&E remains unwavering in our commitment to public safety. Our plans in 2015 include continuing to enhance our process to identify and prioritize risks to the safety of our system and improve the condition and performance of our assets, continuing the execution of our Gas Safety Excellence program to maintain our two international certifications for best-in-class asset management, and continuing to strengthen our public outreach efforts and partnerships with local first responders.



## Customers

PG&E puts customers at the center of everything we do. Our commitment starts with providing the safe, reliable, affordable and clean energy our customers depend on. We are also working at a local level to better understand and meet their different energy needs, and enabling customers to enjoy more clean energy options and control their individual energy choices. And through our support for local economic vitality, we remain focused on keeping customers, their families and businesses growing and staying in California.

# Highlights

- Brought the total number of interconnected customer-owned solar power systems in our service area to 200,000—more than any other utility in the United States.
- Maintained local cross-functional leadership teams throughout our service area to more effectively incorporate local needs and concerns into our operating decisions.
- Helped save customers \$160 million on their energy bills and avoided the emission of more than 776,850 metric tons of CO<sub>2</sub> through our energy efficiency programs.
- Offered an on-bill financing program that funded nearly 1,000 loans for more than \$41.2 million in energy efficiency upgrades for commercial customers and government agencies.
- Piloted a new smart charging partnership with BMW to explore grid benefits from electric vehicles.
- Proposed a major build-out of 25,000 electric vehicle charging stations which, if approved, will add a significant amount to utility deployment of charging stations nationwide, while supporting a portion of the future need in Northern California.

## Key Sustainability Indicators

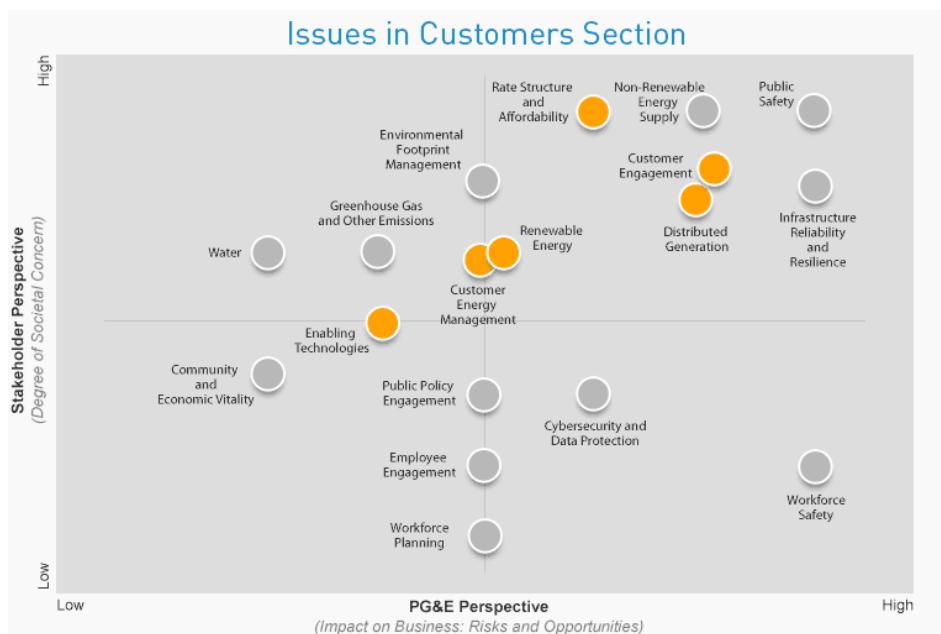
**123,546**

Number of homes weatherized through the Energy Savings Assistance Program

**1,084 GWh**

Electricity saved through customer energy efficiency, exceeding our target

## Our Materiality Matrix



Consistent with best practice, PG&E published a materiality assessment for corporate sustainability in 2014—a strategic project to identify issues that are material to the long-term sustainability of our business. Conducted in coordination with PG&E's strategic planning process, the materiality assessment was designed to engage stakeholders, identify opportunities and risks, and sharpen our corporate sustainability strategy and reporting.

The matrix to the left presents the results—highlighting issues covered in this section of the report.



# Engaging Customers

From Bakersfield to the Oregon border, our customers reflect the rich diversity of California's communities and its economy. At PG&E, we value that diversity and reflect it in how we do business, with the overarching goal of improving the customer experience. We remain focused on understanding and responding to the different needs of our customers and keeping their ever-evolving needs at the forefront of our decisions and actions.

## Our Approach

Pacific Gas and Electric Company's Customer Care organization, led by its Chief Customer Officer, is responsible for our efforts to deliver the desired experience for each and every customer. This includes localizing our presence and strategies in the communities we serve, empowering customers with greater choice and control over how they manage their energy use, continuously integrating customer feedback into improving our products and services, and leading an ongoing effort to drive long-lasting customer engagement and satisfaction.

### Serving Customers Locally

We formally empower our organization to work more effectively at the local level and better incorporate local needs and concerns into our operating decisions. We have built local cross-functional leadership teams who meet regularly to address local issues. The teams are led by local managers and include representatives from across the business.

### Saving Customers Energy and Money

We continue to offer a full portfolio of savings options for customers with an increasing focus on behavioral tips to help customers reduce their energy use and save money. We offer some of the nation's leading programs and incentives for energy efficiency, demand response and installation of solar water heating systems and other distributed generation, as well as simple rate options for charging electric vehicles. We are also preparing to offer a Community Solar Choice program that will allow customers to buy up to 100 percent solar power.



PG&E supports and is committed 100 percent to solar—and we're proud that 200,000 solar customers have connected to our electric grid. We believe that solar is critical for the clean energy future of California. We want to provide our customers with choice and control to help them meet their energy needs, including solar energy options.

## Making It Easy

More than 55 percent of our residential customers prefer self-service options—and that number is growing. As we take advantage of new technologies to help customers understand, manage and reduce their energy use, we are increasingly reaching out to them through a growing variety of channels, including mobile phones, web, email and social media.

We provide the vast majority of customers with access to hourly data on their energy use and a comparison of their use to that of similar homes in their neighborhoods. Within our online tool My Energy, customers can see how and when they use energy, take a home energy audit and find energy saving tips as well as information on our energy efficiency programs and incentives. PG&E's Business Energy Checkup enables small and medium business customers to find energy-saving ideas that can lower their operating costs and programs such as on-bill financing to address up-front cost barriers.

Our energy statements provide clear and easy-to-understand information in multiple languages, with numerous options for customers to pay their bills. PG&E has also improved its mobile website so customers can get real-time outage information on their mobile devices and start, stop or transfer service in addition to capabilities for payment. Customers can also choose their preferred channel for communication: text, email or phone.

In addition to planned digital offerings, PG&E offers self-service capabilities like reconnecting service via our Interactive Voice Response technology. Many of our communications are available in multiple languages and formats, including English, Spanish, Chinese, Vietnamese, Tagalog and large print.

## Integrating Feedback

To increase customer satisfaction, PG&E regularly seeks feedback and insights from customers through various surveys, an online community of our customers called Customer Voice, in-language focus groups and other forms of research that, in turn, help to drive our decision-making and efforts to improve customer service. We also maintain an internal hotline that allows any employee to elevate a customer issue and make sure that PG&E addresses it in a timely fashion.

## 2014 Milestones

We remained focused on better understanding and responding to the unique needs of our different customers in 2014, with a number of highlights:

- **Established local leadership teams.** We met our goal of establishing local cross-functional leadership teams throughout our service area, allowing us to strengthen local relationships and more quickly identify and resolve local customer concerns.
- **Improved the customer experience for digital-first customers.** Through sweeping improvements of PG&E's customer service infrastructure and technologies, customers can now self-manage more of their interactions and transactions with PG&E. In short, customers can now do business with us via their Channel of Choice. We are working to expand the types of transactions that customers can manage digitally or via self-service.
- **Expanded customer data platforms.** We launched a service called Share My Data, which allows customers to share their energy usage data with select third-party service providers who can use the information to help customers determine if energy products and services, such as rooftop solar, may be right for them.

## Second Annual 'Energy Ideation Lab' Yields Fresh, Innovative Ideas



(Photo by Britta Victor)

Students from 12 universities across PG&E's service area spent the day in a competition to identify ways for PG&E to engage its small and medium business customers on energy efficiency.

During the event, the students put themselves in the shoes of a small business—from an autobody shop to a dry cleaner—to identify innovative solutions for PG&E. For the second year, the "ideation lab" event was facilitated by Net Impact, a global nonprofit that empowers a new generation to work within and beyond business for a sustainable future.

## Home Energy Reports stimulate big customer savings



About 1.2 million of PG&E's residential customers receive easy-to-read Home Energy Reports. They show customers how their energy use stacks up against approximately 100 similar households in their area and provide personalized tips on saving energy. These comparisons can encourage customers to manage their energy better. The savings enabled by the report add up: in 2014, electric savings totaled 90 GWh, enough to power about 6,200 typical homes for a year. Total estimated gas savings came to 3 million therms, nearly enough to serve about 1,300 typical homes for a year.

- **Continued strong growth of social media properties.** PG&E produces customer-centric content for social media properties on Facebook, Twitter, Instagram, LinkedIn and YouTube. In 2014, PG&E's social media platforms became essential real-time communication tools during large storms and events, like the Napa earthquake. Both customers and news media turn to our social channels, including our news site at [pgecurrents.com](http://pgecurrents.com), for the latest news and updates from PG&E.
- **Improved outreach to diverse groups.** By deploying more in-language materials, increasing the number of in-language media opportunities and working with local organizations, we saw strong participation in our programs for low income customers. For example, our CARE program, a discounted rate plan, achieved 86 percent participation by eligible customers.

## Measuring Progress

Through a continued focus on improving the experience for our digital-first customers, and tailoring our engagement and offerings based on local customer needs, we are committed to improving satisfaction for both residential and business customers.

In 2014, we achieved a customer satisfaction score of 76.5, our highest annual score since 2009, and above our target of 75.7. Each year, we benchmark our survey with customers of best-in-class performing utilities from J.D. Power's Customer Satisfaction Index. This helps us set our goal each year, as we aim to achieve top quartile performance. In 2015, our target is 77.2.

### MEASURING CUSTOMER SATISFACTION

#### **Customer Satisfaction Score**

2012	74.5
2013	75.4
2014	76.5

To measure customer satisfaction, we use a random-sample, proprietary customer survey that is conducted quarterly by an independent third party. The Customer Satisfaction Score is determined by averaging customers' overall satisfaction with our products and services using a 1 to 10 scale, indexed to a score from 1 to 100. This metric also serves as one of the measures we use for determining performance-related compensation, as employees from all PG&E lines of business contribute to improving the overall satisfaction of our customers.

## Looking Ahead

Through the work of our local cross-functional teams, we will continue to build PG&E's local presence, strengthen relationships with customers and other stakeholders, and increase PG&E's engagement in our communities.

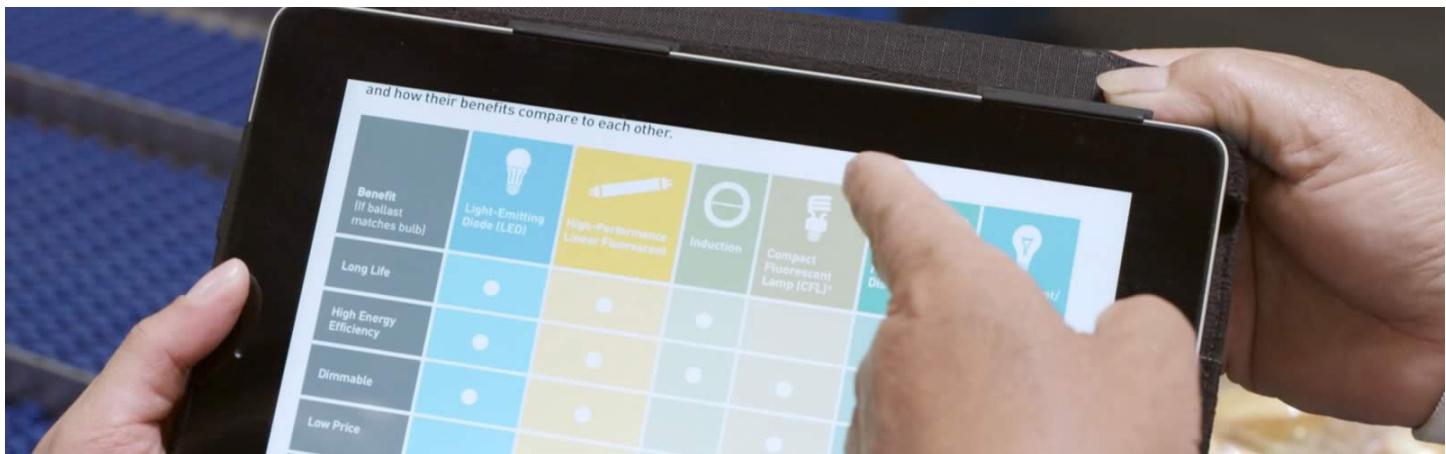
As we work to create a better customer experience, we will continue to provide more self-service options for customers, including customized energy audit opportunities and rate and bill explanations. And, as part of our decades-long commitment to solar, we also support smart energy reform to sustain the long-term growth of rooftop solar in California.

We will also continue to make new technologies available to customers. For example, customers are testing internet- and smartphone-enabled thermostats and Home Area Network devices—made possible with SmartMeter™ technology—that provide energy management and usage information via in-home displays.

### Planting trees for customers switching to paperless billing



In honor of Earth Day 2015, PG&E partnered with the National Fish and Wildlife Foundation to plant a new tree in the wildfire-stricken Los Padres National Forest on behalf of every customer who enrolled in paperless billing. The trees we plant through this effort will reforest approximately 2,800 acres of the 19,000 acres that were burned in forest fires.



## Energy Affordability

While PG&E's average residential bills are well below the national average, we understand the critical importance of keeping gas and electric service affordable for our customers. This drives our continued focus on energy efficiency, helping customers gain greater control over their energy costs, supporting reform of residential electric rate structures and collaborating to address pressing issues, such as California's drought.

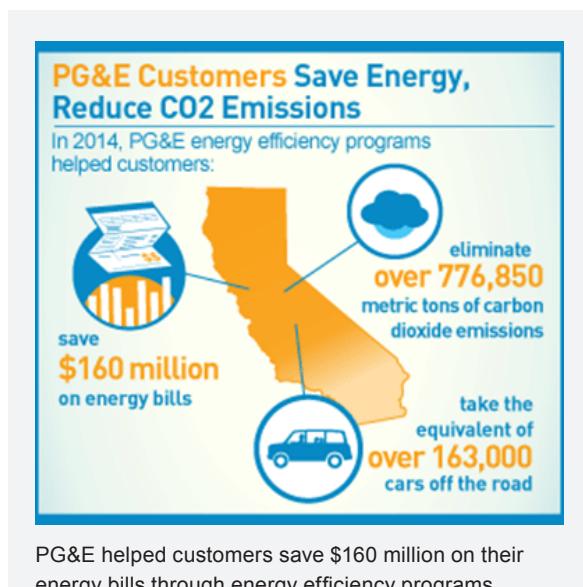
### Our Approach

We are working in a variety of ways to ensure that the gas and electricity we deliver to nearly 16 million people is not only safe and reliable, but also affordable. This includes an ongoing focus on achieving efficiencies in our operations, offering ways for customers to save money by saving energy, and working with customers who are facing financial challenges.

#### Saving Money through Energy Efficiency

Offering a full range of energy efficiency programs is one of the key elements of PG&E's overall commitment to affordability. Our website includes an extensive set of energy-saving tips and lists of appliances and equipment that are eligible for rebates, as well as opportunities to upgrade the entire home. It also provides tools like Home Energy Reports that help customers analyze their usage and pinpoint ways to save.

PG&E also provides customers with rate plan choices to help lower their bills. Residential pricing options made possible by SmartMeter™ technology are helping customers better control and reduce energy costs. The SmartRate™ Summer Pricing Plan enables customers to save money by conserving power during as many as 15 SmartDays™ each summer, when energy may be in short supply. More broadly, time-of-use-rates enable customers to save money by reducing and shifting some of their usage to lower cost off-peak times of day.



## Helping Customers in Need

Whatever the circumstances, PG&E works to continue providing electricity and natural gas to customers facing financial challenges. Programs designed for those in need include:

- **California Alternate Rates for Energy (CARE)**, which offers a monthly discount on energy bills for income-qualified households and housing facilities. Qualified households receive a discount that currently averages about 37 percent.
- **Energy Savings Assistance Program**, which provides income-qualified renters and homeowners with free energy education, weatherization and energy efficiency measures and appliances to reduce gas and electricity use.
- **Balanced Payment Plans**, which spread costs out evenly over the year and eliminate swings in customers' monthly energy bills from seasonal changes in usage.
- **Relief for Energy Assistance through Community Help (REACH)**, which provides emergency energy assistance of up to \$300 to low-income customers experiencing a crisis that prevents them from paying their gas or electric bill. This one-time assistance program, funded in part with charitable dollars from PG&E's shareholders, is administered by The Salvation Army.

## 2014 Milestones

We continue to take steps to keep customer energy bills affordable. Among other highlights during 2014, PG&E has:

- **Worked to continuously adopt more efficient technology and work methods.** We remain focused on initiatives to streamline processes and decision-making, which enables leaders to more effectively develop the strategies that support our core business needs. One example is our corrective action program, which is empowering employees to make a difference.
- **Continued to support residential rate reform.** We support reform of residential electric rate structures and advocate for a simpler system of rates. Our proposal includes simplifying rates, bringing them closer to actual energy costs and supporting informed customer choice with an optional time-of-use rate.
- **Enabled and promoted energy savings in creative ways.** "Energy House Calls," a reality show where PG&E customers get a home energy makeover, is one way to showcase the value of energy efficiency. Another example is the Energy Savings Assistance Program, highlighted at an event in Bakersfield, which allows income-qualified customers to make their homes more energy efficient.
- **Collaborated to address the drought.** As California faces the worst drought in decades, we are working with customers to help them save energy and water. Much of this work is directed at farmers, ranchers and other agricultural customers. For example, in the City of Lemoore, PG&E hosted a workshop to inform agricultural customers about various programs, such as rebates for installing more efficient water pumps. Farmers and ranchers have shared their experiences working with PG&E.

We also continue to aid customers in need through a variety of financial assistance programs:

- **CARE:** Over 1.4 million customers, or 86 percent of those who were eligible, received discounts through the CARE program in 2014. We partnered with more than 70 community organizations to enroll customers throughout our service area. Since the program's inception in 1989, PG&E CARE customers have saved nearly \$7 billion on their energy bills.
- **REACH:** PG&E provided over \$1.4 million to help more than 6,100 customers through the REACH program in 2014.
- **Balanced Payment Plans:** Approximately 253,000 customers took advantage of various balanced payment plan options in 2014, which helped even out the highs and lows of monthly bills.

# Measuring Progress

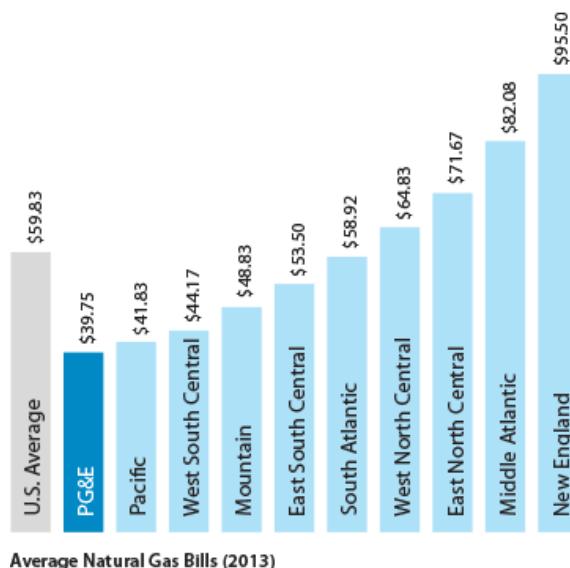
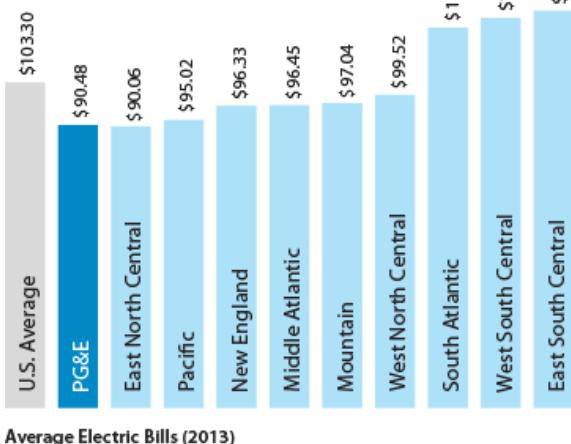
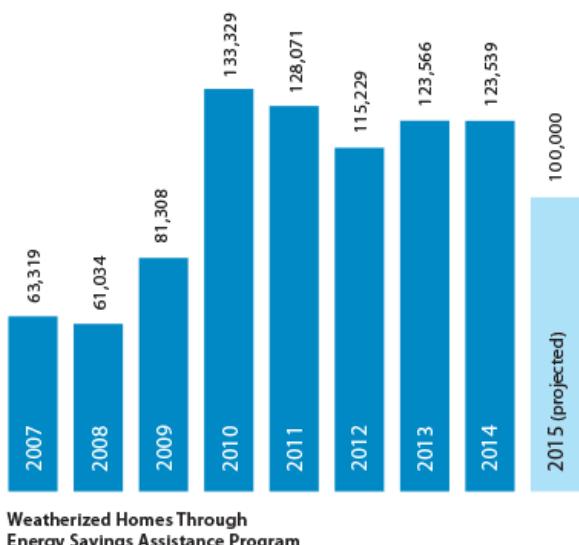
PG&E's Energy Savings Assistance Program helps income-qualified customers reduce energy use, better manage energy costs, and increase safety, health and comfort through a mix of energy education and energy efficiency measures. The program includes measures that reduce lighting costs, provide weatherization to reduce air flow in and out of the home and help customers reduce water use, which is of critical importance given the state's drought.

## Benchmarking Average Residential Bills

Average PG&E residential bills for gas and electric service are among the lowest in the nation, according to figures compiled by leading trade associations.

PG&E's residential electric customers paid less than the average of nearly every region in the country in 2013, the most recent year for which comparative data are available. Their average bill of \$90.48 per month was 12 percent less than the national average of \$103.30.

The average PG&E residential gas customer paid \$39.75 per month, or just over a dollar a day, which was 34 percent less than the national average of \$59.83.



Several factors contribute to low average bills, including our region's relatively temperate climate, which limits the need for winter heating and summer cooling; robust energy efficiency programs, which save customers money; and slower growth in PG&E's gas and electric rates relative to inflation since the start of the last decade.

## Looking Ahead

PG&E is focused on keeping energy affordable for all our customers. We will continue to work proactively with regulators, state officials and other stakeholders to make our rates as fair and equitable as possible.

Energy efficiency measures also will remain at the heart of our efforts to help customers save money on their bills. For example, in 2015, PG&E has set a target to weatherize 100,000 homes through our Energy Savings Assistance Program. We will also work to continue increasing CARE program enrollment.



## Customer Energy Efficiency

At PG&E, we are proud to work with local governments, nonprofits, private sector partners and other stakeholders to deliver innovative energy efficiency programs to our customers. Doing so is part of our broader effort to offer choices to our customers—giving them better control over how and when they use energy. The benefits add up: over more than three decades, PG&E's energy efficiency programs have helped avoid the release of more than 280 million metric tons of carbon dioxide (CO<sub>2</sub>) emissions, based on cumulative lifecycle gross energy savings.

### Our Approach

#### California's Energy Efficiency Model

PG&E's efforts are an integral part of California's energy efficiency model. Over the last 35 years, these measures have helped keep the state's per capita electricity consumption nearly flat while the rest of the nation's consumption has risen by 50 percent.

PG&E fully supported SB 350 as an important step toward achieving California's aggressive climate change and clean energy goals. Passed by California's legislature, SB 350 increases the state's Renewables Portfolio Standard to 50 percent by 2030, and doubles the state's energy efficiency goals. The bill supports the Governor's April Executive Order, which set a new goal to reduce GHG emissions by 40 percent below 1990 levels by 2030.

In addition to this type of legislative and regulatory support, California's energy efficiency model includes:

- A "loading order," which makes energy efficiency the first preferred option for meeting new customer energy demand—ahead of renewable and conventional sources of energy
- Decoupling utility profits from energy sales, which enables PG&E to aggressively pursue energy efficiency without the disincentive of a financial loss

**Mayors step up for opportunity to win \$2 million grant through PG&E energy challenge**

**STEP UP AND POWER DOWN**

San Francisco Mayor Ed Lee and San Jose Mayor Sam Liccardo joined PG&E's new energy-saving pledge to encourage energy efficiency in their cities, with a chance to earn up to \$2 million in funds for local businesses to reinvest in sustainability programs. Sponsored by PG&E, Step Up and Power Down is a community initiative inspiring local companies to adopt behavioral changes in the workplace.

- Aggressive building codes and appliance standards that require Californians to build energy efficient homes and commercial buildings
- Ready availability of energy efficiency programs, training and strong customer participation

## Our Comprehensive Portfolio

PG&E is working to help customers understand, actively manage and reduce their energy use in homes and businesses across our service area. Among other ways, we give customers detailed usage data so they can track their energy consumption throughout the month to better control energy costs, and we provide incentives to customers who purchase energy efficient products.

PG&E reaches customers through a variety of channels, ranging from self-service software tools that provide customized energy insights to one-on-one relationships through seasoned business customer account representatives who work directly with commercial and industrial customers of all sizes. For example, Home Energy Reports show how a customer's energy use compares with similar homes in the neighborhood, along with savings tips and news about PG&E's energy efficiency programs and incentives. We also serve customers through partnerships with state and local governments and through third-party energy efficiency specialists.

Our energy efficiency programs include:

- **Directly encouraging customers to purchase energy efficient products.** We give money back to customers who purchase energy efficient home appliances such as clothes washers and water heaters. Our Home Money Saver is one tool to help customers identify the most efficient products to meet their needs.
- **Working with retailers, distributors and others to increase the availability of high-efficiency products.** This includes providing incentives to encourage increased stocking, promotion and sales of efficient products such as lighting. We tap into 150 trade professionals who sell, install or service products. We also partner with manufacturers and distributors by offering incentives to distributors who sell qualified high-efficiency HVAC equipment.
- **Advocating for stronger building codes and appliance standards.** PG&E is an active member of a statewide team that has provided technical support for more than 125 building codes and 45 appliance standards in California, as well as nearly 90 federal appliance standards or test procedures since 1998.

## 2014 Milestones

Our energy efficiency programs continue to increase affordability for our customers and promote economic growth in the communities we serve. A few highlights from 2014 include:

- **Provided innovative financing options.** We offer an on-bill financing program to address up-front cost barriers for commercial customers and government agencies. The program provides funding for energy efficiency upgrades with no out-of-pocket costs and zero interest. By the end of 2014, the on-bill financing funded nearly 1,000 loans worth more than \$41.2 million. The majority of the loans went to small- and medium-sized businesses.
- **Partnered to serve customers locally.** We actively partner with local governments and community-based nonprofits to offer turnkey energy efficiency solutions tailored to local areas. For example, Mendocino County Energy Watch serves as a champion for rural communities and was recently recognized for pushing the envelope on innovative energy efficiency measures.

The foundation of this support is PG&E's network of local, regional and statewide government partnerships that implement energy efficiency and climate planning programs. The programs are tailored to individual communities, in coordination with the Statewide Energy Efficiency Collaborative, and have served hundreds of cities, counties, small businesses and nonprofit organizations, as well as thousands of low-income residential customers.

### PG&E partners on zero net energy design competition



Students at the University of Aalborg in Copenhagen, Denmark, created "The Wave" as part of the competition.

PG&E and the American Institute of Architects Foundation partnered with the East Bay Asian Local Development Corporation for the fourth annual Architecture at Zero competition for zero net energy building designs. Through the competition—open to designers, academics, researchers and students—applicants designed a zero net energy building for a mixed-use site in Oakland.

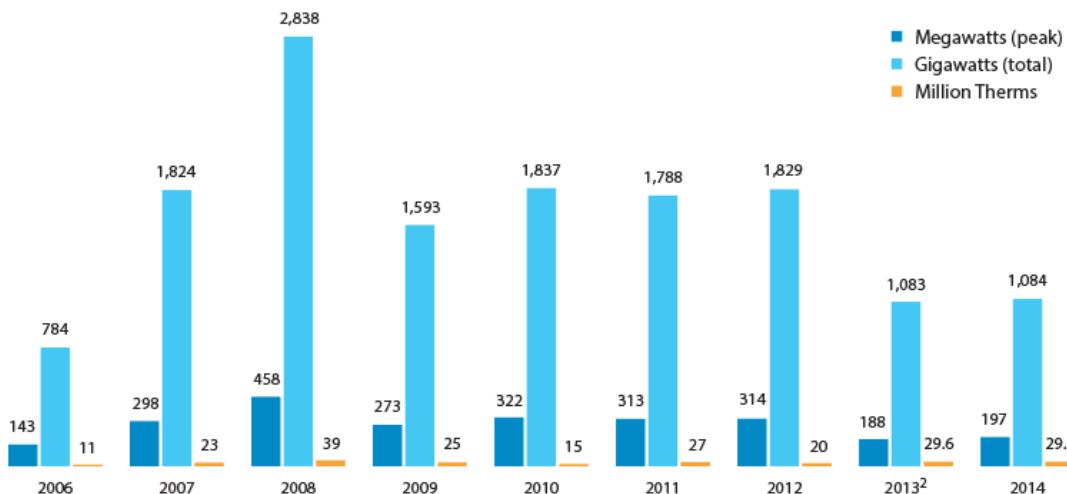
■ **Advanced zero net energy building designs and technologies.** We continue to prepare for a future with zero net energy homes through our hands-on classroom and ongoing pilots and research. We also provided technical assistance to architects and builders to help them meet their energy efficiency goals. California energy policy calls for all newly constructed residential and commercial buildings to be zero net energy by 2020 and 2030, respectively.

■ **Collaborated with major retailers.** We work closely with retail partners such as Home Depot to bring energy efficient products to market. We also worked with ENERGY STAR® staff and other utilities on a pilot program to capture energy savings by motivating retailers to promote, assort, stock and demand more energy efficient models, an important step toward achieving California's goal to reduce plug loads (energy used by products powered by a plug) by 40 percent by 2020.

## Measuring Progress

PG&E and our customers exceeded the CPUC's energy savings goals for 2014, achieving savings of 1,084 GWh, 197 MW of peak load and 29.6 million therms. These results helped save customers \$160 million on their energy bills and resulted in avoided emissions of more than 776,850 metric tons of CO<sub>2</sub>—equivalent to taking over 163,000 cars off the road.

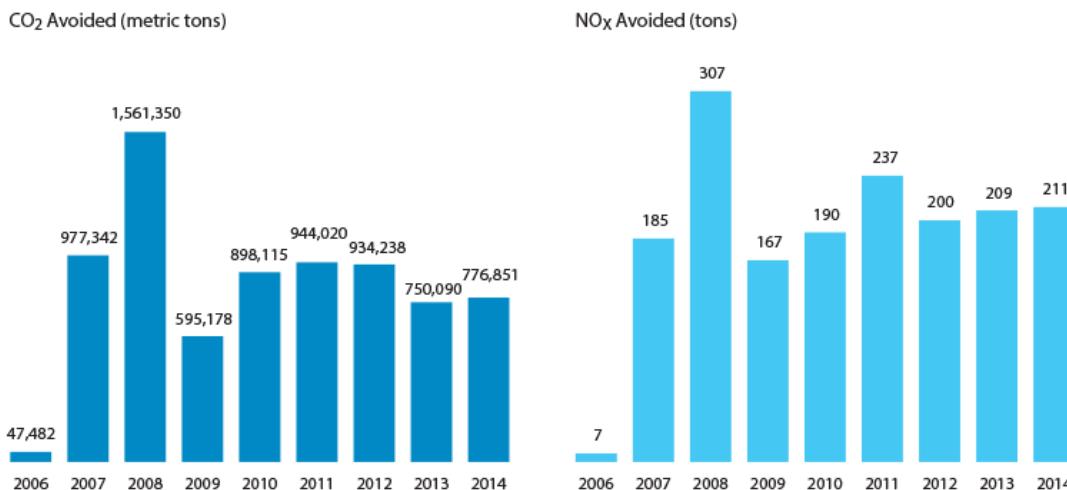
### Annual Energy Savings<sup>1</sup> from Customer Energy Efficiency Programs



<sup>1</sup> Annual energy savings refer to the first-year impacts associated with installed customer energy efficiency projects. All data is as filed with the CPUC in PG&E's Energy Efficiency Program Portfolio Reports.

<sup>2</sup> In 2013, the methodology for reporting Codes and Standards savings changed from gross savings to net savings, resulting in lower reported savings than past years.

### Annual Avoided Emissions<sup>1</sup> from Customer Energy Efficiency Programs



<sup>1</sup> Annual avoided emissions refer to the first-year impacts associated with installed customer energy efficiency projects. All data is as filed with the CPUC in PG&E's Energy Efficiency Program Portfolio Reports.

Based on savings achieved through our programs, the CPUC awarded PG&E's shareholders \$36.3 million in incentives in 2014.

## Shareholder Earnings from Customer Energy Efficiency Programs<sup>1</sup>



<sup>1</sup> Shareholder earnings booked in a specific year reflect program performance of the prior one to three years.



By investing in energy efficiency, we are making a positive economic impact and creating savings that customers can use in other productive ways. PG&E's customer energy efficiency programs supported nearly 7,700 jobs and \$1.1 billion of economic activity in PG&E's service area in 2012. This means that every dollar associated with PG&E's customer energy efficiency programs supported another 80 cents of economic activity.

## Looking Ahead

PG&E's ongoing commitment to implement and elevate energy efficiency programs and policies will continue to support California's standing as the national leader in energy efficiency. While we have made tremendous progress over the last several decades, there are significant opportunities to do even more.

We will continue to look for opportunities to improve our impact, explore new partnerships and engage our customers. For example, PG&E is piloting "Step Up and Power Down," an energy savings initiative designed to encourage smart energy choices at businesses in San Francisco and San Jose. It is a collaboration between PG&E and cities to inform and encourage people to reduce energy waste by changing their behaviors. Step Up and Power Down also includes a residential component to test how local and community-based approaches can increase customer engagement in the cities of Redwood City, San Carlos and Woodland.

PG&E is also piloting an initiative to use energy efficiency to enhance the local reliability of the electric grid. As envisioned, the project would use targeted energy efficiency to reduce peak demand, deferring the need for local investments in substation capacity upgrades.

Other efforts include expanding our on-bill financing program by launching a pilot that will allow residential and commercial customers to work with third-party lenders to invest in clean energy projects that can then be repaid on their PG&E bill. PG&E also recently launched the Energy Smart Marketplace, an online tool to help customers identify energy efficient appliances and consumer electronics.

### PG&E supports energy efficiency competition



PG&E is providing technical support and up to \$20,000 in funding for each of the five cities within our service area named as finalists in the Georgetown University Energy Prize, a nationwide energy efficiency competition for small- to medium-sized communities. PG&E's funding will support residential energy efficiency efforts of each city's choosing, including community outreach and low-income weatherization programs.



## Demand Response

We continue to develop innovative solutions to manage pressure on the grid when demand for electricity is high. PG&E's demand response programs reward customers with incentives for reducing or shifting their energy use at these times, helping to lower costs, reduce strain on the system and ensure that PG&E is there when our customers need us most. We are also piloting new strategies to smooth out the intermittent flow of energy from renewable sources, such as wind and solar generation.

### Our Approach

PG&E's demand response options are enabled by SmartMeter™ technology, which helps customers better control and reduce energy costs. More than 100,000 residential customers take part in the programs we offer, along with many larger commercial and industrial customers. These programs enable PG&E to take a more fiscally and environmentally responsible approach and avoid the need to build and maintain additional power plants that would only be called on for short periods throughout the year.

Since 2012, as part of a plan by the CPUC, PG&E has been transitioning business and agricultural customers to a Time-Varying Pricing (TVP) electric rate structure that better aligns prices with the cost of generating energy at the time it is used. Under the TVP structure, customer rates are higher when electric demand is at its peak, typically during weekday afternoons. In return, customers pay lower rates at all other times.

PG&E also offers several voluntary demand response programs for homes and businesses:

Program	Description
SmartRate	Gives residential customers a discounted rate throughout the summer, with the exception of up to 15 declared “SmartDays” when their rates are higher as demand for electricity reaches its peak. In 2014, 130,000 customers participated in SmartRate and paid up to 20 percent less on their summer electric bills.
SmartAC	Sends a signal to a PG&E-provided device on a customer’s air conditioner during electricity demand peaks, cycling the air conditioner to use less energy. Offered during May through October, the program can provide about 90 MW of load reduction across PG&E’s system.
Peak Day Pricing	Provides business and agricultural customers with discounted rates from May through October. In exchange, prices are higher for energy used during designated peak “Event Days” and times (no more than 15 per year). In 2014, participating customers reduced their energy demand by more than 8 percent during these peak times.
Aggregator Managed Portfolio and Capacity Bidding Program	Works with demand response companies that aggregate customers together. These aggregators—and, by extension, the customers in their portfolios—act as virtual power plants and receive payments from PG&E in exchange for reducing load on peak days.
Base Interruptible Program	Customers agree to reduce their usage to a predetermined level during special emergency circumstances. Participating customers—typically large customers—receive financial incentives in exchange for their commitment to help ensure grid reliability.
Demand Bidding Program	Offers incentives to businesses for reducing energy usage during hot days. Unlike some other programs, this is a “best effort” program that gives customers incentives for reducing their usage but does not apply additional charges if they opt out on any given day.
Automated Demand Response (AutoDR)	Works with customers to identify specific ways to reduce electricity use during peak demand periods and provides them funding to automate their equipment. Then, during a demand response event, PG&E sends the equipment a signal that initiates a series of automatic, customer-defined and preauthorized demand reduction measures.

To further encourage customer participation, both Peak Day Pricing and SmartRate offer bill protection, which reimburses customers for the first year if their bills are higher than they would have been under their previous rate plan.

## 2014 Milestones

In 2014, we leveraged our programs on numerous occasions to reduce demand and ensure reliable electric service for customers. For example, in early 2014, our customers helped meet a CAISO emergency request to conserve electricity. Through our Base Interruptible Program, customers responded to a notification in 30 minutes and averaged a reduction of 184 MW over the four-hour event.

We also continued to transition eligible small- and medium-sized agricultural customers to Time-of-Use rates, following the transition of similarly sized business customers in 2012 and 2013. A “Time for Business” mobile tour invited customers to learn what time-of-use rates would mean for their business and talk with local PG&E representatives about our programs and rebates.

PG&E also continued to provide online tools, programs and services to help businesses thrive with Time-of-Use pricing. Customers can log in to our website to see a custom rate comparison and learn more about available pricing options.

## Measuring Progress

Through our demand response programs, PG&E and our customers had the ability to control up to 586 MW of customer load in 2014—about the capacity of a large conventional power plant.

## Looking Ahead

We will continue to offer programs that enable our customers to cut energy usage during periods of peak demand, helping to lower costs and benefit the environment. Through new data platforms and programs, we will also continue to enable third parties to take advantage of the Grid of Things™ and help ensure reliability as we integrate more renewable energy into the grid. For example, in 2015, we are launching a pilot that incentivizes customers to store energy or shift their energy use to times when energy supply is greater than demand due to high levels of renewable energy production.

### PG&E and BMW partner to extract grid benefits from electric vehicles



PG&E and automaker BMW are teaming up to test the potential for electric vehicle batteries to provide valuable services to the electric grid. If successful, the pilot program could pave the way for utility payments that could stimulate further customer purchases of electric vehicles.

BMW has enlisted 100 owners of its new BMW i3 electric vehicles to take part in the pilot. During the test period, PG&E will send BMW an alert over the Internet, indicating how much load to cut and for how long. BMW then will signal the telemetry equipment in each participating vehicle, telling it to halt its charging for the duration of the event.



## Solar & Distributed Generation

At PG&E, we are proud that 200,000 of our customers have chosen to “go solar,” accounting for about one quarter of all rooftop solar systems in the United States. We’re also committed to doing more and working with our customers and the state to promote solar and other renewable energy resources. We’re finding new ways to enable clean energy options for our customers, and are investing in a modernized grid that can integrate more solar and renewable energy—as well as electric vehicles, electric batteries and related energy technologies—distributed across the system.

### Our Approach

Solar power is critical to California’s clean energy future and we are working closely with our customers to help them add solar and connect to the grid. On average, we are adding nearly 6,000 new solar customers a month—that’s about one new solar customer every 7 minutes.

We offer customer incentives for rooftop solar, solar water heating, fuel cells, wind, battery storage and other advanced technologies. Our programs have helped customers reduce their energy bills and carbon footprint and complement the many cost-effective energy efficiency measures that PG&E offers. PG&E’s solar and distributed generation programs are also an essential component of the electric grid of the future, one that will give customers more choice in how they use energy.

PG&E customers interested in adopting solar can visit our website to learn about finding an experienced contractor, available financing options and how to maximize their solar investment by ensuring their home and appliances are energy efficient. We also offer a solar calculator to help customers better estimate the appropriate size of their solar system, the likely cost and how much energy it will help them save.

PG&E sends new solar customers a welcome kit explaining how their solar bill works and follows up with targeted communications at key times throughout their initial year. Our redesigned solar bill helps customers understand their annual charges and credits. A dedicated solar contact center provides knowledgeable and specialized customer service representatives to answer questions at any point in the solar adoption process. Additionally, an easy-to-use online portal allows solar customers to track their charges and credits throughout the year and tally how much money they have saved.

## Incentive Programs

PG&E currently offers three types of solar and distributed generation incentive programs for customers:

- **PG&E's California Solar Initiative-Thermal program** provides rebates to single-family and multi-family residential projects as well as commercial customers who install eligible solar water heating systems for their home or business. The program will run through December 2017 or until the budget of \$280 million is exhausted, whichever occurs first.
- **PG&E offers solar photovoltaic (PV) incentives** for single- and multi-family affordable housing and customers can also apply for incentives for new energy efficient homes that install solar.
- **PG&E's Self-Generation Incentive Program** provides incentives for customers to implement other advanced on-site generation and/or storage technologies, such as fuel cells, wind turbines, combustion engines and advanced energy storage systems. The goal of the program is to reduce peak load and greenhouse gas emissions for participating customers.

Due to unparalleled demand, PG&E's available incentives for residential and non-residential customers through the California Solar Initiative—totaling \$877.7 million—were exhausted in 2013, three years ahead of schedule.

## 2014 Milestones

In 2014, PG&E continued its strong support for solar and other clean energy technologies. Examples of our efforts include the following:

- **Supported customer solar water heating.** We provided average incentives of about \$2,000 to single-family residential solar water heating projects, and more than \$27,000 on average for multi-family residential and commercial installations. These incentives have helped support over 800 gas-offsetting projects of all types since the program's inception, which, in total, are expected to avoid over 1.2 million therms annually.
- **Supported other customer self-generation.** We allocated an estimated \$60 million to customer projects that will install approximately 37 MW of distributed generation, such as fuel cells, wind turbines, internal combustion engines and advanced energy storage systems.
- **Continued to improve the customer experience.** On average, a new solar rooftop system can be interconnected by PG&E in less than five days. This is one of the fastest processes in the United States and compares to an industry average of four weeks. We've also enhanced the experience for new solar customers with a welcome kit, redesigned bill and online resources.
- **Raised customer awareness of solar power and other generation technology options.** We offered a wide range of training opportunities on solar and other technologies for different audiences and education levels, both online and in the classroom. We held 49 solar classes in 2014 with more than 1,200 attendees.

## Celebrating Solar at Marine Mammal Center



PG&E worked with the Marine Mammal Center in Marin County to install solar panels on its roof to save energy and money. The solar installation saves the center about \$20,000 a year—enough to feed about 200 sea lions each month.



For the seventh straight year, the Solar Electric Power Association named Pacific Gas and Electric Company first in the nation in its ranking of utilities with the most solar megawatts added to the grid in 2014.

## Solar water heating education and workshops



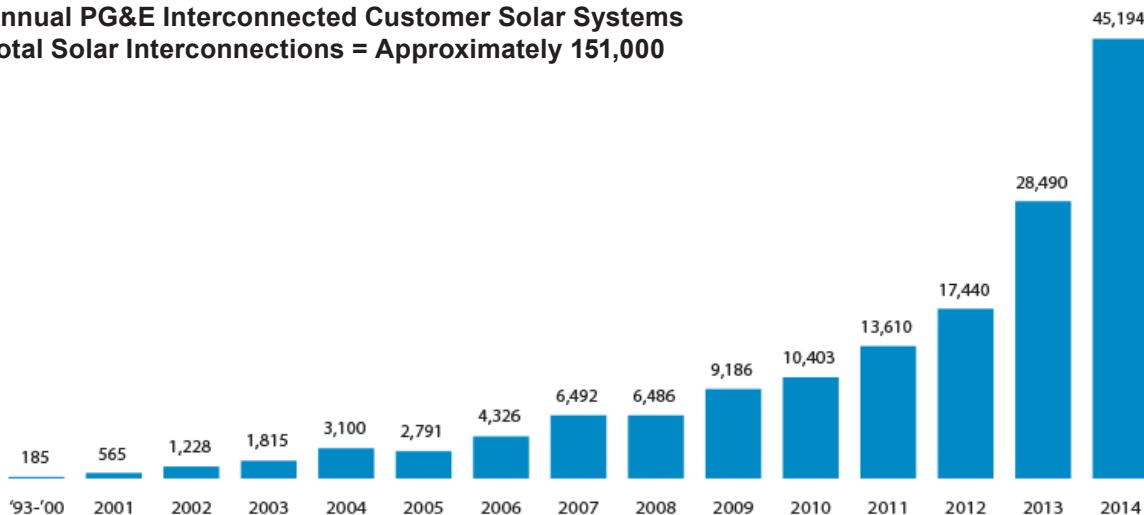
PG&E workshops help educate solar water heating contractors and the public about thermal technology and details of the CSI-Thermal program:

- Solar water heating basics, which provides an overview of the various technologies
- Solar water heating systems for homeowners, which covers the design, specification and installation of systems for residential applications
- Solar water heating—advanced commercial systems, which focuses on large-scale systems for commercial applications
- CSI-Thermal workshop, which is required for becoming an eligible installer with the CSI-Thermal Program

## Measuring Progress

In 2014, we surpassed 150,000 interconnected solar systems, a significant milestone for PG&E, the solar industry and our customers. The total is now about 200,000, representing 25 percent of all rooftop solar in America.

### Annual PG&E Interconnected Customer Solar Systems Total Solar Interconnections = Approximately 151,000



## Looking Ahead

Today, Californians have more energy options than ever before. PG&E is enabling customers to meet their energy needs in whichever way they choose, including generating their own energy with rooftop solar.

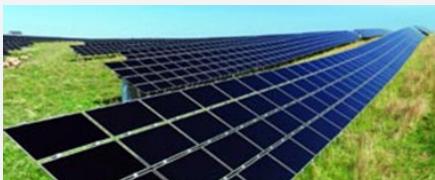
We are working with diverse parties on smart solar reform in response to state law AB 327, which requires the CPUC to revise the current approach for compensating solar customers. The reforms aim to ensure that costs and benefits from customer solar generation are balanced while ensuring sustainable growth of distributed solar.

PG&E supports reform measures that continue to provide compensation for solar energy provided by our customers, while ensuring that everyone who benefits from the grid helps to pay for the investments and modernization projects that enable two-way flow of energy and integration of additional amounts of clean distributed energy resources. Our proposal gives customers the opportunity to control their bill by effectively managing their peak energy usage, which reduces customer costs and benefits the electric grid.

More broadly, we are focused on building the foundation for the Grid of Things™, in which solar plays a crucial role to provide maximum grid flexibility and value to customers. The Grid of Things™ will integrate all of the new energy-related technologies that are being developed and come together in a way that gives customers maximum flexibility, maximum choice in how they use energy and, ultimately, maximum value.

PG&E offers a discount program to encourage employees to choose solar for their home. Through the new program, PG&E offers employees a \$1,000 incentive to help make solar more affordable.

### Community Solar Choice



PG&E received permission from state regulators to offer electric customers a new clean energy program that will provide up to 100 percent solar power for a modest cost premium each month.

Two plans will offer customers a simple and effective way to do even more to support the growth and future of clean energy in California. The programs are in development, with launch dates pending CPUC approval.

- A Community Solar Choice plan will allow customers to purchase 50 or 100 percent of their energy usage from a pool of new solar resources located within PG&E's service area. Enrolled customers will pay a modest cost premium each month and PG&E will

sign long-term power purchase agreements for new solar resources, which range in size from 0.5 to 20 MW.

- A Local Solar Choice plan will enable customers to contract with a third-party developer for a share of the output of a local solar project and receive a credit on their PG&E bill. Projects will range from 0.5 to 3 MW in size and be located within the same county or 10 miles of participating customers.



## Plug-In Electric Vehicles

Today, PG&E customers drive one-fifth of all electric vehicles (EVs) registered in the United States. As the fuel provider for tens of thousands of EV drivers, we are committed to making ownership easy and affordable. We are proactively sharing the benefits of driving electric with our customers and local communities. PG&E is also working to enable the large-scale electric infrastructure needed to meet demand for EVs as well as California's critical clean air and greenhouse gas emission reduction goals.

### Our Approach

We are advancing the adoption of EVs by providing customers with access to information, programs and resources to help them make informed choices. We are also leading innovative new research to plan for a future where hundreds of thousands of customers can charge their EVs with PG&E's clean energy.

Some examples of our efforts include:

- **Conducting workshops and outreach** to help current and potential owners understand the benefits of EVs and steps that can help them save money, such as charging on rates designed for these vehicles.
- **Leading pilot projects and research** to prepare for more EV drivers charging their vehicles on our grid. Current efforts include piloting demand-response smart-charging for EV owners to use their batteries as a resource for delivering energy when demand peaks and studying where to best locate direct-current (DC) fast charging stations, which can recharge an EV's battery in about 30 minutes.
- **Forecasting EV growth and measuring impacts to the electric grid.** Charging an EV can add about one-third the energy demand of an average house to the grid. PG&E is measuring EV adoption and the resulting impacts to grid infrastructure to plan for this growth and achieve smooth and sustainable operations for PG&E and our customers.

## 2014 Milestones

Key steps PG&E has taken to help customers transition to EVs include:

- **Participated in more than 20 events** across our service area to educate customers about the benefits of EVs. These ranged from National Plug-In Day in Cupertino, which set a world record for the longest EV parade, to the AltCar Northern California conference, which brought together local governments and others.
- **Provided an array of online tools** to help drivers navigate the process of researching, buying and owning an EV, from charger installation to advice on rate plans. We also tested online tools with approximately 30 EV dealers—focused on rate analyses, daily travel requirements and incentives—to help car buyers evaluate ownership.
- **Launched a pilot program** to allow residential and commercial customers to install a third-party submeter to measure their EV charging usage. This allows customers to have their EV charges billed at a different rate than home or business usage.
- **Offered a vehicle charging program** for employees who drive their EVs to work. We have installed more than 80 Level 2 chargers at our facilities, which provide up to 25 miles of range for every hour of charging, with plans to install about 50 more in 2015. PG&E's utility fleet also includes a growing number of plug-in vehicles.

## Measuring Progress

The number of EVs in PG&E's service area nearly doubled in 2014, with close to 60,000 registered battery and plug-in hybrid EVs. In 2014, 4.5 percent of vehicles sold in PG&E's service area were EVs, with some counties reaching the 10 percent mark—much higher than the national average. With four years of mass-market EV sales, adoption is already outpacing early hybrid vehicle adoption among PG&E customers.

PG&E predicts that by 2020, our customers will own and operate more than 300,000 plug-in vehicles.

The advanced planning by PG&E, California's other utilities and regulators is paying off with relatively trouble-free adoption of EVs, as confirmed by a 2014 joint utility report. Of the 50,000 plug-in vehicles owned by PG&E customers at the time, only 89, or 0.2 percent, required distribution service upgrades as a result of the added electric load.

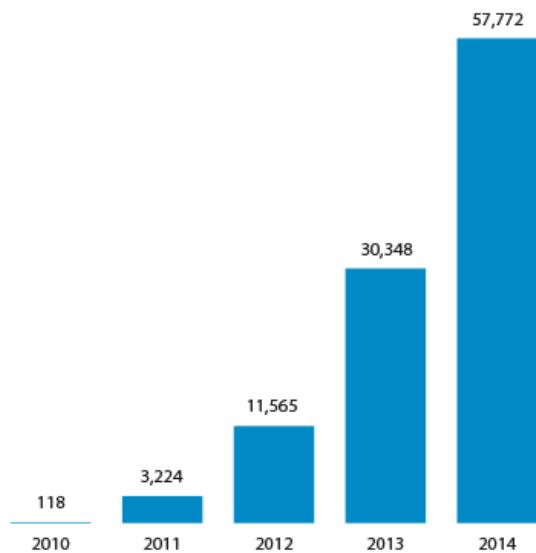
### Connecting with customers



(Photo by Matt Nauman)

PG&E participated in the San Francisco International Auto Show, displaying locally made plug-in hybrid PG&E fleet vehicles and sponsoring EV test drives.

### Plug-In EVs in PG&E's Service Area<sup>1</sup>



<sup>1</sup> EPRI, R.L. Polk Data, 2014.

## Looking Ahead

As EV ownership continues to grow, PG&E is actively designing programs to meet customer needs. For example, PG&E proposed a new program with the CPUC to undertake a significant deployment of EV charging infrastructure across Northern and Central California. If approved, this program would represent a significant increase in utility deployment of EV charging stations in the country.

The program, which will also help meet state clean air and greenhouse gas emission reduction goals, would deploy 25,000 Level 2 charging stations at commercial and public locations, including multi-family dwellings, retail centers and workplaces. The program would also support state-wide EV travel by installing 100 DC fast chargers. PG&E would own the infrastructure and partner with third-party EV service providers to operate and maintain the network of charging stations. A recent ruling by the CPUC has proposed to reduce the initial deployment to about 2,500 charging stations, with an opportunity for PG&E to seek approval for the full program at a later date.

By supporting market acceptance of EVs, the program would create new opportunities for other infrastructure and technology companies, help keep California in the forefront of EV innovation and create new jobs in local communities. Pending regulatory approval, PG&E looks to begin deployments by 2017.

### Providing employee incentives



(Photo by Jason King)

PG&E began a program to encourage employees to make the switch to EVs. Working in partnership with Ford and General Motors, the program helped more than 600 employees purchase EVs, many of which are charged at PG&E facilities via our workplace charging program.



## Employees

Throughout the year, our employees bring our plans to life. Their successes contribute to a better PG&E and, as a result, a better California. Their work is critical—from working on fundamentals like maintaining and improving our gas and electric infrastructure to working around the clock to restore power after a storm.

To build and sustain the workforce PG&E needs to thrive in the long term, we are working on many fronts to ensure our employees are engaged in our success, represent a diversity of perspectives, are safe and healthy, and are continually building their skills to prepare for the challenges ahead.

# Highlights

- Achieved record participation in our biennial employee engagement survey, underscoring our progress in creating a culture where employees feel comfortable speaking up and bringing issues forward.
- Exceeded our goal for employee volunteerism, with employees logging 75,000 hours serving our communities by building homes and playgrounds, cleaning state parks and mentoring students.
- Developed Leading Forward, a program designed to grow leaders at every level and support our goal of filling 75 percent of leadership vacancies from within.
- Engaged nearly 5,000 employees, or about 20 percent of our workforce, in our Employee Resource Groups, which foster career development, leadership and a culture of inclusion.
- Continued to see a reduction in medical cost trends for PG&E with our health care plan, which focuses on preventive care and wellness.

## Key Sustainability Indicators

**70%**

Percentage of favorable responses to questions on employee survey that measure employee engagement

**75,000 hours**

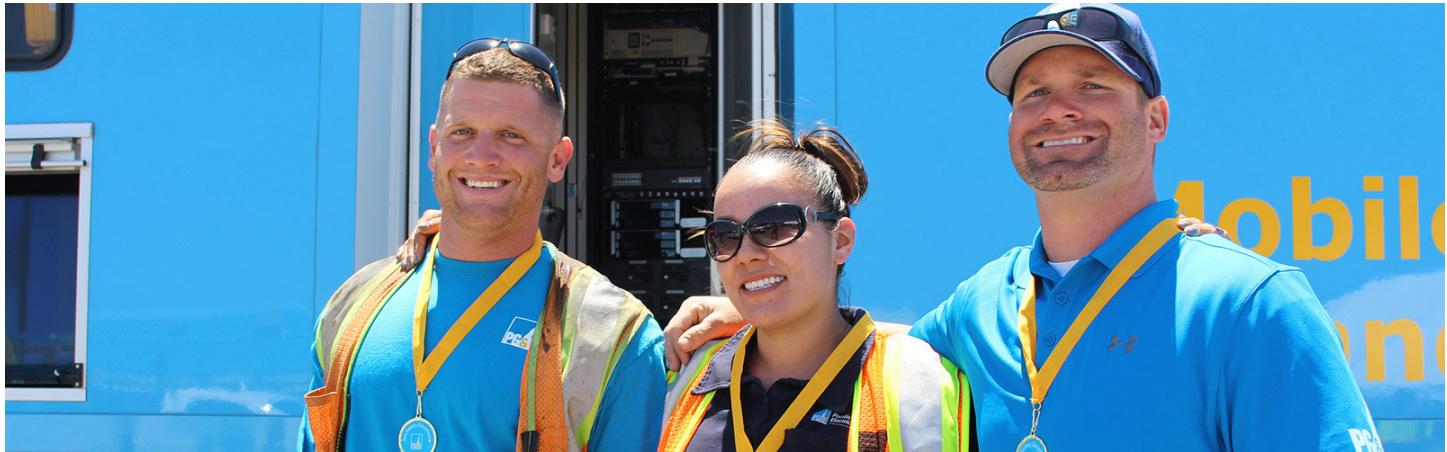
Number of employee volunteer hours

## Our Materiality Matrix



Consistent with best practice, PG&E published a materiality assessment for corporate sustainability in 2014—a strategic project to identify issues that are material to the long-term sustainability of our business. Conducted in coordination with PG&E's strategic planning process, the materiality assessment was designed to engage stakeholders, identify opportunities and risks, and sharpen our corporate sustainability strategy and reporting.

The matrix to the left presents the results—highlighting issues covered in this section of the report.



# Employee Engagement

PG&E's success depends on engaged employees who understand, embrace and apply our values to help us realize operational excellence and superior customer service. To drive engagement, we actively cultivate a workplace that unlocks our employees' potential to be their best through growth and learning opportunities; emphasizes connections with our local communities; promotes a collective vision for California's future; and seeks ongoing feedback from employees on how they—and PG&E—can continue to improve.

## Our Approach

Engaged employees feel a sense of purpose in their work at PG&E. They have a clear line of sight between the work they do and PG&E's goals and success, and they have the capacity and training to make a difference in their role. When employees feel a sense of ownership for our success, they more actively contribute to improving business performance, including in areas such as safety, customer satisfaction, financial performance and environmental leadership.

### Governance

In 2013, we established an Engagement and Culture Steering Committee at the executive level to explore PG&E-wide opportunities to improve engagement and ensure continuous improvement. One of the committee's many areas of focus continues to be improving employee training, including increased access to career development courses. For example, PG&E's new leadership development program, Leading Forward, promotes career advancement and strengthens leadership skills.

We track employee engagement through a biennial employee survey, most recently conducted in 2014. The survey is one of a number of measures in place to hold leaders at all levels accountable for driving engagement within their teams. The Steering Committee also provides guidance on senior leadership's role related to taking action around the survey results. We also incorporate engagement measures into line-of-business goals, to drive continuous improvement.

### Engaging with our Unions

PG&E and its unions work closely together in many important areas, such as enhancing technical training programs, fostering health and wellness, building career pathways and implementing numerous initiatives to promote a stronger culture of safety.

Approximately two-thirds of PG&E employees are covered by collective bargaining agreements with three labor unions: the International Brotherhood of Electrical Workers (IBEW) Local 1245, the Engineers and Scientists of California (ESC) IFPTE Local 20, and the Service Employees International Union (SEIU) United Service Workers West. A negotiated labor agreement with each union establishes the working rules and other terms and conditions of employment. These employees support areas critical to our business, including gas and electric operations, customer service, power generation, environmental and land services, telecommunications, and shared services.

## Engaging at the Grassroots Level

A wide range of employee-led initiatives play an important role in engaging employees throughout the business. These include grassroots initiatives focused on safety, wellness and environmental leadership, as well as ambassador teams that provide engagement opportunities within their lines of business. Also, more than 4,800 employees—more than one-fifth of PG&E's workforce—participate in our Employee Resource Groups (ERGs), each of which contributes to building an inclusive culture at PG&E.

Each year, we honor employees whose work at the grassroots level embodies our highest values—such as safety, diversity and inclusion, environmental leadership, innovation and community service—in our annual Employee Champions Awards ceremony.

## Engaging in our Communities

We also drive engagement through employee volunteer and giving programs. Our volunteerism efforts continue to grow, in part because PG&E's community investment program prioritizes initiatives that offer opportunities for employees to volunteer. Our efforts are supported by local leadership teams that spearhead employee engagement opportunities in local communities.

PG&E also actively supports local nonprofit organizations through board service. Among officers who have been with PG&E for more than a year, more than 80 percent serve on nonprofit boards such as the California Academy of Sciences, the American Red Cross, Habitat for Humanity and Meals on Wheels. Other PG&E employees are also consistently sought after as members of nonprofit boards for a wide range of organizations.

## 2014 Milestones

Volunteerism grew significantly in 2014, with employees enthusiastically contributing their time in the communities that PG&E serves. Whether installing solar panels on Habitat for Humanity homes, cleaning up state parks or volunteering at local food banks, the men and women of PG&E continue to give back. Highlights from 2014 included the following:

- **Set a PG&E record for employee volunteerism.** Employees at every level logged 75,000 hours of community service in 2014—the most volunteer hours in our history—outperforming our goal of 50,000 hours by 50 percent. When multiplied by the California industry-standard value of \$26.87 for a volunteer hour, this represents more than \$2 million in equivalent labor.
- **Achieved record participation in our biennial employee survey.** More than 18,000 employees—83 percent of our workforce—provided feedback, underscoring our progress toward creating a culture where employees feel comfortable speaking up and bringing issues forward. The overall engagement score continued to outperform the utility industry average.
- **Collaborated with our unions to improve safety and other working conditions.** During the past year, PG&E engaged with our unions to adapt and improve existing agreements related to more than 60 issues, including changes to benefits, working conditions, new technology and other factors. This process allows PG&E and our unions to continuously improve working conditions, rather than waiting for the next round of contract negotiations.

### Month of Service Highlights



(Photo by David Kligman)

**Video:** PG&E Employees Volunteered Thousands of Hours at 190 Projects during Month of Service

**Milpitas:** PG&E Volunteers Help Third Graders Learn to Fish During Month of Service

**Merced:** Employees Donate Time, PG&E Provides Grant to Merced Food Bank

**Oakland:** PG&E Volunteers Keep Oakland Lawn Bowling Club in the Green During Month of Service

**San Francisco:** PG&E Volunteers Help Food Bank during Month of Service

**Bakersfield:** PG&E Volunteers Help Beautify Downtown

**San Luis Obispo County:** PG&E Volunteers Have Had Lasting Impact on Montaña de Oro State Park

**San Luis Obispo:** PG&E Volunteers Make Care Packages for Troops

## Collaborating to strengthen training programs and career paths



In an agreement with the IBEW, PG&E established new lines of career progression in our gas organization. These career paths, along with standardized training, increase promotional opportunities and better enable employees to develop expertise in a focus area.

The cover of the "ONE PG&amp;E" employee newsletter. It features a smiling woman in a blue polo shirt. The title "ONE PG&amp;E" is at the top in large yellow letters, followed by "THE PG&amp;E EMPLOYEE NEWSLETTER JULY 2015". Below the title, the main headline reads "Connecting Customers with Energy Savings". The page also includes sections like "Lights, Camera, Action!", "An Oil in Your Garage", and social media links for Facebook, Twitter, LinkedIn, YouTube, and Flickr.

Titled "ONE PG&E," our employee newsletter celebrates the many stories of our workforce and helps them share our progress with their friends, families, neighbors and our customers.



We launched new television, radio and online advertising in local markets, featuring employees from those neighborhoods who are working to make a difference for customers. The ads respond to customer feedback asking for more details on PG&E's progress.

## Measuring Progress

The employee engagement score from our 2014 survey was 70 percent—holding firm at the strong level we saw in our 2012 survey. At the same time, this score fell short of our target of 75 percent, and the survey indicated several opportunities to continue improving our internal processes, information flows and collaboration.

To address these concerns, we are launching initiatives—both in individual lines of business and across PG&E—that will help us make improvements in these areas. In response to survey feedback, PG&E leaders are developing and implementing targeted employee engagement action plans, with measures in place to hold leaders accountable for driving engagement within their teams.

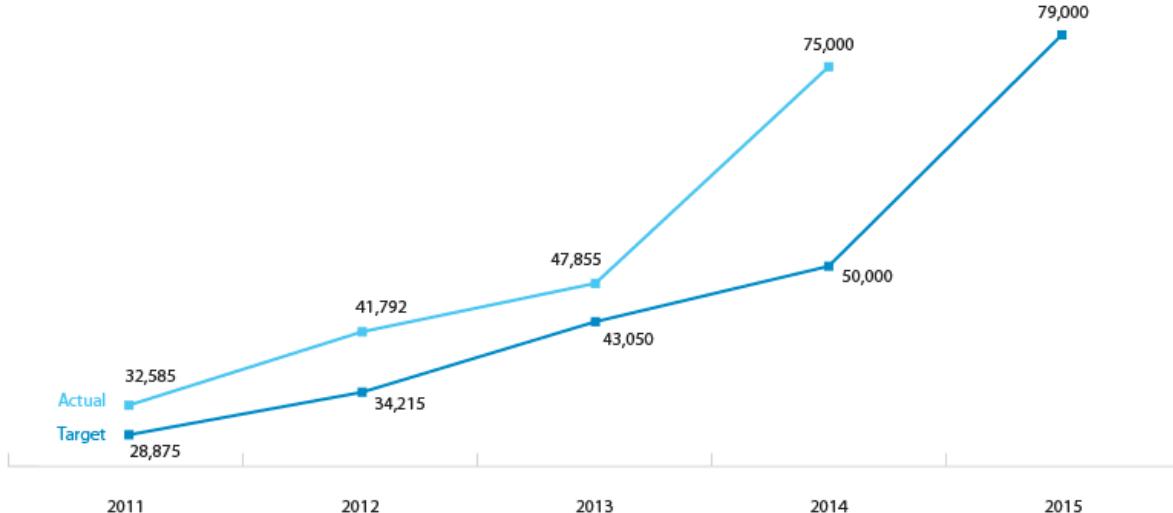
In 2014, the total number of employee volunteer hours more than doubled from five years ago, exceeding our volunteer target by 50 percent. For 2015, we set an ambitious goal of 79,000 hours from employee volunteers.

### EMPLOYEE SURVEY RESULTS

Year	Score <sup>1</sup>
2011	67%
2012	71%
2013	No survey
2014	70%

<sup>1</sup> Refers to the percentage of favorable responses to questions on an employee survey that measures employee engagement.

## Employee Volunteer Hours



## Giving back to the community



PG&E's Campaign for the Community is an annual employee and retiree giving campaign. Employees can pledge a percentage of their salary and direct their donations to schools and nonprofits that are important to them. In 2014, employees and retirees pledged \$7.3 million, exceeding our goal and setting a new record for PG&E. Pledges were made by more than 9,200 employees and retirees, an 18 percent increase over 2013. The funds will be distributed throughout 2015 to more than 5,000 schools and nonprofit organizations. Since 2000, PG&E's employee giving program has raised \$62 million.

## Looking Ahead

Through our executive Engagement and Culture Steering Committee, we will continue to lead an enterprise-wide employee engagement strategy that leverages the strength of local action plans within all lines of business. This approach will allow us to address engagement issues that are larger than any given organization and ensure that priority issues have visibility and are incorporated into PG&E's long-term strategy for improvement.

We will continue to target our efforts to drive employee engagement and respond to our employee survey results, which we will benchmark with others to share best practices. Our ultimate measure will be our next employee engagement survey in 2016. We will also continue stepping up our community engagement through volunteerism and our work with unions in a variety of areas, including establishing new career paths to build the skilled workforce we need.

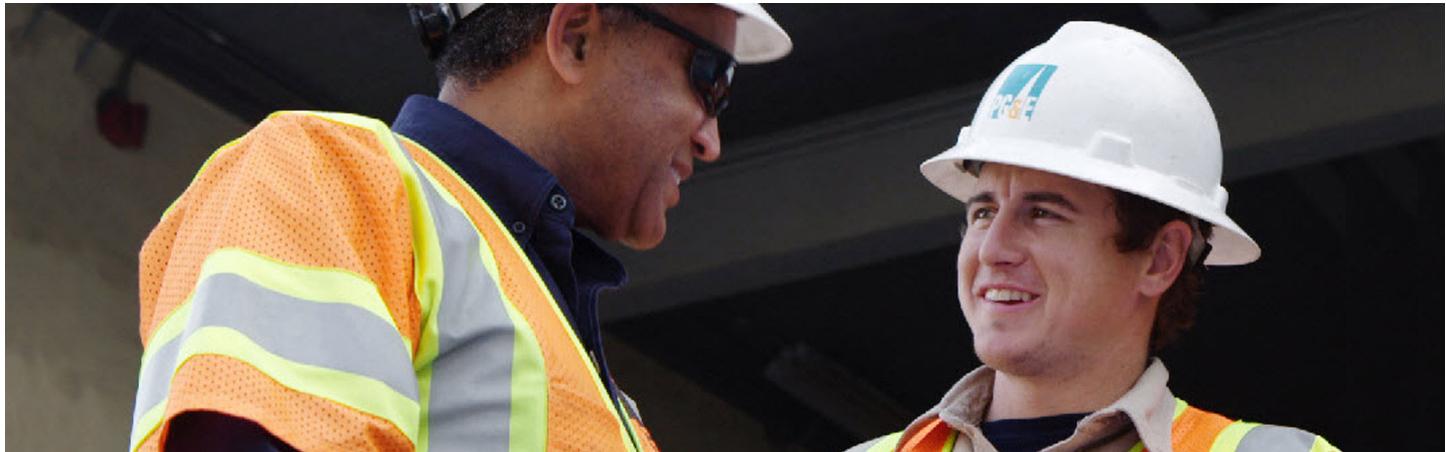
## PG&E ranked among America's Top 100 Best Employers



Our employees participated in a Forbes Magazine survey in 2015, and the results highlighted many of the reasons they are proud to work at PG&E.

The study, which surveyed 1,100 employers in all industries who employ more

than 2,500 people in the United States, ranked Pacific Gas and Electric Company among the top 100 best employers, and the second-highest utility company.



# Employee Development

Growing leaders from within PG&E—at all levels and in all roles—is a priority for PG&E’s long-term sustainability, especially given that 40 percent of our current workforce will be eligible to retire in the next five years. Through our holistic, integrated approach, we are addressing this challenge head-on by developing a next-generation workforce with the skills and expertise needed to operate our business safely, reliably and affordably, while meeting our customers’ evolving energy needs.

## Our Approach

Our goal is always to be cultivating the next generation of emerging leaders within PG&E. Toward that end, we are committed to investing in our people, providing extensive technical training and fostering career growth through an expanding set of leadership and employee development opportunities. Continuous improvement is a priority as we work to ensure that our employees have the necessary skills, knowledge and qualifications to complete their work safely and efficiently.

As a result, we are benchmarking with the best companies and deploying proven best practices to deliver results. In fact, PG&E was recognized in 2015 by the White House for our programs to help workers gain skills to advance into better-paying jobs as part of the administration’s effort to highlight the importance of the private sector in developing the capabilities and leadership skills of their team members.

### Technical Training

We provide a range of technical training to equip our employees with the knowledge and skills to perform their jobs safely using approved work procedures. These courses help prepare our workforce as we integrate new technologies, systems and processes into our operations.

Much of this training is provided at our two primary training facilities: the 44-acre Livermore Training and Qualification Center and the San Ramon Valley Conference Center. Beyond these facilities, we bring the classroom to employees through virtual training options and two mobile training centers that allow for on-site instruction. In 2015, we plan to break ground on a new, state-of-the-art Gas Operations Technical Training Center in Winters, which will provide employees with about 36,000 training hours per year, with 100 to 150 students on site each day.

## Career and Leadership Development

PG&E is committed to fostering career development and integrating succession planning and professional development into our long-term strategic planning. In fact, PG&E has a goal to fill 75 percent of leadership vacancies from within by 2019, up from about 60 percent in 2014.

Our efforts begin on an employee's first day on the job through a robust onboarding program that is designed to engage and inspire. Throughout their careers, employees have access to more than 25 career development courses, an active mentoring program, tuition reimbursement for qualifying education expenses and other tools to help them grow in their current roles and advance at PG&E. For example, our MBA Fellows Program awards full scholarships to select emerging PG&E leaders to attend a top executive MBA program, helping expand their skills and knowledge base, which they then bring back and apply at PG&E.

Other development opportunities include temporary rotational assignments that allow employees, with the support of their supervisor, to vary their experiences and further their careers. In addition, we offer two formal rotational programs:

- **MBA Leadership Program**, a two-year program that enables graduates from the nation's top business schools to work on some of our toughest business challenges.
- **Engineer Rotational Development Program**, an 18-month program in partnership with Stanford University, which gives employees the opportunity to earn a PG&E Engineering Management certification.



In 2015, PG&E was named to Training Magazine's Top 125 list, which ranks companies on employer-sponsored training and development programs. The assessment considers factors such as total training budget; goals, evaluation, measurement and workplace surveys; and hours of training per employee annually.

## 2014 Milestones

Highlights from our training programs last year include the following:

- **Introduced a Crew Leadership Program**, a highly interactive course with an emphasis on hands-on learning and peer discussion. Approximately 450 electric operations crew leaders have completed the program, and in 2015 we plan to offer a similar program to more than 150 gas operations crew leads.
- **Developed Leading Forward**, an integrated framework designed to develop leaders at every level. Participating employees will build their leadership effectiveness through self-assessments, on-the-job experience, education, coaching and feedback. More than 2,500 PG&E team members will have an opportunity to participate, helping PG&E meet its goal of filling 75 percent of leadership vacancies from within.
- **Continued specialized training** that enables employees to learn to operate equipment in a virtual setting, such as our backhoe simulator. This approach improves safety and reduces overall training time, travel-related emissions and wear and tear on equipment.
- **Developed a new four-step training governance process** that enabled us to reduce unneeded training and identify areas where employees require additional training.
- **Expanded our Summer Intern program**, a key way to help develop a talented new generation and provide a view of PG&E to prospective employees. We are on pace to hire 255 interns in 2015, up from 140 in 2013.

### PG&E crew victorious at International Lineman's Rodeo



(Photo by David Kligman)

A three-man PG&E crew from Grass Valley won the top prize at the 2014 International Lineman's Rodeo, a competition that pits the best line workers in the world against each other to test their skills in pole climbing and other difficult feats. The crew has worked together for years in Nevada and Sierra counties, providing service to 100,000 customers in some of the toughest, most mountainous terrain in PG&E's service area.

## Measuring Progress

Our commitment to invest in our people is clear; in 2014, we delivered more than 100,000 student days of training.

To gauge the success of our training program, we survey participating employees to measure the overall quality of the training, as well as their increased level of knowledge. Additionally, we require employees to pass a knowledge-and-skill assessment for each course or program that involves high-consequence tasks.

In 2014, we introduced a new metric to gauge the effectiveness of training courses offered at PG&E Academy, our in-house organization charged with enhancing employees' skills and qualifications. The metric measures training effectiveness on a five-point scale through client surveys from employees on their ability to use training on the job. In 2014, training effectiveness measured 4.29, which exceeded our goal of 4.11.

## Looking Ahead

We remain focused on building and sustaining the skilled and qualified workforce PG&E needs to thrive. And while many employees are nearing the end of their careers, turnover at PG&E remains low. In 2014, just 4.25 percent of employees left PG&E voluntarily.

One continuing area of focus is capturing the institutional knowledge of key personnel before they leave PG&E. We have identified critical positions within PG&E that rely upon experience-based knowledge and have taken steps to retain that information by building it into formal work practices and training, or by directly training other personnel.



# Diversity and Inclusion

Diversity and inclusion are core values at PG&E, and we consider them essential to our success. An inclusive culture spurs innovation and strengthens our business operations. Embracing a diversity of ideas and perspectives helps us better anticipate and respond to the needs of our customers. When our employees reflect the diverse communities we serve, we are building a better PG&E—and a better California—for the long term.

## Our Approach

### Governance Structures

Led by Pacific Gas and Electric Company's Chief Diversity Officer and supported by the senior leadership team, we continuously work to build an inclusive culture and a diverse workforce. A Diversity Council made up of PG&E officers and Employee Resource Group (ERG) leaders meets regularly to review elements of PG&E's overall diversity and inclusion strategy and guide meaningful implementation in the business.

The Compliance and Public Policy Committee of PG&E Corporation's Board of Directors regularly reviews our diversity and inclusion practices and performance. The goal of this oversight is to ensure that our diversity and inclusion principles are embedded throughout the life cycle of our talent management programs—from initial workforce development and recruiting to performance management and career and leadership development.

All PG&E leaders attend an Inclusion Leadership Workshop as part of their development, and inclusion learning materials are available for all employees. Each year, PG&E recognizes outstanding achievements in the areas of diversity and inclusion through the President's Diversity Champion Awards.

### Equal Employment Opportunity and Affirmative Action

Our approach to diversity and inclusion is rooted in our Equal Employment Opportunity Policy, which prohibits discrimination on the basis of race, color, national origin, ancestry, sex, age, religion, physical or mental disability, medical condition, veteran status, marital status, pregnancy, sexual orientation, gender identity, gender expression, genetic information or any other factor that is not related to the job. As a federal contractor, PG&E is required to take affirmative action to provide equal opportunity in employment by eliminating artificial barriers to the recruitment, hiring and promotion of qualified individuals, especially minorities, women, individuals with disabilities and protected veterans.

## Grassroots Engagement

For more than 40 years, our Employee Resource Groups (ERGs) have helped create an inclusive culture by leveraging the experiences, backgrounds and perspectives of our employees. ERGs provide opportunities for employees to develop their careers, grow as leaders and increase their involvement in the local community.

Our ERGs organize workshops, programs and networking events; offer scholarships to local students; and actively support PG&E's volunteer culture. Nearly 5,000 employees, or about 20 percent of our workforce, participate in ERGs, and more than half of PG&E's officers serve as executive sponsor of an ERG. In addition, over 30 percent of ERG members hold membership in more than one ERG.

We also support organizations such as the Society of Hispanic Professional Engineers, the Society of Women Engineers, the National Society of Black Engineers, The Arc San Francisco and Out & Equal Workplace Advocates through collaboration and sponsorship of key events.

### PG&E's Employee Resource Groups

- Access Network (supporters of, and people with, disabilities)
- Black
- Asian
- Samahan (Filipino)
- Latino
- Legacy (tenured employees)
- NuEnergy (new to the workforce or to PG&E)
- PrideNetwork (LGBT and allies)
- Veterans
- Women's Network

### PG&E's ERG scholarships can be a talent pipeline

Each year, PG&E's ERGs donate hundreds of thousands of dollars in scholarships to help local students attend or return to college. In some cases, these scholarships can be an important step in creating a diverse talent pipeline for PG&E. Some examples include:



Elisabeth Sum, who received a scholarship from PG&E's Asian ERG, interned with us and then became a business finance analyst with PG&E after graduation.



Laila Hassen, who received a scholarship from PG&E's Women's Network and then became a PG&E intern in gas transmission integrity management in 2014.

(Photos by Tony Khing)

## 2014 Milestones

In 2014, we continued working to build a diverse and inclusive workforce at all levels within PG&E. Highlights included the following:

- **Continued to integrate diversity into our talent management strategy.** Workforce development programs, such as PowerPathway, prioritize diversity, as do our career development, leadership opportunities and succession planning efforts.
- **Increased engagement in our ERGs.** ERG membership continues to grow, reinforcing the importance of these groups in career development, leadership and fostering a culture of inclusion. For example, PrideNetwork has grown its base of LGBT allies through an award-winning program, engaging more than 600 employees as allies in 2014.
- **Helped improve access to higher education.** Our ERGs and the Pacific Service Employees Association awarded \$316,000 in scholarships to 157 college-bound and returning students in 2014 and \$429,000 to 176 students in 2015. Over the past decade, PG&E's ERGs have provided nearly \$3.7 million in scholarships to students in our diverse communities.
- **Earned top rankings from leading diversity advocates.** We continued to earn recognition for our diversity commitment and results, including our efforts to integrate veterans and those who have faced long-term unemployment into our workforce. Additionally, we consistently receive top rankings by DiversityInc Magazine and the Human Rights Campaign's annual Corporate Equality Index.

# Measuring Progress

As in years past, the percentage of women and minorities in PG&E's workforce continues to trend above the national average for utilities. PG&E's workforce statistics by race, ethnicity and gender for 2012 to 2014 are below.

## PG&E WORKFORCE DEMOGRAPHICS, 2012 – 2014

EEOC Category	2012	2013	2014
<b>Women</b>	<b>28.4%</b>	<b>28.3%</b>	<b>28.2%</b>
Officials and Managers	32.4%	31.9%	32.2%
Professionals	34.9%	34.8%	35.0%
Technicians	18.3%	18.4%	18.7%
Administrative Support Workers	72.5%	74.7%	72.3%
Craft Workers	2.6%	4.0%	2.7%
Operatives <sup>1</sup>	12.6%	12.9%	3.4%
Laborers and Helpers	7.9%	6.6%	9.2%
Service Workers	9.9%	11.3%	9.7%
<b>Ethnic Minorities</b>	<b>39.8%</b>	<b>40.4%</b>	<b>41.1%</b>
Officials and Managers	30.8%	30.1%	31.3%
Professionals	41.2%	42.3%	42.5%
Technicians	37.3%	37.9%	41.9%
Administrative Support Workers	58.5%	59.7%	59.7%
Craft Workers	31.0%	32.3%	31.9%
Operatives	39.5%	37.8%	33.3%
Laborers and Helpers	44.3%	45.8%	47.7%
Service Workers	30.7%	31.7%	32.2%
<b>Minority Groups</b>			
American Indian or Alaskan Native	1.5%	1.4%	1.4%
Asian	14.4%	14.5%	14.6%
Black/African American	6.5%	6.4%	6.3%
Hispanic/Latino	15.9%	16.3%	16.7%
Native Hawaiian or Pacific Islander	0.3%	0.4%	0.4%
Two or more races	1.2%	1.5%	1.7%

<sup>1</sup> Census code remapping in 2014 shifted some positions previously categorized in the Operatives to the Laborers and Helpers job category.

Source: PG&E Corporation EEO-1 Report, as of July 1, 2014.

## BENCHMARKING WORKFORCE DEMOGRAPHICS

Category	PG&E	U.S. Utility Average <sup>1</sup>
Women	28.2%	25.6%
Ethnic Minorities	41.1%	24.6%

<sup>1</sup> Source: U.S. Equal Employment Opportunity Commission, Job Patterns for Minorities and Women in Private industry (EEO-1) 2013 Tables.

As one measure of our performance on diversity and inclusion, our biennial employee survey asks employees if they believe PG&E supports an environment in which diversity is valued and inclusion is practiced. In 2014, 70 percent of employees responded favorably to these questions. While this fell short of our target, the response indicates that our programs are having an impact on our employees' day-to-day experiences.

## Looking Ahead

Our efforts are focused on providing an environment in which all our employees are poised for growth and excellence.

In 2015, we plan to expand departmental efforts to increase diversity in workforce development and recruiting, with an emphasis on bringing more minorities, women, people with disabilities and veterans into our workforce. Each line of business continues to have a Workforce Diversity Champion who works from within his or her organization to help create a culture of diversity and inclusion by building awareness and demonstrating inclusive behaviors.

Additionally, our ERG programs will continue to provide opportunities for employees to build their careers, make an impact at PG&E and connect with the communities we support.



## Health and Wellness

Our employees' health and safety is an integral part of providing our customers with safe, reliable, affordable and clean energy. In an effort to help our employees stay healthy and fit, we've designed our health and wellness programs to target the drivers of employee health and provide integrated solutions that benefit our employees, our communities and our work.

### Our Approach

Since 2010, the Workforce Health department has overseen PG&E's health and wellness programs with the goal of improving the overall health and resiliency of our employees.

Using a holistic and data-driven approach, PG&E's leadership has been able to better analyze and understand the drivers of employee health and wellness and respond with targeted solutions. As a result, we go beyond offering programs that solely support the physical health of our employees. We also offer programs to support their emotional and financial health, understanding that emotional and financial stresses can impact physical health.

#### Physical Health

The centerpiece of our efforts is our medical plan, which is available to all active employees and is designed to improve overall workforce health. The plan emphasizes preventive care and wellness, leveraging our ability to purchase higher-quality care and focuses on free primary and preventive services. From health screenings for early detection of serious disease risks to telephonic health coaching options to improve their health, employees are empowered to become their own health manager and use the resources offered to adopt healthier behaviors at work and at home.

We also continue to offer customized programs for our field workforce. For example, our Industrial Athlete Program provides a comprehensive, job-specific "hire-to-retire" set of actions to reduce injuries and improve the physical and mental resilience of employees working in the most physically demanding positions.

By taking an annual health screening and either being tobacco-free or participating in a tobacco-cessation program, employees can earn credits in a health reimbursement account that can be used to cover their deductible and pay for out-of-pocket medical expenses. During the 2013–2014 campaign, about 89 percent of the eligible workforce received a health screening, placing PG&E in the top quartile for participation rates compared with other companies that offer health screenings.

## Emotional Health

Our Employee Assistance Program offers employees options to help them manage life's demands at work and at home, from confidential counseling to referrals for local services—whether by telephone, with counselors on site or in the communities where they live.

We also engage employee volunteers to help support peers who are seeking to adopt healthier behaviors. For example, our Peer Volunteer Program, in collaboration with union leadership, assists with substance abuse recovery. Additionally, our Wellness Ambassadors—located throughout our service area—assist in implementing and increasing awareness of wellness programs and services.

## Financial Health

Distress over financial matters can have a negative effect on health. To assist our employees with managing their financial future and providing for their families should the unthinkable happen, we offer a number of programs and resources, including life and accident insurance, 401(k) and pension retirement plans.

## 2014 Milestones

In 2014, we continued our efforts to empower employees to make healthier choices and increase participation in the programs and services we offer. Highlights included the following:

- **Reduced health care costs.** Since introducing our new health plan in 2013, PG&E has seen a consistent improvement in medical cost trends. Prior to the new plan, medical costs increased at an average of 9 percent annually, above the national average. Since the introduction of the new plan, cost increases are below 3 percent annually, about half the national average.
- **Expanded specialized wellness programs.** We expanded our Industrial Athlete Program by bringing in athletic trainers to assess early signs of discomfort, observe body mechanics in the field and promote self-care techniques for employees in physically-demanding jobs. By intervening early, this approach has proven that injuries can be interrupted and even reversed, eliminating the need for costly diagnosis and treatment.
- **Piloted an online physical activity competition.** We piloted the Get Active Challenge, which engaged PG&E employees to track their exercise minutes online and compete as teams to achieve health and fitness goals. Over 400 teams participated in this free and easy-to-use program last year. In 2015, we are making the competition available to all benefits-eligible employees to support each other in living a healthier lifestyle.

## Measuring Progress

Over the past five years, PG&E has seen a steady decline in employee unavailability due to health issues. The increase in workforce availability from 2013 to 2014 is equal to 133 employees working full time all year, representing nearly \$10.8 million in savings.

### WORKFORCE UNAVAILABLE DUE TO HEALTH<sup>1</sup>

	2010	2011	2012	2013	2014
Workforce Unavailable Due to Health	10.7%	10.0%	8.7%	8.2%	7.7%

<sup>1</sup> Percentage of full-time employees unavailable for work due to long-term or short-term health reasons.

## Employee Health and Wellness Resources

- Health advocacy services to help employees navigate the complex health care system
- Annual health screenings held on-site at larger PG&E locations, as well as a concierge service so employees can conveniently check key health indicators such as body mass index and cholesterol levels
- Health coaching by phone for one-on-one support to help employees meet their health goals
- An extensive online health and wellness portal with calorie trackers, meal and exercise plans and other resources
- A tobacco-free program providing one-on-one support with a certified tobacco cessation specialist
- Gym discounts for employees and their family members
- A confidential, online health risk questionnaire offering personalized recommendations on how to best maintain or improve health

PG&E's health plan offers free primary care and preventive services, including health screenings for early detection of serious health risks. As a result, in the first two years after the health plan was implemented, inpatient hospital days were reduced by 11 percent, emergency room visits by 10 percent and specialty office visits by 7 percent.

## Looking Ahead

In our multiyear strategy, PG&E remains focused on further improving the health and resilience of our workforce by continuing to:

- Focus on preventive care and provide financial incentives for employees to make healthier choices
- Expand innovative pilot initiatives, such as our Industrial Athlete Program
- Collaborate with union leadership on approaches that reduce the risk of injuries
- Expand on-site care and access to wellness resources through health coaching and fitness classes
- Provide Centers of Excellence—hospitals or medical center facilities recognized for providing the highest quality of care for high-risk conditions, such as complex and rare cancers—for PG&E employees and their families that are part of the medical plan
- Provide access to telemedicine and on-site care via video conferencing technology to ensure employees have access to primary care by a physician or nurse practitioner for early detection, prevention and treatment of chronic conditions



In 2014, the Integrated Benefits Institute, the leading workforce and productivity research and measurement organization, honored PG&E with its Health and Business Performance Award. The award recognizes an employer that has demonstrated outstanding work in the field of health, productivity and business performance.



## Economic Vitality

As part of the cooperative effort to build a better California, PG&E actively works to help the communities we serve to grow and thrive economically. As one of California's largest employers and taxpayers, we have maintained a long, proud history of promoting local economic growth in the state and supporting the local organizations that work hard to provide career training and create even more jobs for Californians.

# Highlights

- Invested nearly \$5 billion to enhance our infrastructure and improve safety and reliability.
- Provided career opportunities for veterans and women through our pioneering PowerPathway™ workforce development program.
- Achieved industry-leading supplier diversity results, helping thousands of businesses to grow and hire.
- Contributed more than \$23 million to about 1,300 charitable organizations, enriching educational opportunities, preserving our environment and supporting the vitality of our communities.
- Continued offering a new economic-development rate designed to lower energy costs for qualifying businesses.
- Helped customers save \$160 million on their energy bills through the nation's largest utility energy efficiency program.
- Made more than \$152 million in franchise fee payments and \$344 million in property tax payments to local governments.

## Key Sustainability Indicators

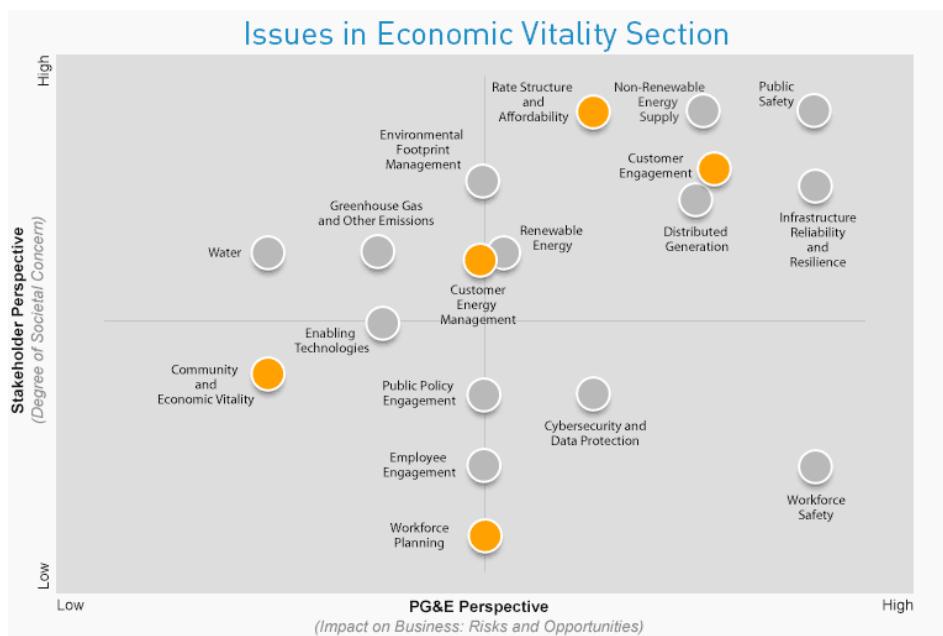
**82%**

Percentage of PowerPathway graduates hired into industry jobs

**40.9%**

Percentage of overall spending with diverse certified firms in 2014

## Our Materiality Matrix



Consistent with best practice, PG&E published a materiality assessment for corporate sustainability in 2014—a strategic project to identify issues that are material to the long-term sustainability of our business. Conducted in coordination with PG&E's strategic planning process, the materiality assessment was designed to engage stakeholders, identify opportunities and risks, and sharpen our corporate sustainability strategy and reporting.

The matrix to the left presents the results—highlighting issues covered in this section of the report.



## Economic Impact and Assistance

PG&E is a major economic contributor in California, investing billions of dollars annually in our operations, employing tens of thousands of Californians directly and indirectly, doing business with thousands of local suppliers and partnering with economic development organizations and other groups.

### Our Approach

#### Powering the Economy through Our Operations

As part of PG&E's general operations, every year we invest heavily in upgrades to natural gas pipelines, electric power lines, generation facilities and other key infrastructure. These upgrades create jobs and contribute to California's prosperity, helping stimulate economic growth while creating a reliable and efficient energy system that promotes local business development.

#### Partnering Locally

We actively partner with local, regional and statewide economic development organizations in a variety of ways, from providing funding to nearly 50 organizations to having employees serve in leadership roles on boards of directors and organizing local economic forums and training programs.

We also made a total of \$23 million in community investments in 2014, over 40 percent of which focused on economic and community vitality. These investments ranged from donations to charitable organizations that assist low-income families with their utility bills to investments in local job creation and economic development initiatives and support for civic projects that vitalize local communities.

#### Providing Assistance to Businesses

PG&E's economic development team provides one-on-one assistance to current and future commercial customers who are considering competing locations inside or outside California. The team directly supports local efforts to attract, retain and grow companies by helping them analyze and lower their energy costs through a variety of programs.



The work proposed in PG&E's latest Gas Transmission and Storage Rate Case could help boost the state's economy. If approved by state regulators, the plan, which calls for replacing and pressure-testing transmission pipeline and adding automated valves and other upgrades to the system, could support 10,750 jobs, \$75 million in state and local tax revenue, and \$1.8 billion in business sales.

We also continue to develop new offerings to help businesses grow or maintain jobs in California, such as our Economic Development Rate for eligible customers with high energy loads who are considering locating in California, relocating from California to other states or closing their existing California operations. Eligible companies can receive a 12 percent rate reduction for five years, and companies in cities and counties where the annual unemployment rate is at least 25 percent higher than the state average can receive a 30 percent rate reduction for five years.

JM Eagle, a pipe manufacturer based in Stockton, kept more than 100 local jobs in its facility after qualifying for PG&E's Economic Development Rate. Amy's Kitchen took advantage of the rate to justify building a new food processing facility in Santa Rosa, which will add about 150 jobs. Synergy Health, a medical device manufacturer, is moving into Petaluma with help from PG&E's new rate.

## Helping Customers in Need

PG&E offers many ways for customers to save money by saving energy. We help customers increase energy efficiency through online tools to analyze their energy use and provide rebates for energy efficient products. We also assist residential customers when they experience challenges or unexpected changes in their financial situation.

## Contributing to State and Local Revenues

As one of the largest companies operating in California, PG&E is a major contributor to the revenue that state and local governments depend on to fund critical public services. In addition to property taxes, we pay franchise fees to cities and counties for the right to use public streets for our gas and electric facilities.

### PG&E Holds Hiring Fair



(Photo by James Green)

With two planned maintenance and refueling outages scheduled at our Diablo Canyon Power Plant in 2014, Pacific Gas and Electric Company held an event to hire workers to support these projects. The hiring fair included opportunities to learn about outage work and full-time jobs at PG&E, as well as how local companies can do business with us. The additional workers assisted Diablo Canyon's nearly 1,500 employees on projects to support the continued safe and reliable operation of the facility. The additional workers also generated about \$5 million in additional spending in nearby Pismo Beach, California.

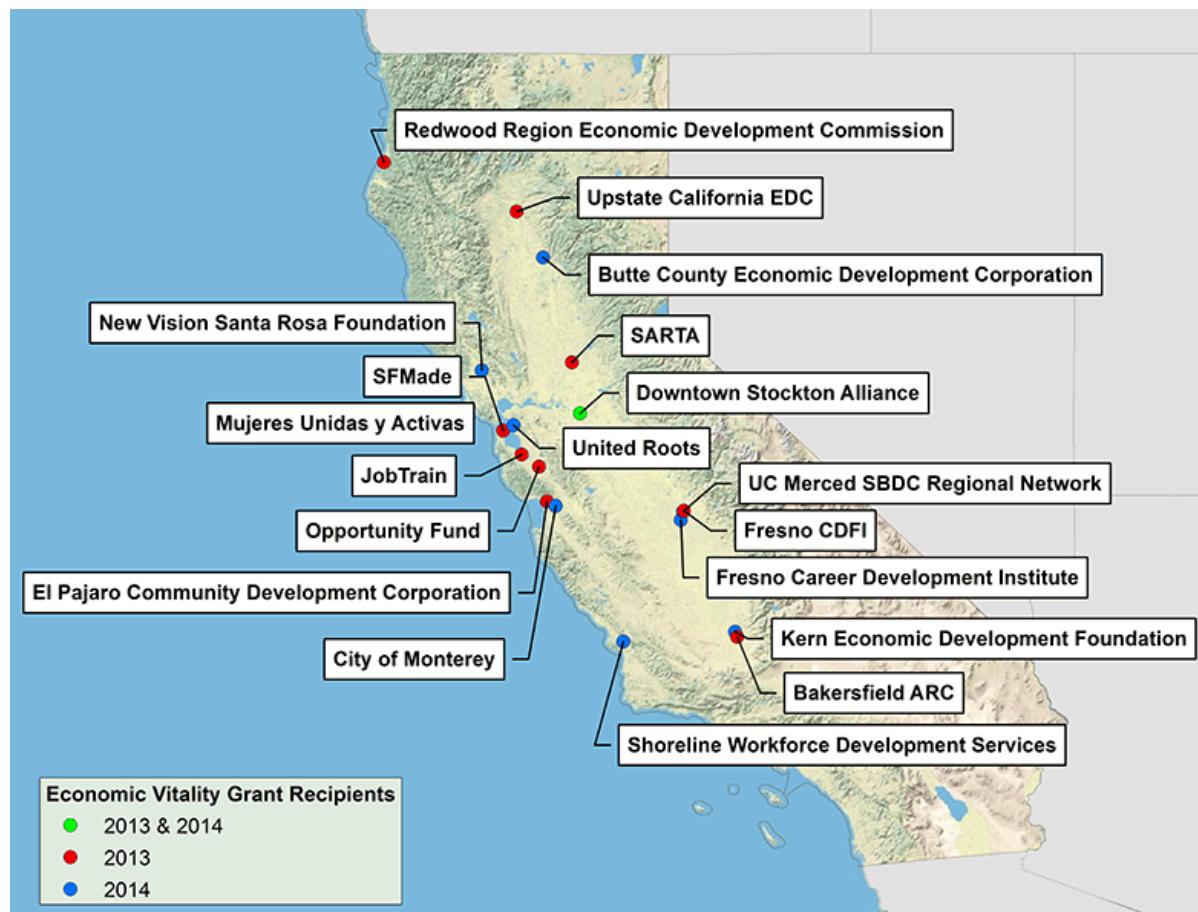
## 2014 Milestones

In 2014, the investments we made to improve our operations and serve our customers contributed to the revitalization of the state's economy. Highlights included the following:

- **Invested in our infrastructure.** Capital investments in our system totaled more than \$4.8 billion in 2014, enabling us to further modernize our system and accelerate the progress toward our long-term goal of being the safest utility in the country.
- **Contributed to community vitality.** We continued to invest in our communities through our Economic Vitality Grant Program, which supports local workforce development and business incubation. In 2014, we awarded 10 grants totaling \$200,000 to help organizations like New Vision Santa Rosa offer job training and career-boosting skills to more than 200 workers.

- **Partnered locally for economic development.** In partnership with the Governor's Office and the California Association of Local Economic Development, we hosted four economic development workshops in local communities, among other actions.
- **Helped attract or retain key local employers.** We worked with 56 new and existing businesses that were looking to locate or expand in our service area. Of these, PG&E was successful in helping to retain or attract 17 companies within our service area, bringing more than 2,500 new jobs and over \$15 million in revenue to the region.

## Economic Vitality Grant Recipients 2013–2014



## Measuring Progress

### PG&E's Economic Impact

PG&E's activities can support significant economic activity and jobs in our service area, as shown in an independent study.

#### ECONOMIC CONTRIBUTIONS OF PACIFIC GAS AND ELECTRIC COMPANY

	Economic Activity	Jobs Supported
General Operations	\$22.2 billion	71,582
Customer Energy Efficiency Programs	\$1.1 billion	7,688
Community Investments	\$38.9 million	419

These impacts represent the economic contributions of PG&E's general operations, customer energy efficiency programs and community investments program, based on 2012 data. They include the utility's direct economic activities, including the market value of goods and services provided, as well as the multiplier or "ripple" effect of those activities in the service area economy.

## FRANCHISE FEE AND PROPERTY TAX PAYMENTS

	2012	2013	2014
Franchise Fees	\$136,105,101	\$144,073,069	\$152,081,941
Property Tax Payments	\$314,534,703	\$316,970,343	\$344,194,074

## Looking Ahead

We know that our success depends on the success of the many local communities we serve. We plan to make \$5.5 billion in new capital investments in 2015, which will help support local job creation and spur economic growth. We will continue to focus on fostering economic development, finding opportunities to support communities through our supply chain and creating opportunities through community investments, particularly to help people living in underserved neighborhoods.

### San Francisco System Upgrades Will Boost Reliability



PG&E is constructing a new 230-kilovolt power line and expanding two substations in San Francisco to bolster electric reliability for residents and businesses and enhance readiness in the downtown area in the event of a catastrophic emergency. The project is part of PG&E's five-year plan to invest \$1.2 billion in San Francisco's electric and gas infrastructure to provide safe and reliable service for customers.



## Community Investments

Our commitment to strengthen the communities where our customers live and work is at the heart of our business. We are investing in partnerships that enrich educational opportunities, preserve our environment, promote emergency preparedness and support economic vitality. Our community investments demonstrate that we are more than just a utility; we are a community partner helping to build a better California.

### Our Approach

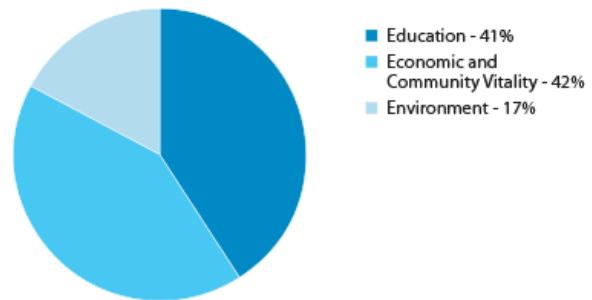
Each year, PG&E provides numerous grants to organizations across Northern and Central California. These grants support 501(c)(3) nonprofit organizations, schools and local governments. Our community investment strategy focuses on education, the environment, economic and community vitality, and—new in 2015—emergency preparedness. In support of these focus areas, each year we provide several high-impact grants, along with about 1,300 local grants, to support community needs. We prioritize supporting underserved communities and partnerships that provide volunteer opportunities for our employees.

We also make in-kind contributions and provide other forms of support to community groups. As always, PG&E's community investment program is funded entirely by shareholders and has no impact on our customers' electric or natural gas rates.

PG&E also offers several ways for employees to direct the community investment process on a local level:

- Our Community Service Award program allows employees who log more than 25 volunteer hours with one organization to direct \$350 to that organization.
- Each of PG&E's 10 Employee Resource Groups—representing PG&E's diverse workforce—is given the opportunity to direct funds to community groups and activities.

### 2014 Charitable Contributions



For the third year in a row, Pacific Gas and Electric Company earned a spot on the Civic 50 as one of America's most community-minded companies. The list highlighted the S&P 500 corporations that best use their time, talent and resources to improve the quality of life in the communities where they do business.

- Our Matching Gifts Program enables PG&E to match eligible gifts dollar-for-dollar up to \$1,000 per calendar year per employee, retiree or current member of the PG&E Corporation Board of Directors.

## 2014 Milestones

PG&E's community investment program is powering local organizations and fostering healthy, vibrant communities where our customers live and work. Here are highlights from each of our focus areas in 2014.

### Education

To create opportunities for students throughout our service area—especially those interested in science, technology, engineering and math (STEM) fields—we provide scholarships and grants to help students learn about energy and the environment in innovative ways. Highlights include:

- **PG&E Bright Minds Scholarships.** We awarded 10 students with a \$20,000 scholarship that is renewable for up to five years, and an additional 90 students with a one-time \$2,000 scholarship. Since the program's inception in 2012, the PG&E Bright Minds Scholarship Program has awarded \$3 million in scholarships for 400 students to complete their higher education, with an increasing focus on students who major in STEM fields. Students are selected based on community leadership, personal triumph, financial need, academic achievement and commitment to pursuing a STEM career.
- **PG&E Energy Academies.** More than 100 students successfully graduated from PG&E Energy Academies, with nearly 80 percent planning to attend a community college or four-year university. Starting in 2014, all 11th graders in the program also received a paid summer internship opportunity at PG&E to gain hands-on experience.

### Economic and Community Vitality

To foster safe and vibrant neighborhoods throughout our service area, we help communities prepare for and recover from natural disasters, provide career training opportunities, support local businesses and offer energy assistance to low-income families. Highlights include:

- **Economic Vitality Grant Program.** We awarded \$200,000 to 10 California organizations through this program, which provides grants to programs designed to boost local job creation and promote economic opportunity throughout our service area. Recipients included a Latina immigrant community empowerment program in San Francisco and a digital media arts training program for youth in Butte, among others.
- **PG&E Summer Jobs for Youth.** We committed over \$900,000 to PG&E's Summer Jobs program, which we offer in partnership with local Boys & Girls Club chapters in Fresno, Sacramento and Bakersfield. During 2014, the program provided about 845 young people with workforce training and helped 210 youth find paid summer jobs in their communities. To date, we've provided training for about 2,500 youth and helped nearly 500 youth secure summer jobs.
- **Partners in Preparedness.** We continued to partner with the Red Cross to provide Californians with critical disaster preparedness training and emergency response resources. PG&E's \$1.1 million investment enabled the Red Cross to build safer, more resilient communities through programs such as Team Firestopper and the FEMA award-winning Ready Neighborhoods. Over the past three years, PG&E's investment has helped train, educate or engage more than 2 million people in California.

### PG&E Bright Minds Scholarship



(Photo by David Kligman)

Ignatious Hoh was giving a robotics demonstration to elementary school students when he was interrupted with some big news from PG&E.

### Economic Vitality Grant Program



(Photo by Chris Benjamin)

Van Jones, left, joined PG&E's Eunice Barnett Garcia and Galen Silvestri of United Roots for the presentation of the Economic Vitality grant in Oakland.

## Environment

Because we are California-based and have a strong commitment to the environment, we understand the importance of offering programs that promote renewable energy, foster energy efficiency and protect our parks, recreation areas and natural habitats. Recently offered programs include:

■ **PG&E Solar Habitat Program.** Through this award-winning program, PG&E fully funds the installation of solar panels on every new Habitat for Humanity-built home in our service area. The program saves each family approximately \$500 a year on energy costs, avoids the emission of 132,000 pounds of carbon dioxide to the atmosphere over the 30-year life of the system and provides popular volunteer opportunities for our employees. In 2015, PG&E marked the 10th anniversary of this partnership to bring solar energy to hardworking families with limited incomes.

■ **PG&E Nature Restoration Trust.** We sponsored a project by River Partners and the Kern River Corridor Endowment to restore part of the Panorama Vista Preserve and plant more than 3,000 native trees and shrubs. The project was part of the PG&E Nature Restoration Trust, a partnership with the National Fish and Wildlife Foundation (NFWF) that supports community-based projects to restore natural habitats. In honor of Earth Day, we also partnered with the NFWF to plant more than 55,000 new trees in the wildfire-stricken Los Padres National Forest on behalf of customers who enrolled in paperless billing.

## Measuring Progress

In 2014, PG&E contributed more than \$23 million to charitable organizations through about 1,300 grants, representing 1.3 percent of our pretax earnings from operations from the prior year. This exceeded our 1.1 percent target and the benchmark of 0.93 percent based on the median percentage of total giving from Fortune 500 companies.

PG&E's community investments are focused on providing assistance to underserved communities, such as low-income individuals, communities of color, women and girls, veterans, senior citizens, people with disabilities and members of the lesbian, gay, bisexual and transgender (LGBT) community. In 2014, approximately 80 percent of PG&E's community investments were directed toward these groups, consistent with the prior year.

### PG&E's Solar Habitat Program

Celebrating the 10th anniversary of the Habitat for Humanity and PG&E Solar Habitat Partnership.



PG&E has committed  
**\$9.6 million**  
to equipping new Habitat homes with solar panels

More than **600**  
Habitat families have benefited from this program

PG&E employees volunteered  
**7,000** hours building  
Habitat homes in San Francisco



**132,000**  
pounds of CO<sub>2</sub>  
emissions prevented  
by each panel



Habitat families save  
**\$7.5 million**  
in energy costs

In April 2015, PG&E celebrated its 10-year partnership with Habitat for Humanity.

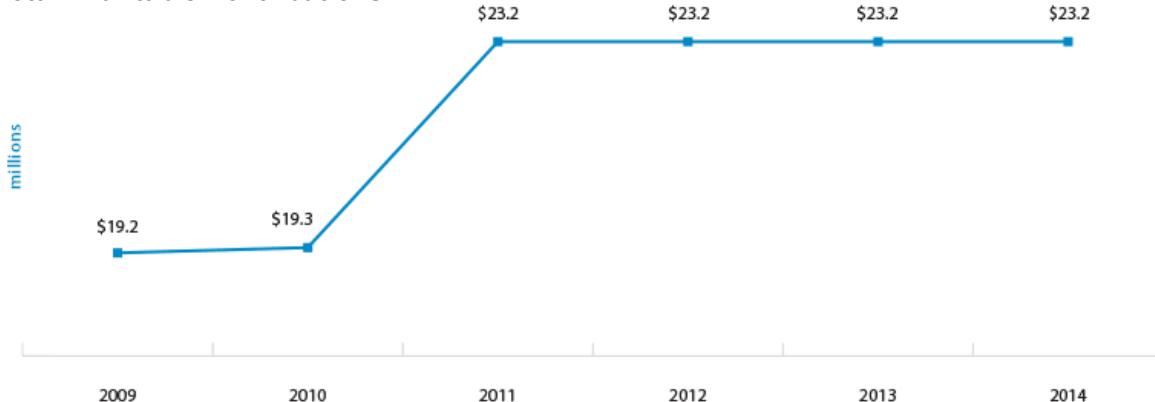
### Together, Building a Better California

Here's a look at progress in 2014.



PG&E employees gave back to our communities through personal donations and volunteering.

### Total Charitable Contributions



## Looking Ahead

In 2015, PG&E expects to invest more than \$25 million in charitable funding to support underserved communities. Our strategy includes an expanded focus on emergency preparedness to reinforce PG&E's commitment to safety in the communities where we live and work. We are also working to strengthen the tie between our community investments and our future workforce needs by partnering to provide students with internships and job-shadowing opportunities.

PG&E partners with Junior Achievement of Northern California, an organization with hands-on, experiential programs that serve more than 100,000 students from kindergarten through high school with knowledge and skills in financial literacy, work readiness and entrepreneurship.



## Career Pathways

By training the next generation of utility workers so that they and we are prepared to upgrade and maintain our gas and electric infrastructure, PG&E is helping to build the workforce that will power California's future. Our workforce development strategy reflects industry needs, leverages public-private partnerships and reaches out to underserved communities to attract qualified and diverse candidates from our communities for local jobs.

### Our Approach

Utilities nationwide face a shortage of skilled workers and trained professionals to meet the growing industry demand. In response, we are conducting strategic outreach, engagement and training to create a qualified and sustainable pipeline of candidates for PG&E.

#### Partnering through PowerPathway

PG&E's PowerPathway™ program is a core component of our workforce development strategy. Through PowerPathway, we collaborate with local community colleges, community organizations, the public workforce development system and PG&E leaders to enlarge the talent pool of skilled and diverse workers needed by PG&E and our peers in the industry.

Students receive an industry-informed curriculum that equips them with the academic, vocational and physical skills needed to compete for entry-level employment. PowerPathway was designed to help people who are out of work or underemployed. Since its inception in 2008, the program has produced qualified graduates for our own hiring pipeline who have gone on to support the economic vitality of our local communities.

#### Military Workforce Outreach

PG&E has been a strong supporter of training and hiring veterans and recognizes the invaluable skills and perspectives they can offer companies looking for mature, highly qualified employees. More than 1,000 employees, both veterans and those who support them, are part of PG&E's Veterans Employee Resource Group.

#### PG&E partners to train next-generation utility workers



(Photo by Tamar Sarkissian)

PG&E partnered with the Cypress Mandela Training Center in Oakland to provide gas pre-apprentice training. Fifty-five students have graduated since the program's inception—and nearly half were hired by PG&E.

We continue to make progress in helping veterans escape long-term unemployment and have partnered with other businesses and President Obama's administration to develop best practices for hiring and recruiting the long-term unemployed.

## Proactive Recruiting

Our recruiting strategy involves extensive community diversity outreach. In 2014 alone, our recruiting staff attended three national diversity recruiting conferences and approximately 23 on-campus recruiting events for university students, giving them the opportunity to speak with our employees and learn firsthand about PG&E. More broadly, we also use LinkedIn and specialized, targeted online job boards to advertise career opportunities and source candidates.

We also offer summer internships and entry-level engineer and other rotational programs for recent college graduates to introduce young professionals to new work experiences and career development opportunities.

## Education and Training in Energy Efficiency

At our three training centers, PG&E offers a variety of education and training programs in energy efficiency for building professionals, including architects, designers, engineers, contractors and technicians.

The Energy Training Center in Stockton, the Pacific Energy Center in San Francisco and the Food Service Technology Center in San Ramon offer specialized classes on topics such as residential building weatherization, constructing and maintaining energy efficient commercial buildings and energy performance in commercial kitchens. PG&E also offers a Tool Lending Library that loans building-measurement equipment at no cost to anyone working on short-term energy efficiency projects.

To provide these courses, the centers collaborate with community colleges, trade and professional organizations, state colleges and universities, community-based organizations and other training providers.

## 2014 Milestones

In 2014, PowerPathway continued to provide a promising path toward employment for would-be utility workers. Major accomplishments included the following:

■ **Successfully championed initiatives for the long-term unemployed.**

This included conducting two PowerPathway programs in California's Fresno region that focused on long-term unemployed veterans. Also, PG&E and the U.S. Chamber of Commerce co-sponsored a Fresno Hiring Our Heroes event where about 30 employers, including PG&E, met with more than 100 unemployed veterans looking for a new career.

■ **Developed and executed training programs** in Fresno, Oakland, Sacramento and Lemoore geared toward military veterans and women,

as well as specialty courses on climbing power poles and welding. Other courses focus on electric line work and gas utility work.

Other milestones included:

■ **Earned recognition as one of the country's top 100 military-friendly employers for the third consecutive year and fourth time overall.**

This ranking from G.I. Jobs Magazine is based on the strength of military recruiting efforts, the percentage of new hires with prior military service, and the retention programs and PG&E policies on National Guard and Reserve service. PG&E increased its ranking to No. 70 nationally.

■ **Hosted technology showcases.** PG&E hosted two technology showcases at the Pacific Energy Center, where customers learned about the latest products and technologies for lighting and water conservation.

### Vice President Biden visits PG&E



(Photo by IBEW/John Storey)

During a visit to a PowerPathway training class in Oakland, Vice President Joe Biden described the program as "the framework for a lot of other big companies, not just utility companies" for workforce development.

## Measuring Progress

Programs developed by PowerPathway and our training partners are helping both new and experienced workers acquire and hone the job skills needed to be successful in today's energy industry. Through 2014, 520 people—including 300 veterans—had graduated from PowerPathway training programs, with more than 80 percent hired by PG&E or other utility industry employers. Other key highlights include the following:

- 224 PowerPathway graduates hired by PG&E since 2008—with a 98 percent retention rate after six months.
- 99 PowerPathway graduates trained in 2014.
- 60 percent of participants from underrepresented communities.

PG&E also helped architects and other building professionals gain new skills and expertise in energy efficient design and construction at its three training centers, holding more than 350 training sessions in 47 cities and providing 1,200 technical consultations.

## Looking Ahead

Our workforce development programs will continue to focus on recruiting and training talented employees to address the shortage of skilled workers in the utility industry. Among many initiatives, PG&E is creating new approaches for direct hiring to help increase the likelihood that PowerPathway™ participants are hired upon completion of training. Another initiative involves launching a pilot program to recruit veterans as customer service representatives.

PG&E is also creating an opportunity for PG&E Energy Academy graduates from Foothill High School (Sacramento) and the Venture Academy Family of Schools (Stockton) to participate in PowerPathway to receive hands-on job training in the utility industry.



PG&E earned the Faraday Award at the annual Electric Power Conference. The award honors corporations that have successfully connected, employed and engaged veterans to become long-term employees in the power industry.



# Supplier Diversity

PG&E's supplier diversity program shines through as a cornerstone of our commitment to build a better California. For more than three decades, we've worked to integrate diverse suppliers and small businesses into our business. The benefits are of doing so are clear: a diverse supplier base not only helps us provide safe, reliable and affordable gas and electric service, it also supports economic development, drives job creation and strengthens local communities.

## Our Approach

Within the energy industry, PG&E has one of the leading programs for bringing diverse business enterprises (DBE)—companies owned by women, minorities, service-disabled veterans and LGBT individuals—into our supply chain with annual goals that drive our sustained commitment.

To broaden our efforts, we actively work to strengthen the competitive profile of small and diverse businesses through business workshops and capacity-building training that support safe, cyber-secure, green and thriving suppliers. Doing so reflects and celebrates our diversity, increases economic vitality in our communities and improves the quality and cost-effectiveness of our supply chain.

### Championing Diverse Suppliers

Internally, we promote supplier diversity through a broad network of Supplier Diversity Champions, a group of employees responsible for expanding supplier diversity within our lines of business. Through regular meetings with senior leadership, these employees set diversity goals, develop strategies, share best practices and monitor progress toward continuous improvement of our supplier diversity results. We also recognize leadership; employees who make the largest impact are honored at PG&E's annual Supplier Diversity and Sustainability Achievement Awards event.

Our Supplier Development Program engages PG&E executives to mentor incumbent diverse suppliers and, with cross-functional team support, identify opportunities for those selected diverse suppliers to grow. PG&E also

### Magic Johnson joins PG&E in applauding supplier diversity achievements



(Photo by Matt Nauman)

PG&E's 2014 Supplier Diversity Achievement Awards ceremony was attended by professional basketball legend, and minority business enterprise (MBE) owner, Ervin "Magic" Johnson, who commended Pacific Gas and Electric Company for "making diversity an important part of your company, part of the DNA of your company."

actively engages with community-based organizations at the local, state and national levels to promote supplier diversity, spur innovation and support the competitiveness of diverse suppliers. Last year, PG&E participated in more than 100 outreach events to meet and promote diverse suppliers, introduce prime suppliers to the diverse business community and learn and share best practices with peer companies.

When INTREN, Inc., a woman-owned business, started providing PG&E with underground and electrical overhead work in 2011, it had a local employee base of 15 people. PG&E's initial spend with INTREN was under \$1 million. Four years later, the supplier has nearly 90 local employees working out of two San Francisco Bay Area offices, and PG&E's spend has risen to more than \$30 million. In 2014, INTREN, Inc. was honored as both PG&E Supplier of the Year and Electric Operations Supplier of the Year.

## Focusing on Small Businesses

PG&E partners with organizations in the private and public sector to advance supplier diversity, innovation and competition, particularly at the small business level. In 2014, PG&E partnered with the U.S. Small Business Administration (SBA) to organize a series of capacity-building workshops and training seminars throughout Northern and Central California. SBA is the only federal agency dedicated to providing loans, loan guarantees, contracts, counseling sessions and other forms of assistance to small businesses.

## Encouraging Prime Suppliers to Participate in Supplier Diversity

PG&E encourages prime suppliers to subcontract with diverse suppliers and develop measurable and sustainable supplier diversity programs of their own. Prime suppliers are asked to set diverse subcontracting goals, track performance through monthly reports and participate in business matchmaking and other outreach events to meet prospective diverse suppliers.

## Strengthening Suppliers and Relationships

PG&E offers a wide variety of technical assistance and training programs to suppliers, many in conjunction with community organizations. These initiatives help diverse suppliers build their business acumen, and include scholarship opportunities from the UCLA Management Development for Entrepreneurs Program and the University of Washington Minority Business Executive Program.

PG&E is also focused on supporting the growth of mature diverse suppliers into new technology by sponsoring their participation in the University of California Advanced Technology Management Institute. This executive training initiative helps diverse firms identify business strategies to take advantage of emerging technology opportunities.

PG&E's Technical Assistance Program includes signature training offerings for diverse suppliers:

- **Diverse Suppliers are Safe** educates diverse suppliers on the importance of developing and improving their company safety plans.
- **Diverse Suppliers Go Green** instructs participants on how to establish a sustainability program, reduce their environmental footprint and identify green business opportunities.
- **Diverse Suppliers Go Global** offers information and shares resources on how to evaluate and participate in the global marketplace.
- **Diverse Suppliers are Cyber-Secure**, new in 2014, raises cyber-security awareness and offers approaches that a small business can take to cost-effectively assess its vulnerability and reduce risk.

## 2014 Milestones

In 2014, we spent \$2.1 billion with diverse suppliers—or 40.9 percent of our total procurement spend—exceeding our goal of 40 percent. In addition, PG&E surpassed the California Public Utilities Commission's diverse spending goal of 21.5 percent for the ninth consecutive year.

This is the third consecutive year PG&E's diverse spend has surpassed the \$2 billion mark. Moreover, this was achieved as PG&E's overall procurement in 2014 decreased by \$343 million, or 6.2 percent, due to the completion of major projects.

Highlights of our efforts in 2014 included the following:

- **Further embedded supplier diversity within our core business.** For example, the Power Generation department organized a supplier diversity business matchmaking session, mentored diverse suppliers to improve their capability on larger projects and implemented a requirement to conduct a supplier diversity webinar for any parties submitting Requests for Proposals greater than \$500,000. As a result, the department exceeded its 2014 goal.
- **Supported President Obama's SupplierPay Program.** Pacific Gas and Electric Company was the first utility and one of the initial 26 companies to participate in President Obama's SupplierPay Pledge, which encourages large corporations to develop ways to help small business suppliers address financial challenges.
- **Expanded our Supplier Diversity Ambassador Program.** An additional 35 employees signed up to represent PG&E in the community by becoming Supplier Diversity Outreach Ambassadors in 2014, growing the volunteer list to nearly 200 members. Through the efforts of Outreach Ambassadors, many of whom are buyers, PG&E was able to extend its outreach to thousands of prospective diverse suppliers that came to business matchmaking sessions, visited PG&E booths or attended diverse business conferences and trade shows.
- **Put boots on the ground.** Held in partnership with the SBA, the California Department of General Services and the San Francisco Minority Business Development Agency Business Center, the second annual "Boots to Business" SBA program introduced transitioning military service members to the fundamentals of small business ownership and available tools and resources. More than 90 veterans attended the workshop at PG&E's corporate headquarters in San Francisco.

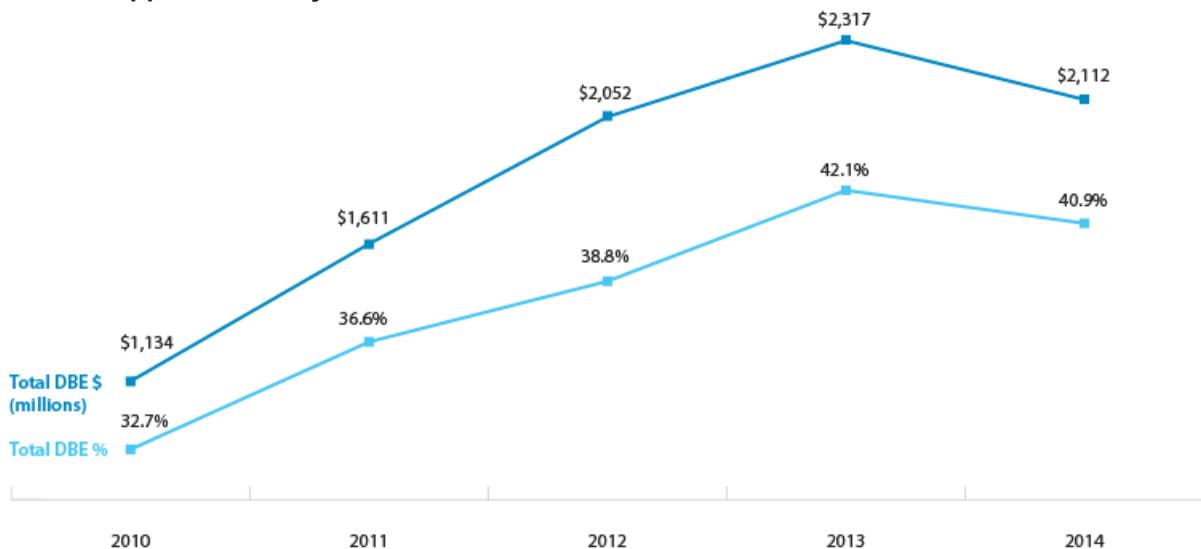
## Measuring Progress

PG&E's spending with diverse businesses has grown substantially over the past 10 years. In the past five years alone, PG&E nearly doubled its annual spend with diverse businesses; in the past decade, diverse spending has increased by 488 percent, or more than \$1.7 billion.

Highlights from 2014 include:

- Minority business enterprises: \$1.4 billion or 26.4 percent of total spend
- Woman business enterprises: \$622 million or 12.1 percent of total spend
- Service-disabled veteran business enterprises: \$125 million or 2.4 percent of total spend, an all-time high

### 5-Year Supplier Diversity Trend



## SUPPLIER DIVERSITY AND SMALL BUSINESS RESULTS

Category	2012 (%)	2013	2014
Minority Men	16.7	19.8	19.0
Minority Women	7.5	7.6	7.4
Minority Business Enterprise	24.2	27.4	26.4
Women Business Enterprise (WBE)	12.5	12.5	12.1
<i>Subtotal Women, Minority Business Enterprise (WMBE)</i>	<i>36.7</i>	<i>39.8</i>	<i>38.5</i>
Service-Disabled-Veteran Business Enterprise (DVBE)	2.2	2.3	2.4
Total DBE	38.8	42.1	40.9
Utility Target	37.3	38.5	40.0
Non-Diverse Small Business	5.3	7.1	6.9
<b>Grand Total</b>	<b>44.1</b>	<b>49.2</b>	<b>47.8</b>
	2012 (\$, millions)	2013 (\$, millions)	2014 (\$, millions)
Supplier Diversity Spend	2,052	2,317	2,112
Non-Diverse Small Business Enterprise Spend	280	393	385
<b>Total Diverse and Small Business Spend</b>	<b>2,332</b>	<b>2,710</b>	<b>2,497</b>

PG&E's growth in diverse business procurement demonstrates our long-term commitment and has earned PG&E recognition. A partial list of honors includes being named to the "2014 Million Dollar Club" by the U.S. Hispanic Chamber of Commerce for spending with Hispanic-owned businesses in 2013 and recognition from the Women's Business Enterprise National Council as one of "America's Top Corporations for Women Businesses Enterprises".

## Looking Ahead

PG&E strives to improve its industry-leading supplier diversity program by enhancing existing and developing new initiatives to support the continued success and growth of diverse businesses and local communities.

Areas of focus in 2015 include:

- Supporting the development of diverse suppliers in areas of PG&E's growth such as gas pipeline safety, energy procurement and new technology through technical assistance and capacity-building initiatives.
- Enhancing our Prime Supplier Program through additional training and communication on diverse subcontracting, partnering and mentoring.
- Supporting executive training initiatives that encourage mature diverse suppliers to consider competing for opportunities in emerging technology.
- Providing quality and environmental systems certification scholarships to help diverse suppliers build the necessary business practices for successful, scalable growth.



## Environment

A pillar of our sustainability journey, PG&E's commitment to the environment dates back decades. Today, our efforts can be seen in a multitude of ways, spanning our operations, our work in the communities we serve and our relationships with our customers. Our approach begins with fully meeting all environmental requirements and extends to our commitment to increase our use of clean and renewable energy, reduce the impacts of our business, protect sensitive habitats and species, and work locally to help our customers use energy more efficiently.

# Highlights

- Collaborated to address the impacts of California's drought, including conserving water in our facilities and helping customers save about 1.8 billion gallons through energy efficiency.
- Extended our leadership on fleet electrification, introducing the utility industry's first plug-in electric utility truck that can also provide power for up to 100 homes.
- Partnered to ensure the successful implementation of California's landmark Global Warming Solutions Act (AB 32), which requires the gradual reduction of greenhouse gas emissions in California to 1990 levels by 2020.
- Achieved our five-year goals for reducing energy, water and waste in our offices and service yards.
- Made our second land transfer as part of the Land Conservation Commitment, which ultimately will permanently protect 140,000 acres of PG&E-owned watershed lands.
- Further integrated climate change adaptation planning into our risk management processes.

## Key Sustainability Indicators

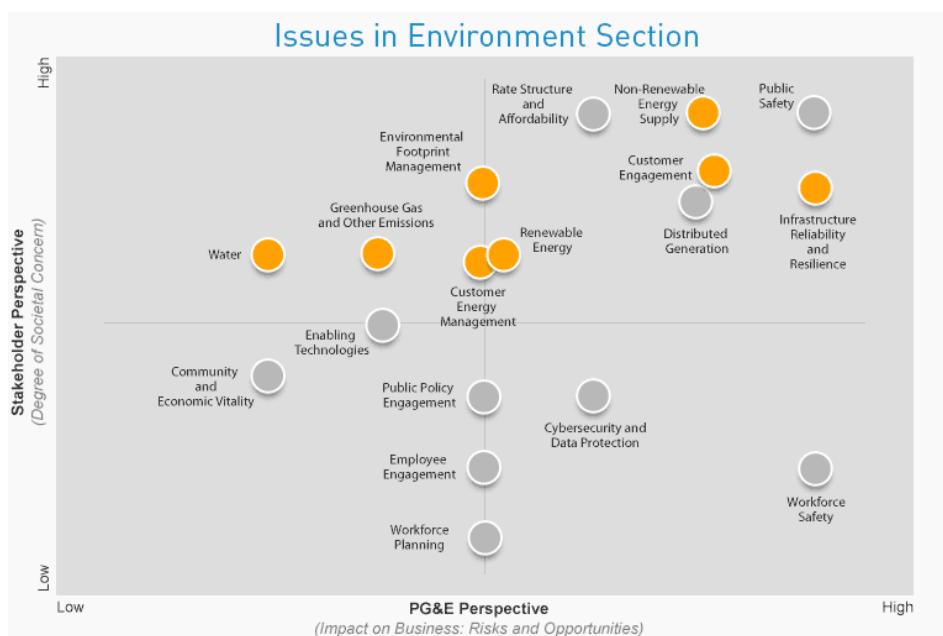
**13%**

Reduction in water use at office facilities and service yards

**27%**

Percentage of power from eligible renewable resources delivered to customers in 2014

## Our Materiality Matrix



Consistent with best practice, PG&E published a materiality assessment for corporate sustainability in 2014—a strategic project to identify issues that are material to the long-term sustainability of our business. Conducted in coordination with PG&E's strategic planning process, the materiality assessment was designed to engage stakeholders, identify opportunities and risks, and sharpen our corporate sustainability strategy and reporting.

The matrix to the left presents the results—highlighting issues covered in this section of the report.



# Compliance

Just as operational excellence serves as the foundation for meeting our customer commitments, environmental compliance is the bedrock of PG&E's commitment to environmental leadership. In fact, our environmental policy begins with a commitment to "comply fully with the letter and spirit of all applicable environmental laws and regulations."

Our environmental policy and governance practices are designed to promote compliance with environmental requirements and provide a platform from which we can take our performance beyond legal and regulatory baselines.

## Our Approach

### Environmental Management System

PG&E's operations are subject to extensive federal, state and local environmental laws and regulations. These requirements relate to a broad range of activities, including preventing the discharge of pollutants; safely transporting, handling and storing hazardous materials; properly managing hazardous wastes; protecting threatened and endangered species; and reporting and reducing carbon dioxide and other greenhouse gas emissions.

To ensure we meet these requirements, PG&E uses an Environmental Management System (EMS) modeled after the ISO 14001 environmental management standard and consistent with its "Plan, Do, Check, Act" model for continuous improvement. The system uses a series of compliance work processes that enable PG&E to manage regulatory compliance and our environmental impacts by each line of business.

The Vice President of Safety, Health and Environment for Pacific Gas and Electric Company oversees our commitment to meet safety and environmental requirements, with the goal of exceeding them. In addition, an Environmental Officer Steering Committee meets quarterly to provide oversight on environmental issues across PG&E. Other technical forums serve as additional vehicles to discuss, prioritize and cross-check environmental issues across the business.

Compliance performance updates are reviewed monthly by PG&E's officers, and an annual environmental compliance summary is presented to the Compliance and Public Policy Committee of the PG&E Corporation Board of Directors.

# 2014 Milestones

## Planning

Our current system uses a series of work processes to manage regulatory compliance and environmental performance by each line of business. While we have not sought ISO 14001 certifications for our facilities, we performed an independent third-party gap analysis to support the development of an EMS consistent with the ISO 14001 methodology and principles.

## Implementation and Operation

PG&E employs a variety of operational controls to help ensure that actions to meet our environmental compliance obligations are performed on time, on purpose and are repeatable. We also continuously learn from our experiences and integrate these lessons back into our work processes and staff development.

In 2014, we continued to leverage technology solutions to drive compliance and minimize impacts on the environment. Key EMS initiatives included:

- Implementing an SAP-based tool to track facility and project compliance.
- Deploying an automated tool that uses Geographic Information System spatial data to assess projects for potential environmental impacts.
- Continuing a multiyear effort to embed environmental procedures into the work standards and procedures of our operating lines of business.

PG&E conducts extensive training to ensure employees have the skills and knowledge to correctly perform environmental activities associated with their work. Each year, PG&E trains thousands of employees on various environmental compliance responsibilities. Additionally, we require all employees to take a training course on our environmental policy to reinforce every employee's role in supporting PG&E's goal of environmental leadership.

## Reviews and Corrective Actions

A robust environmental auditing program is critical to ensure that we are effectively complying with the many environmental laws and regulations relating to our business.

We review and audit environmental performance in three different ways: self-assessments, comprehensive reviews and internal audits.

- **Self-Assessments:** Environmental personnel perform self-assessments on facilities or projects they oversee. Each assessment evaluates a facility or project for compliance with environmental regulations.
- **Comprehensive Reviews:** These reviews are performed by personnel from the Environmental department who are not responsible for compliance at the facility or project being inspected. Each comprehensive review involves evaluating all environmental compliance obligations associated with the operations of a facility or project.
- **Internal Audits:** The Internal Audit department conducts systemic and programmatic controls-based audits to independently analyze the effectiveness of our environmental compliance management systems. The results of these audits are reported annually to the PG&E Corporation and Pacific Gas and Electric Company Audit Committees of the Boards of Directors.

During 2014, we performed a combination of 5,673 self-assessments, comprehensive reviews and internal audits of various environmental processes, facilities and projects.

To drive continuous improvement, we employ a rigorous corrective action process, which includes performing root-cause analyses on noncompliance issues identified through environmental agency inspections and tracking detailed corrective action plans to resolution.

# Measuring Progress

## Operational Performance

PG&E tracks and reports a wide range of annual environmental compliance performance indicators. This section details our performance results for 2014.

### Reported Releases and Permit Exceedances

We reported a total of 134 releases in 2014, a decrease from 211 reported in 2013. A release is defined as an unintentional discharge of a regulated substance that exceeds a reporting threshold. We report releases that meet regulatory thresholds, as well as many smaller releases, in an effort to ensure operational transparency to local agencies.

We reported six permit exceedances in 2014, compared to seven in 2013. An exceedance is defined as a discharge in excess of what is allowed by a permit.

### Agency Inspections

In 2014, a total of 571 agency inspections were conducted at our facilities. The majority of these inspections were performed by Certified Unified Program Agencies, such as city and county environmental health departments and fire departments.

### Environmental Sanctions and Penalties

To measure compliance performance, we categorize all written enforcement actions issued by a regulatory agency as Level 1 (those findings that resulted in an actual or potential environmental impact) or Level 2 (findings that did not result in an actual or potential environmental impact). We also track the percentage of agency inspections that do not result in a written enforcement action.

We received five Level 1 enforcement actions in 2014. Our rate of inspections without a written sanction was 93 percent, exceeding our target of 90 percent.

PG&E paid a total of \$3,100 in penalties.

### COMPLIANCE DATA

	2012	2013	2014
Level 1 Enforcement Actions	4	6	5
Percentage of Inspections Without a Written Enforcement Action	89%	90%	93%
Releases/Exceedances	188	218	134
Penalties Paid	\$3,770,360 <sup>1</sup>	\$64,244	\$3,100
Agency Inspections	632	341 <sup>2</sup>	571 <sup>2</sup>
Audits Performed (System Audits and Comprehensive Facility Reviews)	40	33	40
Self-Assessments Performed	1,694	2,508	5,633 <sup>3</sup>

<sup>1</sup> This includes \$3.6 million that PG&E paid to resolve an alleged violation of a 2008 Clean Up and Abatement Order issued by the Lahantan Regional Water Quality Control Board regarding the chromium plume in Hinkley. The alleged violation was resolved by a settlement under which \$1.8 million was paid to the state and the remaining \$1.8 million was put toward a supplemental environmental project in the Hinkley area.

<sup>2</sup> In 2013, PG&E adopted a new Environmental Compliance System and only tracked facility inspections, whereas previous years included project inspections.

<sup>3</sup> The number of self-assessments performed increased largely due to enhanced rigor around compliance management tracking.

## Looking Ahead

We will maintain our commitment to continuous improvement as we work to enhance our environmental management system. In 2015, we will continue to focus on expanding the use of technology to minimize environmental impacts as we perform gas and electric infrastructure improvements. We also remain focused on further embedding environmental considerations into our work procedures and construction project plans.



# Climate Change

As a provider of gas and electricity to millions of Californians, PG&E has a long history of taking action to combat climate change—from an operational, investment and policy perspective. Today, we remain focused on managing our carbon footprint, advancing low-carbon policies for California and the nation, helping our customers reduce their energy use with industry-leading tools and incentives, and addressing the need to adapt to changing climate conditions.

## Our Approach

In October 2015, California's Governor signed Senate Bill (SB) 350, which increases the state's Renewables Portfolio Standard (RPS) to 50 percent by 2030 and doubles state energy efficiency goals. The bill supports the Governor's April 2015 Executive Order, which set a new goal to reduce greenhouse gas emissions by 40 percent below 1990 levels by 2030.

PG&E fully supported SB 350 as an important step toward achieving California's aggressive climate change and clean energy goals. It builds on a strong legacy of policy leadership in California that, in turn, has helped the state maintain leadership in technology, the environment and innovation for decades.

To do our part, we are taking an integrated approach to achieve sustainable greenhouse gas emission reductions in a way that manages costs for our customers, delivers safe and reliable electric and gas service, and creates a model program for others to follow.

## Reporting Our Impacts

We believe it is critical that investors, customers, policymakers and other stakeholders have access to information that allows them to assess and understand a company's risks and opportunities associated with climate change.

PG&E reports its greenhouse gas emissions to the California Air Resources Board (ARB) and U.S. Environmental Protection Agency (EPA) on a mandatory basis.

On a voluntary basis, PG&E reports a more comprehensive emissions inventory to The Climate Registry, a nonprofit organization. Each year, PG&E also reports its greenhouse gas emissions and climate change strategies to the CDP, an international not-for-profit organization that requests information on behalf of institutional investors.



## Engaging Our Customers

An integral part of our business is working with customers to help them achieve energy savings and greenhouse gas emission reductions through some of the nation's leading programs and incentives for energy efficiency, demand response and solar installation. These efforts include helping local governments develop strategies and implementation plans to reduce emissions, including providing them with community energy profiles to assess opportunities and connecting them with PG&E programs and other resources that meet local needs.

## Addressing Our Own Carbon Footprint

PG&E understands the need to reduce utility sector emissions. While some companies have adopted voluntary greenhouse gas reduction goals, PG&E is committed to helping the state meet the long-term targets established by the Governor and, in the near term, California's Global Warming Solutions Act, or AB 32. This law requires California to gradually reduce its greenhouse gas emissions to the 1990 level of 431 million metric tons of carbon dioxide (CO<sub>2</sub>)-equivalent by 2020. The law covers emissions from PG&E's fossil-fuel power plants, natural gas compressor stations and electricity imported into California. In 2015, it expanded to cover emissions from the combustion of natural gas delivered to customers.

We are actively working to reduce our carbon footprint in a variety of ways, such as increasing supplies of clean and renewable energy, reducing energy use in our facilities, avoiding emissions in our operations, investing in lower-emission vehicles and building a more sustainable supply chain.

## Advancing Responsible Policy Solutions

PG&E is committed to promoting a diverse set of low- and zero-carbon resources to drive clean energy innovation in California and beyond. This approach can reduce greenhouse gas emissions in an economically sustainable and environmentally effective way, while spurring innovation and job creation.

PG&E actively engages in ARB's stakeholder activities to refine California's cap-and-trade program implementation in order to meet AB 32's greenhouse gas emissions reduction goals at the lowest possible cost to customers. Features that will help mitigate costs to customers include free allocation of greenhouse gas emissions allowances to utilities for the benefit of their customers, a sufficient supply of high-quality offsets, robust market oversight and an allowance price containment reserve that reduces the risk of excessively high allowance prices.

In 2014, the U.S. EPA proposed new CO<sub>2</sub> regulations, known as the Clean Power Plan, for new and existing power plants under section 111 of the Clean Air Act. We are working closely with the State of California and U.S. EPA to ensure that the final rules align with California's climate change policy and the progress made to date toward reducing greenhouse gas emissions from California's electricity sector.

In August 2015, U.S. EPA released the final Clean Power Plan which includes guidelines for each state to develop plans to achieve greenhouse gas reduction targets under section 111(d) of the Clean Air Act. PG&E appreciates the significant outreach and stakeholder engagement conducted by the U.S. EPA in conjunction with the rule's development. It is expected that this first-ever national program to reduce greenhouse gas emissions from the power sector will advance investments in clean energy technologies throughout the country and provide tremendous environmental benefit.

Ultimately, PG&E wants to ensure that the U.S. EPA's rules provide the flexibility to recognize the unique circumstances and emissions profiles of power companies and individual states across the country. We will also work with stakeholders to explore opportunities to develop regional compliance approaches, including regional cap-and-trade programs.

Central to our approach is engaging at the state, federal and international levels through a variety of policy think tanks and advocacy groups, such as the Center for a New Energy Economy, Georgetown Climate Center, Center for Climate and Energy Solutions, Alliance to Save Energy, Edison Electric Institute, Bipartisan Policy Center, Electric Power Research Institute, International Emissions Trading Association, Business Council

The image shows the front cover of a report. At the top left is the logo for 'pmr PARTNERSHIP FOR MARKET READINESS'. Below it is the text 'TECHNICAL NOTE 9 | JANUARY 2015'. The main title 'Preparing for Carbon Pricing' is centered in large blue letters. Below the title is a subtitle 'Case Studies from Company Experience: Royal Dutch Shell, Rio Tinto, and Pacific Gas and Electric Company'. The background of the cover features a large, stylized graphic of overlapping blue and green curves on the left, and a photograph of several people seated around a conference table in a bright room on the right.

PG&E's long-standing commitment to address climate change and prepare for California's carbon market was featured in a report by the World Bank's Partnership for Market Readiness.

for Sustainable Energy, Coalition for Emission Reduction Policy, Natural Gas Downstream Initiative and the Electric Drive Transportation Association.

## Planning for Potential Climate Change Impacts

Since 2008, PG&E has been investigating the potential physical risks of climate change to our system. We have identified a number of potential risks to our business, including sea level rise, temperature changes, rainfall and runoff patterns, wildfire risk and storm frequency and intensity.

There are four key aspects to PG&E's approach to addressing changing climate conditions:

- Robust emergency response plans and procedures to address near-term risks, including more extreme storms, heat and wildfires.
- Active engagement at the federal, state, and local level on climate change adaptation and resilience.
- A multi-year, comprehensive risk assessment process to prioritize infrastructure investments for longer term risks, such as sea level rise.
- An in-house climate change science team that regularly reviews the most relevant science and integrates its research into PG&E's risk assessment process.

PG&E continues to make substantial investments to build a more modern and resilient gas and electric system that can better withstand extreme weather and natural disasters.

As California experiences one of the most severe droughts on record, we are working diligently to steward our water resources in a responsible manner and ease the drought's impact on customers, communities and our own operations. With regard to increased electricity demand from more extreme, persistent and frequent hot weather, PG&E believes its strategies to reduce greenhouse gas emissions—such as energy efficiency and demand response programs, infrastructure improvements and the support of renewable energy development and storage—will help offset the expected rise in demand.

We also continue to engage with multistakeholder groups on climate adaptation, including the Bay Area Council, U.S. Department of Energy's Partnership for Energy Sector Climate Resilience and a variety of other forums at the local level in our service area.

## 2014 Milestones

In 2014, we continued to minimize our carbon footprint:

- **Increased renewable energy.** We remained on track to meet the state's requirement to deliver 33 percent renewable energy by the end of 2020. By the end of 2014, we reached 27 percent. An additional 8 percent came from large hydroelectric power, which does not count toward the state's 33 percent goal.
- **Reduced facility energy use.** We reduced energy use by more than 8 percent, meeting our annual target and five-year reduction goal.
- **Reduced methane emissions.** We avoided the release of nearly 35,000 metric tons of CO<sub>2</sub>-equivalent emissions. These savings were achieved primarily by replacing older gas mains and by implementing a technique called cross-compression, where natural gas is transferred from one pipeline to another during pipeline construction and repair projects.

## Partnering on Climate Resilience

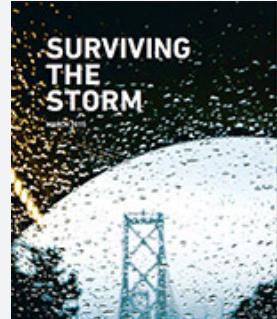


PG&E is collaborating with other leading electric utilities in the U.S. Department of Energy's Partnership for Energy Sector Climate Resilience to share best practices on reducing vulnerabilities to climate impacts.

PG&E participated in a climate change adaptation workshop co-hosted by the California Public Utilities Commission and the California Energy Commission. The event explored the physical vulnerabilities of California's gas and electric systems due to climate change and the actions that utilities like PG&E are taking to adapt to those changes.

## Surviving the Storm

The Bay Area Council Economic Institute published "Surviving the Storm," a report that found that a Superstorm and the associated flooding could have a \$10.4 billion impact on the San Francisco Bay Area economy. The report included solutions for creating greater regional resilience with a focus on the need for increased investment in flood control. Included in the report is PG&E's estimate that disruption to several Bay Area substations could result in an economic impact of up to \$125 million—an impact mitigated by PG&E's redundant electric system where substations are interconnected through the electric grid and typically can play a back-up role to one another to help minimize customer service interruptions.



- **Continued to green our fleet.** We added new plug-in electric vehicles to our fleet and joined the Edison Electric Institute in calling on utilities to invest 5 percent of their total fleet investment, or approximately \$1 billion, in plug-in electric vehicle technologies starting in 2015.

## Measuring Progress

### Mandatory Emissions Reporting

Under AB 32's annual reporting requirements, PG&E reports greenhouse gas emissions to the ARB. These reports include emissions from our electric generation facilities, natural gas compressor stations, natural gas supplied to customers and the fugitive emissions from our natural gas distribution system and compressor stations.

In 2015, as part of California's cap-and-trade system, PG&E anticipates a compliance obligation associated with the emissions from the combustion of natural gas supplied to customers, excluding the fuel that is delivered to covered entities. The following table shows the greenhouse gas emissions data PG&E reported to ARB under AB 32.

#### **PG&E EMISSIONS REPORTED TO THE CALIFORNIA AIR RESOURCES BOARD: CO<sub>2</sub> EMISSIONS FROM OWNED POWER GENERATION<sup>1</sup> AND OPERATIONS**

	2012	2013	2014
<b>Total CO<sub>2</sub> Emissions (metric tons)</b>	<b>2,464,464</b>	<b>2,380,159</b>	<b>2,405,407</b>
Humboldt Bay Generating Station	193,004	163,242	162,385
Gateway Generating Station	1,246,180	1,237,351	1,276,932
Colusa Generating Station	1,025,280	979,566	966,090
<hr/>			
<b>CO<sub>2</sub> Emissions Rates (lbs/MWh)</b>			
Humboldt Bay Generating Station	1,020	997	1,023
Gateway Generating Station	866	857	868
Colusa Generating Station	838	852	857
Fossil Plants	864	863	873
All Plants	172	167	184
<hr/>			
<b>Other CO<sub>2</sub>-e Emissions (metric tons)</b>			
Natural Gas Compressor Stations <sup>2</sup>	351,878	325,701	348,155
Distribution Fugitive Natural Gas Emissions	222,995	213,858	750,223 <sup>3</sup>
Customer Natural Gas Use <sup>4</sup>	42,434,940	43,506,493	41,616,935

<sup>1</sup> PG&E's utility-owned generation comprised more than 35 percent of our delivered electricity in 2014. PG&E also reported N<sub>2</sub>O and CH<sub>4</sub> emissions from each of our generating stations.

<sup>2</sup> Includes compressor stations emitting more than 25,000 metric tons of CO<sub>2</sub>-e annually.

<sup>3</sup> The increase in emissions was largely due to the inclusion of more sources in the mandatory reporting requirements, including customer meters and pipeline dig-ins. PG&E previously reported emissions from these sources only under its voluntary greenhouse gas emissions inventory.

<sup>4</sup> Includes emissions from the combustion of natural gas delivered to all entities on PG&E's distribution system, with the exception of gas delivered to other natural gas local distribution companies. This figure does not represent PG&E's compliance obligation under AB 32, which will be equivalent to the above reported value less the fuel that is delivered to covered entities as calculated by ARB.

PG&E also reports the greenhouse gas emissions from our facilities and operations to the U.S. EPA under its mandatory reporting requirements.

## **Voluntary Emissions Reporting**

PG&E's voluntary greenhouse gas emissions reporting showed that PG&E's CO<sub>2</sub> emissions rate was approximately one-third of the national utility average in 2013, the most recent year for which verified data are available. PG&E's emissions rate of 427 pounds of CO<sub>2</sub> per megawatt-hour of delivered electricity takes into account both PG&E-owned power generation and power purchased from third parties.

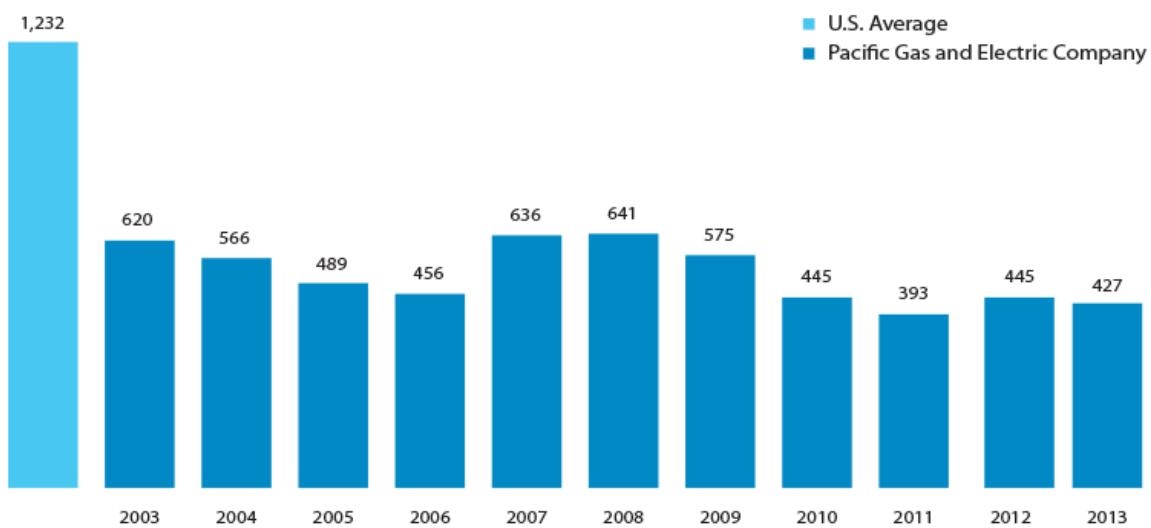
From year to year, several factors affect PG&E's power mix and emissions, including demand growth and the availability of clean hydro power. However, PG&E's emissions have continued a downward trend. Our 2013 emissions rate is 17 percent lower than the past five-year average of 500 pounds of CO<sub>2</sub> per megawatt-hour.

PG&E's total CO<sub>2</sub> emissions from delivered electricity decreased to 15.8 million metric tons in 2013. This was largely due to lower demand for electricity and an increase in renewable energy.

Reduced demand and cleaner energy led to a drop in PG&E's Scope 1 and Scope 2 greenhouse gas emissions. These emissions, from sources PG&E has direct control over—including owned power generation, fleet and our own electricity use—were just under 5 million metric tons CO<sub>2</sub>-equivalent in 2013. Higher customer demand for natural gas was the primary driver for an increase in our Scope 3 emissions.

### **Benchmarking Greenhouse Gas Emissions for Delivered Electricity**

(Pounds of CO<sub>2</sub> per MWh)

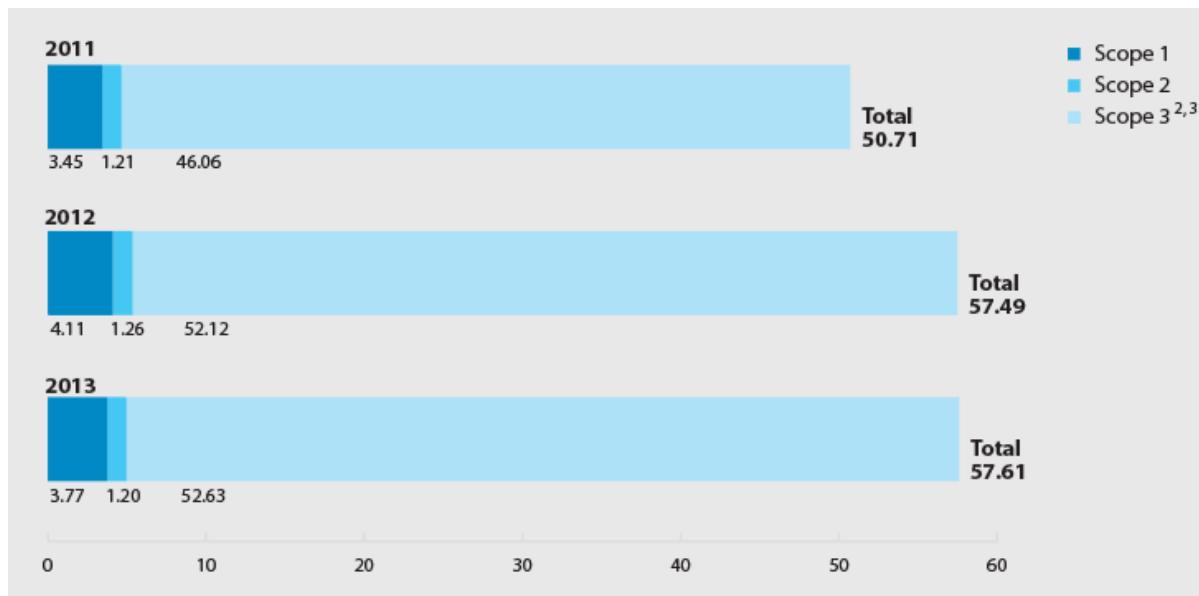


<sup>1</sup> Source: U.S. Environmental Protection Agency eGRID Version 1.0, which contains year 2010 information configured to reflect the electric power industry's current structure as of February 24, 2014.

<sup>2</sup> Because PG&E purchases a portion of its electricity from the wholesale market, we are not able to track some of our delivered electricity back to a specific generator. Therefore, there is some unavoidable uncertainty in PG&E's total emissions and emissions rate for delivered electricity.

## PG&E's Scope 1, 2 and 3 Greenhouse Gas Emissions

(Million Metric Tons CO<sub>2</sub>-e)<sup>1</sup>



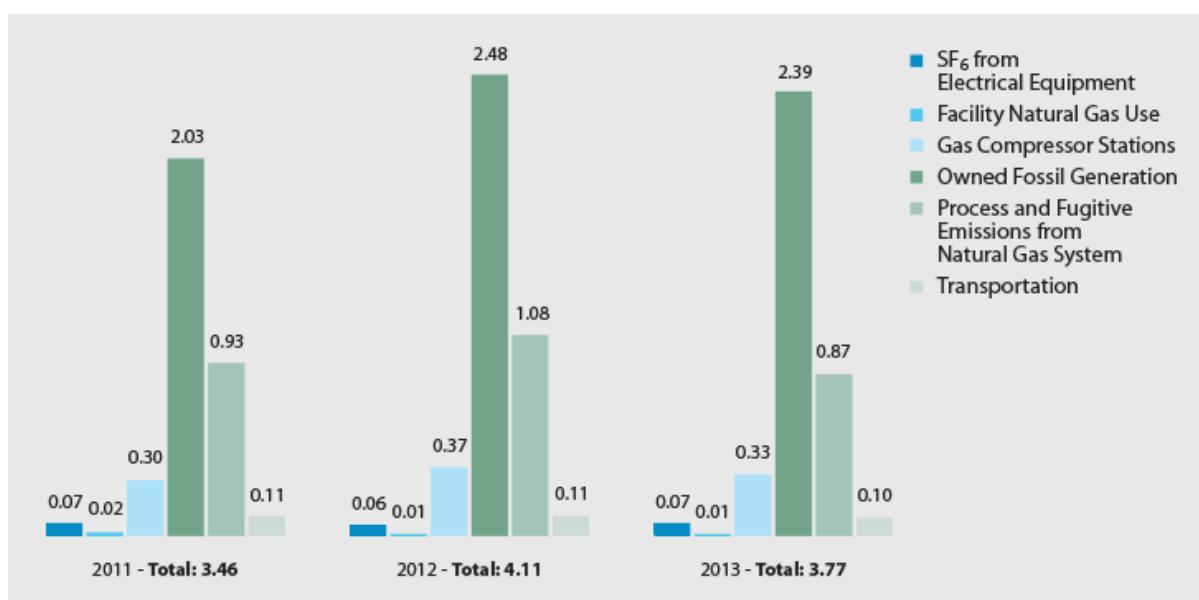
<sup>1</sup> Because PG&E purchases a portion of its electricity from the wholesale market, we are not able to track some of our delivered electricity back to a specific generator. Therefore, there is some unavoidable uncertainty in PG&E's total emissions and emissions rate for delivered electricity.

<sup>2</sup> The emissions associated with purchased electricity are considered Scope 3 per The Climate Registry's Electric Power Sector Protocol for the Voluntary Reporting Program, Annex I to the General Reporting Protocol, June 2009, Version 1.0.

<sup>3</sup> This figure includes the emissions from the combustion of natural gas delivered to all entities on PG&E's distribution system, with the exception of gas delivered to other natural gas local distribution companies, as well as gas delivered to PG&E facilities such as power plants, compressor stations and offices, the emissions of which are reported separately.

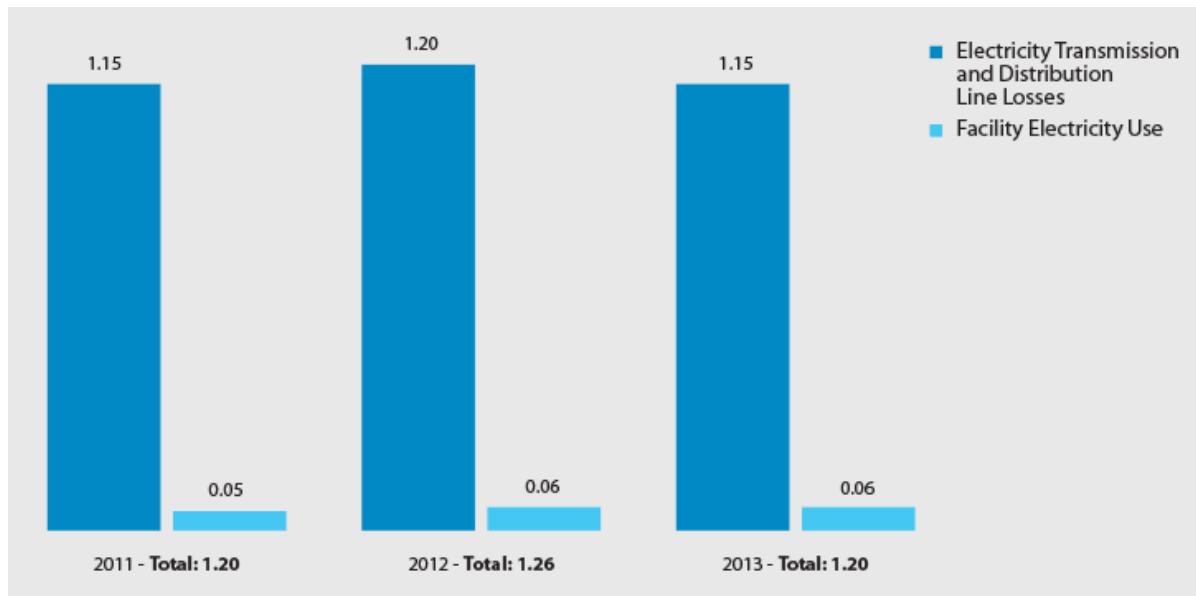
## PG&E's Scope 1 Greenhouse Gas Emissions

(Million Metric Tons CO<sub>2</sub>-e)



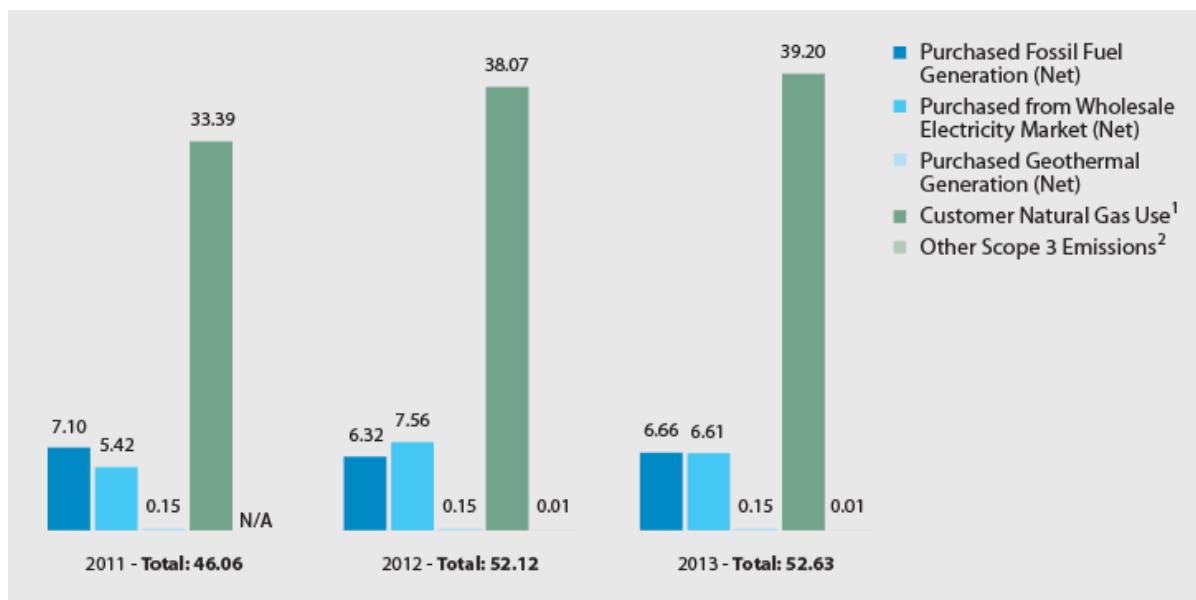
## PG&E's Scope 2 Greenhouse Gas Emissions

(Million Metric Tons CO<sub>2</sub>-e)



## PG&E's Scope 3 Greenhouse Gas Emissions

(Million Metric Tons CO<sub>2</sub>-e)

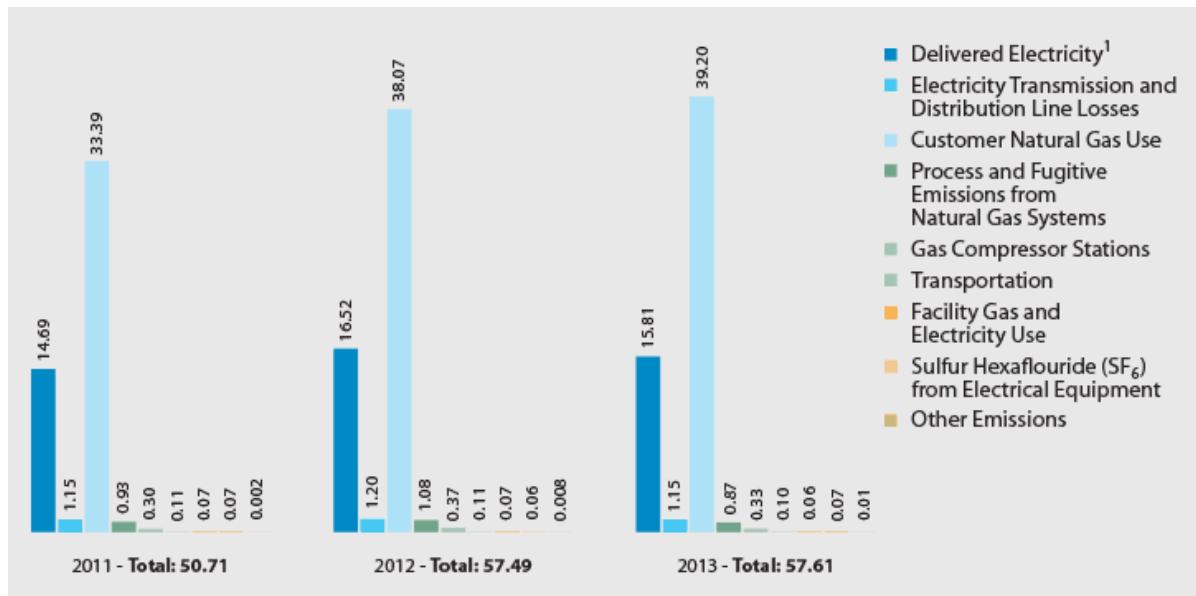


<sup>1</sup> This figure includes the emissions from the combustion of natural gas delivered to all entities on PG&E's distribution system, with the exception of gas delivered to other natural gas local distribution companies, as well as gas delivered to PG&E facilities such as power plants, compressor stations and offices, the emissions of which are reported separately.

<sup>2</sup> Other Scope 3 emissions include the greenhouse gas emissions from business air travel, waste management and employee commuting. PG&E began measuring these optional categories for its 2012 emissions.

## Total Greenhouse Gas Emissions by Source Category

(Million Metric Tons CO<sub>2</sub>-e)



<sup>1</sup> Because PG&E purchases a portion of its electricity from the wholesale market, we are not able to track some of our delivered electricity back to a specific generator. Therefore, there is some unavoidable uncertainty in PG&E's total emissions and emissions rate for delivered electricity.

## Assistance to Local Communities

PG&E provides data, financial assistance and technical support to local governments for the development of greenhouse gas inventories and climate action plans tailored to the unique needs of individual communities. The inventories include analyses of energy consumption, vehicle fuel use and waste production to provide a baseline for measuring future greenhouse gas reductions. Climate Action Plans outline a set of policies, programs and ordinances necessary to meet greenhouse gas reduction goals at the local level.

### PARTNERING WITH LOCAL COMMUNITIES<sup>1</sup>

Cumulative number of greenhouse gas inventories supported (municipal and community-wide)	271
Cumulative number of Climate Action Plans supported	64

<sup>1</sup> Data represent totals through 2014.

## Looking Ahead

PG&E has made significant contributions to the state's progress toward a low-carbon future and is well on its way to meeting California's ambitious clean energy goals through renewables, energy efficiency, support for distributed resources, infrastructure investment and efforts to get more electric vehicles on the road.

We will continue to do our part to further reduce greenhouse gas emission levels in the electric and gas sectors. This includes our active engagement on state and local policy, such as the governor's ambitious greenhouse gas reduction target, as well as discussions around new Clean Air Act greenhouse gas regulations with the U.S. EPA, the State of California, and stakeholders as the framework and details for the rules are finalized.

We also remain focused on providing some of the nation's cleanest energy to our customers. One important milestone was the development of a new community solar program that will give customers the option to purchase 50 or 100 percent solar power locally produced in their area for a small incremental cost. The program is in development, with a launch date pending CPUC approval.

### Methane study's findings are standard practice at PG&E



A recently released Washington State University and Environmental Defense Fund study found a significant reduction in methane emissions from natural gas distribution lines. Reasons for the reduction—including upgrades at metering and regulating stations, improvements in leak detection, and maintenance and replacement of older pipeline materials—are standard practice at PG&E.

PG&E contributed to the findings of a comprehensive, peer-reviewed study published in Environmental Science & Technology that confirms methane emissions from local natural gas systems have significantly decreased in the past 20 years, even as the systems' mileage has increased. Improvements made to the natural gas system are contributing to a reduction in greenhouse gas emissions nationwide.



# Natural Resource Stewardship

As one of California's largest land owners, PG&E has a long history of managing lands and waters in a responsible and environmentally sensitive way. This includes protecting threatened and endangered species and their habitats, managing watershed lands that PG&E has committed to preserve in perpetuity, maintaining forest lands to minimize the threat of wildfire and managing vegetation around our overhead power lines so that customers experience fewer outages.

## Our Approach

### Minimizing Impacts of Our Operations

As we upgrade and maintain gas, electric and generation facilities to meet customer needs, we recognize the critical importance of protecting threatened and endangered species and their habitats. Examples of our efforts include:

- **Safe Harbor Agreements:** PG&E maintains Safe Harbor Agreements with the U.S. Fish and Wildlife Service for PG&E-owned land at two locations: Antioch Dunes National Wildlife Refuge in Contra Costa County and Tulear Hill in Santa Clara County. Through these agreements, PG&E is working to protect species such as the Lange's Metalmark butterfly, Antioch Dunes evening primrose, Bay Checkerspot butterfly and Metcalf Canyon jewelflower.
- **Habitat Conservation Plans (HCPs):** We continued to implement our San Joaquin Valley Operations and Maintenance HCP, a 30-year permit covering our gas and electric operations and maintenance activities in California's San Joaquin Valley. The HCP's provisions cover 23 wildlife and 42 plant species and enable PG&E to maintain our operations in a way that protects these species and the habitats on which they depend. We are developing additional HCPs and other programmatic permits for our operations.



(Photo by Andi Henke)

## Protecting Birds

PG&E has an important responsibility to protect birds, both to comply with state and federal laws and to maintain electric service reliability. Our work is guided by PG&E's Avian Protection Plan to protect migratory birds while improving system safety and electric reliability for customers. PG&E's plan is one of the most comprehensive in the nation and we expanded it by developing an Eagle Conservation Plan to reduce impacts to eagles, including measures that make power poles safer for birds and eagles.

## Sustainably Managing Lands and Watersheds

PG&E's stewardship commitment includes working to manage our hydroelectric facilities in a manner that restores and enhances habitat for fish and other wildlife. We also maintain 52,000 acres of forestland in ways that help prevent the spread of wildfires, which includes engaging nearby communities in wildfire prevention programs and collecting and storing seeds from PG&E forestlands for future restoration purposes.

In addition, PG&E's Land Conservation Commitment permanently protects 140,000 acres of PG&E-owned watershed lands across the Sierra and Cascade mountain ranges through the donation of conservation easements to qualified conservation organizations. Donees are identified by the Pacific Forest and Watershed Lands Stewardship Council, an independent nonprofit organization. A portion of these watershed lands will be donated to local and state organizations.

We also carry out a variety of land stewardship activities at our Diablo Canyon Power Plant, including wildlife habitat management and environmental education programs.

## Vegetation Management

Each year, PG&E's Vegetation Management department, in consultation with utility arborists and foresters, inspects every mile of power line in our service area for public safety and electric reliability. We do so in compliance with relevant laws and with a focus on public involvement, including extensive "Right Tree, Right Place" outreach. PG&E has been recognized by the National Arbor Day Foundation as a Tree Line USA recipient for 20 consecutive years for demonstrating best practices in utility arboriculture.

### PG&E improves wetland habitat in Shasta County



(Photo by James Green)

PG&E worked with the California Waterfowl Association and other stakeholders to restore 500 acres of wetland habitat in Shasta County. The project filters water, recharges groundwater and provides habitat to waterfowl and other birds and mammals.



## 2014 Milestones

We continued to develop partnerships and new approaches to help us deliver safe and reliable service while protecting wildlife and other natural resources, including:

- **Protected bees and other pollinators** by landscaping targeted lands and rights of way with shrubs and other plants that provide habitat for these species. PG&E is doing so as a member of the Pollinator Partnership, a nonprofit organization working to protect bees, birds, bats and butterflies. We are also a founding member of Business for Bees—American Business Collaboration for Pollinator Conservation Action (ABC/PCA), a commitment to manage our corporate lands in a way that protects these declining pollinator species.
- **Permanently protected land** by making the second land transfer as part of our Land Conservation Commitment, donating 151 acres in Tehama County to the U.S. Forest Service. Located in the Sierra Nevada Mountain Range, the land includes habitat for the federally threatened Chinook salmon and other wildlife and fish, and offers recreation to the public.
- **Earned renewed accreditation** from the Wildlife Habitat Council's Corporate Lands for Learning for our Diablo Canyon Land Stewardship Program, which recognizes our wildlife habitat management and environmental education programs. PG&E manages and protects natural resources on more than 14 miles of coastline surrounding the nuclear power plant and opens the land to researchers and the public. PG&E has earned "Wildlife at Work" certification for five additional sites.
- **Offered an online reservation system for our recreational areas**, making it easier to reserve recreational areas and campgrounds. PG&E is required to maintain campgrounds and picnics at many of the reservoirs that are part of our hydroelectric system, and visitors can now easily browse photos and descriptions of these sites and reserve them online.

## Measuring Progress

PG&E carries out a range of restoration and habitat protection activities to fulfill state and federal regulatory requirements and to support voluntary environmental initiatives. Last year, our efforts protected or restored nearly 1,800 acres of habitat and more than 11 miles of stream and river riparian vegetation.

### PROTECTED AND RESTORED HABITAT<sup>1</sup>

	2012	2013	2014
Acres set aside and protected	0 acres	253.8 acres	259.3 acres
Acres of restored habitat	1,255.7 acres	236.5 acres	1,539.3 acres
Miles of stream and river riparian vegetation protected	23.6 miles	6.4 miles	11.6 miles

<sup>1</sup> PG&E undertook these activities to meet various regulatory requirements.

### PG&E honored for conservation efforts

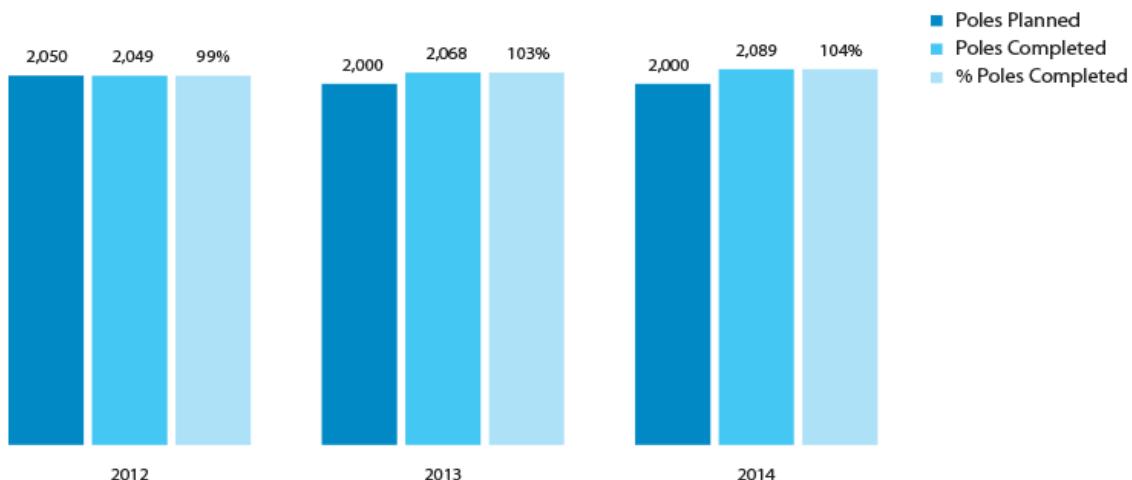


PG&E earned recognition for its use of helicopters to transport crews and equipment during an upgrade of 16 miles of transmission lines from Atascadero to San Luis Obispo. For going the extra mile to conserve natural resources, PG&E earned the Conservationist of the Year Award from the Coastal San Luis Resource Conservation.

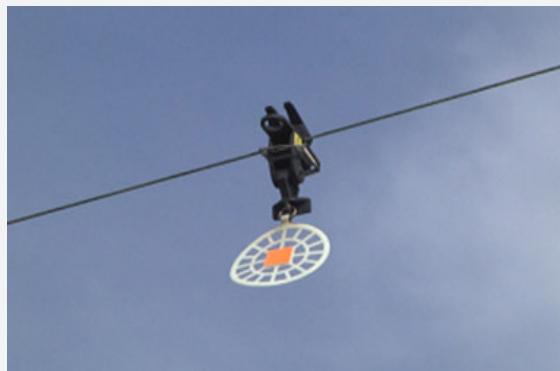
## Protecting Birds

Since 2002, PG&E has made approximately 27,000 existing utility poles and towers bird-safe. In that time, we have also retrofitted more than 30,000 utility poles in areas where bird injuries, fatalities or bird-related power outages have occurred. All new poles and replacement poles in our designated "Raptor Concentration Zone" are also built to be bird-safe.

### Bird Protection Program (Bird-Safe Retrofits)



### PG&E Avian Protection Plan protects birds and keeps the lights on for customers



(Photo by James Green)

PG&E's Avian Protection Plan program focuses on compliance as well as building best practices for the utility industry for bird protection.

It's an ongoing effort to educate employees and the public, and make utility poles "bird safe" by retrofitting them. Crews either increase spacing between the ends of the poles, creating a clearance area for any bird that lands there, or install protective covers over equipment.

## Looking Ahead

As part of our environmental commitment, PG&E will continue efforts to avoid, minimize and mitigate the impacts of our operations on sensitive habitat and species. This includes making it a priority to work collaboratively with federal, state and local stakeholders, as well as other utilities, to seek feedback and identify best practices as we strive to manage lands and waters in a responsible and environmentally sensitive way.

For example, we anticipate completing a 136-acre mitigation acquisition in 2015 to protect the California tiger salamander, California red-legged frog and San Joaquin kit fox, as part of our San Joaquin Valley Operations and Maintenance HCP. We also continue to implement our Land Conservation Commitment, donating 41 acres in Yuba County to the University of California.

Given the ongoing drought in California, we will continue to face an increased risk of wildfires. In response, we have deployed active vegetation management programs on PG&E lands, improving the health of the forests while also proactively mitigating wildfire risks.

### Partnering to plant thousands of trees



PG&E extended its partnership with the National Fish and Wildlife Foundation to plant new trees in the wildfire-stricken Los Padres National Forest on behalf of customers who enrolled in paperless billing. The trees we plant through this effort will reforest approximately 2,800 acres of the 19,000 acres that were burned in forest fires.



# Water and Drought Response

Water is one of our most precious resources—and today in California, it's also a scarce one, as we face the state's worst drought in modern history. In response, we are working vigorously to conserve water in our operations and at our facilities, engage our employees to reduce water use and help our customers do the same at work and at home. We are also collaborating with key partners to limit the threat of wildfire due to the drought and protect the many watersheds that contribute to the vibrancy of our state.

## Our Approach

Our response to the state's severe drought conditions is governed by an internal Drought Task Force, charged with identifying and working to address drought impacts on PG&E's operations, as well as our customers and communities. Led by the task force, we have identified much we can do, given the link between energy and water usage.

Water is essential to operating our infrastructure—including our vast network of hydroelectric generating stations—just as it is essential to our customers in their everyday lives. At the same time, nearly 20 percent of California's electricity use goes toward moving, treating, disposing of, heating and consuming water. This connection, also known as the "water-energy nexus," places PG&E in a unique position to help our state and our customers.

PG&E is working proactively to respond to the drought in a number of ways:

- Strategically managing our power generation facilities
- Reducing water consumption at PG&E offices and service yards
- Coordinating with key agencies to prevent and respond to wildfires
- Outreach and guidance to customers, particularly those in the agricultural community, on how to reduce water usage

The screenshot shows the PG&E website with a blue header. The main content area features a section titled "Drought Resources" with the subtext "Find tips, tools and information to help you conserve water, energy and money." Below this is a "Explore Your Options" section with links for "Residential Customers" and "Agriculture and Business Customers". To the right is a map of California titled "Severity of the Drought" with a legend indicating four levels: "Extreme" (dark red), "Very Droughty" (orange), "Moderate Drought" (yellow), and "No Drought" (green). A callout box states: "Almost 50 percent of the state falls into the most intense category of the drought, which is D4, or 'Exceptional Drought'."

PG&E's website features drought resources, including tips, tools and information to help customers save water, energy and money.

## Water Use at Diablo Canyon

PG&E does not use freshwater for cooling at any of our power plants. At the Diablo Canyon Power Plant, we use saltwater from the Pacific Ocean for once-through cooling. The 2,240 MW nuclear power plant has a maximum discharge of 2.5 billion gallons per day, set by the facility's Clean Water Act permit. PG&E closely monitors the marine environment at the plant by conducting regular studies and sampling, also required under the plant's Clean Water Act permit.

In May 2014, U.S. EPA issued federal regulations under Section 316(b) of the Clean Water Act to minimize adverse environmental impacts from facilities that use once-through cooling. The rule allows Diablo Canyon to continue to be regulated under California's once-through cooling policy adopted in 2010, which is considered to be at least as stringent as the new federal regulations. Under state policy, nuclear facilities may be granted an alternative to the compliance requirements if they meet certain cost and technical feasibility criteria. The State Water Resources Control Board will decide whether to grant PG&E the alternative compliance.

In addition, PG&E uses an on-site desalination plant to generate the majority of freshwater for Diablo Canyon to support the internal operations of the facility.

## Dry Cooled Conventional Sources

PG&E relies on air for cooling at its three natural gas power plants. Humboldt Bay Generating Station is cooled with air radiators using a closed-loop liquid coolant and requires minimal water use. We use an air-cooled condenser at the Gateway Generating Station, which uses approximately 97 percent less water and discharges 98 percent less wastewater than a traditional once-through cooled plant. The similarly designed Colusa Generating Station also uses dry cooling and a zero liquid discharge system that recycles wastewater. PG&E uses some freshwater for internal operations at the plants, but these are largely closed-loop systems that minimize the amount of water consumed.

## Hydroelectric Generation

PG&E owns and operates the nation's largest investor-owned hydroelectric system. Our hydroelectric power plants are largely non-consumptive, meaning that after water passes through turbines to produce electricity, it is returned to the river.

PG&E also uses water for energy storage to help balance daily variations in electric demand at the 1,212 MW Helms Pumped Storage Project. Located more than 1,000 feet inside a mountain, the non-consumptive Helms facility alternately dispatches water from an upper reservoir to a lower reservoir to produce electricity when demand is high, and pumps it back uphill when demand is low.

## Water Conservation in Our Facilities

PG&E's offices and service centers rely on water for restrooms, kitchens, mechanical system cooling, vehicle washing and landscape irrigation. In 2009, PG&E set a five-year goal to reduce water usage in offices and service yards by 20 percent by the end of 2014. Given the drought, we redoubled our efforts to conserve water and engage our employees. As a result, we reduced water use by 13 percent in 2014 and achieved a total five-year reduction of 30 percent.

We also achieved LEED Gold certification for our headquarters complex in downtown San Francisco—the first time the U.S. Green Building Council has awarded this honor to an entire office complex. Best water conservation practices that contributed to this certification include use of low-flow toilets and urinals, the installation of auto-faucets and aerators in sinks, and a state-of-the-art chemical control system in our cooling towers.

## Providing water in times of need



Limited water supplies as a result of the drought have led to a water-sharing agreement between PG&E's Diablo Canyon Power Plant and San Luis Obispo County. In 2015, the County's Board of Supervisors approved a plan for PG&E to begin providing excess desalinated water to the county for use in fighting wildfires. The board is also studying additional ways the excess water can be used.



(Photo by James Green)

Helms Pumped Storage operates between two reservoirs in the Sierra Mountains.

## Helping Customers Reduce Water Use

PG&E offers customers a wide range of options to help them reduce their water use. Our water-saving solutions for residential customers include energy efficiency rebates for high-efficiency appliances, such as clothes washers and shower heads, and free wood chips for landscape mulching, which reduces evaporation. We also offer incentives to agricultural customers who convert from sprinkler systems to water-efficient drip irrigation, as well as programs for energy efficient pumping systems.

Altogether, customers who participated in PG&E's programs reduced water usage by about 1.8 billion gallons in 2014, based on an analysis of our most common energy efficiency measures that deliver water savings.

### Working one-on-one with farmers



Beyond the incentives PG&E offers, our employees also work directly with farmers to make sure they're familiar with and take advantage of all the resources we provide. One of these partnerships was described in a National Geographic story featuring PG&E representative Joe Segura and Central Valley farmer Barat Bisabri, who installed micro sprinklers with a PG&E rebate and cut his water use by 25 percent.

## 2014 Milestones

As the drought persists, PG&E continues to partner to conserve water and protect the watersheds where we operate. Our successes in 2014 included:

- **Conserved water at PG&E facilities.** Last year, we reduced water use by 13 percent and achieved a five-year reduction of 30 percent, surpassing our annual and five-year goals. We are now using 48 million fewer gallons of water per year than five years ago, and we aim to reduce water use by another 4.5 percent in 2015.
- **Engaged our employees.** PG&E led a grassroots Water Wise Pledge Campaign that encouraged employees to make a pledge to reduce their water usage at work and at home. More than 10 percent of our workforce, or nearly 2,300 employees, pledged to take actions such as taking shorter showers, checking for leaks and installing water-saving aerators.
- **Strategically managed our hydroelectric facilities.** Working with state agencies and other stakeholders, we strategically generated less hydropower so that we could save water in our reservoirs to generate power during the summer peak periods. Conserving this water early in the season also helps ensure adequate water supplies for communities, supports recreational opportunities and benefits the many species that depend on water.
- **Took new steps to prevent and mitigate wildfires.** In addition to our routine vegetation management program, through which we inspect all 134,000 miles of overhead electric lines, PG&E provided significant funding to local Fire Safe Councils throughout the state in a community partnership to prevent fires.

### PG&E partners to help customers conserve water



At the Greater Bakersfield Water Conservation Day, PG&E joined other local groups to showcase the importance of water conservation during the state's record drought. Residents toured booths to learn about conserving water at home, including water efficient landscape and irrigation techniques, residential water conservation and energy efficiency.

■ **Expanded agricultural energy efficiency programs and incentives.** We added a new program for agricultural customers who install low-flow irrigation nozzles or convert sprinklers to drip irrigation. We also increased rebates and our outreach through events such as the World Ag Expo, and we formed agricultural customer advisory groups to provide feedback on the types of programs and services that would be most helpful to their businesses.

## Measuring Progress

### WATER USE STATISTICS

	2012	2013	2014
<b>Water Withdrawal (Saltwater and Freshwater) (thousand gallons)</b>			
<b>Water Withdrawal (Saltwater)</b>			
Diablo Canyon Power Plant <sup>1</sup>	833,704,367	845,930,015	852,781,935
Once-Through Cooling	833,390,000	845,609,000	852,463,000
Seawater Withdrawal for Reverse Osmosis	314,367	321,015	318,935
<b>Domestic and Process Water (Freshwater)</b>			
Diablo Canyon Power Plant <sup>2</sup>	21,100	21,400	17,930
Humboldt Bay Generating Station <sup>1</sup>	131	193	168
Gateway Generating Station <sup>1</sup>	20,012	14,893	20,726
Colusa Generating Station <sup>1</sup>	4,086	32,3213	18,877
<b>Facilities (Freshwater)</b>			
Offices and Service Yards <sup>4</sup>	122,473	127,208	106,708
Permitted Water Systems <sup>5</sup>	64,044	66,912	63,231
<b>Hydrostatic Testing (Freshwater)</b>			
Water Withdrawal	9,335	6,166	5,974
<b>Water Discharged (Saltwater and Freshwater) (thousand gallons)</b>			
<b>Water Discharge (Saltwater)<sup>6</sup></b>			
Diablo Canyon Power Plant	833,575,762	845,798,691	852,651,462
<b>Domestic and Process Water (Freshwater)</b>			
Diablo Canyon Power Plant (Permitted Discharge)	135,401	141,469	140,223
Humboldt Bay Generating Station (Sanitary Sewer)	59	73	80
Gateway Generating Station (Sanitary Sewer)	9,262	8,603	10,395
Colusa Generating Station <sup>7</sup>	0	0	0
<b>Hydrostatic Testing (Freshwater)</b>			
Total Discharge <sup>8</sup>	7,537	2,132	4,120

<sup>1</sup> Net operating capacity on December 31, 2014: Diablo Canyon: 2,240 MW; Humboldt Bay Generating Station: 163 MW; Gateway Generating Station: 580 MW; Colusa Generating Station: 657 MW.

<sup>2</sup> Freshwater sources are well water for back-up and emergency purposes.

<sup>3</sup> Increase due to a combination of operational conditions and improved tracking of water usage.

<sup>4</sup> This figure represents the water supplied to offices and service yards managed by the Utility's Corporate Real Estate Strategy and Services department for the 12-month period from October to September. The data includes between 125 and 135 sites between 2012 and 2014.

<sup>5</sup> PG&E monitors water usage at permitted, public water systems owned and operated by PG&E. These systems are metered in accordance with state regulations.

<sup>6</sup> These figures incorporate once-through cooling discharge (equivalent to withdrawal) plus estimated reverse osmosis system brine/backwash discharge.

<sup>7</sup> Colusa Generating Station uses a zero liquid discharge system. A septic system is used to manage sanitary waste.

<sup>8</sup> Of these totals, a portion of water was reused for other hydrostatic testing prior to being discharged.

## Looking Ahead

Amid California's unprecedented drought, and the groundbreaking executive and legislative action it has inspired, PG&E will continue our work across the board to proactively promote water conservation, outreach and education, and wildfire prevention—both at our facilities and job sites and within the communities we serve.

### PG&E hosts Water Conservation Showcase



(Photo by James Green)

For the 12th consecutive year, PG&E held a Water Conservation Showcase at our Pacific Energy Center in San Francisco, bringing together hundreds of industry professionals to hear from experts and engage with new technologies. For PG&E, the event is an extension of the company's focus on energy efficiency and sustainability, highlighting the direct connection between water conservation and energy use.



## Greening Our Fleet

PG&E operates one of the cleanest fleets in the utility industry and advances clean fleet technologies that support local economies in our service area. From electric hybrid bucket trucks to extended-range pickups, PG&E actively invests in new vehicle technologies to support local businesses and reduce emissions and operating costs.

### Our Approach

PG&E remains committed to meeting federal and state vehicle emission and alternative fuel requirements. Federal regulations require that 90 percent of all light-duty vehicles purchased for our fleet be capable of using an alternative fuel—such as electricity or compressed natural gas—provided the technology is commercially available. California regulations require that we turn over our entire fleet to meet new U.S. EPA tailpipe emission standards by 2017. All heavy-duty diesel vehicles in PG&E's fleet must meet or exceed 2007 standards for particulate levels and 2010 standards for nitrogen oxide emissions.

PG&E's leadership in this area is clear: 97 percent of our fleet is already compliant with the 2007 standards and more than 70 percent is compliant with the 2010 standards. We are also working to meet these requirements in a way that fosters innovation and economic vitality by partnering with vehicle manufacturers to design and test new types of vehicles and technologies.

## 2014 Milestones

Electric vehicles reduce emissions and lower costs, and quieter operation provides a better experience for our crews and our communities on the road and at the job site. The following are examples of the vehicles we're helping to develop and add to our fleet:

■ **Electric hybrid utility truck.** This Class 5 utility truck features exportable power capable of supplying 120 kW, which allows the vehicle to be plugged directly into the grid and power up to 100 homes during outages. Manufactured by locally-based Efficient Drivetrains Incorporated (EDI), this vehicle features an 80 percent improvement in fuel efficiency when compared to conventional trucks and an 80 percent reduction in carbon emissions when operating in hybrid mode.



With up to 120 kW of exportable power, the trucks could power a neighborhood as crews make repairs.

(Photo by Jason King)

■ **Battery-powered bucket trucks.** These first-of-their kind trucks feature technology developed by PG&E and Altec Industries that allows the vehicle's engine to rest while at the job site. A plug-in battery-powered system called JEMS operates the auxiliary systems of the trucks, including the bucket, lights, hydraulic lifts, heating and air conditioning, and tools. In 2014, PG&E deployed JEMS technology in 610 trucks, with plans to have more than 700 of these battery-powered bucket trucks in our fleet by the end of 2015.



PG&E battery-powered bucket trucks at Altec Industries Inc.'s green-fleet facility in Dixon.

■ **Extended-range electric pickup truck.** PG&E is working with VIA Motors to develop a pickup truck with a 40-mile electric range and 15 kilowatts of exportable power that allows crews to power their tools and lights on the job. In 2014, PG&E continued testing the trucks and has added three to our fleet in 2015.



The extended-range pick-up truck from VIA Motors runs on electric power for the first 40 miles.

### PG&E unveils new trucks on Capitol Hill



(Photo by Jason King)

During a Capitol Hill event, PG&E unveiled two innovative new electric hybrid utility trucks, one of which can provide power to up to 100 homes during outages.

### PG&E, Edison Electric Institute urge utilities to add more electric fleet vehicles



PG&E joined with the Edison Electric Institute (EEI) to urge utilities to more than double their current investments in electric utility fleet vehicles—a goal that represents an estimated \$50 million of new investment in electric vehicles across the industry. PG&E and EEI called on companies to invest 5 percent of their total fleet investment, approximately \$1 billion in total, starting in 2015.

# Measuring Progress

Of the roughly 13,600 on-road vehicles we owned at the end of 2014, approximately 1,400 were electric-based, 500 were powered by CNG and 1,200 were fueled by biodiesel. Our network of charging stations is also growing. Last year we added more installations, bringing our total to more than 500 charge points at about 80 locations across our service area.

We also maintain a network of 32 CNG facilities, 24 of which are open to customers. PG&E uses its expertise to help commercial customers take advantage of this relatively low-emitting, domestic alternative fuel in their own fleets.

## Fuel Use and Emissions

PG&E uses petroleum and biodiesel to power many of the vehicles in our fleet. The following chart shows PG&E's fuel usage over the past three years.

### TRANSPORTATION FUEL CONSUMED BY PACIFIC GAS AND ELECTRIC COMPANY

	2012	2013	2014
Petroleum Consumed by PG&E Fleet (gallons)	10,099,540	9,840,447	10,182,712
Biodiesel Consumed by PG&E Fleet (gallons)	196,164	175,724	175,809

The use of natural gas in PG&E's vehicle fleet, combined with usage in customers' fleets, saved 2.5 million gallons of petroleum last year, which in turn avoided about 9,800 metric tons of CO<sub>2</sub> in addition to other air emissions.

### CLEAN AIR TRANSPORTATION (CUSTOMER FLEETS)<sup>1</sup>

	2012	2013	2014
Compressed Natural Gas Therms Used (×1,000)	2,413	2,685	2,865
Avoided NO <sub>x</sub> Emissions (tons)	7	8	8
Avoided PM Emissions (tons)	2	2	2
Avoided CO <sub>2</sub> Emissions (metric tons)	7,374	8,206	8,755
Equivalent Petroleum Gallons Displaced (×1,000)	2,045	2,276	2,428

### CLEAN AIR TRANSPORTATION (PG&E'S FLEET)<sup>1</sup>

	2012	2013	2014
Compressed Natural Gas Therms Used (×1,000)	847	1,124	343
Avoided NO <sub>x</sub> Emissions (tons)	2	3	1
Avoided PM Emissions (tons)	1	1	0
Avoided CO <sub>2</sub> Emissions (metric tons)	2,588	3,436	1,047
Equivalent Petroleum Gallons Displaced (×1,000)	718	953	290

<sup>1</sup> Prior year values have been updated to reflect PG&E's natural gas fuel reporting to the California Air Resources Board (CARB) under the Low Carbon Fuel Standard (for customer vehicles) and the use of an improved methodology for calculating avoided emissions.

FleetOwner Magazine names PG&E as top vocational fleet

**FleetOwner**

PG&E was ranked the top vocational fleet in the United States by FleetOwner Magazine's 12th Annual Fleet of the Year Awards for demonstrating innovation and excellence in its fleet operations.

## Looking Ahead

At PG&E, we understand that fulfilling electric transportation's potential requires a utility industry that's an active partner in the transition to vehicle electrification. Moving forward, we will aggressively electrify our own fleet and add more of the innovative trucks we've helped to develop. We will also continue to innovate, invest and work closely with our industry, regulators, automakers and other partners to develop policies and best practices that will enable electric vehicles to flourish.

This commitment includes our active engagement with EEI, which is part of a broad industry effort to accelerate the adoption of plug-in electric vehicles (PEVs) and technologies by utilities. EEI's *Transportation Electrification: Utility Fleets Leading the Charge* report offers a road map for a long-term, coordinated effort to further spur the development of electric vehicle technologies in the transportation market. The effort is led by EEI's Electric Transportation Task Force, which is co-chaired by Tony Earley, Chairman of the Board, CEO and President of PG&E Corporation.

We will also continue to promote CNG and LNG for heavy-duty truck and marine transportation.



Photo: Matt Nauman

# Buildings and Facilities

At PG&E, we are reducing the environmental footprint of our facilities while providing an enhanced workplace for our employees. A growing network of employee volunteers has been critical to our progress, as they engage and train fellow employees to reduce their environmental impact at work.

## Our Approach

### Energy, Water and Waste Reduction

In 2014, we achieved ambitious five-year goals for reducing energy, water and landfill waste in our office facilities and service yards. Going forward, we will continue to execute a multifaceted strategy to invest in key facility improvements, engage employees and incorporate sustainability principles and continuous improvement into all aspects of our real estate management.

We pursue Leadership in Energy and Environmental Design (LEED) certification for new buildings and large remodeling projects. Our efforts include improving the operational efficiency of existing buildings; ensuring that equipment replacement, major remodels and new facilities meet high efficiency standards; and identifying additional projects that would result in significant efficiency improvements. We also continue to engage our broader workforce, including partnering with our Grassroots Green Network that brings together employee volunteers to support energy, water and waste reduction awareness and initiatives.

### Hazardous and Other Waste

In the normal course of business, utility operations generate certain hazardous wastes. Waste is also created during the remediation and cleanup of historic legacy sites.

PG&E manages all hazardous waste in accordance with federal and state regulations. Our comprehensive approach includes providing guidance and training to employees to reduce overall waste generated and ensure that waste is properly managed from the point of generation to its ultimate disposal or recycling.

Federal hazardous waste management statutes include the Resource Conservation and Recovery Act and the Toxic Substances Control Act. In addition, our operations are subject to California's hazardous waste management laws and regulations, which are more stringent and encompass a broader scope of waste streams. For example, wastes such as used oil are subject to California's hazardous waste requirements.

## 2014 Milestones

In 2014, PG&E continued to achieve reductions in energy, water and landfill waste at office facilities and service yards—a strong finish that helped us achieve our five-year goals.

**■ Reduced energy use by 8.1 percent, exceeding our annual target of 3.5 percent.** We achieved this reduction through upgrades, such as installing LED exterior lighting, and by adopting energy efficient designs during major remodel projects. We achieved significant natural gas savings by leveraging the building management system at our corporate headquarters. Overall, we achieved a 16 percent reduction over five years, exceeding our 15 percent goal.

**■ Reduced water use by 13 percent, exceeding our annual target of 1.6 percent.** We are now using 48 million fewer gallons of water per year by installing low-flow plumbing fixtures, proactively managing irrigation systems, replacing landscaping with drought-resistant plants and engaging employees to reduce water use at work and at home. We achieved a 30 percent reduction in water use over five years, exceeding our 20 percent goal.

**■ Reached an 81 percent waste-diversion rate.** Key steps to divert waste from the landfill included ensuring yard bins were the right size, upgrading service, adding composting and single-stream recycling at more locations and engaging employees in a friendly waste competition. Our 81 percent diversion rate over five years exceeded the 80 percent target.

**■ Achieved LEED Gold certification for our headquarters complex** in downtown San Francisco—the first time the U.S. Green Building Council has awarded this honor to an entire office complex. As part of our ongoing efforts to certify new buildings and large remodeling projects we increased the number of PG&E LEED certification projects to 16, representing more than 30 percent of our building footprint.

### Earning recognition for innovative green design



A new PG&E facility in San Luis Obispo was recognized by the U.S. Green Building Council for its sustainable and energy efficient design. PG&E is applying for LEED certification for the facility.

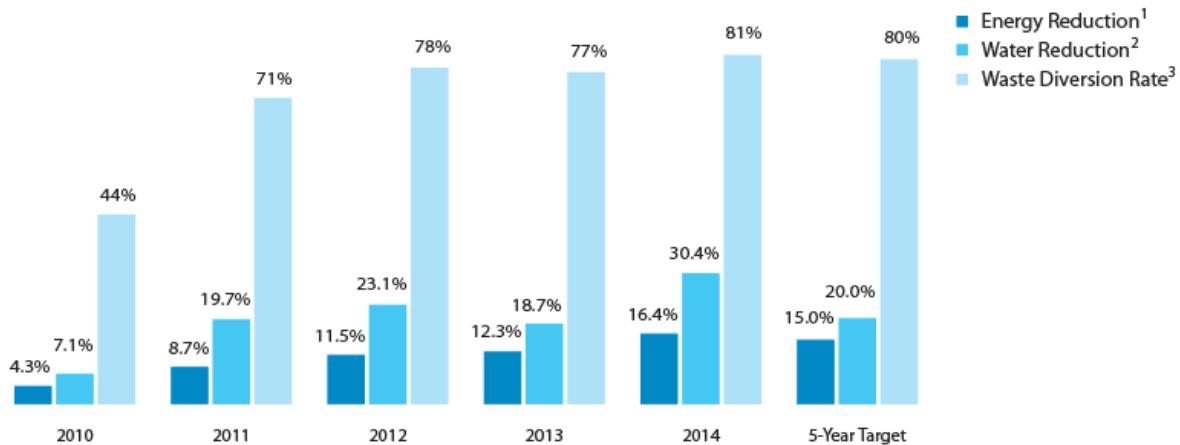
### Deploying drought-resistant landscaping

PG&E earned the Power Inn Alliance's "Best Development" award for a landscape replacement project at our Sacramento Service Center. The project included replacing 2.1 acres of grass and other vegetation with native, drought-resistant plants and installing a storm water pretreatment system.



# Measuring Progress

## Progress Toward PG&E's Energy, Water and Waste Reduction Goals (2009 Baseline)



<sup>1</sup> The energy reduction goal is measured in million BTUs (MMBtus) and has included between 156 and 168 sites from 2010 to 2014.

<sup>2</sup> The water reduction goal is measured in gallons and included 91 sites in 2010 and between 125 and 135 sites between 2011 and 2014.

<sup>3</sup> The waste diversion rate measures the diversion rate in the final quarter of each year. It included administrative waste for 48 office facilities and service yard sites in 2010 and 2011. In 2012, we expanded the scope to include all non-hazardous municipal waste for the 48 sites. For 2013 and 2014, we expanded further to all non-hazardous waste at 115 sites covered by the California Mandatory Recycling regulation.

We've also set new goals for 2015: To reduce energy use by 2.5 percent and water use by 4.5 percent while maintaining an 80 percent waste-diversion rate.

## Energy Consumption Statistics

These figures represent electricity and natural gas usage at 168 facilities managed by our Corporate Real Estate Strategy and Services department.

### ENERGY CONSUMED<sup>1</sup>

	2012	2013	2014
Electricity Consumed (Gigawatt hours)	79	78	73
Natural Gas Consumed (Million cubic feet)	127	119	101
Energy Intensity (Million BTUs per square foot) <sup>2</sup>	62	60	58

<sup>1</sup> The data reflects the 12-month period from December to November and is normalized for weather.

<sup>2</sup> Figures are reported in the industry standard of BTU per square foot, which incorporates all of the energy used in a facility into one comparative number.

## Water Use Statistics

In 2014, we made continued progress toward quantifying our "water footprint." Please see the Water and Drought Response section for statistics on PG&E's water usage.

## Waste Generation Statistics

PG&E strives to minimize the overall amount of waste generated, compost organic waste and recycle non-hazardous waste such as glass, paper and certain metals. These figures represent the total waste diverted from the landfill at 115 sites managed by our Corporate Real Estate Strategy and Services department.

## **WASTE DIVERSION AT FACILITIES<sup>1</sup>**

	<b>2014</b>
Total Waste Generated (tons)	24,332
Total Waste Diverted (tons)	18,686
Waste Diversion Rate	81%

<sup>1</sup> The tonnage data reflects all of the non-hazardous municipal waste at 115 sites managed by PG&E's Corporate Real Estate Strategy and Services department for the 12 months from October 2013 to September 2014.

### **Other waste reduction efforts included:**

- Recycling more than 28 million pounds of scrap iron, aluminum and copper from conductors, meters and miscellaneous material. We also recycled more than 1.8 million pounds of recovered meters, 18.7 million pounds of transformers and 310,000 pounds of plastic, including pipes and hard hats.
- Recycling 114 tons of e-waste, including consumer electronic devices, CPUs, monitors, servers, printers and other equipment.
- Recycling more than 150,000 pounds of steel and copper from Humboldt Bay Power Plant and Diablo Canyon Power Plant.

### **Hazardous and Other Waste**

The following table provides statistics on PG&E's waste generation. While PG&E works to reduce hazardous waste, certain projects such as infrastructure upgrades or remediation of historical contamination may increase the amount generated in a given year.

## HAZARDOUS AND OTHER WASTE

	2012	2013	2014
<b>Total Hazardous Waste (tons)</b>	<b>117,553</b>	<b>22,234<sup>1</sup></b>	<b>28,164</b>
RCRA <sup>2</sup> Hazardous Waste	13,204	1,570	1,391
TSCA <sup>3</sup> Hazardous Waste	1,783	2,901	885
California Regulated Hazardous Waste	102,566	17,763	25,888
<b>Federal Regulated Hazardous Waste (TSCA)—PCB Waste ≥ 50 ppm PCB (tons)</b>			
<b>Total</b>	<b>1,783</b>	<b>2,901</b>	<b>885</b>
Incineration	290	204	250
Landfill	1,204	2,697	504
Recycled	289	0	131
% Recycled	16.2%	0%	14.8%
<b>California Regulated Hazardous Waste (Non-RCRA)<sup>4</sup></b>			
<b>Total</b>	<b>102,566</b>	<b>17,763</b>	<b>25,888</b>
Disposed	97,580	12,539	17,860
Recycled	4,986	5,224	8,028
% Recycled	4.9%	29.4%	31.0%
<b>Other Waste</b>			
<b>Universal Waste (tons)</b>			
<b>Total</b>	<b>200</b>	<b>199</b>	<b>268</b>
Recycled	200	199	268
% Recycled	100%	100%	100%
<b>Low-Level Radioactive Waste Disposed (cubic feet)</b>			
Diablo Canyon Power Plant	453	2,630	810
Humboldt Bay Power Plant	12,344	13,404	18,966
<b>Radioactively Cleared Waste Disposed (pounds)</b>			
Diablo Canyon Power Plant	133,917	167,871	291,728
Humboldt Bay Power Plant	2,819,197	5,429,786	12,586,215
<b>Materials Recycled from Power Plants</b>			
Diablo Canyon Power Plant			
Steel (pounds)	68,463	31,649	18,167
Copper (pounds)	4,215	1,450	0
Lead (pounds)	N/A	N/A	3,007
Humboldt Bay Power Plant			
Steel (pounds)	41,700	120,340	129,940
Copper (pounds)	N/A	12,500	17,305

<sup>1</sup> The reduction in hazardous waste was largely driven by PG&E's substantially completing remediation at some larger-scale remediation sites.

<sup>2</sup> Refers to the Resource Conservation and Recovery Act (RCRA).

<sup>3</sup> Refers to the Toxic Substances Control Act (TSCA).

<sup>4</sup> These figures include polychlorinated biphenyl (PCB) waste < 50 ppm PCB.

## Air Emissions

To comply with stringent local air quality regulations, PG&E is focused on minimizing air emissions from its conventional sources of power generation. The following figures reflect emissions from PG&E-owned generation sources.

### AIR EMISSIONS<sup>1</sup>

	2012	2013	2014
<b>Total NO<sub>x</sub> Emissions (tons)</b>	<b>158</b>	<b>153</b>	<b>141</b>
Humboldt Bay Generating Station	25	23	25
Gateway Generating Station	78	78	80
Colusa Generating Station	55	52	36
<b>NO<sub>x</sub> Emissions Rates (lbs/MWh)</b>			
Humboldt Bay Generating Station	0.12	0.04	0.15
Gateway Generating Station	0.05	0.05	0.05
Colusa Generating Station	0.04	0.04	0.03
Fossil Plants	0.05	0.05	0.05
All Plants	0.01	0.01	0.01
<b>Total SO<sub>2</sub> Emissions (tons)</b>			
Humboldt Bay Generating Station	1	1	1
Gateway Generating Station	8	11	8
Colusa Generating Station	6	5	5
<b>SO<sub>2</sub> Emissions Rates (lbs/MWh)</b>			
Humboldt Bay Generating Station	0.005	0.004	0.004
Gateway Generating Station	0.005	0.007	0.005
Colusa Generating Station	0.004	0.004	0.004
Fossil Plants	0.005	0.005	0.005
All Plants	0.0009	0.0011	0.001
<b>Total Particulate Matter Emissions (tons)</b>			
Humboldt Bay Generating Station	51	44	45
Gateway Generating Station	22	25	23
Colusa Generating Station	26	25	25
<b>Total CO Emissions (tons)</b>			
Humboldt Bay Generating Station	14	15	20
Gateway Generating Station	8	10	9
Colusa Generating Station	24	20	10
<b>Total VOC Emissions (tons)</b>			
Humboldt Bay Generating Station	47	41	40
Gateway Generating Station	8	11	8
Colusa Generating Station	4	7	5

<sup>1</sup> Due to rounding conventions, some data above sum to an amount greater or less than the totals provided. Additionally, there were no reportable mercury air emissions from PG&E's facilities during 2012 to 2014.

## Looking Ahead

With new goals to reduce energy, water and waste in 2015, we will continue to reduce costs and environmental impacts. As the drought continues in California, we also remain committed to reducing water use, with plans to replace additional landscaping with native, drought-resistant plants.

We will also continue to build and renovate our offices and service centers to meet LEED energy efficiency standards, with 10 LEED certification projects under way. This includes an office building in Stockton that will house a new Energy Training Center for the public and local business operations.

To support construction and major remodeling projects, we have created new workplace standards for using environmentally responsible materials and construction practices. These new standards will help us improve indoor air quality, generate less waste and increase operational efficiency over the life span of our facilities.



# Supplier Sustainability

PG&E's commitment to sustainability shapes how we assess and manage our supply chain priorities and processes. It affects how we select, engage with and manage these business partners, and influences our product and service choices and strategies, which helps PG&E to better serve our customers and supports our goal of environmental leadership.

## Our Approach

### Driving Strong Supplier Engagement and Performance

Since 2007, we have encouraged environmental responsibility, excellence and innovation among our suppliers. Our approach focuses on advancing the performance of our top-tier suppliers—approximately 100 critical firms that represent about 60 percent of PG&E's \$5 billion annual spend.

We expect our top-tier suppliers to follow a set of Supplier Environmental Performance Standards. These standards encourage performance improvement and promote greater transparency and accountability by setting the expectation that all top-tier suppliers:

1. Implement an Environmental Management System and track greenhouse gas emissions (Scope 1 and 2), energy use, water use, waste and compliance with environmental requirements.
2. Set voluntary reduction goals in three of the following areas: greenhouse gas emissions (Scope 1 and 2), energy, water and waste.
3. Publicly report their performance against the goals.

We conduct annual evaluations of each top-tier supplier on key performance indicators, including safety, product quality and operations, diversity and environmental performance. We work with suppliers to drive continuous improvement and provide training to all suppliers on PG&E's expectations and systems for improving sustainability management. Additionally, we provide one-on-one coaching and mentoring to suppliers that need additional support.

## Advancing Supplier Sustainability Performance

Since 2007, PG&E has been working to advance sustainability within our supplier network.

2007	2008	2009	2010	2011-2012	2013-2014
		<ul style="list-style-type: none"><li>• Piloted energy efficiency projects and best practice roundtables with select suppliers</li><li>• Began survey to assess supplier environmental performance</li><li>• Added green evaluation criteria to request-for-proposal process</li><li>• Created Green Supplier of the Year Award</li></ul>		<ul style="list-style-type: none"><li>• Completed supply chain carbon emissions study with UC Berkeley and Climate Earth</li><li>• Issued Supplier Environmental Performance Standards</li></ul>	
		<ul style="list-style-type: none"><li>• Co-founded Electric Utility Industry Sustainable Supply Chain Alliance</li></ul>	<ul style="list-style-type: none"><li>• Added environmental metric to supplier scorecards</li><li>• Launched Diverse Suppliers Go Green program and trained suppliers</li></ul>		<ul style="list-style-type: none"><li>• Conducted assessment to guide program strategies</li><li>• Updated Supplier Code of Conduct</li><li>• Enhanced processes to engage suppliers</li><li>• Delivered customized internal training</li></ul>

2007	2008	2009	2010	2011-2012	2013-2014
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## Reducing Our Environmental Footprint through Product Strategies

PG&E works to identify product choices and procurement strategies that measurably improve our environmental profile. We use the “reduce-reuse-recycle” framework to guide our strategies and plans:

- **Reduce** resource consumption through our product choices. Where there is no feasible option to reduce consumption, buy products and equipment with a lower environmental footprint.
- **Reuse** products and equipment when they can be repaired or refurbished to meet required performance standards.
- **Recycle** products and equipment with licensed vendors if they cannot be refurbished for reuse.

When recycling options are not available, we dispose of products in compliance with environmental requirements.

## Partnering with Industry Peers



PG&E continues to partner with industry peers through the Electric Utility Industry Sustainable Supply Chain Alliance, a consortium of utilities that PG&E cofounded in 2008 to advance sustainable business practices among utility industry suppliers. The Alliance provides a forum to benchmark our performance and share best practices in areas spanning from fleet operations to life-cycle assessment.

## 2014 Milestones

In 2014, we expanded the scope of our efforts to engage more suppliers and to strengthen our internal partnerships. We completed several key initiatives, including:

- **Expanded the scope of our program.** More than 100 suppliers were assessed using our supplier environmental performance survey and scorecard of key performance indicators, and were offered one-on-one mentoring.
- **Delivered customized training.** We delivered training on PG&E's sustainability requirements to our top 300 suppliers and community-based organization partners. We also delivered training to key internal partners on the importance of supply chain sustainability and their role in driving further progress and innovation.
- **Led continuous improvement projects.** We initiated several projects with environmental and business benefits, including research to reduce hazardous chemicals, creating an online compendium of energy efficiency best practices for suppliers and developing environmentally preferable purchasing specifications for office and facility commodity purchases.

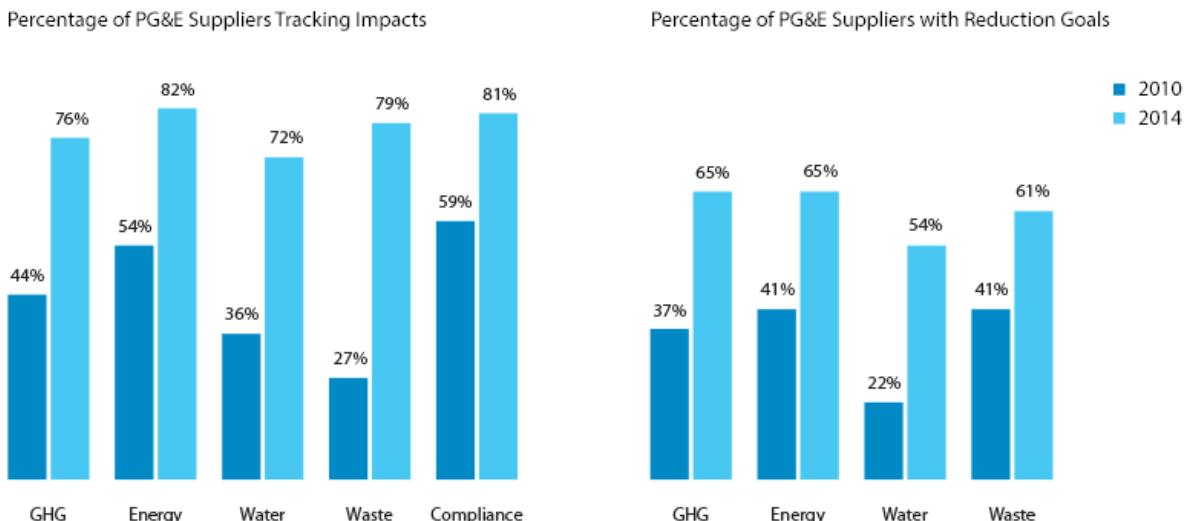
## Measuring Progress

To rate suppliers' performance relative to our Supplier Environmental Performance Standards, as well as identify areas for improvement, PG&E uses supplier responses to an annual survey conducted by the Electric Utility Industry Sustainable Supply Chain Alliance. In 2014, PG&E achieved a 100 percent response rate from surveyed suppliers for the third consecutive year.

PG&E's 2014 target was for at least 60 percent of top-tier suppliers to achieve a score of three or higher on a five-point scale. PG&E exceeded that goal, with 72 percent of suppliers meeting the standards. To maintain this progress, PG&E set a goal of 65 percent for 2015.

The following chart shows the progress in reported performance among top-tier suppliers between 2010 and 2014 against our Supplier Environmental Performance Standard.

### Performance Against PG&E's Supplier Environmental Performance Standard



Additionally, PG&E's suppliers have demonstrated leadership among Alliance suppliers in tracking environmental impacts and setting voluntary reduction goals.

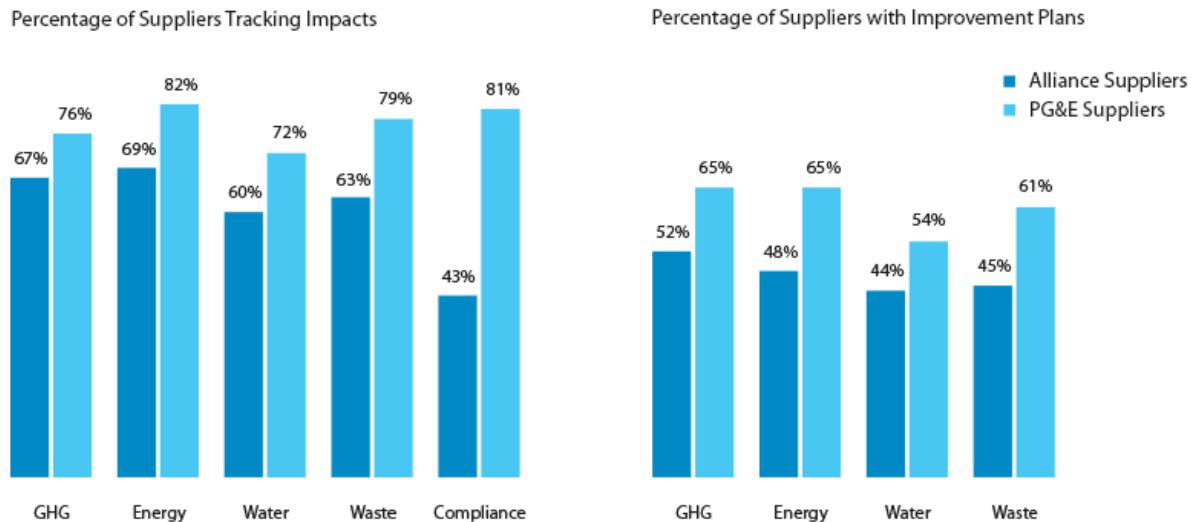
### Recognizing Innovation



(Photo by Tony Khing)

PG&E's Green Supplier of the Year Award recognizes suppliers that demonstrate excellence across a broad spectrum of environmental factors. Richard Heath & Associates, Inc., which administers PG&E's energy efficiency program for low-income customers, received the award in 2014. The company has been a critical partner, helping customers achieve energy savings in communities in need.

## Supplier Engagement in Environmental Management Compared to Alliance Suppliers



## Looking Ahead

We will continue to work with our suppliers to achieve mutually beneficial sustainability goals by launching new training and working with our top-tier suppliers to engage their supplier networks on sustainability. We also plan to strengthen our internal engagement to drive strategies that help reduce PG&E's environmental footprint. This includes new projects that will compile sustainability best practices for construction contractors and enhance procurement processes for environmentally preferable products.



## Historic Impacts

As part of PG&E's environmental commitment, we have a robust environmental remediation program to address contamination associated with historic PG&E operations and the operations of predecessor companies dating as far back as the mid- to late-1800s. PG&E's Environmental Remediation Department is responsible for managing the successful cleanup of more than 100 sites in more than 60 communities across California.

## Our Approach

PG&E's environmental remediation work reflects our commitment to environmental stewardship, safety and customer service. Our sustainable principles, practices and technologies focus on minimizing impacts to the environment and community and employing sustainable remediation practices to the greatest extent possible. We have implemented our guidance for sustainable remediation, prepared and piloted with the California Department of Toxic Substances Control (DTSC).

Stakeholder engagement is an important component of our work. We regularly communicate with local businesses, community leaders and residents to promote awareness, solicit feedback and develop strategies to minimize disruption during the cleanup process. In addition, we strive to support the local economy and partner with agencies on initiatives that serve the community.

We also share best practices and benchmark our efforts against other utilities and industries, including through the MGP Consortium, a peer group of environmental remediation experts from gas utility companies across the nation.

## 2014 Milestones

### PG&E's Natural Gas Compressor Stations

PG&E's natural gas system includes eight compressor stations, which receive and move natural gas throughout the system. PG&E used hexavalent chromium to prevent rust in cooling towers at the Topock and Hinkley compressor stations during the 1950s and 1960s—a common industry practice at the time, long before the environmental standards to which we adhere today. These operations resulted in groundwater contamination that PG&E is working diligently to address, with several recent milestones:

■ **Neared completion of the Topock Compressor Station groundwater cleanup plan.** PG&E is working closely with regulatory agencies, Native American tribes and other community stakeholders to make progress on a cleanup plan for the Topock Compressor Station in San Bernardino County. PG&E also submitted a plan for soil investigation, which underwent a public review process in 2014. Until final plans are approved, PG&E continues interim groundwater treatments that ensure the ongoing protection of the nearby Colorado River.

■ **Made significant remediation progress at the Hinkley Compressor Station.** PG&E remains committed to protecting public health and safety while cleaning up the environment, restoring water quality and recognizing and responding to community concerns at the Hinkley Compressor Station. Through 2014, PG&E estimates that approximately 50 percent of chromium groundwater impacts have been removed. In 2014, PG&E also expanded agricultural treatment technologies, inviting local farmers to harvest crops on PG&E's new 60-acre Ranch Agricultural Treatment Unit (ATU). More progress is expected as additional units are brought online in 2015.

Ongoing testing of the groundwater confirms that the water quality in domestic wells within the program boundaries meets the safety standard approved in 2014 by the California Department of Public Health. In light of the new standard, PG&E phased out a whole-house water treatment program that provided area residents with an alternative drinking water solution.

## Manufactured Gas Plants

In the mid-1800s to the mid-1900s, before natural gas was available as an energy source, thousands of Manufactured Gas Plant (MGP) sites were located in cities and towns across the country, using coal and oil to produce gas for lighting, heating and cooking. With the arrival of natural gas in the 1930s, most of the MGP facilities in PG&E's service area were closed and the properties put to other uses. PG&E continues to make progress with remediation at 41 MGPs owned or operated by PG&E or its predecessor companies, including this example:

■ **Worked with local community in Lodi.** For our cleanup of a MGP in Lodi, California, PG&E worked with the local Salvation Army to hire and train unemployed community members, investing more than \$1 million in the local economy and removing over 20,000 tons of impacted soil. The skills learned on the project site helped previously unemployed local hires earn full-time jobs within the hazardous waste removal industry.

## Additional Environmental Remediation Projects

PG&E applied sustainable principles, practices and technologies at other remediation projects in 2014, including:

■ **Neared completion of the cleanup at Hunters Point Power Plant.** PG&E completed substantial cleanup at the site of the former Hunters Point Power Plant, located along the southeastern waterfront of San Francisco. Soil cleanup is 95 percent complete, and remediation efforts are focused on cleaning the remaining soil surrounding the shoreline. Members of the Hunters Point Project Advisory Committee and other local leaders and residents attended a PG&E-hosted open house on the property to learn about the plan, which received regulatory approval in spring 2015.

With project completion on the horizon, PG&E is engaging with local residents to gather ideas for the future of the site. Community members have been recording their reflections on life in the neighborhood and visions for the future through a partnership with StoryCorps, a nationally recognized nonprofit oral history project.

■ **Leveraging nature to clean up Shell Pond.** Now owned by PG&E, this site in Bay Point is home to a 73-acre former wastewater treatment pond built and operated by Shell Oil. PG&E has explored the use of a promising sustainable cleanup method to treat contamination at the site. The new method, called phytoremediation, uses the root systems of plants and fungi to break down and trap contaminants on-site, thereby eliminating the need for off-site disposal.

### Hosting community events at former power plant site



At the site of PG&E's former Hunters Point Power Plant, we host events for the public to gather ongoing community input. Last summer, more than 600 adults and children turned out to share their vision of the future and enjoy the Circus Bella.

## Measuring Progress

### Sustainable Remediation

In 2014, we tracked avoided environmental impacts from more than 85 remediation sites, which resulted from best practices such as:

- Using heavy construction and remediation equipment meeting Tier 3 and Tier 4 federal emission standards, reflecting the highest standards in the industry
- Using standard construction and remediation equipment augmented to further minimize emissions
- Using alternative fuels and renewable sources of energy for equipment and vehicles
- Maximizing recycling, onsite reuse of materials and reductions in liquid and soil wastes generated during remediation

Through these efforts, PG&E reduced cumulative greenhouse gas emissions by as much as 11,000 metric tons, reduced liquid wastes by an estimated 5.5 million gallons and added more than \$12 million to the local economies near our remediation projects.

### Looking Ahead

PG&E has taken responsibility for historic environmental impacts and continues to work closely with regulators, local residents and others as we make progress on our cleanup plans. For example, building on the success of the Shell Pond cleanup, PG&E will continue piloting large-scale studies of phytoremediation to clean up contaminants using root systems of plant and fungi. In 2015, following approval of the groundwater cleanup plan and soil Environmental Impact Report, we will also begin work to remediate impacts at the Topock Compressor Station, while continuing to engage with key stakeholders before and during field activities.

# Global Reporting Initiative

PG&E is committed to continuous improvement when it comes to how we report our impacts and sustainable business strategies, and we use the Global Reporting Initiative (GRI) as an important guide and reference point. The table below shows how this report aligns with GRI's Sustainability Reporting Guidelines versions G4 and 3.1, including the Electric Utility Sector Supplement. While we are working toward meeting the GRI reporting protocols, for several indicators below we currently only partially meet the recommended standard.

## General Standard Disclosures

G4 Indicator	G3.1 Indicator	Description	2015 Report Location
<b>Strategy and Analysis</b>			
G4-1	1.1	Statement from the most senior decision-maker	Message from the Chairman and CEO
G4-2	1.2	Description of key impacts, risks, and opportunities	Materiality Key Sustainability Indicators
<b>Organizational Profile</b>			
G4-3	2.1	Name of the organization	Home Page
G4-4	2.2	Primary brands, products, and/or services	PG&E Overview
G4-5	2.4	Location of organization's headquarters	PG&E Overview
G4-6	2.5	Countries in which the company has operations	PG&E Overview
G4-7	2.6	Nature of ownership and legal form	PG&E Overview
G4-8	2.7	Markets served	PG&E Overview
G4-9	2.8	Scale of the reporting organization	PG&E Overview 2014 Annual Report
G4-10	LA1	Gender breakdown of employees	Diversity & Inclusion
G4-11	LA4	Percentage of employees covered by collective bargaining agreements	PG&E Overview Employee Engagement
G4-13	2.9	Significant changes during reporting period of organization's size, structure, ownership or supply chain	No significant changes
G4-EU1	EU1	Installed capacity (MW)	PG&E Overview
G4-EU2	EU2	Net energy output (GWh)	PG&E Overview
G4-EU3	EU3	Number of residential, industrial, institutional, and commercial customer accounts	PG&E Overview
G4-EU4	EU4	Length of transmission and distribution lines	PG&E Overview
G4-EU5	EU5	Allocation of CO2-e emissions allowances	PG&E Corporation's Climate Change 2015 Information Request response, pg. 76-77
<b>Commitments to External Initiatives</b>			
G4-14	4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	PG&E's approach to risk management is discussed in Risk and Compliance Management
G4-15	4.12	Externally developed economic, environmental, and social charters	Engaging Stakeholders
G4-16	4.13	Memberships in associations	Public Policy Engagement Climate Change

<b>Identified Material Aspects and Boundaries</b>			
G4-17	2.3	Operational structure of the organization	PG&E Overview
G4-18	3.5	Process for defining report content	Materiality
G4-19	-	Material aspects identified	Materiality
G4-20 G4-21	-	Boundaries of material aspects	Throughout the report, when we refer to "PG&E" we are discussing all of PG&E Corporation and its subsidiaries, including Pacific Gas and Electric Company. For specific issues, data and discussion about other entities—such as suppliers or customers—may be disclosed.
G4-22	3.10	Explanation of the effect of any re-statements of information provided in earlier reports	No significant re-statements of information
G4-23	3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	No significant changes in scope, boundary or measurement methods
<b>Stakeholder Engagement</b>			
G4-24	4.14	Stakeholder groups engaged by the organization	Engaging Stakeholders
G4-25	4.15	Identification and selection of stakeholders	Engaging Stakeholders
G4-26	4.16	Approaches to stakeholder engagement	Engaging Stakeholders Our Approach Materiality
G4-27	4.17	Key topics and concerns raised through stakeholder engagement	Engaging Stakeholders Our Approach Materiality
<b>Report Profile</b>			
G4-28	3.1	Reporting period	Home Page; 2014-2015
G4-29	3.2	Date of most recent previous report	September 2014
G4-30	3.3	Reporting cycle	Our Approach; Annual
G4-31	3.4	Contact point for questions regarding the report	Feedback
G4-32	3.12	GRI index	GRI Index  This report contains Standard Disclosures from the GRI Sustainability Reporting Guidelines.
G4-33	3.13	Policy and current practice with regard to seeking external assurance for the report	PG&E has not sought external assurance of its Corporate Responsibility and Sustainability Report. However, some data (such as greenhouse gas emissions) are third-party verified; where this is the case, it is noted in the report.
<b>Governance</b>			
G4-34	4.1	Governance structure of the organization, including committees overseeing sustainability	Corporate Governance Our Approach
G4-35	-	Process for delegating sustainability authority from board to executives	Our Approach
G4-36	-	Executive-level position over sustainability efforts	Our Approach
G4-37	4.4	Stakeholder consultation process on sustainability topics	Engaging Stakeholders
G4-38	4.1	Composition of the highest governance body and committees	2015 PG&E Corporation and Pacific Gas and Electric Company Joint Proxy Statement, p. 15
G4-39	4.2	Indicate whether the Chair of the highest governance body is an executive officer	2015 PG&E Corporation and Pacific Gas and Electric Company Joint Proxy Statement, p. 12

G4-40	4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body.	2015 PG&E Corporation and Pacific Gas and Electric Company Joint Proxy Statement, p. 16-17
G4-41	4.6	Processes for the highest governance body to ensure conflicts of interest are avoided	2015 PG&E Corporation and Pacific Gas and Electric Company Joint Proxy Statement, p. 12-13
G4-42	-	Roles in updating company sustainability statements and goals	Our Approach
G4-44	4.10	Processes for evaluating the highest governance body's own performance	PG&E Corporate Governance Guidelines, p. 23
G4-46	4.9	Board oversight of sustainability risk management	Our Approach
G4-47	4.9	Frequency of the highest governance body's review of sustainability issues	Our Approach
G4-48	-	Highest committee or position that formally reviews and approves the organization's sustainability report	This report has been approved by PG&E's Chairman, CEO and President, as well as the company's officers.
G4-51	4.5	Linkage between compensation and the organization's performance	Our Approach
G4-52	-	Process for determining remuneration	2015 PG&E Corporation and Pacific Gas and Electric Company Joint Proxy Statement, p. 34-49
G4-53	4.4	How stakeholders' views are sought and taken into account regarding remuneration	Corporate Governance
G4-56	-	Corporate mission and values, codes of conduct and principles	Our Approach Compliance and Risk Management Corporate Governance
G4-57	-	Mechanisms for seeking advice on ethical and lawful behavior	PG&E Compliance and Ethics
G4-58	-	Mechanisms for reporting concerns about unethical or unlawful behavior	PG&E Employee Code of Conduct - How to Raise Concerns

## Specific Standard Disclosures

Material Aspect	G4 Indicator	G3.1 Indicator	Description	2015 Report Location
<b>Economic</b>				
Economic Performance	Disclosure of Management Approach			PG&E Corporation and Pacific Gas and Electric Company 2014 Annual Report
	G4-EC1	EC1	Direct economic value generated and distributed	PG&E Overview
	G4-EC2	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	Climate Change
	G4-EC3	EC3	Coverage of the organization's defined benefit plan obligations	PG&E Corporation and Pacific Gas and Electric Company 2014 Annual Report, p. 108-109
Indirect Economic Impacts	Disclosure of Management Approach			Economic Vitality
	G4-EC7	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit	Economic Impact & Assistance Community Investments
	G4-EC8	EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	Economic Impact & Assistance Nuclear Operations

Availability and Reliability	Disclosure of Management Approach (G3.1 EU6)			Clean Energy
	G4-EU10	EU10	Planned capacity against projected electricity demand over the long term	Clean Energy
Demand-Side Management	Disclosure of Management Approach (G3.1 EU7)			Customer Energy Efficiency Demand Response
Research and Development	Disclosure of Management Approach (G3.1 EU8)			Electric Operations
Plant Decommissioning	Disclosure of Management Approach (G3.1 EU9)			Nuclear Operations

## Environmental

Energy	Disclosure of Management Approach			Clean Energy Customer Energy Efficiency Buildings and Facilities
	G4-EN3	EN3	Energy consumption within the organization	PG&E Overview Clean Energy Buildings and Facilities
	G4-EN4	EN3	Energy consumption outside of the organization	PG&E Overview Clean Energy
	G4-EN6	EN5	Energy saved due to conservation and efficiency improvements	Customer Energy Efficiency Buildings and Facilities
	G4-EN7	EN6	Initiatives to provide energy-efficient or renewable-energy-based products and services, and reductions in energy requirements as a result of these initiatives	Engaging Customers Energy Affordability Customer Energy Efficiency Demand Response Solar and Distributed Generation Clean Energy Renewable Energy
	Disclosure of Management Approach			Water and Drought Response
Water	G4-EN8	EN8	Total water withdrawal by source	Water and Drought Response
	G4-EN9	EN9	Water sources significantly affected by withdrawal of water	Water and Drought Response Hydroelectric Operations Natural Resource Stewardship
	Disclosure of Management Approach			Natural Resource Stewardship
Biodiversity	G4-EN12	EN12	Description of significant impacts of activities, products, and services on biodiversity	Natural Resource Stewardship
	G4-EN13	EN13	Habitats protected or restored	Natural Resource Stewardship
	Disclosure of Management Approach			Climate Change Buildings and Facilities
Emissions	G4-EN15	EN16	Direct greenhouse gas emissions (Scope 1)	Climate Change
	G4-EN16	EN16	Indirect greenhouse gas emissions (Scope 2)	Climate Change
	G4-EN17	EN17	Other relevant indirect greenhouse gas emissions (Scope 3)	Climate Change
	G4-EN18	EN19	Greenhouse gas emissions intensity	Climate Change
	G4-EN19	EN18	Reduction of greenhouse gas emissions	Climate Change
	G4-EN21	EN20	NOX, SOX, and other significant air emissions by type and weight	Buildings and Facilities

Effluents and Waste	Disclosure of Management Approach			Compliance Buildings and Facilities
	G4-EN22	EN21	Total water discharge by quality and destination	Water and Drought Response
	G4-EN23	EN22	Total weight of waste by type and disposal method	Buildings and Facilities
	G4-EN24	EN23	Total number and volume of significant spills	Compliance
	G4-EN25	EN24	Weight of transported, imported, exported or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III and VIII	Buildings and Facilities
Products and Services	Disclosure of Management Approach			Clean Energy
	G4-EN27	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	Clean Energy Renewable Energy Hydroelectric Operations Conventional Sources Nuclear Operations Customer Energy Efficiency Demand Response Solar and Distributed Generation Natural Resource Stewardship
Compliance	Disclosure of Management Approach			Compliance
	G4-EN29	EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Compliance
Transport	Disclosure of Management Approach			
	G4-EN30	EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	Greening Our Fleet
Supplier Environmental Assessment	Disclosure of Management Approach			Supplier Sustainability
	G4-EN32	-	Percentage of new suppliers screened using environmental criteria	Supplier Sustainability
<b>Social</b>				
Employment	Disclosure of Management Approach			Employees
	G4-LA1	LA2	Total number and rate of employee turnover by age group, gender and region	Employee Development
	G4-LA2	LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Health and Wellness Our Benefits
	G4-EU15	EU15	Percentage of employees eligible to retire in the next five years	Employee Development
Labor/Management Relations	Disclosure of Management Approach			Employee Engagement
Occupational Health and Safety	Disclosure of Management Approach			Building a Safety-First Culture Workplace Safety
	G4-LA6	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region	Workplace Safety
Training and Education	Disclosure of Management Approach			Employee Development
	G4-LA10	LA11	Programs for skills management and lifelong learning	Employee Development

Diversity and Equal Opportunity	Disclosure of Management Approach			Diversity and Inclusion
	G4-LA12	LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	Diversity and Inclusion 2015 PG&E Corporation and Pacific Gas and Electric Company Joint Proxy Statement, p. 3-10
Local Communities	Disclosure of Management Approach (G3.1 EU19)			Engaging Stakeholders
Anti-Corruption	Disclosure of Management Approach			Compliance and Risk Management
	G4-SO4	SO3	Communication and training on anti-corruption policies and procedures	Compliance and Risk Management
	G4-SO5	SO4	Confirmed incidents of corruption and actions taken	Compliance and Risk Management
Public Policy	Disclosure of Management Approach			Public Policy Engagement
	G4-SO6	SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions	Public Policy Engagement
Compliance	Disclosure of Management Approach			Compliance and Risk Management
	G4-SO8	SO8	Monetary value of significant fines for noncompliance with laws and regulations	PG&E Overview
Disaster/Emergency Planning and Response	Disclosure of Management Approach (G3.1 EU21)			Public Safety
Customer Health and Safety	Disclosure of Management Approach			Public Safety
Product and Service Labeling	Disclosure of Management Approach			Customers
	G4-PR5	PR5	Results of surveys measuring customer satisfaction	Engaging Customers
Customer Privacy	Disclosure of Management Approach			Public Safety
Access	Disclosure of Management Approach (G3.1 EU23)			Energy Affordability
	G4-EU28	EU28	Power outage frequency	Electric Operations
	G4-EU29	EU29	Average power outage duration	Electric Operations
	G4-EU30	EU30	Average plant availability factor by energy source	Conventional Sources Nuclear Operations

### Cautionary Language Regarding Forward-Looking Statements

This Corporate Responsibility and Sustainability Report and the Messages from the Chairman and Chief Sustainability Officer contain forward-looking statements regarding our strategic plans that have been shaped by an assessment of risks and opportunities that management have determined are material to our long-term corporate sustainability.

These plans, the assessment, and the underlying assumptions and forecasts on which they are based, are necessarily subject to various risks and uncertainties, the realization or resolution of which may be outside of management's control. Actual results could differ materially from those expressed or implied in the forward-looking statements. For a discussion of some of the factors that could cause actual results to differ materially please see our reports filed with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the year ended December 31, 2014 (the "2014 Annual Report") and the Quarterly Report on Form 10-Q for the quarters ended March 31 and June 30.

Photos by Lewis Stewart on pages 4, 7, 17, 22, 25, 29, 33, 40, 46, 52, 56, 61, 84, 100, 105, 113, 116, 123, 126, 134, 155

Photo by Tyler Medel on page 40

Photo by Matt Nauman on page 148