Residential Lighting: Towards a Portfolio Approach





Pacific Gas and Electric Company



Energy services to 15 MM people:

- 5.1 MM Electric customer accounts
- 4.3 MM Natural Gas accounts

70,000 square miles with diverse topography and climate zones

20,000 employees

A regulated investor-owned utility

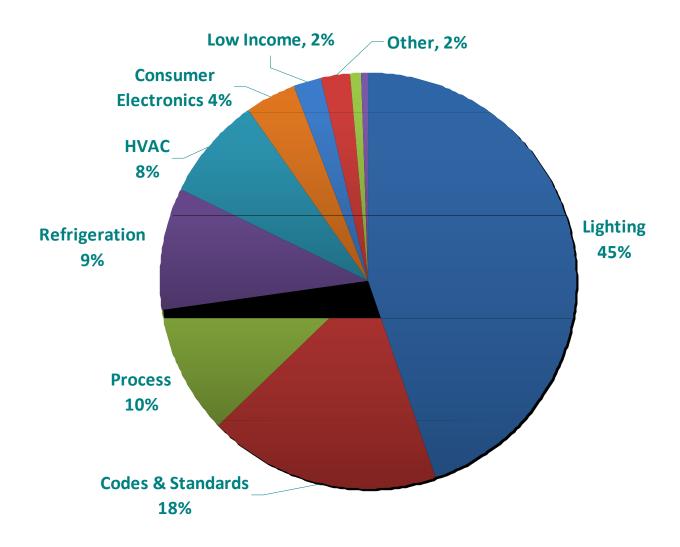


- 2009 -

Ranked the greenest utility in the United States in 2009 and 2010



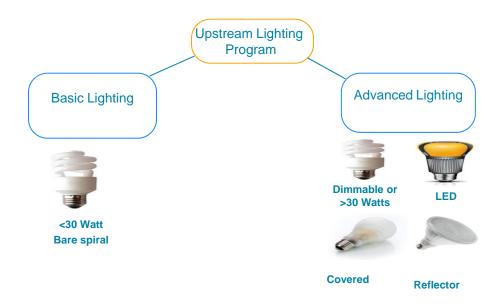
2010 Savings Drivers: Electric



Gigawatt Hour Savings: Largest End Use Drivers



California Investor Owned Utility Residential Lighting Program Overview



	PG&E	SCE	SDG&E
Basic Lighting	\$30MM	\$32MM	\$16MM
Advanced Lighting	\$33MM	\$45MM	\$11MM

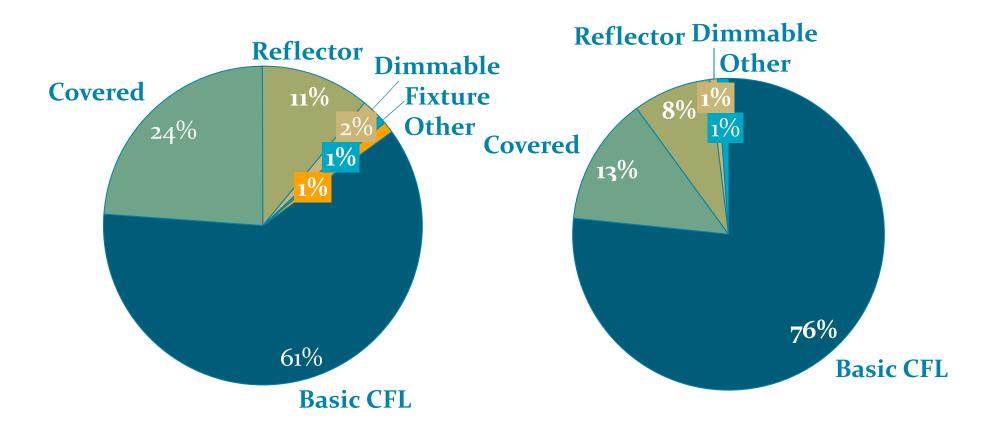


Current Program Snapshot

- Upstream Lighting Program is primarily a CFL program
 - Basic CFLs directed to hard-to-reach customers
 - Advanced products in most significant lighting retail channels



Lighting Portfolio Mix: 2010 to Present



Incentives

Energy Savings (kW)



Transition Challenges

- Advanced lighting more expensive; not necessarily more efficacious
- EISA understanding
- Education and outreach
- Product quality



Pricing Test

PG&E is completing a <u>pricing test</u> for LED PAR and MR lights in two mass market retailers.

- **Purpose**: To test different incentive levels to determine optimal price
- **Duration**: Three phases, each lasting four weeks
- Incentive Levels:

Product	High	Medium	Low
MR-16	\$10	\$5	\$2
PAR30/PAR38	\$15	\$10	\$5



Pricing Test-Results

For PAR 38 lamps (retail \$40), the highest rebate amount (\$15) generated the highest sales increase, but the **middle incentive level (\$10) produced similar results**.

• Sales Increases:

• \$15: **422%**

• \$10: **383**%

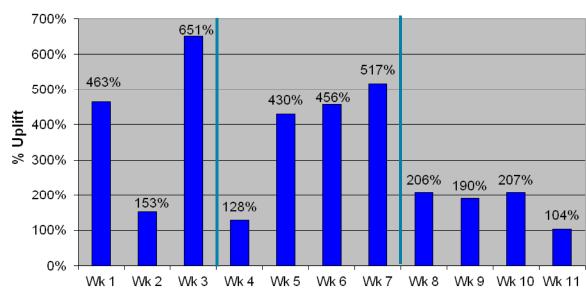
• \$5: **177%**

• **Baseline**: Month of previous sales data

• Limitations:

- Insufficient Inventory
- Missing Signage
- Knowledgeable Sales Staff

Pricing Test: LED PAR38





Pricing Test-Lessons Learned

- <u>Signage</u>: Rebates are important, but signage also played a key role.
 - Impact on Sales
 - Proximity to Product
 - Clear on Rebate Process
 - Regular Maintenance
- Optimal Pricing Level: On a \$40 retail price, the \$10 rebate provided similar results as a \$15 rebate, but much more than a \$5 rebate
- Engage Stakeholders: Engage Stakeholders (i.e. Marketing, Legal, Sales) Early





Upcoming Pricing Tests

- Recessed Downlight Retrofit Kits
- LED A-Line, Globe, Candelabra



Marketing Efforts and Education

With so many different technologies in the market, there is **consumer confusion**. We feel that this is an **opportunity for utilities** to help lead the way and **educate** consumers. We are designing collateral for two main purposes: **Driving Sales** and **Consumer Education**.

• Sales:

- Understand Retailer Needs
- Help Increase Sales

• Education:

- Available Lighting Options
- Lumens vs. Watts

• Strategy:

- Website
- POP Signage
- Sales Staff

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MOST EFFICIENT	LUMENS	450	800	1100	1600
	Standard Incandescents	40W	60W	75W	100W
	New Halogen Incandescents Save up to 28%*	29W	43W	53W	72W
	CFLs Save up to 75%	9W	14W	19W	23W
	LEDs Save up to 77%*	8W	13W	17W	N/A

^{*}Percentage of energy saved by replacing a standard incandescent light bulb; based on usage of approximately 796 hours annually and average residential rate of .15 cents/kWh.



2012 Planned LED Products

- Recessed Downlight Retrofit Kit
- PAR38, PAR30, PAR20
- MR-16
- A-Line, Globe, Candelabra (Late 2012)



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