



Southern  
California  
Gas Company

A  Sempra Energy utility<sup>®</sup>



# Water Heating – Markets and Programs

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# Southern California Gas Company



- Southern California Gas Company (SoCalGas) has been delivering clean, safe and reliable natural gas to its customers for nearly 140 years.
- It is the nation's largest natural gas distribution utility, serving a population of 19.8 million consumers through 5.6 million gas meters in more than 500 communities.
- The company's service territory encompasses approximately 20,000 square miles of diverse terrain throughout Central and Southern California, from Visalia to the Mexican border.
- Headquartered in Los Angeles, we are a subsidiary of [Sempra Energy](#) (NYSE:SRE), a Fortune 500 company based in San Diego.
- Our commitment to provide customers with world-class service has been the key to our longevity and success. Our motto, "Glad to be of service" reflects this spirit.





## SoCal Gas Customer Base

- 5.7 million meters
  - Residential Single and Multi-Family

## Gas Hot Water Market Penetration

- 93% Market penetration in Residential Sector (RASS)
  - **5 million** water heaters
  - Accounts for **31%** of the average residential customer bill
- Water Heater Life Expectancy
  - 12-15 years
- Average Age of Water Heaters in Use
  - 8-10 years
  - .52 EF (Based on 50 gal unit)
- Average Age of Water Heaters at Replacement
  - 12.9 years





## What Motivates Energy Efficiency

- California Energy Action Plan (2005)
  - Loading Order – Ensures California’s Growing Energy Needs
  - [http://www.cpuc.ca.gov/cleanenergy/design/docs/CAstory\\_PDF.pdf](http://www.cpuc.ca.gov/cleanenergy/design/docs/CAstory_PDF.pdf)
- California Energy Efficiency Strategic Plan (CEESP)
  - Statewide Effort – IOU’s and Industry Stakeholders
  - Development of Short, Mid, and Long Term Energy Efficiency Goals
    - Residential New Construction – Zero Net Energy Homes by 2020
    - Existing Residential – 40% Energy Reduction by 2020
      - Whole House Approach





## What Motivates Energy Efficiency (Cont.)

- Energy Efficiency Utility Program Goals
  - 2009- 2011 Goals – 35% increase over previous program cycle goals
- Save Energy and Money
  - Energy Management
  - Customer Education
  - Energy Efficiency Programs
- Green House Gas Reduction\*
  - Reduce Environmental Impact
  - Global Warming

•If all California households with old, inefficient (0.58 EF) gas water heaters upgraded to energy-efficient models (0.62 EF), it would save 100 million therms and 552,000 tons of CO<sub>2</sub> per year (equivalent to taking 100,000 cars off the road.)

[www.fypower.com/res/naturalgas/calculations.html](http://www.fypower.com/res/naturalgas/calculations.html)



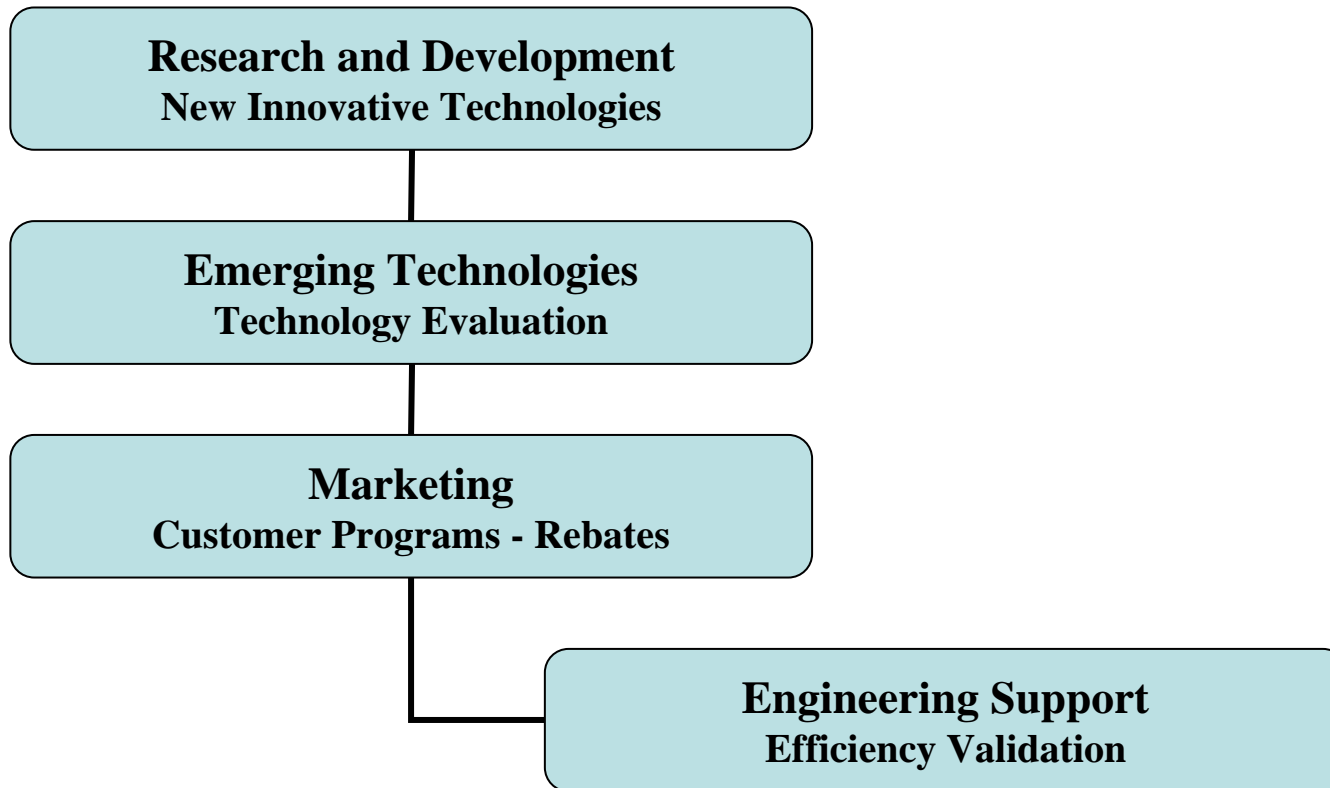


## How Do We Get There?

- California Energy Commission (CEC)
  - SEGWHAI Study (Stakeholder)
- Consortium for Energy Efficiency (CEE)
  - Energy Star Label for Gas Water Heaters
  - Energy Star National Marketing Campaign
  - CEC Water Heater Initiative
  - CEC/Manufacturer Collaboration
- Energy Solutions Center (ESC)
  - Utility/Manufacturer Collaboration



## Technology Development and Introduction





## Residential Water Heater Rebate and Incentives

- Storage Tank  $\geq$  .62 EF - \$30
  - Mail-in
  - On-line
  - P.O.S. (Big Box and Smaller Independent Retailers)
- Tankless Units  $\geq$  .80 EF - \$ 200
  - Utility rebate offered through Manufacturer
  - Participation of 6 Major Manufacturer
- Multi-Family
  - Central System Natural Gas Water Heaters - \$500
  - Natural Gas Water Heater and/ or Boiler Controllers - \$750 - \$1500
  - Central System Natural Gas Boiler - \$1500  
(May be Water and Space Heating or Water Heating only)





## 3rd Party Contractor Programs

- Water Heater Upstream Rebate Program
  - Distributor/Contractor/Installer Focused
  - Incentives to Stock High Efficiency Water Heaters
- Water Heater Controller Program
  - Multifamily Market



# The Energy Resource Center



## Energy Efficiency Education & Training



**ENERGY RESOURCE CENTER**

**Seminar Schedule: 4<sup>th</sup> Quarter 2006**

**Build It Green™**  
Certified Green Building Professional Training

**2007 Combustion Seminars**

**2007 L.A. Steam Operator's License Training**

# Energy Efficiency Education & Training



## Education and Training Activities

- 148 seminars and workshops in 2006
- Customers reached: 7,920

## Hot Water Heating Seminars

- Solar Water Heating
- Tankless Water Heater Technology
  - Some Like it Hot! (Gary Klein)





## SCG 2009-2011 Residential Programs

- Roll over of existing water heater programs
- Home Performance Program
  - Provides comprehensive approach to energy efficiency
  - Address water heating on a system approach
  - Efficient hot water distribution design





## Challenges

- Stimulate Development of Higher Efficient Technologies
  - Working with Industry Partners
- Higher Equipment Cost
  - Higher level of sophisticated engineering and technology
- Increase Awareness
- Customer Acceptance of New Technologies
- Develop Cost Effective Utility Rebate Programs
- Air Quality Regulations

For more information contact:



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