



The ClimateSmart™ Program

Robert Parkhurst

Manager of Climate Protection and Analysis

May 1, 2008



PG&E's Stance on Climate Change



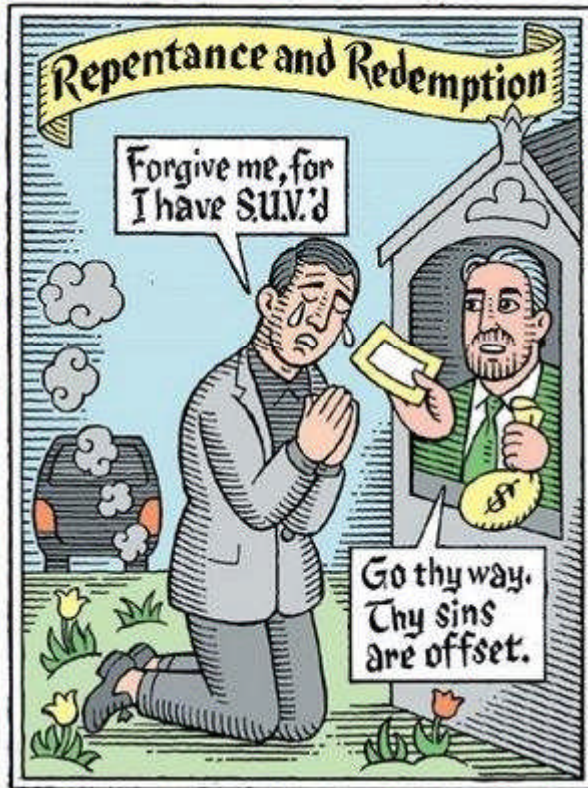
“I believe climate change and its implications is one of the most pressing issues of our time. It is clear that the link between greenhouse gas emissions and the Earth’s warming climate is convincing, the potential consequences serious and the need for action urgent.” ...

“The U.S. has a tremendous capacity for innovation and it is clear that we have the human capital to develop the solutions. By signaling, as a nation, that we are serious about making progress on clean energy, we can stimulate investment and engage our best and brightest minds in this effort.

The longer we wait, the costlier the solutions will likely become. On the other hand, by acting now, we preserve valuable response options. We narrow the uncertainties. And we avoid the economic and social dislocation of drastic changes later.”

- Testimony of Peter A. Darbee, Chairman, CEO and President of PG&E Corporation, before the U.S. Senate Environment and Public Works Committee, February 13, 2007 and June 28, 2007.

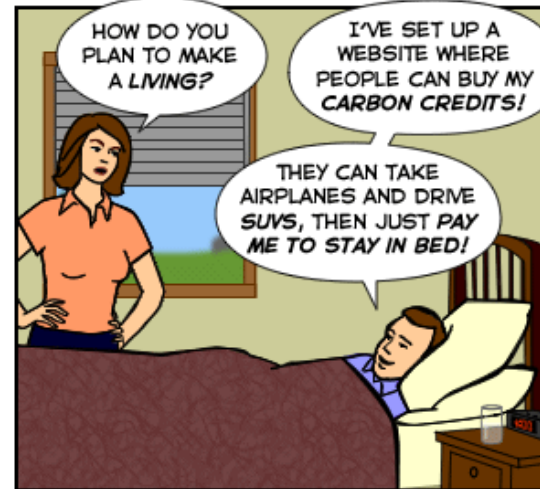
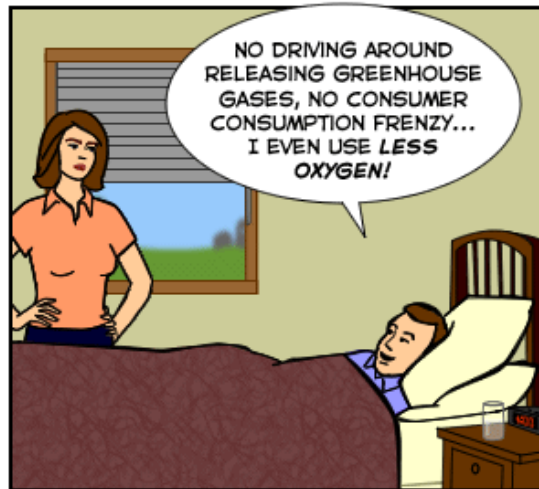
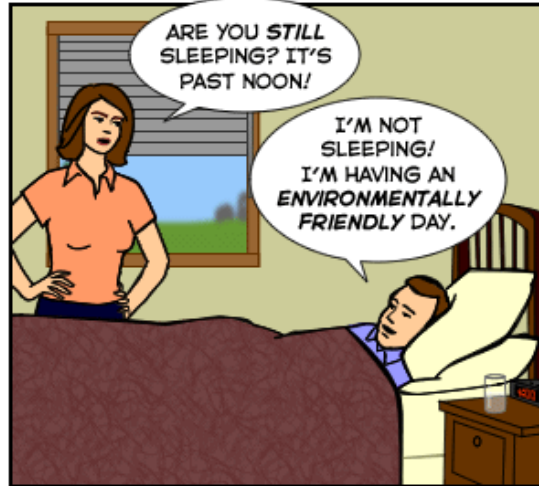
Concerns with Carbon Offsets



Concerns with Carbon Offsets

The Joy of Tech™

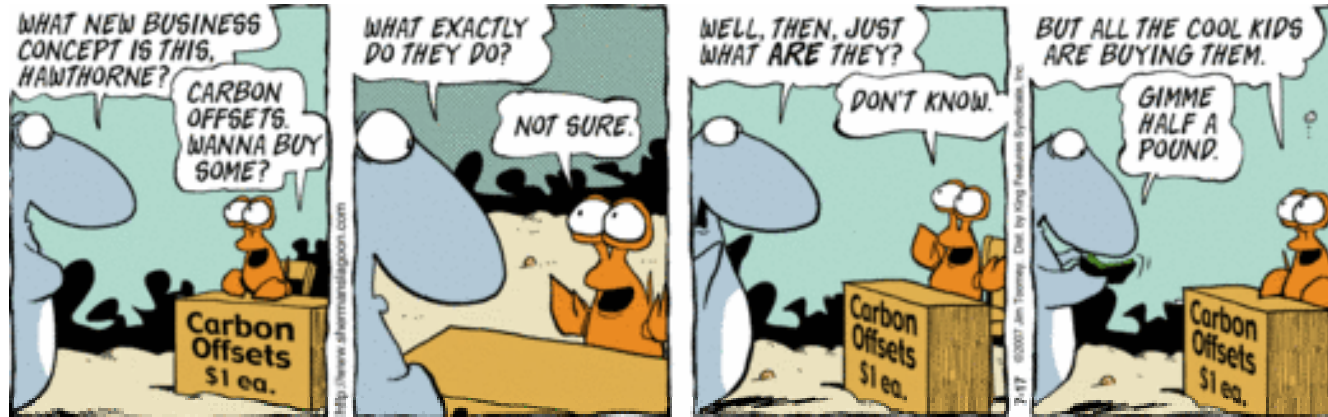
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Concerns with Carbon Offsets



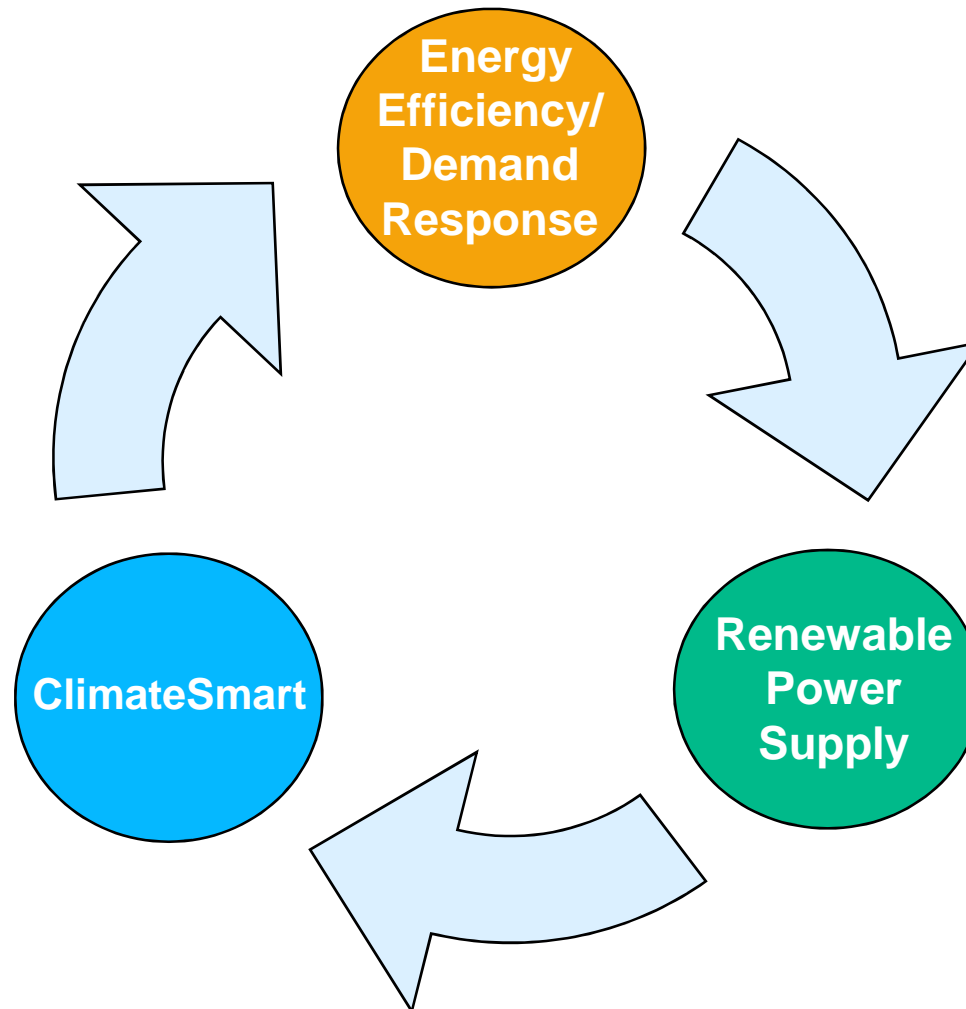


PG&E as a Partner and Solutions Provider



PG&E Portfolio Solution

ClimateSmart™ is part of an integrated portfolio of solutions from PG&E





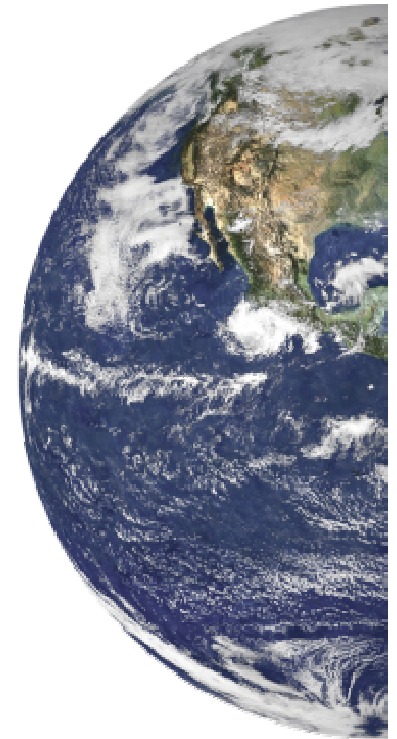
About ClimateSmart



On June 28, 2007, PG&E launched ClimateSmart™, a first-of-its-kind voluntary program that gives PG&E customers another way to take action to reduce greenhouse gases.

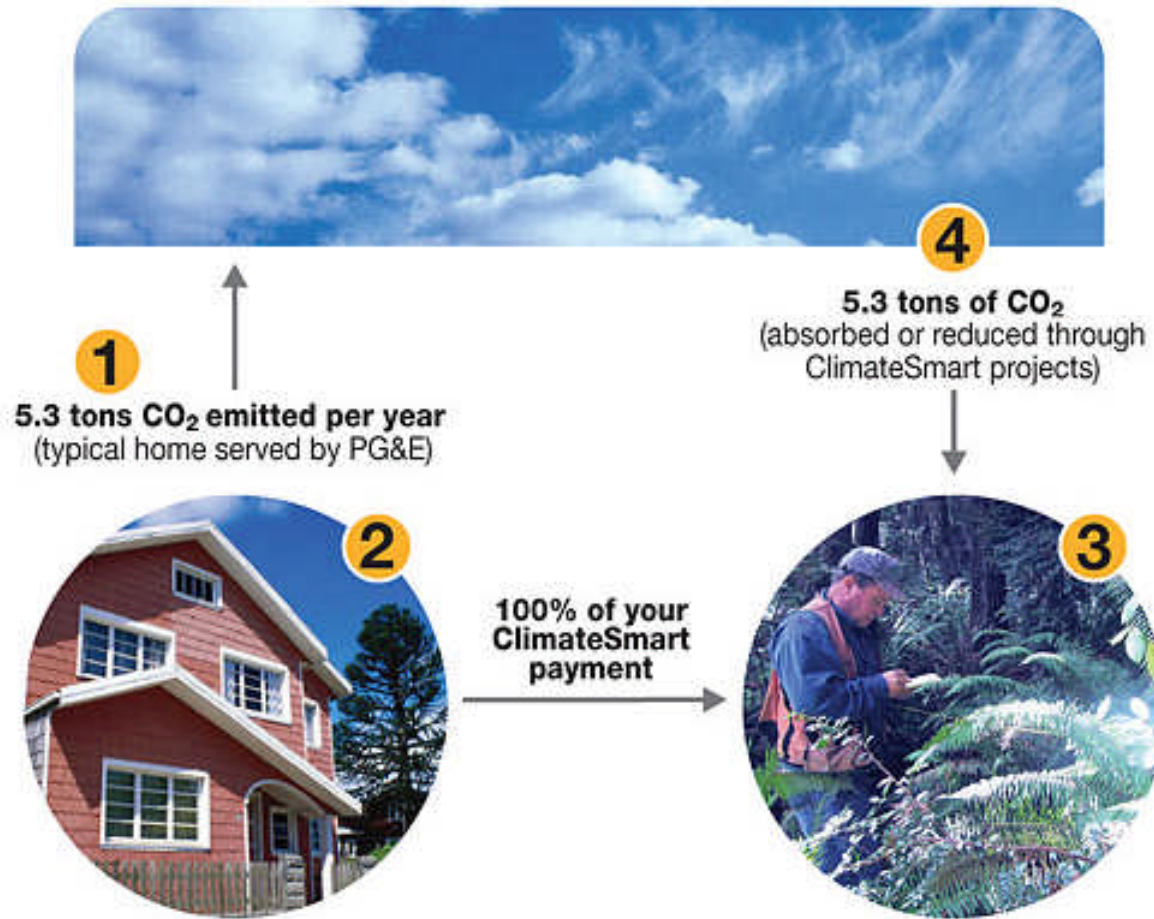
Program Basics:

- Developed with the help of environmental groups, regulators, and other stakeholders.
- PG&E knows its carbon footprint.
- Cost is based on usage – \$0.00254 per kWh and \$0.06528 per therm. Less than \$5 per month makes a typical home “climate neutral” for its energy use.
- Contributions to the program are tax deductible.



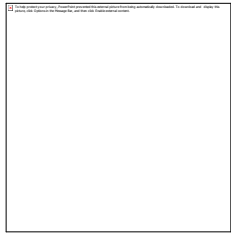
How it Works

**Make the Energy You Use “Climate Neutral”
with ClimateSmart™**





Selected ClimateSmart customers



West Sacramento



WALDECK'S OFFICE SUPPLIES



Julia Morgan School for Girls
The Only Middle School for Girls in the East Bay





ClimateSmart™ Bill Insert (January 2008)




Take another action to fight climate change.

Sign up for ClimateSmart™ and join the thousands of our customers who are fighting climate change with PG&E.



Sign up for ClimateSmart™ and join PG&E and our customers in fighting climate change.



What is climate change?

Climate change is caused by the things we do, like watching TV and turning on the lights. Although PG&E delivers some of the cleanest energy in the nation, the energy we use still releases greenhouse gases which contributes to climate change. To fight climate change, reduce your energy usage through energy efficiency and balance out the rest through ClimateSmart.

Less than \$5 a month for a typical household.

The ClimateSmart program calculates the exact amount each month needed to make your energy use climate neutral. For the typical residential customer ClimateSmart costs less than \$5 a month, on average.

To sign up or learn more, go to www.pge.com/cs or call 1-800-PGE-5000.

What is ClimateSmart?

ClimateSmart lets you balance out the greenhouse gas emissions associated with your energy use by investing in environmental projects that absorb or reduce greenhouse gases, like preserving California forests. By signing up, you are joining PG&E and the thousands of our customers who have made their energy use "climate neutral."

Business Customers

To determine your ClimateSmart amount, go to www.pge.com/cost. To sign up or to learn more, please contact our Business Customer Service Center at 1-800-468-4743.



Yes, sign me up for ClimateSmart

Complete this form and mail. Or, enroll online at www.pge.com/cs

**Please give us your e-mail address so we can keep you updated on the program.*

Name	
PG&E Account Number (optional)	
Service Address	
Telephone Number	E-mail Address*
Signature/Date	

The ClimateSmart program is being funded by PG&E customers in accordance with a decision of the California Public Utilities Commission. To make participating customers climate neutral, PG&E may enter into greenhouse gas emission reduction contracts where the reductions occur over time into the future. *PG&E refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. © 2008 Pacific Gas and Electric Company. All rights reserved. Printed on recycled paper. ♻️ Printed with soy ink.

No Tape • No Staples

PLEASE FOLD, MOISTEN AND SEAL



ClimateSmart™ e-Newsletter and postcard



Welcome to the inaugural issue of ClimateSmart™ News. We created this newsletter to keep you updated on ClimateSmart program developments, as well as the many different ways all of us are helping our environment. Since its launch on June 28, 2007, thousands of residential and business customers have enrolled in the program. Through ClimateSmart, energy efficiency and many other efforts, we are making real progress together in reducing greenhouse gas emissions from the atmosphere. We welcome your thoughts and hope you find this newsletter informative.

A Working Mom Does Her Part to Fight Climate Change

A working mother with two small children, Santa Rosa's Sarah Abramson wants to lead by example when it comes to protecting the environment and fighting climate... [click here to read on...](#)



How Producing a Premium Product Doesn't Have to Cost the Environment

Chico based Sierra Nevada Brewery is committed to the environment by setting its sights on achieving a "Zero carbon footprint." According to founder and owner... [click here to read on...](#)



A Closer Look at the Competitive Bidding Process for ClimateSmart Projects

As a member of the ClimateSmart External Advisory Group (EAG), I am in a unique position to witness the behind-the-scenes effort and the selection process of the ClimateSmart... [click here to read on...](#)



Save up to \$150 on Energy Costs and Help the Environment

With the winter season, days are shorter and millions of lights are being turned on earlier each day. PG&E wants to help customers save money, save energy and... [click here to read on...](#)



Did You Know?

68% of the greenhouse gas emissions from a typical home come from natural gas use for things like heating and cooking. [Click here for tips on how to save gas this winter.](#)



TELL US
How You're ClimateSmart

ASK US
Renewable power as a ClimateSmart project

WHAT OTHERS ARE SAYING
Discover

DO MORE GO PAPERLESS
Make your PG&E bill paperless
Save trees and help avoid the release of thousands of pounds of greenhouse gases
Take action by signing up today!

TAKE OUR SURVEY
We provide the questions— you provide the answers on how we can make this a better newsletter
[Newsletter Survey](#)



Get a good read on climate change.

The PG&E ClimateSmart™ e-Newsletter is now available. All we need is your e-mail.



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San Francisco, CA 94177-0000

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Redwood City, CA

Thank you for taking action against climate change by joining the ClimateSmart™ program. We value your commitment to "make your energy use climate neutral" and we want to keep you updated on exciting program developments with our ClimateSmart e-Newsletter.

In the Inaugural Issue you will discover:

- How participants are making choices at work and at home to help the environment
- The latest news on the ClimateSmart projects
- Tools and tips to use less energy and save money

To sign up for our FREE ClimateSmart e-Newsletter, please visit www.pge.com/csnews. Or if you are a residential customer you can call us at 1-800-PGE-5000. Our business customers can reach us at 1 800 466 4743

Together we can make a difference.



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ClimateSmart is Rigorous



- Program was approved and is overseen by the California Public Utility Commission. One of the requirements is for PG&E to contract for at least **1.5 million tons CO₂e** of GHG emission reductions by December 31, 2009.
- PG&E is using a competitive bidding process to select the **best greenhouse gas emission reduction projects available**, using clear and stringent criteria.
- The program seeks advice from an **External Advisory Group** composed of respected community, environmental, business and governmental leaders.
- **100%** of the funds collected will be invested in projects that sequester or prevent greenhouse gas emissions.
- To ensure the integrity of the program, all greenhouse gas reductions for ClimateSmart will be **independently verified, registered, and retired** with the non-profit **California Climate Action Registry**.

Forestry



- Carbon sequestration
- Habitat preservation
- Watershed protection
- CA is losing ~ 40,000 acres of forestland annually

Dairy Methane Capture *



- Reduce impact of methane (>21 x greater impact per ton than CO₂)
- CA has ~ 1900 dairies, < 24 capture methane

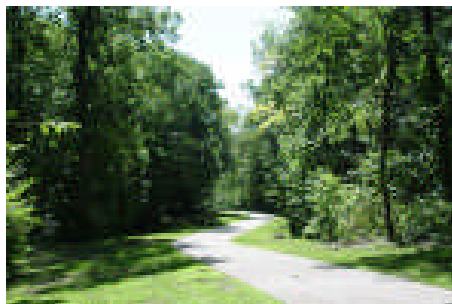
Landfill Methane Capture **



- Reduce impact of methane (>21 x greater impact per ton than CO₂)

Potential Other Protocols

Urban Forestry



Bus Rapid Transit



Tidal Wetland



* Pending CPUC approval.

** Requesting CPUC approval.



Photo credit: Douglas Steakley

Garcia River Forest

THE CONSERVATION FUND

America's Partner in Conservation

Reduces greenhouse gas emissions by protecting trees that would otherwise have been harvested and that absorb and trap carbon. With PG&E's support, Garcia River Forest will sequester 40,000 metric tons of carbon annually for the next five years.

Located within the 23,780-acre Garcia River Forest in the coastal mountain range of southwestern Mendocino County.

Lompico Headwaters Forest

Reduces greenhouse gas emissions by permanently preserving 202 acres of trees that were once slated for harvest and that continue to absorb and trap carbon.

Located within the 425-acre Lompico Headwaters in the Santa Cruz mountains.



Photo Courtesy Sempervirens Fund



Challenges with Carbon Offsets



- Is it additional?
 - Does it change behavior? Would they have done it anyway?
 - Was it required by law?
 - Did it require additional funding to occur?
- Renewable Energy
 - What factors do you use?
 - What is the baseline?
- Forestry
 - What do you do about forest fires? Disease?
- Methane capture
 - Can you get credit for the methane capture and the renewable energy?



Questions?



Robert Parkhurst
ClimateSmart Manager
Pacific Gas & Electric Company

RTP8@pge.com

415-973-1470





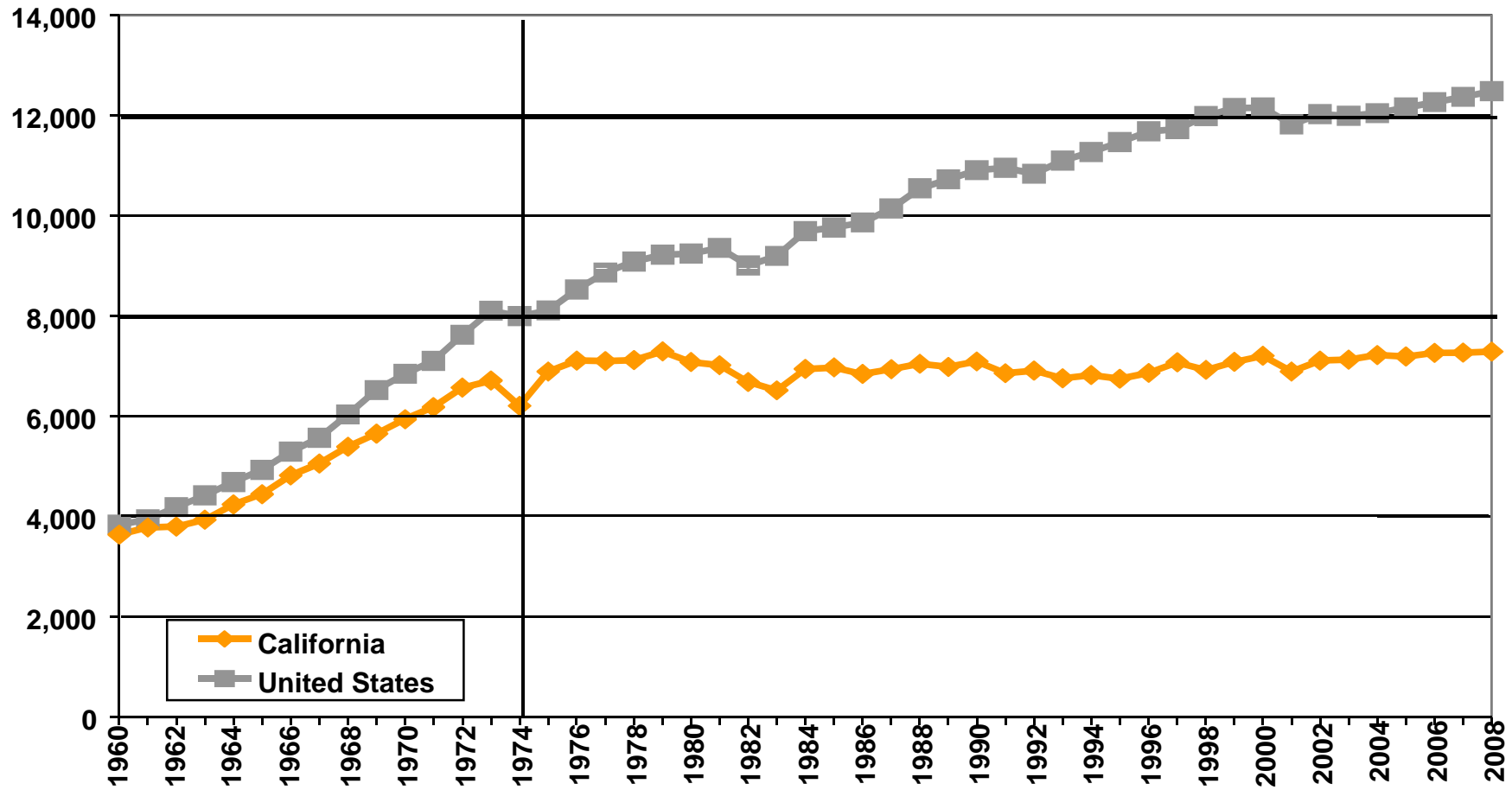
APPENDIX



Committed to Energy Efficiency



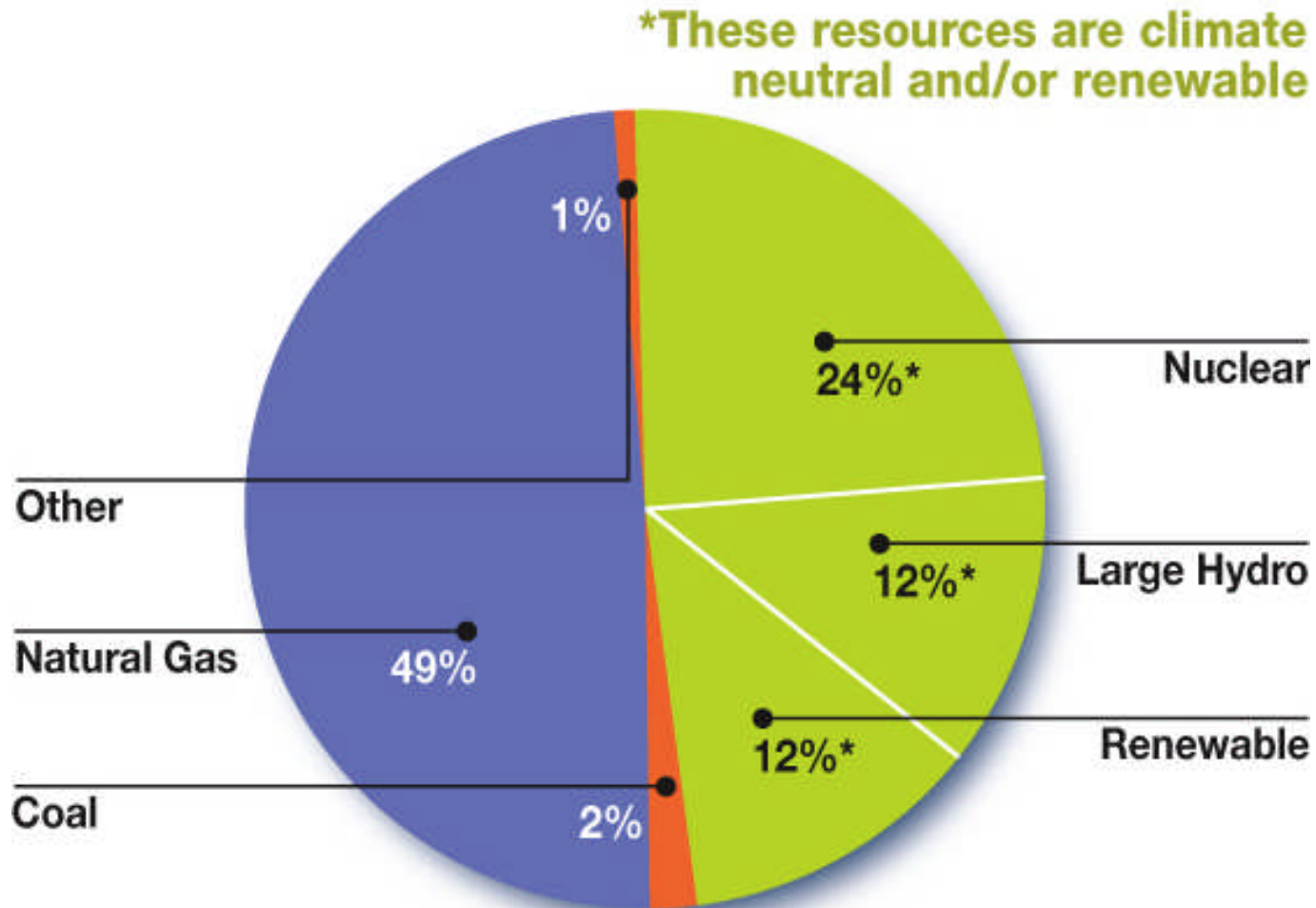
Over the past 30 years, California per capita energy use has remained relatively flat compared to the 50% increase in U.S. per capita energy use.



Source: California Energy Commission



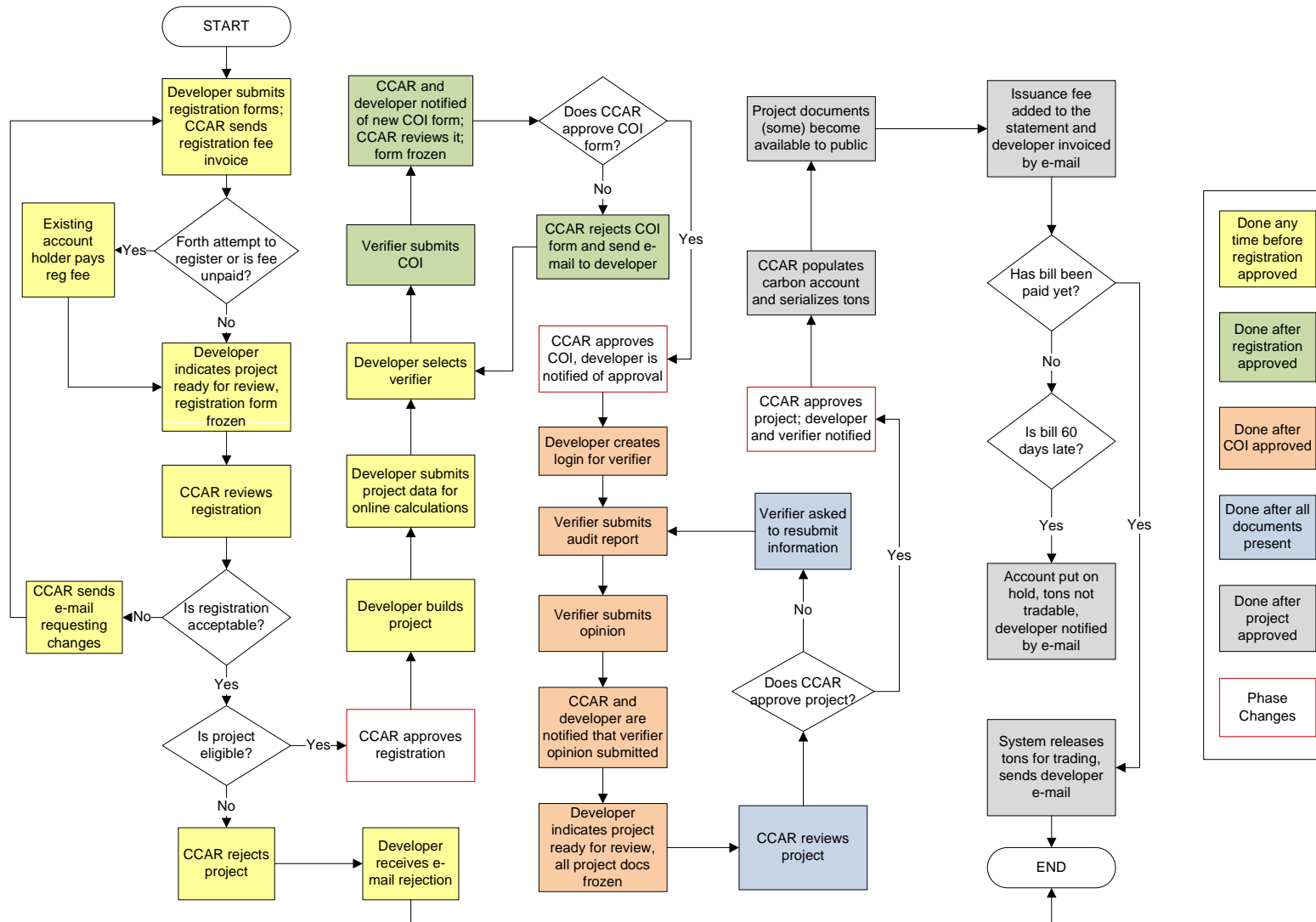
PG&E's 2007 Electric Delivery Mix



Note: These figures are a preliminary projection and will be finalized in April. Delivery mix includes all of PG&E's owned generation plus all of PG&E's power purchases.



California Climate Action Registry Verification Process





Don't just take our word for it



- "Voluntary carbon storage projects like the Garcia River and Lompico Headwaters illustrate the important role California forests and forest landowners can play in helping the state achieve its ambitious goal of reducing greenhouse gas emissions to 1990 levels by 2020. By purchasing offsets that are verifiable under CARB-approved protocols, PG&E has demonstrated that corporations can make progressive decisions about investing in real, measurable reductions of greenhouse gas emissions."
Mary Nichols, Chairman of the California Air Resources Board (CARB)
- "There are significant financial risks associated with climate change and businesses can be both a source of the problem and of the solution. That's why it's important for us to make smart investments to reduce our carbon footprint. ClimateSmart's approach to certifying projects with the California Climate Action Registry is a real plus in ensuring reductions are real and additional."
Peter Liu, Initial Founder and Vice Chairman, New Resource Bank
- "Global Warming is putting our children's future at risk. That's why I signed up my family for PG&E's ClimateSmart program, and I encourage everyone to join us in the fight against climate change."
Dan Kammen, Professor, Energy and Resources Group, University of California, Berkeley
- "By meeting strict standards for offsets, the ClimateSmart program will engage individuals and businesses as part of the solution in the fight on global warming."
David Festa, Associate Vice President, Environmental Defense Fund