EVALUATION OF THE 2002 STATEWIDE CROSSCUTTING RESIDENTIAL LIGHTING PROGRAM

FINAL REPORT

Prepared for

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October 13, 2003

LIST OF TABLES

LIST OF FIGURES

1 EXECUTIVE SUMMARY

This is the final report of the evaluation of the 2002 Statewide Crosscutting Residential Lighting Program, sponsored by San Diego Gas & Electric Company (SDG&E), Pacific Gas & Electric Company (PG&E) and Southern California Edison (SCE).

This executive summary provides a brief overview of the program background, discusses the evaluation objectives and approach, and presents study conclusions and recommendations.

1.1 PROGRAM BACKGROUND

The Statewide Crosscutting Residential Lighting Program (or Residential Lighting Program) was designed to achieve energy savings by increasing the availability of ENERGY STAR®-qualified lighting products in the marketplace and expanding the number of fixtures in each home that have energy-efficient lights. The program addressed three key market barriers that are thought to exist in the lighting product market that limit energy-efficient market shares: consumer awareness, product pricing, and product availability.

The main program strategy consisted of offering rebates to retailers and manufacturers on ENERGY STAR-qualifying compact fluorescent lamps (CFLs or CF bulbs), torchieres, fixtures and ceiling fans. The 2002 program ultimately was responsible for reducing the price of over 3 million CFL products in 2002, saving more than 160 GWh and 21 MW.

1.2 EVALUATION OBJECTIVES AND APPROACH

The overall goal of the evaluation was to verify the Program's approach to increasing the supply of ENERGY STAR-qualified lighting products in the market through retailers and manufacturers to achieve immediate and long-term energy savings. Specifically, the evaluation objectives were to verify energy savings, assess customer behaviors in response to Program activities, and evaluate the Program approach in delivering customer satisfaction.

Our approach to meeting the study objectives included conducting the following research:

- **Measurement and verification (M&V)**: verification of program savings and ex post evaluation of program savings assumptions using on-site data collection
- **Market actor analyses**: assessment of consumer and upstream market actor awareness, attitudes, and behaviors with respect to energy-efficient lighting
- **Process evaluation**: assessment of the program's implementation strategies, participant satisfaction, and identification of areas for improvement.

1.3 CONCLUSIONS

This section presents high-level findings from the M&V study, the market actor analysis, and the process evaluation.

1.3.1 Measurement and Verification

The M&V component of the study included verification of program accomplishments and an ex post evaluation of program savings assumptions using on-site data collection.

Verification of Program Accomplishments

The objective of the verification task was to verify the program accomplishments that each investor-owned utility (IOU) claimed in its final report for program year 2002. Our approach included an audit of a sample of invoices, calculation of overall and HTR incentive payments based on the program tracking data, and comparison with the utilities' final reports.

The verification task results indicated that the program's measure accomplishments reported by the IOUs in their final report matched almost exactly with the program tracking data (only SDG&E had a variance, under-reporting its accomplishments by less than 1 percent). However, there were some significant variances with the hard-to-reach (HTR) accomplishments between the program tracking data and what was reported in the final fourth quarter report narrative. SDG&E's HTR accomplishments matched. PG&E used a conservative approach that underestimated the accomplishments. SCE did not update the final reported geographic HTR accomplishments figure in the May Annual Energy Efficiency Report, but mistakenly reported the number from its fourth quarter report. However, these do not affect goal attainment.

Ex Post Savings Study

The objective of the ex post savings analysis is to estimate key parameters in the savings calculations in order to revise the deemed savings values for the measures installed under the program.[1] To support this analysis, lighting loggers have been installed on interior fixtures containing CFLs at a sample of 100 homes located throughout the state (i.e., the bay area, the central valley, Los Angeles County, and San Diego). Loggers were installed over the period of July and August 2002, with monitoring of on average about three fixtures with CF bulbs per home. The loggers will remain installed for a period of 6 months. A report containing the results of the ex post savings analysis will be available in March of 2004.

1.3.2 Market Actor Analyses

The market actor analysis component of the study was designed to assess the effectiveness of the program in increasing the supply of CFL products into the marketplace and in reducing the

[1] These values will not be used to estimate 2002 program savings. Rather, when completed, the results of the ex post savings analysis will be used to update the assumptions for future programs.

awareness, pricing, and availability market barriers that are thought to exist in lighting product markets. A consumer telephone survey (1,001 total surveys) and in-depth retailer and manufacturer interviews (45 total surveys) were conducted during the summer of 2003 in support of the analysis. This research continued prior efforts that tracked both downstream and upstream awareness, attitudes, and behaviors with respect to energy efficiency in general and CFL products, which are indicators of consumers' willingness to purchase and suppliers' willingness to produce, stock, and promote CFL products.[2]

Downstream Findings

The downstream or consumer market findings address attitudes, awareness levels, and behaviors with regard to energy efficiency in general and specifically regarding CFL products. Both the consumer survey and the upstream market actor interview results were used to develop these conclusions.

- **In the general population, the energy efficiency "climate" continues to be positive.** Consumer awareness, knowledge, and attitudes with regard to energy efficiency and conservation in general are favorable and have not declined much since the energy crisis subsided. In some cases, indicators of the general population's awareness of energy efficiency have increased. Likewise, conservation and energy efficiency self-reported behavior has either sustained energy crisis rates or has increased.
- **CFL awareness has increased significantly over time and is currently very high.** Currently, 82 percent of the population is aware of CF bulbs. This represents an increase of 14 percent since 2001. However, there remain opportunities for increasing awareness of CFL fixtures and torchieres. Currently, less than one-quarter of the population was aware of CFL-dedicated fixtures and torchieres. This percentage has remained flat over the last 2 years.
- **Over half of all consumers have used CFLs.** Fifty-six percent of the state's residents have purchased CFLs, the majority of whom first purchased CFLs since the energy crisis. CFL fixture and torchiere purchase rates are relatively low (less than 5 percent) and have remained flat over the last few years.
- **Satisfaction with CFL performance is presently very high.** CFL product diversity and performance have made great strides in the last few years, and customer satisfaction is currently very high. Only 13 percent of CFL adopters were somewhat or very dissatisfied with CFLs they have used in their homes. Over three-quarters (78 percent) of consumers who are aware of CFLs would purchase them in the future. While first cost is of a lesser concern to most consumers due to recent decreases in CFL prices, opportunities remain for further improving products and increasing

[2] KEMA-XENERGY completed in 2001 a four-phase market effects study of the IOUs' California Residential Lighting and Appliance Program. The program was launched in 1999, and continued through 2001. The evaluation included baseline (1998) and final (2001) measurements of consumer indicators of market effects, and these time series results are included in this report where relevant.

consumer awareness with regard to appropriate applications for CFLs and the availability of newer, improved products.

Upstream Findings

The upstream market findings are based on the consumer survey and retailer and manufacturer interviews, and cover product diversity, price, availability, and expectations for CFL sales in the future.

- **CFL diversity has exploded in recent years.** Both retailers and manufacturers agree that there has been an influx of new shapes, sizes, and designs of both bulbs and fixtures. New manufacturers have entered the market and existing producers have expanded their product offerings, leading to greater competition to produce a wide range of CFLs that are acceptable to consumers. Most manufacturers expected to see continued improvements in CFL product diversity in the near future. Likewise, manufacturers expect to see continued improvements in the immature markets for CFL fixtures, torchieres, and ceiling fans, which currently are only available in a limited number of sizes and shapes.
- **CFL prices have declined significantly.** Retailer and manufacturers alike reported that CF bulb prices have dropped considerably since 2000 because of greater competition among manufacturers and retailers, larger production runs, and large-scale utility rebate programs. Prices for CFL fixtures and torchieres have also declined over time. Manufacturers are hesitant to predict whether wholesale CFL prices will continue to drop in the future. However, with increasing competition from China, India, and other Asian countries, there is likely room for additional wholesale price decreases. On the retail side, manufacturers feel that prices could drop further, particularly at warehouse stores that sell CFLs in bulk quantities.
- **CFL availability has expanded.** Both retailers and manufacturers attributed higher CFL sales in 2002 to greater product availability. The Program specifically targeted rural retail stores and grocery and drug stores, locations that previously had not sold CFLs at the same volume as the major big box and home improvement chains. In particular, the independent, smaller chain and franchise stores we spoke with had a positive experience with the program and experienced dramatic increases in CFL sales in 2002 as compared to 2001. Moreover, consumers are not experiencing availability concerns. There remain opportunities for the program to expand CFL availability further in grocery and drug stores, as only a small fraction of consumers are aware that those outlets sell CFLs. Furthermore, CFL fixture and torchiere availability remains an issue as there are only a limited number of shapes, styles, and features currently produced.

- **Expectations for 2004 CFL sales are mixed.** Manufacturers are optimistic that CFL sales will continue to increase in 2004 and beyond. They attribute their predictions to a number of factors: continued price decreases; improved bulb technology, diversity, and aesthetics; greater consumer trust and awareness; the untapped potential in the average household; and the natural bulb replacement cycle. Retailer sentiments depended on their prior levels of CFL sales. The big box stores who had participated in the Program historically and had sold large volumes of CFLs prior to 2002 do not foresee continued growth in CFL product sales. However, independent stores and smaller retail chains, which had not participated in prior years' programs to the degree that the big box stores had, experienced increasing sales from 2001 to 2002 and are upbeat about the potential for even higher sales in the future. All retailers and manufacturers felt optimistic that CFL torchiere and fixture sales would increase in the near future. There is great potential for these products as far as diversity, availability, and consumer awareness are concerned, and most suppliers felt that gains would be made across all these fronts in 2003 and 2004, resulting in higher sales.

1.3.3 Process Evaluation

The process evaluation was designed to evaluate the program's implementation strategies, assess satisfaction with the program, and identify areas for program improvement. There were three sources of data that were used to evaluate the effectiveness of the program processes. The first source was a series of in-depth interviews with each of the utilities' program staff that were conducted on site by the KEMA-XENEGY project manager in May of 2003. Additionally, both the market actor and consumer survey data were incorporated into the program process assessment.

The program process evaluation findings are based on analysis of program manager interviews, upstream market actor interviews, and the consumer survey.

- **Program administration is effective and efficient statewide** due to lean in-house operations that rely on prior successful program strategies, effective statewide working relationships, and cumulative efforts to build strategic relationships with the major trade allies in the state.
- **Coordination issues were minimal in 2002**. Going truly statewide in 2002 was not accompanied by significant coordination problems, as the program managers had worked closely together in 2001 to meet unprecedented unit goals. As a result of these prior efforts, the utilities were able to share responsibilities and maximize their knowledge of the lighting markets and speak with one voice to their many trade allies. The program did experience some difficulty coordinating with overlapping "local" programs, which were implemented by third-party non-utility entities in specific areas of the utilities' service territories. In particular, a small rural hardware/ethnic grocery store program that operated in Southern California offered more than double the rebate than the statewide program and impacted the utility's ability to meet its HTR goals (since it was harder for manufacturers to enroll retailers with lower rebate levels than the competing program) and caused retailer confusion.
- **Program implementation strategies are effective and well received by program participants**. The utilities' involvement in national ENERGY STAR activities and

their working knowledge of the California lighting market allows the program to stay on the leading edge of lighting technologies and markets. Program participants are particularly satisfied with the program itself and its processes. Retailers and manufacturers attribute a significant portion of the improvements seen as far as lower CFL prices, expanded product availability, and higher CFL sales to the program.

- **Customer-level data is unavailable, posing M&V issues.** Due to the upstream nature of the program, customer-level data is not tracked. The point-of-sale rebate and manufacturer approach poses M&V challenges for evaluators because they are unable to identify the consumers purchasing the product to follow up about various installation and usage issues. This evaluation, however, did attempt to shed light on these important research questions by identifying and surveying CFL purchasers in general and probing their awareness of the rebate and its influence on their purchase decision. However, as the program is expanded and as the point-of-sale approach in general is considered by other programs, these M&V issues should be given attention.
- **Retail CFL promotions are "low-tech" and may not be very effective in influencing purchases.** Program marketing that is conducted by retailers and manufacturers is one area of program implementation that could be improved. In 2002, the utilities relied primarily on retailers to develop their own promotions. The promotions that retailers used in their stores in 2002 were not very effective in influencing CFL sales, based on consumer survey results. The utilities should continue their efforts to monitor retailer displays and encourage stores to dedicate resources towards effective product promotion (most importantly for utility discounted products, but also for products being sold during non-promotional times). Moreover, providing retailers with enough lead time to allow them to develop effective promotional campaigns might also improve the quality of their advertisements.
- **Rural HTR goals are arbitrary and could be more closely aligned with demographic and purchase rate data.** The blanket 15 percent rural goal was out of line with the underlying distribution of rural customers located in each utility's service territory. Moreover, the study results show that CFL awareness and purchase rates do not differ significantly between rural and urban customer segments. While it is important that the utilities continue their efforts to encourage broad participation among a diversity of retailers, it is not clear that rural customers have been previously underserved and that the Program needs to have specific rural goals. However, it is clear that the grocery and drug store goals did encourage more active participation among these outlets and program efforts to expand CFL product availability within this retail segment should be continued.

1.4 RECOMMENDATIONS

We are providing recommendations with regard to consumer marketing and education, product eligibility and rebate levels, HTR goals, and providing lead time to participating retailers and manufacturers. These recommendations were developed based on the results of the market actor analysis and process evaluation. As mentioned previously, the results from the ex-post savings analysis portion of the M&V work will be discussed in a subsequent report (to be available in March 2004) that documents the on-site logger study results.

- **Continue efforts to raise awareness and educate consumers on CFLs.** It is clear that although significant gains have been made with regard to CFL awareness and satisfaction, there remain opportunities to further educate consumers on the benefits of CFL products and how to use them appropriately. Continuing successful partnerships with the EPA's Change-a-Light promotion and Flex Your Power mass media advertisements is crucial to sustain interest in CFL products and to expose more consumers to CFLs, particularly to the lesser-known CFL-dedicated fixtures and torchieres. Likewise, working closely with participating retailers to ensure that their promotional materials are educational and effective is also key.
- **Continue to maximize incentive budgets by using tiered rebate structure.** The program should continue efforts to be proactive in ensuring that incentive budgets are directed towards CFL product categories where price and availability are significant barriers to consumer adoptions.
- **Set HTR goals that are in line with utility-specific demographics and historic purchase rates.** The rural HTR goals for 2002 were arbitrarily set without considering the underlying population demographics and historic purchase rates. The utilities spent significant resources in an attempt to meet the rural HTR goal, including rolling out the program only to HTR stores at the beginning of the 2003 program year, and these strategies certainly have an impact on overall program success. Rural HTR goals should be reconsidered in light of this study's consumer research findings. However, grocery and drug store goals may make sense in expanding CF bulb availability into such new channels. This is an area where further research could be conducted to more closely examine the effectiveness of the program in expanding CFL availability among this retail segment.
- **Give participating retailers and manufacturers adequate lead time to ensure effective marketing.** Both retailers and manufacturers need 2 to 3 months to effectively develop advertising campaigns. The 2003 program was not approved until April, significantly impacting participants' abilities to develop effective program promotions. Market participants need consistent signals from the program, and funding lapses and program delays negatively impact the effectiveness of the program in influencing these actors.

2 INTRODUCTION

This is the final report for the evaluation of the 2002 Statewide Crosscutting Residential Lighting Program, sponsored by San Diego Gas & Electric Company (SDG&E), Pacific Gas & Electric Company (PG&E) and Southern California Edison (SCE).

This section provides a brief overview of the program background, discusses the evaluation objectives and approach, and presents the organization of the remainder of the report. To obtain background information about the program, we referred to utility program filings, including implementation plans and quarterly reports.

2.1 PROGRAM BACKGROUND

The Statewide Crosscutting Residential Lighting Program (or Residential Lighting Program) was designed to achieve energy savings by increasing the availability of ENERGY STAR®-qualified lighting products in the marketplace and expanding the number of fixtures in each home that have energy-efficient lights. The program addressed three key market barriers that are thought to exist in the lighting product market that limit energy-efficient market shares: consumer awareness, product pricing, and product availability.

The main program strategy consisted of offering rebates to retailers and manufacturers on ENERGY STAR-qualifying compact fluorescent lamps (CFL or CF bulb), torchieres, fixtures, and ceiling fans. The 2002 program ultimately was responsible for reducing the price of over 3 million CFL products in 2002, saving more than 160 GWh and 21 MW.

2.2 EVALUATION OBJECTIVES AND APPROACH

The overall goal of the evaluation was to verify the Program's approach to increasing the supply of ENERGY STAR-qualified lighting products in the market through retailers and manufacturers to achieve immediate and long-term energy savings. Specifically, the evaluation objectives were to:

1. Verify energy savings
2. Assess customer behaviors in response to Program activities
3. Evaluate the Program approach in delivering customer satisfaction.

Our approach to meeting the study objectives included conducting measurement and verification analyses, market actor analyses, and a process evaluation. These three research components meet the study objectives as shown below in Table 2-1. The following subsections describe in more detail the research activities that were conducted in support of each of the three study components.

Table 2-1
Study Objectives and Approach

Study Component	Study Objective	Approach
M&V Analyses	Verify energy savings	• Verify Program accomplishments • Review recent studies to validate and/or update savings parameters • Perform on-site metering/ surveys to update energy savings parameters
Market Actor Analyses	Assess consumer and supplier behaviors in response to Program activities	• Evaluate the effectiveness of the program in addressing relevant consumer and supplier market barriers
Process Evaluation	Evaluate the Program approach in delivering customer satisfaction	• Evaluate implementation and marketing strategies • Assess participant satisfaction with the program • Identify areas for program improvement

2.2.1 Measurement and Verification

The approach to the verification of energy savings included both verification of program savings using ex ante program savings assumptions and an ex post evaluation of program savings assumptions using on-site data collection.

Verification of Program Savings

The objective of this task was to verify the program accomplishments that each investor-owned utility claimed in its final report for program year 2002. Two aspects of the accomplishments were verified:

- The total number of units rebated through the program, by measure type, as reported in the final California Public Utilities Commission (CPUC) workbook in the Program Activities Worksheet, Table - A, column S.
- The percent of program incentives that were paid to the two hard-to-reach (HTR) segments (geographic location and grocery and drug) as reported in the final CPUC report narrative.

To verify the total number of units reported by the program, we first verified that a sample of invoices was entered correctly into the program tracking system. We then calculated the number of rebates by measure type using the program tracking data. To verify that the HTR accomplishments were accurately reported, we first determined whether a given retailer in the tracking system met either of the two HTR requirements and then calculated the amount of incentives paid to each of the HTR segments. Both the overall and HTR units and incentive payments were then compared to the utilities' final reports.

The results of the verification task were presented to the utilities in June of 2003. The verification results report is included in this report as Appendix A.

Ex Post Savings Analysis

The objective of the ex post savings analysis was to estimate key parameters in the savings calculations in order to revise the deemed savings values for the measures installed under the program. These values will be used for future program filings, and will provide input to the Deemed Savings Database project. These values were not used to estimate the 2002 program savings.

The most important parameters that were studied as part of this task are:

- Hours of operation
- Peak diversity factors
- Pre-installation wattage assumptions
- Net-to-gross
- Effective useful life.

The data collection that was conducted to support this task included the installation of lighting loggers on interior fixtures containing CFLs at a sample of 100 homes. The 100 sites were clustered within 4 regions throughout the state: (1) the San Francisco Bay Area, (2) the central valley, (3) Los Angeles County (excluding the Los Angeles Department of Water and Power service area), and (4) San Diego. These clusters represent the major rural/urban and geographic distinctions within the IOU service territories.

The on-site logger study is still in progress. Loggers were installed at 100 sites during July and August 2002, monitoring on average about 3 fixtures with CF bulbs per home. The loggers will remain installed for 6 months. A report containing the results of the ex post savings analysis will be available in March of 2004.

2.2.2 Market Actor Analysis

The market actor analysis component of the study was designed to assess the effectiveness of the program in increasing the supply of CFL products into the marketplace and in reducing the awareness, pricing, and availability market barriers that are thought to exist in lighting product markets. A consumer telephone survey and in-depth retailer and manufacturer interviews were conducted during the summer of 2003 in support of the analysis. This research continued prior efforts that tracked both downstream and upstream awareness, attitudes, and behaviors with respect to energy efficiency in general and CFL products, which are indicators of consumers' willingness to purchase and suppliers' willingness to produce, stock, and promote CFL products.[1]

Consumer Survey Approach

The consumer survey was conducted from June 6 through July 20, 2003 using Quantum Consulting's in-house computer-aided telephone interview facility. We surveyed households randomly within IOU service territory ZIP codes, using random-digit dialing. As shown in Table 2-2, 1,001 surveys were conducted, over half of these with lighting purchasers.

Table 2-2
Consumer Behavior Survey Summary

Utility	PG&E	SCE	SDG&E	Total
CF bulb purchaser	162	138	110	410
Torchiere purchaser	53	48	39	140
Fixture purchaser	72	70	56	198
Total purchasers	211	200	146	557
Total non-purchasers	159	171	114	444
Total overall	370	371	260	1,001

Supplier Survey Approach

A total of 45 high-level interviews were conducted by KEMA-XENERGY analysts with participating retailers and manufacturers and other key market actors. The utilities provided contact information for participating retailers and manufacturers, and we attempted a census of participating manufacturers and big box[2] retailers and selected a sample of franchise and single-location independent retailers. The interviews took place from June through August of 2003.

We also conducted a separate data collection effort to support an analysis of incremental measure cost (see Appendix B) to assist the utilities in preparing their cost and savings assumptions for future program-year planning. This research task consisted of visiting a sample of retail stores to collect retail price data and analyzing these data, along with invoiced wholesale and retail pricing information recorded in utility program tracking databases. These analyses produced incremental measure cost estimates for a range of CFL products that are promoted through the utility programs.

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[1] In 2001, KEMA-XENERGY completed a four-phase market effects study of the IOUs' California Residential Lighting and Appliance Program. The program was launched in 1999, and continued through 2001. The evaluation included baseline (1998) and final (2001) measurements of consumer indicators of market effects, and these time series results are included in this report where relevant.

[2] Large retail stores, often discount or warehouse stores, that tend to rely on lower mark-ups and high-volume sales. These stores are often box-like, one-story structures.

2.2.3 Process Evaluation

The process evaluation was designed to evaluate the program's implementation strategies, assess satisfaction with the program, and identify areas for program improvement. Three sources of data were used to evaluate the effectiveness of the program processes. The first source was a series of in-depth interviews with each of the utilities' program staff that were conducted on site by the KEMA-XENEGY project manager in May of 2003. Additionally, both the market actor and consumer survey data were incorporated into the program process assessment.

2.3 REPORT ORGANIZATION

The remainder of the report is organized as follows.

- Section 3: Program Description
- Section 4: Product and Market Background
- Section 5: Market Actor Analysis Results
- Section 6: Process Evaluation Findings
- Section 7: Conclusions

The verification report, survey instruments and interview guides, the survey methodology, and cross-tabulations of consumer survey data are included as appendices.

- Appendix A: Verification Report
- Appendix B: Consumer Survey Instrument
- Appendix C: Program Staff Interview Guide
- Appendix D: Retailer Interview Guide
- Appendix E: Manufacturer Interview Guide
- Appendix F: Survey Methodology
- Appendix G: Consumer Survey Cross-Tabulation Results

3 PROGRAM DESCRIPTION

This section presents a detailed description of the California electric investor-owned utilities' (IOUs') 2002 Residential Lighting Program. First, we present program background, followed by program objectives and approach. Finally, we present the program's goals and its unit and savings accomplishments. The sources used for developing this description are interviews with program managers and utility program filings.

3.1 BACKGROUND

The Residential Lighting Program was designed to achieve energy savings by increasing the availability of ENERGY STAR®-qualified lighting products in the marketplace and expanding the number of fixtures in each home that have energy-efficient lights. The 2002 program continued successful aspects of a prior multi-year program that was designed to transform the markets for ENERGY STAR lighting products by partnering with retailers and manufacturers.

The prior lighting program that the California IOUs administered from mid-year 1999 through 2001 was the California Residential Lighting and Appliance Program (CRLAP). CRLAP was designed to address barriers to the adoption of energy-efficient appliances and lighting products. The program primarily focused its activities at influencing the supply side of the market to increase the production, stocking, promotion, and sales of energy-efficient appliances and lighting products.

In 2001, CRLAP's emphasis shifted from its longer-term market transformation-oriented goals toward achieving more immediate energy and peak demand savings. This shift in policy was instigated by the California energy crisis, which intensified in the summer of 2001 with anticipated and real shortages of energy supply occurring during peak hours. The utilities ultimately rebated over 7 million compact fluorescent lamps in 2001 in response to the state's energy policy shift. Upstream market actor support, such as salesperson training, was sharply reduced.

The 2002 program was designed to build upon the successes of CRLAP by leveraging the existing retailer and manufacturer partnerships and continuing to increase the supply of ENERGY STAR lighting products into the marketplace through the use of discounts. The 2002 program did not include an emphasis on supplier support functions such as co-operative advertising and salesperson training. Instead, the 2002 program relied on retailers and manufacturers to advertise the discount using their own point-of-purchase promotions.

3.2 PROGRAM OBJECTIVES

The Residential Lighting Program was designed to achieve energy savings by increasing the availability of ENERGY STAR-qualified lighting products in the marketplace and expanding the number of fixtures in each home that have energy efficient lights. The Program's objectives were to:

- Achieve immediate and long-term energy savings
- Increase supply of ENERGY STAR-qualified products into the marketplace
- Administer the program in a cost-effective manner, which maximizes available dollars for product discounts
- Provide the discounts in an innovative way that maximizes consumer acceptance and retailer and manufacturer partnerships
- Coordinate the program with the State's "Flex Your Power" campaign.

The 2002 program was designed with the intent to address three key market barriers that are thought to exist in the lighting product market that limit ENERGY STAR lighting product market shares:

- **Awareness**: The program was designed to increase awareness among consumers and suppliers by coordinating extensively with retailers and manufacturers to increase product advertising.
- **Pricing**: The program was designed to increase demand and build off prior years' successes in lowering product prices to continue to fuel demand for the product in previously unreached portions of the market.
- **Availability**: The program was designed to increase the number of channels where ENERGY STAR products are available at promoted prices to increase consumer exposure.

3.3 PROGRAM APPROACH

As stated above, the 2002 Program continued prior utility efforts targeted to upstream market actors involved in the sale of ENERGY STAR lighting products. This upstream approach relies on the partnerships with lighting product retailers and manufacturers that the utilities had developed over several years of working closely with these market actors. The program's primary strategy was to offer rebates to retailers and manufacturers on four categories of ENERGY STAR lighting products: compact fluorescent lamps, torchieres, fixtures, and ceiling fans.

The utilities offered both a manufacturer buydown and a point-of-sale retailer discount. Retailers were eligible to participate in the large statewide retailer component of the program if they had retail outlets in all three utilities' service territories and if they could comply with the reporting requirements (i.e., the ability to track rebated sales electronically). Smaller and/or independent retailers were eligible to participate in the program via the manufacturer buydown component. The utilities essentially relied on manufacturers to solicit participating retailers for the buydown program component. This program design element was successful in encouraging many independent chain and single-location retailers to participate, without expending significant marketing resources to make these retailers aware of the program.

The 2002 program was statewide in the sense that it was coordinated so that incentive levels, promotional materials, equipment eligibility requirements, participation agreements, and program timing was consistent across the three IOU service territories. The prior program that addressed energy-efficient lighting, CRLAP, was also coordinated on a statewide basis (including all four IOUs). However, only in 2002 were the utilities required by the California Public Utilities Commission (Commission) to offer statewide programs that were identical for all consumers across the utilities.

The statewide program utilized the following strategies to meet its objectives:

- Collaboration with statewide retailers to offer the instant discount (e.g., Costco, Orchard Supply Hardware, Lowe's, and Sam's Club)
- Collaboration with regional home improvement centers desiring to use the upstream incentive to manufacturers to lower the retail cost of ENERGY STAR lighting products (e.g., Home Depot)
- Coordination on timing and incentive amounts with the respective retailers, utility websites/bill inserts/advertising, and statewide advertising
- Continuation of support for national and regional efforts that affect the manufacture, distribution, and quality of products
- Identical point-of-purchase materials.

Program marketing consisted of program staff soliciting major retailers and manufacturers to participate and apply for compact fluorescent lamp (CFL) product rebates. The utilities by and large relied on participating retailers and manufacturers to promote the discount to consumers using in-store advertising, desirable product placement, and salesperson promotion. The program was coordinated with the EPA's fall Change a Light promotion and the state's Flex Your Power advertisements. As mentioned above, the utilities also relied on their websites, bill inserts, and other statewide advertising to promote the program.

A feature of the 2002 program that was unique as compared to prior utility lighting programs is the introduction of hard-to-reach targets, which were intended to expand the effects of the program to trade allies and consumer segments that had not historically participated. The utilities were required by the Commission to reserve 15 percent of their incentive budget for retailers located outside the major urban areas and 10 percent for grocery and drug stores.

3.4 GOALS AND BUDGET

Through the Residential Lighting Program, the IOUs sought to achieve annual energy and peak demand savings of 192 GWh and 24 MW by discounting and promoting over 3 million CFL products in 2002. Table 3-1 summarizes the Program's unit and energy savings goals for 2002. As shown, over 90 percent of the energy savings and more than 95 percent of the demand savings were expected to be realized by compact fluorescent bulb installations.

The Program budget totaled $9.4 million, with $7.7 million earmarked towards product incentives.

Table 3-1
2002 Program Goals

CF Product	Incentive Level	Unit Goals	Energy Savings (Net MWh)	Demand Savings (Net kW)	Total Incentive Budget
Screw-in CF bulbs	$2.00	3,296,650	174,000	23,000	$6,593,300
ENERGY STAR® Hardwire Fixtures	$10.00	46,225	5,000	200	$462,250
ENERGY STAR® Torchieres	$10.00	59,650	13,000	500	$596,500
ENERGY STAR® Ceiling Fan with CF bulbs	$20.00	4,475	700	50	$89,500
Total		3,407,000	192,000	24,000	$7,741,550

Source: PY2002 Utility Fourth Quarter Reports

3.5 ACCOMPLISHMENTS AND EXPENDITURES

The program ultimately rebated over 3.5 million CFL products, mostly CF bulbs. As shown in Table 3-2, the program rebated fewer fixtures, torchieres, and ceiling fans than planned. The process evaluation findings that are discussed in Section 6 of this report concern product-specific issues that affected program unit accomplishments. In particular, as will be described in Section 6.6.2, the program was more effective in discounting the 15- and 25-Watt CFLs than the 30-Watt bulbs, which are associated with higher savings. As a result, program savings were lower than expected, even though unit accomplishments were higher than unit goals.

Table 3-2
2002 Program Accomplishments

CF Product	Incentive Level	Unit Accomplish-ments	Energy Savings (Net MWh)	Demand Savings (Net kW)	Total Incentive Expenditures
Screw-in CF bulbs	$2.00	3,502,518	158,447	21,018	$7,005,036
ENERGY STAR® Hardwire Fixtures	$10.00	24,932	2,960	144	$249,320
ENERGY STAR® Torchieres	$10.00	6,736	1,473	204	$67,360
ENERGY STAR® Ceiling Fan with CF bulbs	$20.00	50	8	0	$1,000
Total		3,534,236	162,888	21,365	$7,322,716

Source: PY2002 Utility Revised Fourth Quarter Reports

4 PRODUCT AND MARKET BACKGROUND

This section provides extensive background on compact fluorescent lamp (CFL) products and market structure. Information in this section was obtained from a combination of primary and secondary data sources. Primary sources are the retailer and manufacturer market actor interviews conducted through this project. Secondary sources include the ENERGY STAR® website,[1] other websites devoted to energy-efficient lighting[2], and the California Lamp Trends Report, Volume 2 (Itron 2002).

The CFL product and market information presented below is organized as follows:

- **Detailed CFL Product Information:** detailed, technical information about the wide range of CFL products that are currently available. Information is provided for the following CFL product categories: bulbs, hard-wired indoor fixtures, and hard-wired exterior fixtures.
- **CFL Product Market Structure:** information on CFL market structure (i.e., manufacturing, distribution and retail sales of CFL products) and CFL market share information.

4.1 DETAILED CFL PRODUCT INFORMATION

This section provides detailed descriptions of CFL products that are currently available as well as new CFL products that are in the development stages. This information provides insight into:

- The types and numbers of products being offered now
- current product trends and new features being introduced.

4.1.1 Compact Fluorescent Light Bulbs

The Residential Lighting Program promotes ENERGY STAR-labeled CFLs. The ENERGY STAR website lists a total of 1,269 ENERGY STAR-qualified CFL models produced by 103 different manufacturers around the world. Technical Consumer Products and Westinghouse have the most extensive product lists, with 69 and 71 different models respectively.

CFL Bulb Size Information

ENERGY STAR CFL bulb wattages range from 3 to 45 Watts. Table 4-1 provides, by CFL bulb wattage category, the numbers of separate CFL bulb products currently being manufactured. As

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[1] www.energystar.gov

[2] Namely, the National Lighting Product Information Program website (www.lrc.rpi.edu), BetterBulbsDirect.com, and the U.S. Department of Energy's Energy Efficiency and Renewable Energy website (www.eere.energy.gov).

the table shows, the most common CFL bulb size categories are 14 to 18 Watts and 19 to 24 Watts.

Table 4-1
Numbers of CFL Bulb Products by Wattage Category

CFL Bulb Wattage Category	Numbers of CFL Bulb Products
Less than 11 Watts	75
11 to13 Watts	131
14 to 18 Watts	435
19 to 24 Watts	421
25 to 30 Watts	179
Over 30 Watts	17

Although all CFLs fit into three-way light sockets, only a few models have more than one brightness level. The 12/20/26 Watts category is the most popular 3-way bulb; it comprises 5 out of the 11 models that are listed on the ENERGY STAR website. Other functional CFL types include bug lights, outdoor CFLs, and covered lights.

CFL Bulb Types

CFLs come in a multitude of sizes and shapes to fit a wide variety of fixtures. The size, color, and surface area of the tube(s) determine the amount of light produced. CFLs can have either a plug-in base or a screw-in base. The following paragraphs provide detailed descriptions of the various CFL bulb types that are currently available:

- **Plug-In Base:** There are 19 plug-in base types that fall under either the 2-pin or 4-pin ballast category. One to three twin tubes can be connected to the ballasts. Most CFLs with plug-in bases are sold either within ENERGY STAR CFL fixtures or as replacement bulbs for such fixtures.
- **Screw-In Base:** The CFL market consists of mostly screw-based bulbs. Most of the screw-in bulbs fit into medium bases. CFL bulbs are connected to magnetic or electronic ballasts for starting and circuit protection. Integral CFLs have the tubes and ballast permanently connected. Modular CFL designs have separate tubes and ballasts; this allows replacement of tubes without changing the ballast. Screw-in CFL bulbs come in six common shapes plus a myriad of envelope shapes.
    - *Twin-tube*—These CFLs have two small parallel tubes. They are designed to fit into lamps, task lights, recessed ceiling lights and wall lights.
    - *Quad-tube*—These are only half the length of twin-tube CFLs but give nearly as much light. They may fit better in smaller lamps and similar application.
    - *F-lamps*—They also have two twin tubes like a quad tube. However, instead of being aligned top to bottom, they are aligned from side to side. They are used for task lights and low-profile recessed fixtures.

  - *Triple tube*—These CFLs generate even more light in shorter bulbs. They pack high light output into a very small space and can be used in fixtures designed for incandescent bulbs, such as table lamps.
  - *Circular Lamps, also called "Circline"* — These are mainly designed for reading lamps. Some brands give the cool white light of a typical fluorescent while others have electronic ballasts and give warm light.
  - *Coiled/spiral tube* — Spirals have a continuous tube in a spiral shape that has similar outside shape and light-casting qualities to a standard incandescent bulb. This bulb configuration is one of the most common as of late.
  - *Square*—These are pretzel-shaped tubes that resemble two back-to-back Ds. The flat profile fits well into wall-mounted fixtures, sleek floor fixtures, and recessed downlights.
  - *Envelope shapes*— Some bulbs are encapsulated in glass tubes that look similar to conventional incandescent light bulbs, such as A-line, globe, candle, or reflector. Other shapes are unique to CFL bulbs.

New CFL Bulb Products

Some new CFL bulb products are being developed now. They are:

- **Sub-CFL bulbs*:*** Sub-CFLs belongs to a new generation of screw-in CFLs. They are smaller (as short as 4.5 inches), more compact, and even more energy efficient. They can fit most fixtures designed for incandescent lamps. These bulbs are also known as mini-CFLs.
- **Cold Cathode Fluorescent Light (CCFL) Bulb:** A new type of CFLs, CCFL (Cold Cathode Florescent Light) and an upgrade of CFL-reflector, are currently being developed. These bulbs will produce even less heat than conventional CFLs. High operating temperatures typical in entirely-enclosed or airtight recessed downlights can cause premature lamp failure; therefore, these new CFLs will be recommended for such fixtures when they enter the market in the near future.

4.1.2 Hard-Wired Interior Fixtures

The Residential Lighting Program is designed to promote a variety of ENERGY STAR-labeled residential lighting technologies, including hard-wired indoor lighting fixtures. There are seven different categories of hard-wired interior lighting listed in the on-line product lists for ENERGY STAR Residential Lighting Fixtures. They are:

- Architectural
- Ceiling-mounted
- Furniture/cabinet integrated
- Portable lighting

- Recessed lighting
- Suspended lighting
- Wall mounted.

Detailed descriptions are provided below for each of these indoor fixture categories.

- **Architectural:** Many types of architectural light fixtures are found in family rooms and recreation rooms. These fixtures are commonly stocked in lighting stores and by electrical suppliers, and the use of T-8 fluorescent bulbs is recommended for these fixtures to provide the highest quality light with the least amount of energy use.
- **Ceiling-mounted Lighting:** Diffusers and track lighting are the most common of this lighting fixture category. These fixtures attach directly to the ceiling surface and are commonly used in entrance foyers, hallways, stairways, kitchens, basements, and garages. These products are typically available in home improvement and lighting stores, and from electrical suppliers. These fixtures can use either compact or linear fluorescent bulbs to reduce energy costs.
- **Furniture/Cabinet Integrated Lighting:** Cabinet lighting is designed to provide task or accent lighting for specific uses, most commonly integrated into bathroom lighting systems. Lighting stores and electrical suppliers stock bulbs, sockets and fixtures, and some cabinet/furniture manufacturers also offer built-in fixtures as an option. Compact fluorescent bulbs and small-diameter T-5 and other linear fluorescent bulbs fit most fixtures. There are 32 products currently in the market manufactured by 7 different companies.
- **Portable Lighting:** Portable lighting such as table lamps are usually found in bedrooms and living rooms whereas shades are used throughout the house. One of the most common portable indoor lighting fixtures is torchiere. According to the ENERGY STAR website, about 50 million halogen bulb torchiere lamps are in use across the U.S. However, since ENERGY STAR-labeled torchieres operate at less than 100 °F, they are recommended by the U.S. Department of Energy as a safer substitute for halogen lamps which burn at 1000 °F. Moreover, CFL torchieres offer the benefits of longer bulb life and lower operating costs.
- **Recessed Lighting:** Recessed light fixtures are most commonly found as either troffers (with diffusing lens) or recessed circular downlights, wall-wash downlights or accent lights. Troffers are commonly used in kitchens and downlights and accent lights are commonly used in family rooms, living rooms, and recreation rooms. These fixtures can be purchased from home-improvement stores, lighting stores, and electrical suppliers. Linear and U-shaped fluorescent bulbs work well in troffers, and compact fluorescent bulbs are available for downlight applications.
- **Suspended Lighting:** Some of the more common types of suspended lighting fixtures include downlights, uplights, uplights/downlights, chandeliers, and ceiling fan light fixtures. Dining rooms and entrance hallways commonly use chandeliers, whereas ceiling fans can be found in almost any room in the house. Other styles of

suspended fixtures can be found in kitchens and recreation rooms. Suspended light fixtures can be found in home-improvement stores, lighting stores, and from electrical suppliers. Some department stores stock a variety of suspended light fixtures as well. Some suspended light fixtures can use compact fluorescent bulbs, although not all.

- **Wall-mounted Lighting:** Common wall-mounted light fixtures include sconces, diffusers, vanity lights, and track lights. Wall-mounted fixtures can be used in any room in the house, sconces and diffusers are commonly used in hallways, bedrooms, and family rooms. Track lighting is commonly used in family rooms, recreation rooms, and sometimes kitchens. Vanity lights are found in bathrooms. These fixtures can be purchased from home-improvement stores, lighting stores, and electrical suppliers and can utilize either linear or compact fluorescent bulbs.

The CFL indoor fixture market is highly decentralized, with dozens of manufacturers producing hundreds of different fixture products. The ceiling- and wall-mounted categories have the largest range of product choices as shown in Table 4-2.

Table 4-2
CFL Indoor Hard-Wired Fixture Products

CFL Indoor Hard-Wired Fixture Category	Number of ENERGY STAR Products	Largest Manufacturer(s)
Architectural lighting	38	• ASL Energy Efficient Lighting
Ceiling mounted lighting	2,614	• Access Lighting • ASL Energy Efficient Lighting • Incon
Furniture/cabinet integrated lighting	32	• 7 different companies
Portable lighting	471	• VIVA Company Ltd.
Recessed lighting	169	• LaMar Lighting
Suspended lighting	1,000	• VIVA Company Ltd.
Wall-mounted lighting	2,195	• American Fluorescent Corp. • ASL Energy Efficient Lighting

Source: ENERGY STAR on-line product lists, www.energystar.gov

4.1.3 Hard-Wired Exterior Lighting

In addition to interior lighting fixtures, the Statewide Crosscutting Residential Lighting Program promotes a variety of ENERGY STAR-labeled exterior lighting products. The outdoor lighting section of the ENERGY STAR website describes a number of different uses and features associated with hard-wired exterior lighting fixtures. These fixtures can utilize either fluorescent or high-intensity discharge lighting technology.

There are 12 manufacturers producing 269 different types of ENERGY STAR hard-wired exterior lighting fixtures. By far, the most extensive product list is available from Cooper Lighting, which manufactures 101 different types of hard-wired outdoor fixtures.

4.2 CFL PRODUCT MARKET STRUCTURE

This section provides a wide range of CFL market information, both on the manufacturing side and on the distribution/retailing side. The source of this data is the market actor interviews that were conducted with major CFL manufacturers and retailers in July and August of 2003. Information is provided for manufacturers and distributors/retailers, respectively, regarding:

- Current market structure
- Major market actors and degree of market concentration
- Market trends anticipated in each sector.

4.2.1 CFL Market Structure

Manufacturing

We asked manufacturers to characterize the current market for CFL products by describing the major CFL product manufacturers and estimating their market shares. From this information, we found that:

- The so-called **Big Three firms (GE, Phillips, and Osram Sylvania) are the largest players in the light bulb market but not necessarily in the CFL bulb market.** The California CFL market is much more decentralized, with market shares more equitably distributed among a number of different firms. In addition to this top tier of the Big Three firms, there is a middle tier of medium-sized firms with a significant share of the CFL market. These middle tier firms include: Feit Electric, Lights of America, Maxlite, Greenlite, American Power Products, TCP, and Harmony. Below this middle tier there is a third tier with many smaller companies. One manufacturer claimed that the Big Three bulb producers could dominate the CFL market if they chose to, but they have been happy with their dominance in the incandescent market.

  Manufacturers were also asked to provide estimates of market share by firm, but many chose not to, and among those that did, there are many inconsistencies in the data provided. For these reasons, we were not able to develop market share estimates by manufacturer from the information provided in the market actor interviews.

- Manufacturers also mentioned the trend of **more CFL manufacturing shifting to Asia in the future.** A number of manufacturers are expected to increase their CFL production levels in China, India, and other Asian countries due to lower labor costs in those countries. Currently, the lowest-priced CFLs in the California market are produced by an Indian manufacturer. However, some manufacturers wondered about the quality of these Asian-produced CFLs and 1 manufacturer said that at least 80 Chinese CFL suppliers had recently shut down.

- In terms of how they distribute CFL products to retailers, manufacturers reported using similar approaches with **most selling directly to retailers**. However, they do use lighting distributors as their agent for selling products to large commercial and industrial customers and to some independent hardware stores. One manufacturer also mentioned lighting showrooms as an alternative distribution option.

- With respect to the CFL fixture and torchiere markets, they **are smaller, with different players and a more uncertain structure.** The few CFL fixture and torchiere manufacturers who commented on this market said that it was a much smaller market with many more distributors and fewer manufacturers. One manufacturer said that big box retailers were much more influential in the CFL torchiere market than they were in the CFL market and there are many CFL torchieres sold under retailer private labels.

Key manufacturers for the CFL torchiere and fixture markets include:

- Westinghouse
- Sea Gull
- Hampton Bay
- Good Earth
- Lights of America
- Maxlite.

Major players among the CFL ceiling fan producers include:

- Westinghouse
- Sea Gull
- Casablanca
- Monte Carlo.

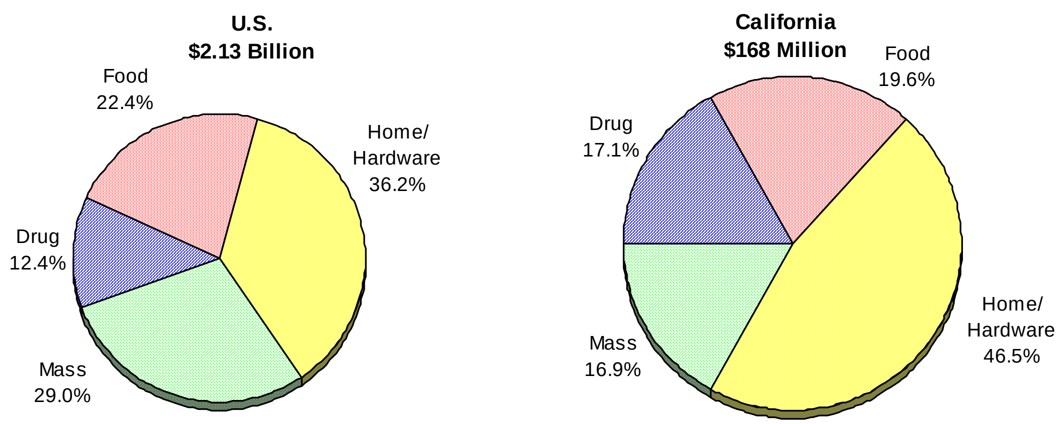
In general, the CFL ceiling fan market was viewed as young and emerging market with great potential for change in the market actors.

Distribution Channels

The present lighting industry distribution system evolved after World War II from a system in which manufacturers sold mostly through hardware stores to one where manufacturers sold through a variety of retail outlets. The current distribution channels differ primarily depending on whether the product is hard-wired or freestanding (replaceable by CFLs or energy-efficient torchieres). Most hardwired lighting products are installed when the home is built or renovated, and usually by a construction contractor. However, end users do replace some existing hard-wired fixtures and install new ones over the life of a home. Freestanding lighting equipment, on the other hand, is usually purchased exclusively by owner-occupants from retail outlets that can be one of the giant home center chains, mass merchant chains, or independent stores.[3]

According to the 2002 RER California Lamp Trends Report, almost half of the residential lamps in California were purchased in home/hardware stores. Nationally, however, lamp sales share more or less equally between home/hardware stores, mass market and food/drug stores. Figure 4-1 below provides both national data and data specific to California regarding the distribution of residential lamp sales among the various retail channels.

Figure 4-1
Residential Lamp Sales by Retail Channel
California vs. U.S. (non-California), 2002



Source: *California Lamp Trends 2002, Volume 2*. Itron, Inc.

CFL Retailing Practices

To get a sense of how important CFL products are in retailers' mix of lighting products offered, we asked them about the shares of CFL products they sell as a percentage of total lighting products. We found that **the share of CFL lighting sales varies widely among retailer market actors.** With regard to big box retailers, each company has a unique retailing strategy ("low price leader," environmentally conscious, etc), which helps to explain the differences across firms' CFL shares. CFL product shares range from a low of 2 percent of products sold to a high

[3] KEMA-XENERGY, Inc. 1999, *Phase 1 Baseline Assessment for the Statewide Residential Lighting and Appliance Program*, prepared for San Diego Gas and Electric Company.

of 100 percent, depending on the retailer and CFL product category. Likewise, chain stores and independent retailers exhibited a wide range of CFL product shares, again probably reflecting their differing retailing strategies and market niches. CFL shares ranged from a low of 1 percent of lighting product sales (for that category) to a high of 100 percent. No distinct pattern emerged by retailer market segment (e.g., by home improvement versus food and drug stores).

With respect to CFL stocking practices, nearly all retailers interviewed reported they were offering **a wide range of CFL products for sale.** All four big box stores interviewed sell CFL bulbs, wall/ceiling fixtures, and fans. Three of the four also sell CFL torchieres. Chain stores and independent retailers interviewed have two distinct patterns of CFL stocking. Specialty lighting, hardware, and home improvement stores offer all four CFL product categories (bulbs, torchieres, fixtures, and ceiling fans), while food and drug stores offer only one category—CFL bulbs.

Another issue has to do with where retailers source the CFL products that they sell. In the market actor interviews, retailers as a group reported **they source their CFL products from both manufacturers and regional buyers.** Big box retailers, retailer chains, and independent stores tend to buy CFL products exclusively from manufacturers, while franchises rely both on manufacturers and regional buyers.

The wholesale/distributor segment of the residential lighting market is not an important leverage point for promoting energy efficiency because it sells less than 10 percent of its product to retail stores.[4] Hard-wired lighting equipment (fixtures), on the other hand, are sold mainly through wholesalers. This channel is relevant mainly to the new construction market.

4.2.2 CFL Bulbs

According to the latest reports available from the California Residential Market Share Tracking (RMST) project,[5] the total market for CFLs in the U.S. is steadily increasing. Over 25 million bulbs were sold during 2002, almost 4 million more than the same period in 2001 and almost 4 times the number sold throughout 2000. CFL sales in California dropped somewhat in 2002 to 4.5 million bulbs, compared to the 5.7 million sold in 2001. Moreover, market share for CFLs in California averaged 5.1 percent in 2002, a slight decrease from 5.6 percent the year before. The rest of the U.S. experienced a slight increase in CFL market share from 2001 to 2002, with nationwide average increasing from 1.5 percent to 2.1 percent. These data are summarized in Table 4-3.

[4] KEMA-XENERGY, Inc. 1998. *PG&E and SDG&E Commercial Lighting Market Effects Study*, prepared for Pacific Gas and Electric Company and San Diego Gas and Electric Company.
[5] Itron, Inc., *California Lamp Trends 2002, Volume 2,* prepared as part of the Residential Market Share Tracking Project, managed by Southern California Edison.

Table 4-3
Total CFL Sales and CFL Market Share and
Percent of Total Residential Sales of Medium Screw-Based Bulbs

U.S. vs. California
2000 to 2002

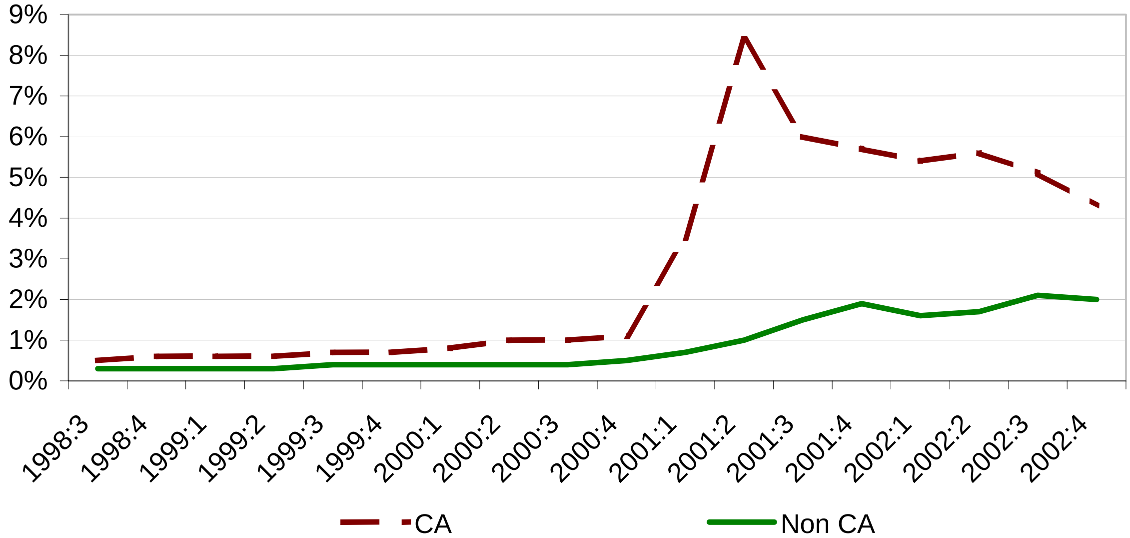
CFL Sales	**2000**	**2001**	**2002**
U.S.	7,264,000	22,263,000	26,045,000
California	1,240,000	5,723,000	4,508,000
CFL Market Share			
U.S.	0.5%	1.5%	2.1%
California	1.0%	5.6%	5.1%

Source: *California Lamp Trends 2002, Volume 2*. Itron, Inc.

It is important to note that the data on CFL sales from the RMST project does not include sales through the major retail chain Costco. About 7 million CFLs were discounted through PG&E's incentive program alone, the majority of which were distributed through Costco. PG&E program managers have indicated that, during 2001, Costco reportedly provided discounts for CFLs sold in PG&E's service territory once the utility's program funding was depleted.

Figure 4-2 illustrates how CFL sales in California outpaced the rest of the country. At its peak during 2001, CFL market share reached 8.6 percent. This figure depicts the trend of a slowdown in California CFL market share since mid-2001. By the end of 2001, the rest of the U.S. sees a plateau in market share at around 2 percent.

Figure 4-2
Quarterly CFL Market Share of Medium Screw-Based Lamps
California vs. the U.S. (non-California), 1998-2002



Source: *California Lamp Trends 2002, Volume 2,* Itron, Inc.

5 MARKET ACTOR ANALYSIS RESULTS

This section presents the results from the market actor analysis. This component of the study was designed to assess the effectiveness of the program in increasing the supply of compact fluorescent lamp (CFL) products into the marketplace and in reducing the awareness, pricing, and availability market barriers that are thought to exist in lighting product markets. The market actor assessment included both downstream (residential customers) and upstream (retailers and manufacturers) interviews and built upon prior research that tracked various indicators of consumer and supplier willingness to purchase and stock CFL products.

The market actor results that are presented in this section are categorized as follows.

- **General Population Motivations and Behaviors:** Results on the general population's motivations and behaviors with regard to energy efficiency and conservation.
- **CFL Awareness and Purchases:** Results on consumer CFL product awareness, attitudes, and purchases.
- **Supplier Sales, Product and Pricing Trends:** Results on retailer and manufacturer-reported trends in CFL product sales, market shares, product diversity, and price.

The survey that supported the consumer analysis presented in this section was designed to leverage prior consumer research efforts, and as such, where possible we present time series results. Unless otherwise noted, the prior results are from the four-phase market effects study of the California Residential Lighting and Appliance Program (KEMA-XENERGY 1998-2001).

5.1 GENERAL POPULATION MOTIVATIONS AND BEHAVIORS

This subsection presents results on California residents' motivations and behaviors with regard to energy efficiency and conservation. These data provide context for interpreting awareness, attitudes, and behaviors with regard to specific energy-efficient products such as compact fluorescent bulbs and fixtures. That is, the general population's willingness to adopt energy-efficient measures can be explained in part by their concern about energy usage and their feelings about energy efficiency in general. The consumer survey included a battery of questions that was designed to determine the general population's overall knowledge, attitudes, and behaviors with regard to energy efficiency and conservation. This battery was essentially a condensed version of a longer, more comprehensive general population survey that was conducted in 1998 and 2001 as part of KEMA-XENERGY's market effects study of the California Residential Lighting and Appliance Program.

The results that follow are categorized as follows:

- **Awareness, Knowledge, and Attitudes:** Respondent self-rating of their knowledge of ways to save energy at home and lower energy bills, awareness of the ENERGY STAR® label, and self-ranking of general attitudes towards conservation
- **Self-Reported Behavior:** Respondent reporting of current conservation activities and energy efficiency purchases.

5.1.1 Awareness, Knowledge, and Attitudes

Each respondent was asked to rate their overall knowledge of the ways that they could save energy in their home on a scale from 1 to 10, with 1 meaning not at all knowledgeable and 10 meaning extremely knowledgeable. As shown in Table 5-1 below, **the average rating was 7.2, a slight decrease from an average of 7.6 in 2001**. However, consumers on average rate themselves more knowledgeable than they did in 1998, when the average was 6.7.

Table 5-1
General Knowledge Levels

How knowledgeable are you about ways to save energy in your home?

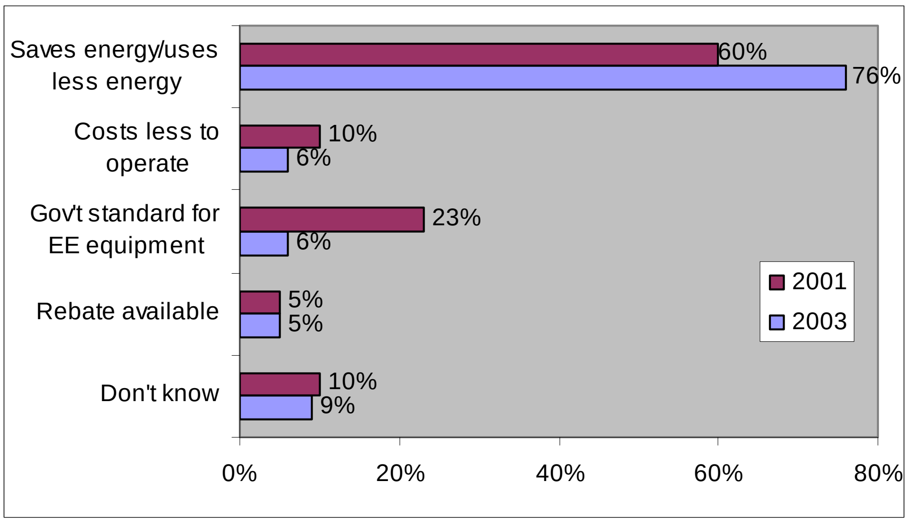
	1998[1]	2001	2003
1 Not at all knowledgeable	3%	1%	1%
2	2%	1%	1%
3	3%	1%	3%
4	4%	1%	2%
5	22%	11%	14%
6	8%	8%	9%
7	15%	21%	19%
8	22%	30%	26%
9	7%	11%	10%
10 Extremely Knowledgeable	13%	16%	14%
Don't Know	1%	1%	1%
Top Box (>7)	42%	57%	50%
Mean	**6.7**	**7.6**	**7.2**
Number of Respondents	1,170	721	1,001

[1]Source: CBEE Baseline Study on Public Awareness and Attitudes Towards Energy Efficiency (Hagler Bailly, 1998)

The majority of the general population continues to attribute some of their overall energy efficiency knowledge to the energy crisis, as they did in 2001. Based on the current survey results, **61 percent of respondents attribute "some" or "a lot" of their present knowledge to the energy crisis**. In 2001, we asked consumers to rate to what extent their knowledge increased as a result of the energy crisis on a scale from 1 to 10, with 1 meaning "not at all" and 10 meaning "a great deal," and 61 percent gave a rating of 6 or higher. These results and those that follow substantiate other concurrent research results that contend that the heightened attention that energy conservation and energy efficiency gained with consumers has sustained at least through mid-2003.[1]

We attempted to measure another indicator of consumer awareness and knowledge by asking the general population whether they had seen or heard of ENERGY STAR. We followed up the awareness question by asking respondents (unprompted) to explain what it means. **Over half (54 percent) of the general population said they had either heard or seen of ENERGY STAR**, compared to 42 percent in 2001. Moreover, three-quarters (76 percent) know that it means "saves energy/uses less energy," an increase from 60 percent in 2001. Figure 5-1 presents a comparison over time of what consumers who are aware of ENERGY STAR think the label means.

Figure 5-1
Meaning of ENERGY STAR, of those who are Aware

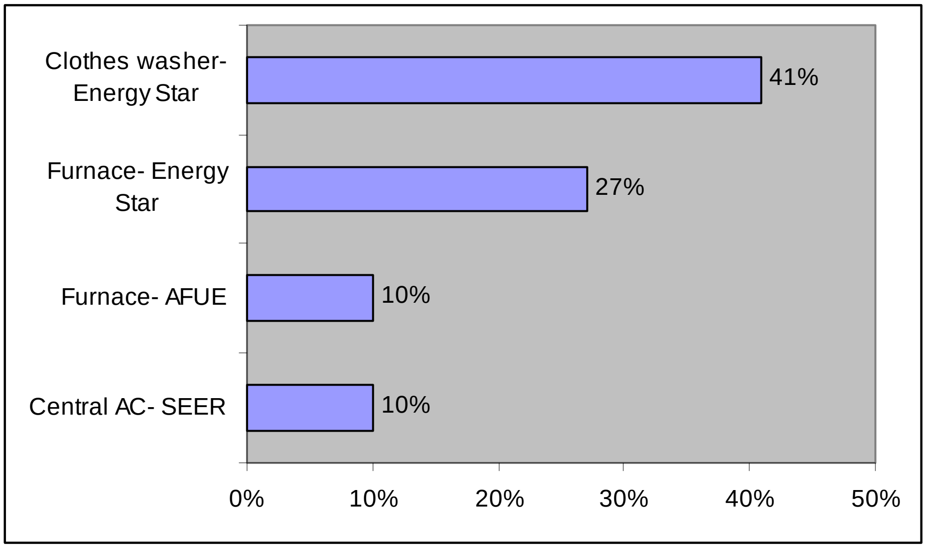


2001: N=515 (52% of the population)
2003: N=304 (42% of the population)

We asked consumers a short survey battery on their awareness of how to identify "energy-efficient" clothes washers, furnaces, and central air conditioners to further probe consumer awareness and knowledge of energy efficiency. **We found fairly high awareness among the population that the ENERGY STAR label designates energy-efficient clothes washers**. For furnaces and central air conditioners, we found lower awareness levels of what distinguishes between a standard and an efficient unit. Figure 5-2 presents the results of this survey battery.

[1] See "Changes in Household Energy Use as a Result of the California Energy Crisis", Lutzenhiser, Lauren, Portland State University and Bender, Sylvia, California Energy Commission. (International Energy Program Evaluation Conference, Seattle 2003.)

Figure 5-2
Awareness of What Distinguishes Energy-Efficient Equipment



Clothes washer: N=1,001
Furnace: N=600 (those that have central heating or 60% of the population)
Central AC: N=364 (those that have central AC or 36% of the population)

Consumer attitudes towards energy efficiency and conservation remain favorable and have not changed significantly since the energy crisis. We asked consumers to rate their agreement with three attitude statements regarding energy efficiency on a scale from 1 to 10, with 1 meaning strongly disagree and 10 meaning strongly agree. As shown in Table 5-2, since 2001, consumers are less likely to say they are too busy to worry about making energy-related improvements in their home. They are slightly more likely to say they that using less energy is worthwhile to preserve the environment. And in 2003, more consumers feel that they do not have to sacrifice their comfort to be energy efficient.

Table 5-2
Mean Agreement Scores for Attitude Statements

Statement	1998[1]	2001	2003
My life is too busy to worry about making energy-related improvements in my home.	3.7	2.7	2.9
It is worth it to me for my household to use less energy in order to help preserve the environment.	7.7	8.2	8.1
It is possible to save energy without sacrificing comfort by being energy efficient.	7.7	7.9	8.3
Base	1,170	721	1,001

Scale: 1 = "strongly disagree," 10 = "strongly agree"

[1]Source: CBEE Baseline Study on Public Awareness and Attitudes Towards Energy Efficiency (Hagler Bailly, 1998)

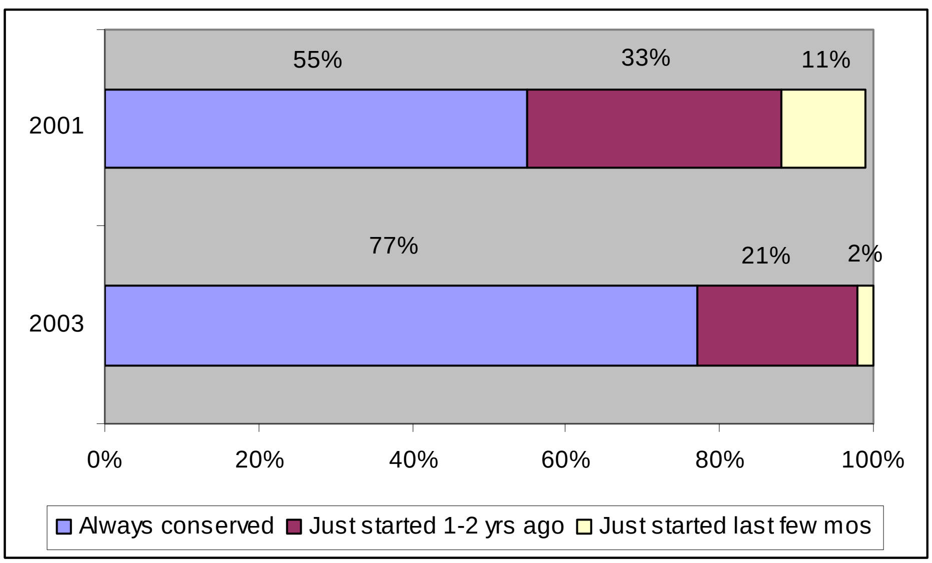
5.1.2 Self-Reported Behavior

Self-reported energy conservation and energy-efficiency behaviors have increased since the energy crisis. We asked consumers a battery of questions to determine whether they had made any equipment purchases since January 2002 and whether their new equipment was energy efficient (i.e., "more energy efficient than standard models available at the time of your purchase"). We also asked consumers to describe any conservation activities that they had undertaken recently.

Almost everyone says they regularly take actions to save energy (95 percent of respondents). The most frequent types of conservation activities cited were: turning off lights (76 percent), turning off appliances when not in use (45 percent), adjusting thermostats (39 percent), and using appliances off peak (23 percent). Conservation activities have increased slightly since the crisis, when 87 percent said they were conserving and slightly fewer respondents were undertaking the conservation measures mentioned above.

Notably, most respondents are reporting that they have always been conserving (77 percent), whereas during the energy crisis close to half of respondents said they just started conserving within 1 or 2 years. Figure 5-3 illustrates the change in perceptions of conservation behavior from 2001 (during the energy crisis) to 2003.

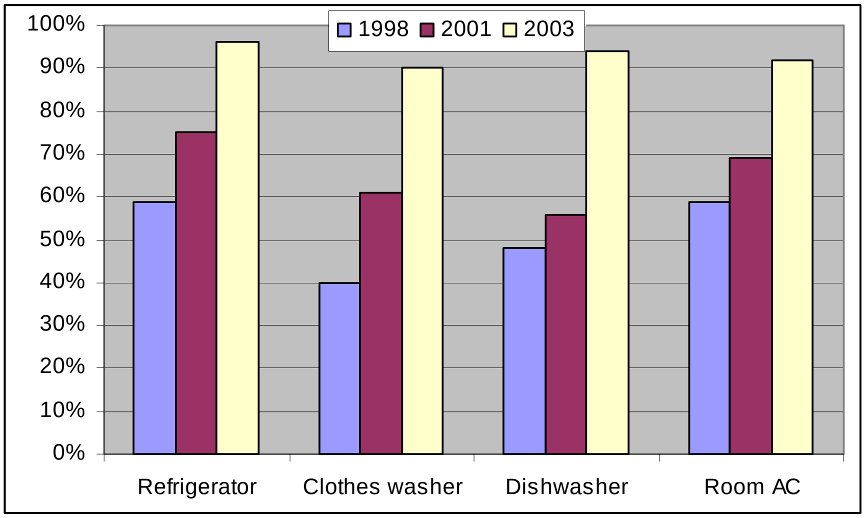
Figure 5-3
When Respondents Started Conserving Energy in their Home



2001: N=721; 2003: N =1,001

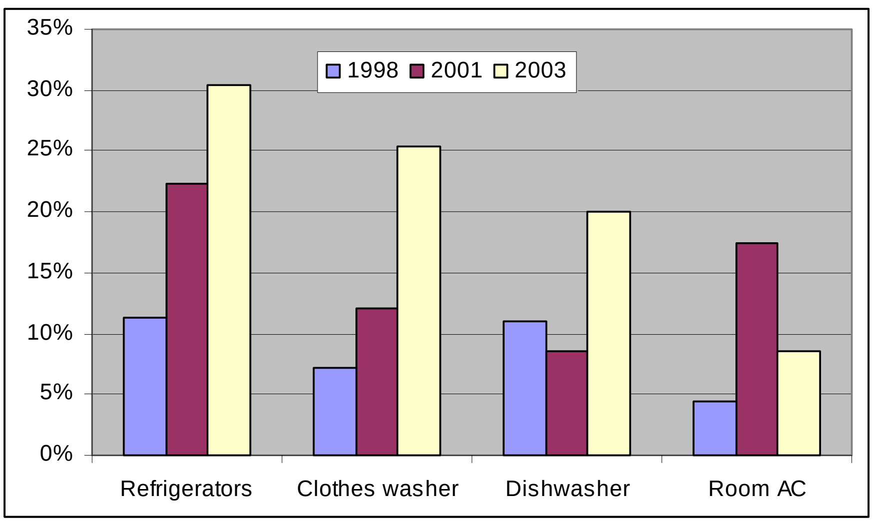
Self-reported share of energy-efficiency purchases also increased from 2001. Currently, upwards of 90 percent of appliance purchasers report that their new appliance is more efficient than the standard models available. We asked a follow-up question to determine how the purchaser knew their purchase was energy efficient. Figure 5-4 below shows the percentage of purchases that were reportedly energy efficient. Figure 5-5 shows the percentage of purchases that reportedly were designated ENERGY STAR. Note that the second figure is more in line with current market share tracking data.[2] Both figures, however, illustrate the upward trend in energy-efficient appliance purchases over the last 5 years.[3]

Figure 5-4
Percentage of Appliance Purchases that were Reportedly Energy Efficient



refrigerator N=248, 184, 50; clothes washer N=254, 97, 50; dishwasher N=186, 75, 49; room AC N=66, 19, 21

Figure 5-5
Percentage of Appliance Purchases that were Reportedly ENERGY STAR



N same as Figure 5-4

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[2] See "California Residential Efficiency Market Share Tracking – Appliances 2002", Itron 2002.
[3] Note that changing federal minimum efficient levels and ENERGY STAR specifications for refrigerators and room air conditioners affected the availability and purchases of ENERGY STAR products. The dip seen in 2003 for ENERGY STAR room air conditioners may have been caused by lack of availability of Energy Star products due to the changing standards.

5.2 CFL AWARENESS AND PURCHASES

This subsection presents time series consumer results on awareness of, attitudes towards, and purchases of CFL products. These data are intended to illustrate how downstream barriers to CFL product adoptions such as awareness and unfavorable perceptions of product performance have changed over time and provide context for evaluating the effectiveness of the program in mitigating these barriers. The CFL awareness and purchase results are organized by the following topics.

- **Awareness of CFLs:** Respondent familiarity with CF bulb, fixture, and torchiere technology; of CFL prices; and where CFL products are sold.
- **Purchases of CFLs:** Respondent reporting of prior CFL purchases, including when they were first purchased.
- **Satisfaction with CFLs:** Respondent rating of their satisfaction with their most recent CFL purchases and whether they intend to purchase CFLs in the future.

5.2.1 Awareness of CFLs

To determine consumer awareness of CF bulbs, we provided respondents with a short description and then asked them if before this interview had they ever heard of CF bulbs. We found that the level of awareness is very high among California residents. Currently, **82 percent of the population has heard of CF bulbs**, an increase from 68 percent in 2001 (see Figure 5-6).

We asked consumers who were aware of CF bulbs to tell us if they were going to buy a CFL today how much they thought it would cost without any discounts or rebates. As shown below in Table 5-3, most consumers are aware that CFLs now cost less than $10. We also asked what types of stores consumers had seen CFLs for sale. As shown in Table 5-4, only 12 percent had *not* seen them for sale. The most likely store type consumers saw CFLs for sale was home improvement stores. **Consumers are not likely to have seen CFLs for sale in grocery or drug stores.** However, when compared to where consumers thought they could find CFLs for sale in 1998 (Table 5-5), the percentage that mentioned grocery stores has increased fairly significantly—from 2 to 13 percent.

Table 5-3
Perception of Current Retail Price of CFL Without Discounts or Rebates, of those who are Aware of CFLs

Cost per CFL	Percentage of Respondents
Less than $2 each	7%
$3-$5 each	30%
$6-$10 each	30%
More than $10 each	9%
Don’t know	24%
Number of respondents[1]	824

[1]N=82% of the population

Table 5-4
Where Consumers Have Seen CFLs for Sale, of those who are Aware of CFLs

Type of Store	Percentage of Respondents[1]
Home improvement store	66%
Big Box retailer	26%
Costco	16%
Grocery store	13%
Have not seen them	12%
Drug store	7%
Don’t know	4%
Number of respondents[2]	824

[1]Multiple mentions accepted
[2]N=82% of the population

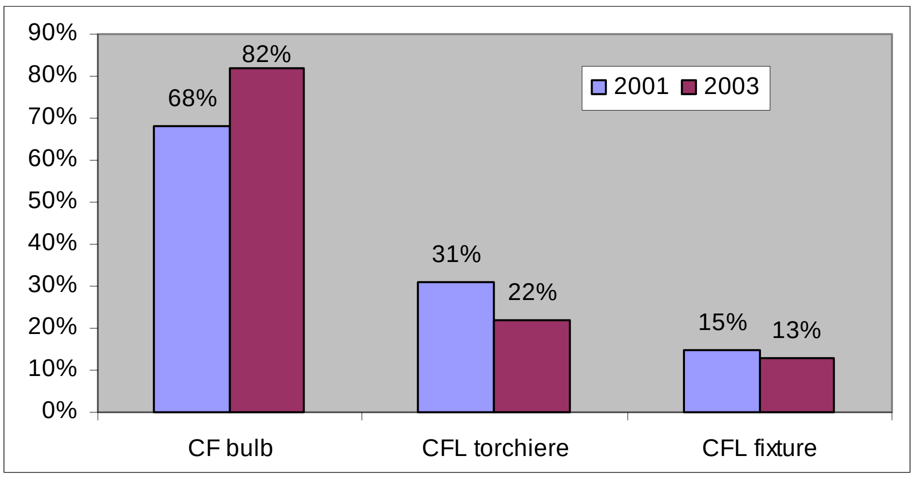
Table 5-5
Where Consumers Would Find CFLs for Sale (1998)

Type of Store	Percentage of Respondents[1]
Discount hardware store	65%
Hardware store	20%
Discount department store	6%
Department store	6%
Warehouse	6%
Lighting store	4%
Grocery store	2%
Drug store	1%

Source: Residential Market Effects Study: Refrigerators and CFLs (Hagler Bailly 1998)

We also asked consumers if they have ever heard of fixtures or torchieres that use only CF bulbs, v. incandescent or halogen bulbs. **We found that awareness of CFL fixtures and torchieres is very low**. Twenty-two percent of the population is aware of CFL torchieres and 13 percent is aware of CFL hard-wired fixtures. We compared these current results to similar results from the 1998 and 2001 consumer surveys. As shown in Figure 5-6, it appears that CFL torchiere and fixture awareness levels have remained flat for fixtures and have decreased slightly for torchieres. Since it is impossible for a consumer to become "unaware" of something, we assume that the level of CFL torchiere awareness among the general population has remained flat.

Figure 5-6
Percentage of the Population that is Aware of CF Bulbs, Torchieres, and Fixtures (2001-2003)

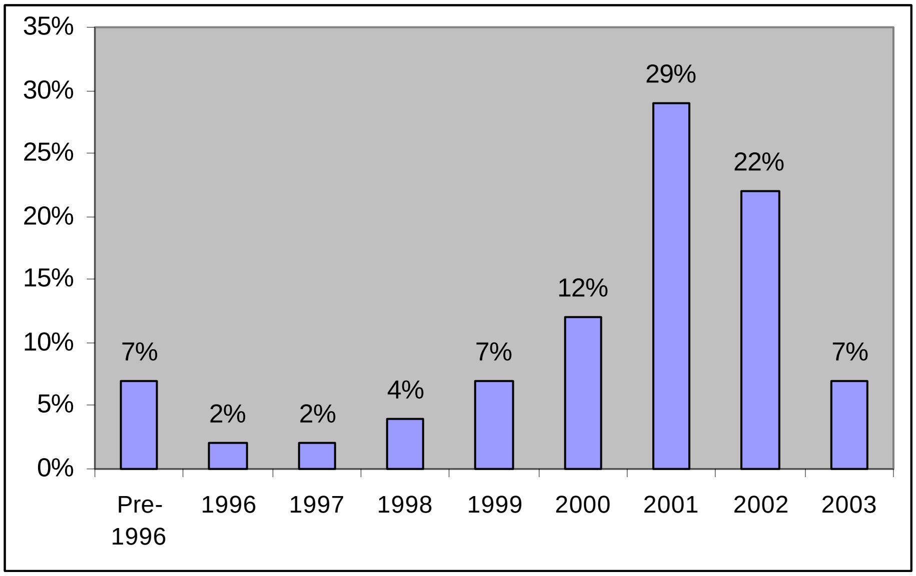


2001: N=721; 2003: N =1,001

5.2.2 Purchases of CFLs

To determine self-reported CFL purchases, we asked consumers if they had ever purchased or been given CFLs. We also asked them when they purchased or received their first CFL. We found that the majority of consumers have used CFLs—**56 percent have purchased and 10 percent have been given CFLs**. As shown in Figure 5-7 below, the majority of "first" CFL purchases have occurred since the energy crisis, which intensified in the summer of 2001.

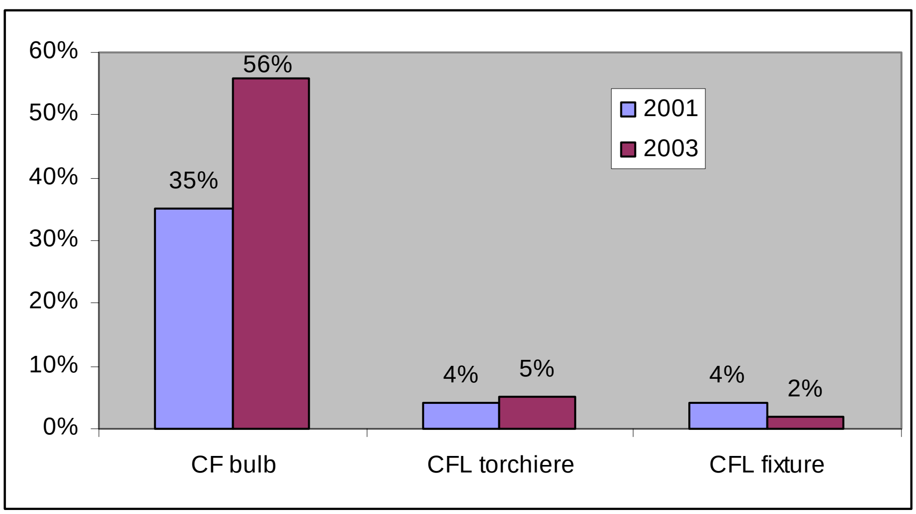
Figure 5-7
Year of First CFL Purchase, Of CFL Purchasers



N=560 (56% of the population)

We also asked if consumers have purchased or been given CFL torchieres or fixtures. As seen with awareness rates, purchase rates of torchieres and fixtures are much lower than the rate for bulbs. Moreover, while purchases of bulbs have increased over time, **purchases of torchieres and fixtures have remained flat**. Figure 5-8 presents self-reported consumer purchase rates for CF bulbs, torchieres and fixtures for 2001 and 2003.

Figure 5-8
Percentage of the Population that Has Purchased CF Bulbs, Torchieres, and Fixtures (2001-2003)



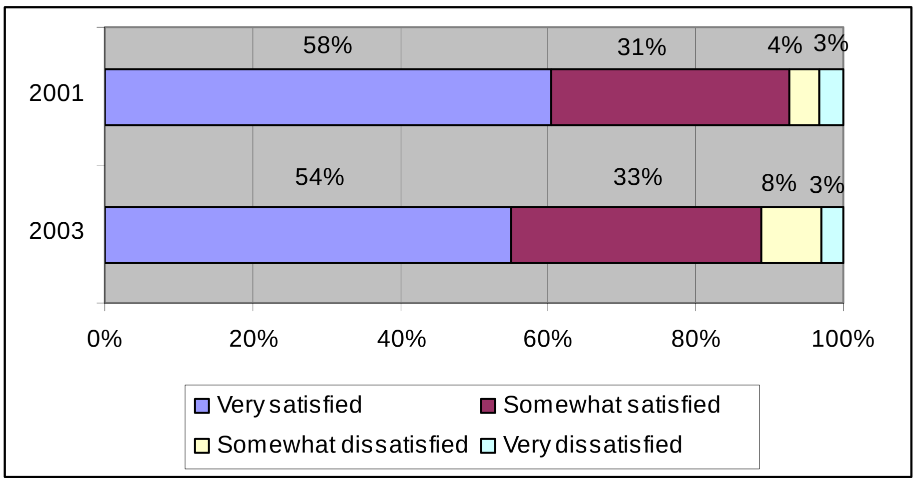
2001: N=721; 2003: N =1,001

5.2.3 Satisfaction with CFLs

We included two questions in our consumer survey to assess consumer satisfaction with CFLs. First, we asked how satisfied CFL adopters were with the CFLs they have used in their home, and for those who were dissatisfied we probed for reasons for their dissatisfaction. Second, we asked all consumers who were aware of CFLs (including those who had not yet used CFLs) if they intended to purchase them in the future if they cost around $3.

We found that satisfaction levels are very high, where **87 percent of those who have used CFLs in their homes are "very" or "somewhat" satisfied**. As shown in Figure 5-9, satisfaction with CFLs has not changed since 2001.

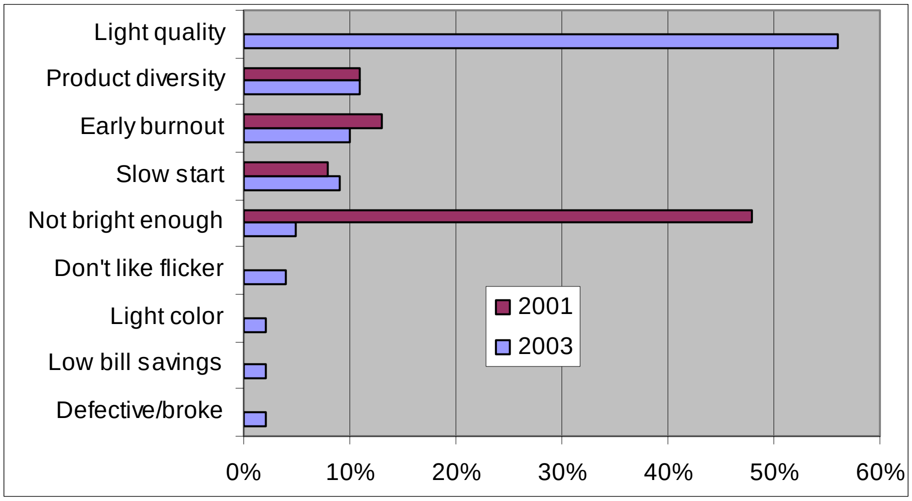
Figure 5-9
Satisfaction with CFLs, Of CFL Adopters



N=620 (62% of the population)

We asked any CFL adopter who reported a satisfaction rating other than "very satisfied" to describe their reason(s) for dissatisfaction. Figure 5-10 presents the results, as compared to a similar question that was asked in 2001 of dissatisfied CFL adopters. Note that **the main complaint in 2001 was that the bulbs were not bright enough, compared to light quality in 2003.**

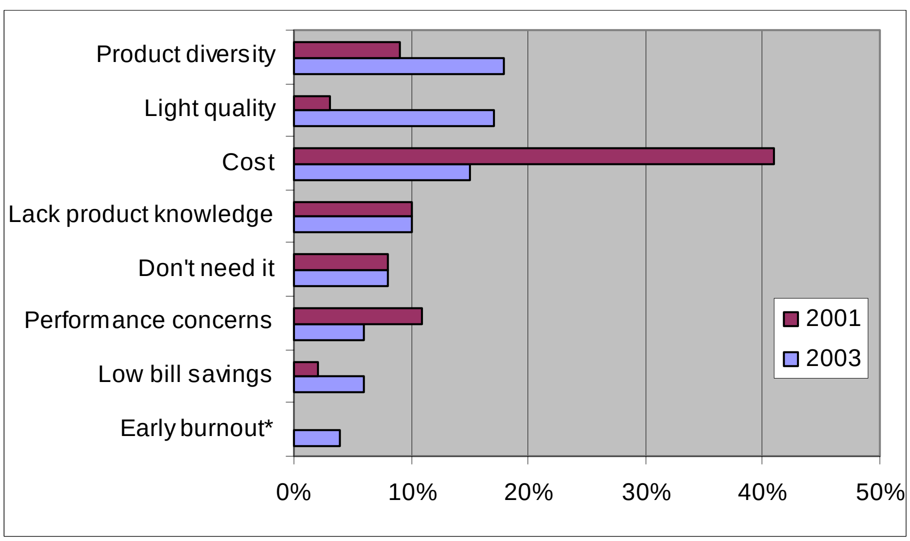
Figure 5-10
Reasons for Dissatisfaction with CFLs, of CFL Adopters that were not "Very Satisfied"



2001: N=113 (42% of CFL adopters or 16% of the population)
2003: N=277 (45% of CFL adopters or 28% of the population)

We also found evidence of high consumer satisfaction with CFLs when we asked if consumers would be willing to purchase them in the future at a cost of approximately $3. **Seventy-eight percent of consumers who are aware of CFLs said they would purchase them in the future**. Figure 5-11 shows the various reasons given by those who do not plan to purchase CFLs in the future. We also included 2001 responses. Note that cost was the main concern in 2001, while lack of product diversity (e.g., the brand, style, size, shape, features I want are not available) is the biggest concern at present.

Figure 5-11
Reasons for Not Planning on Purchasing CFLs in the Future



*In 2001, no respondents cited "early burnout".
2001: N=303 (those who were not very likely to purchase CFLs in the future if they cost $5-$15- 42% of the population)
2003: N=133 (respondents who do not plan to purchase CFLs in the future if they cost $3- 16% of those who are aware of CFLs or 13% of the population)

5.3 SALES, PRODUCT AND PRICING TRENDS

This subsection presents results from the upstream market actor interviews that were conducted in support of the market actor analysis task. We will present qualitative data from retailers and manufacturers regarding past trends and expectations for the future for CFL sales, product diversity and availability, and pricing. These results help to identify how supply-side barriers to CFL adoptions such as lack of product diversity, high prices, and inadequate supply have changed over time, and provide context for determining how the program has affected these barriers.

The upstream results are organized by the following topics:

- **CFL Pricing Trends:** Retail and wholesale price impacts in the recent past and expectations for the future
- **CFL Products Diversity:** Reporting of CFL products offered, recent changes in CFL manufacturing/stocking practices, and future CFL product expectations
- **CFL Market Shares:** Reporting of estimated CFL product sales shares for the past 2 years and sales share expectations for the future.

5.3.1 CFL Pricing Trends[4]

We asked manufacturers a series of questions regarding CFL product price levels. We asked them to characterize the change in CFL prices for three distinct periods: 2002 vs. 2003; 2000 vs. 2003; and 2005 (expected levels), and for each of the four CFL product categories (bulbs, torchieres, hard-wired fixtures, and ceiling fans). The majority of firms provided qualitative responses to these questions ("CF bulb prices have gone down significantly"). A few firms also provided quantitative information on past, current and future CF bulb and fixture prices. Our summary provides both sets of results whenever possible.

We found that **CF bulb wholesale and retail prices have dropped considerably since 2000.** All manufacturers and retailers reported significant price reductions during the 2000–2003 period. CF bulbs that retailed for $6 and above in 2000 are now priced in the $2-to-$3 range. Wholesale CFL prices have fallen below the $1-per-bulb level, an important price threshold needed for further mass market penetration. For at least one CF bulb type—the R30[5]—CFLs are price-competitive with incandescents. In the future, most manufacturers believe CF bulb prices will drop a bit further, though a few are convinced that prices have already bottomed out. Figure 5-12 reports CF bulb price trends, past and future, from those firms that reported this information.

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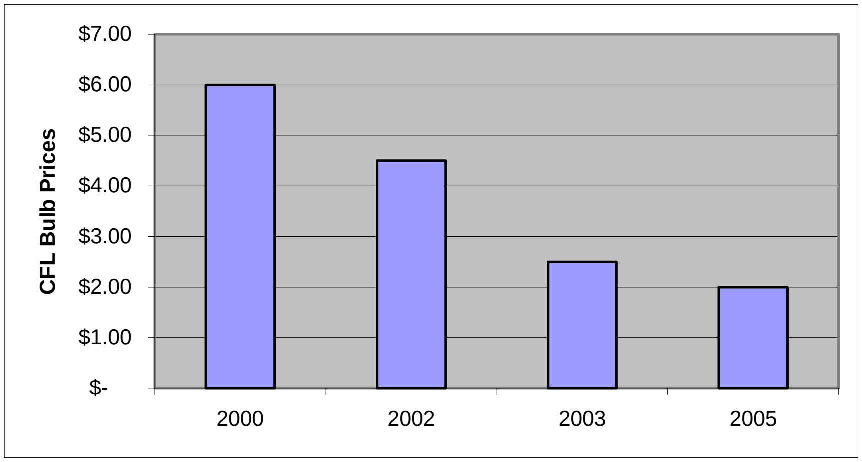
[4] KEMA-XENERGY is currently conducting research on incremental measure costs for CFLs to support the utilities' 2004/2005 program planning. The results of this research were not available in time for this draft report.
[5] 15-watt Medium Base CFL with Electronic Ballast.

Figure 5-12
Average CF bulb Retail Prices: 2000 to 2005

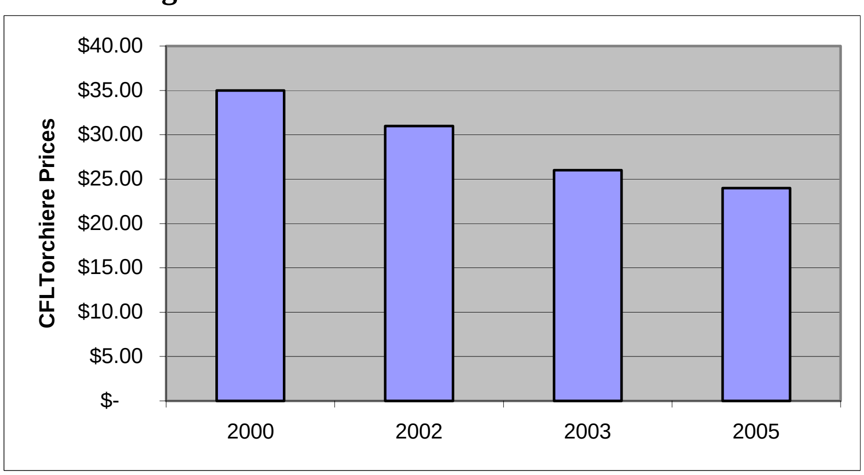


N=3, other respondents provided qualitative comments supporting these price trends.

Our analysis of incremental measure costs (see Appendix B) shows an average CFL price of approximately $5. This result is weighted by sales and reflects some of the more commonly purchased CFL bulb types. However, this average price does not include any utility discounts. The comments from manufacturers and retailers above, along with the data presented in the figure, most likely reflect their recollection of retail prices available during program promotional periods.

CFL torchiere prices have also been dropping. Manufacturers reported that **CFL torchiere prices have fallen 35 to 50 percent**. Figure 5-13 reports manufacturers' CFL torchiere prices and expectations for these same time periods.

Figure 5-13
Average CFL Torchiere Retail Prices: 2000 to 2005



N=3, other respondents provided qualitative comments supporting these price trends.

Price reductions of similar magnitudes have occurred for hard-wired CFL fixture and ceiling fan prices. One manufacturer reported their CFL fixture prices have dropped by 20 percent during the past year and by 45 percent over the past 3 years.

While manufacturers agree that incremental costs are a key factor in encouraging consumer adoption of ENERGY STAR fixtures, there are other important factors such as aesthetics and safety that have almost as much bearing on the potential for CFL torchieres, fixtures, and fans. One manufacturer commented, "you can use incentives to drive down the price as much as possible, but if the fixture doesn't look good, they won't buy it." With CFL torchieres, an additional selling point is they are much safer than halogen torchieres. CFL torchiere bulbs are much cooler than halogens and there are no concerns about fire safety (as with halogens). Another significant influence in the CFL torchiere market is the presence of halogen torchiere turn-in programs. Through these programs, consumers have acquired a substantial number of CFL torchieres at a greatly reduced cost.

And finally, manufacturers are somewhat **skeptical as to whether CF bulb and fixture prices will continue to drop.** Because of the significant price reductions that have already taken place, manufacturers believe there is little room for further price decreases on their end. At best, they expect to see only modest decreases in CFL wholesale prices. However, they believe there may be continued downward movement in retail prices, particularly for certain retailer types. For example, wholesale warehouses (e.g., Costco and Sam's Club), may be able to further reduce their prices for CFLs bought in bulk quantities.

5.3.2 CFL Product Diversity

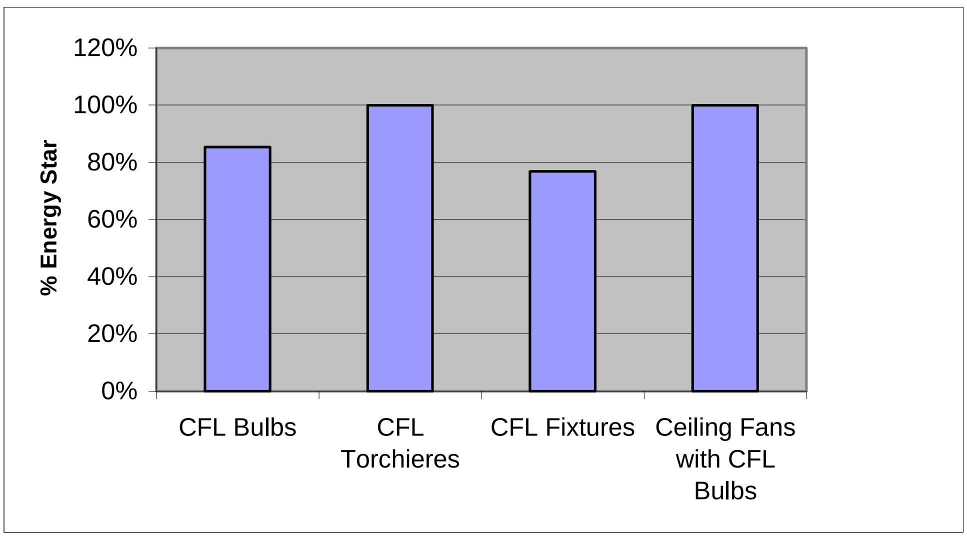
We asked retailers a battery of questions about the diversity of CFL products. We inquired whether they had noticed a change in the diversity of CFL products available in the market over the past 5 years. We also probed both manufacturers and retailers about the future—what products they expect to see, what new features will be available, and when these should hit the market.

Retailers reported that **CFL product diversity has "exploded" since 2000.** Retailers said that there are many more manufacturers in the market today and many more CFL product choices available. One retailer reported that there are "many more manufacturers," that "everyone is trying to get a piece of the pie." And, "these people can be seen at lighting shows, etc., and there are many more designs, shapes and sizes of CF bulbs and fixtures in the market." With the exception of pin-type bulbs greater than 15 Watts, there are many more CF bulb types being produced for all bulb type and size categories. For the most part, manufacturers have eliminated the bulb features that consumers have found most objectionable (e.g., oversized bulbs too large to fit into lamp sockets, poor light quality, and color rendering). The number of firms producing these CFL products has also increased significantly, leading to ever-greater competition to produce a wide range of CFL products that are more acceptable to consumers.

Manufacturers provided additional support for this point. Eleven of 13 manufacturers interviewed cited improvements in CFL product diversity as one of the most important influences in the market for CFL products. One manufacturer also provided counts of the variety of CF bulbs it produces within a given wattage category for the 2000–2003 period. The data show a doubling and tripling of bulb models for many of their wattage categories.

We also learned that **most CFLs manufactured are ENERGY STAR certified.** The ENERGY STAR certification process requires manufacturers to have their bulbs tested by an accredited third-party testing laboratory, which tests whether the bulbs meet a variety of criteria, including a minimum lifetime rating of 6,000 hours. (The certification process is described in greater detail in Section 6.6.5.) The majority of manufacturers surveyed (11 of 13) reported that ENERGY STAR-certified CF bulbs made up at least 75 percent of their total CF bulbs produced. One-third of those interviewed said they made only ENERGY STAR-certified CF bulbs. Those that manufacture CFL torchieres, hard-wired fixtures, and ceiling fans also indicated that the majority of their products in that category are ENERGY STAR compliant. Figure 5-14 provides a graphical representation of our findings for those manufacturers in each category.

Figure 5-14
Percent of CFL Products that are ENERGY STAR Certified



Bulbs N=13; Torchieres N=5; Fixtures N=7; Fans N=1

We also found substantial evidence that **there will be continued improvements in CFL product diversity** for at least the foreseeable future**.** Manufacturers reported a number of improvements in CF bulbs that are already underway: dimmable CF bulbs and continued improvements in screw-in CF bulbs (better sizing, color rendition, and light quality). Most also expect to see continued improvements in the fledgling CFL fixture and ceiling fan markets, though they did not give any specifics.

5.3.3 CFL Market Shares

As discussed in Section 4, market share for CFLs in California amounted to about 4 percent of total bulb sales as of the fourth quarter of 2002.[6] This market share level is down considerably from 2001, when CF bulb sales peaked at 8.6 percent of total bulb sales. The sharp increase in CFL market shares during 2001 coincided with the state's energy crisis (which included rolling blackouts), a massive statewide advertising campaign to promote CF bulb usage, and substantial rate increases for all three investor-owned utilities. The current 4-percent market share level, while lower than in 2001, is still about double the national average (2 percent of bulb sales for states without large CF bulb programs).

What were manufacturers' and retailers' experiences with CFL product sales in 2002? What do they expect CFL product sales to be in the future? We asked a series of questions in the upstream market actor interviews designed to get at these points.

Retailers and manufacturers **experienced mixed results in 2002 with respect to CF bulb and fixture sales.** Roughly half the firms interviewed produced and/or sold more CFL products in 2002, while the other half produced and/or sold fewer CFL products. Some of those that reported producing and/or selling fewer CFL products were deeply involved with the CFL program in 2001 when CFL product sales levels peaked. Other smaller firms that were not as involved in 2001 fared better in 2002 than previously.

We learned that **manufacturers foresee continued sales increases in CF bulbs during 2004.** Some of those interviewed anticipate sales increases of 20% or greater. Manufacturers gave a number of reasons for this optimistic outlook:

- Continued price decreases
- Improved bulb technology, diversity and aesthetics
- Greater consumer trust and awareness
- The untapped potential in the average household
- Natural bulb replacement cycles.

One manufacturer sees the future CF bulb sales potential as "Huge!" "As the price goes down, and as long as the rebates don't get smaller, the market for CFLs will begin to explode. The market is being transformed. CFLs are no longer only for the middle and upper classes. People with lower incomes are getting involved. California is experiencing a good market transformation."

We also found that **retailers are more skeptical than manufacturers that current CFL sales levels and market shares can be sustained.** Retailers were mixed in their CFL sales outlook. Big box stores do not foresee continued growth in CFL product sales. For several of them, CFL

[6] Source: California Lamp Trends 2002, Volume 2, RER, Inc.

product sales peaked in 2001 and have been declining ever since. Most reported that 2003 CF bulb sales would be flat or slightly declining, while CFL fixture sales would increase slightly. However, smaller retailer chains and independent stores are more upbeat, projecting further increases in 2003 CFL product sales. These firms were not major players during the 2001 program.

Finally, we found a **generally optimistic outlook among retailers and manufacturers with respect to the CFL fixture and ceiling fan markets.** This market is viewed as "young and emerging" with great potential for change with respect to key market actors involved, CFL products made, and CFL market shares achieved. Retailers' outlook for future CFL fixture sales were generally upbeat with most firms predicting moderately or dramatically higher sales in 2003 as versus 2002. Two of the CFL fixture manufacturers predicted their sales will grow by at least 10 to 30 percent during 2004.

6 PROCESS EVALUATION FINDINGS

This section presents the process evaluation findings. This component of the study was designed to evaluate the program's implementation strategies, assess satisfaction with the program, and identify areas for program improvement. The research activities that were conducted in support of this study component were in-depth interviews with utility program staff, market actor surveys, and the consumer survey. We also reviewed utility program filings including implementation plans and quarterly reports.

The findings presented in this section are categorized as follows.

- **Administration:** An overview of program administration and its effectiveness
- **Coordination:** A description of how the program is coordinated statewide and with local programs
- **Tracking:** An overview of the tracking systems that the program uses to manage rebate allotments and payments
- **Marketing:** A description of how the program is promoted by the utilities to their trade allies and by retailers to their customers and an assessment of the effectiveness of retailer promotions from the consumer perspective
- **Hard-to-reach goals:** A discussion of the effectiveness of the program in reaching hard-to-reach (HTR) segments and the effects of HTR strategies on overall program success
- **Product Mix and Specification:** Presentation of implementation issues with respect to product mix and specifications, such as compact fluorescent (CF) bulb wattage levels, fixture, and torchiere rebate levels and the effect of ENERGY STAR® de-listing of CFL products on the program
- **Retailer and Manufacturer Participant Satisfaction:** An assessment of participant satisfaction with program processes
- **Program Impact and Influence on Purchases:** Consumer survey results on compact fluorescent lamp (CFL) purchase and installation rates from 2002/2003 and awareness and influence of the utility rebate.

6.1 ADMINISTRATION

This subsection provides a description of how the 2002 Residential Lighting Program was administered and assesses the effectiveness of administration. The sources for this assessment were program staff interviews and utility program filings.

6.1.1 Background

The utilities have administered residential lighting programs for many years, utilizing internal staff and contractors to process rebates for energy-efficient lighting equipment and provide field support to trade allies (e.g., retailers). In 2002, the utilities administered the programs entirely in house. The program benefited from utilities' cumulative efforts at developing an in-depth understanding of the residential lighting market and its key market actors. The 2002 program continued successful implementation strategies used in prior years, such as the point-of-sale rebate and manufacturer buydown. Internal procedures that were developed in 2001 for assigning rebate allotments, tracking rebate payments, and performing quality control provided the foundation for the 2002 program.

The lighting program is unique in some ways as compared to other utility energy-efficiency programs because the program promotes only lighting measures. This program design feature simplifies administration to some extent because the utilities need only work with one distinct set of market actors and address a single technology. Each utility has one program manager, along with a small number of support staff (in some cases only one full-time assistant), making statewide coordination somewhat simpler than for other programs where there are multiple program decision-makers.

6.1.2 Major Administrative Functions

The utility program managers focus most of their efforts on the following activities:

- Developing consistent policies and procedures, measure specifications, rebate levels, participation agreements and rebate reservation forms
- Setting program unit and energy savings goals
- Informing the major retailers and manufacturers about the program (i.e., program start and end date, rebate levels, qualifying equipment, etc.)
- Enrolling retailers in the large statewide retailer component and manufacturers in the buydown component
- Soliciting and reassigning rebate allotments
- Tracking goals
- Tracking and paying rebates (e.g., processing invoices, performing quality control, communicating with retailers and manufacturers to obtain necessary back-up paperwork)
- Following trends in technology improvements, ENERGY STAR specification changes and testing results and national lighting initiatives.

One of the major functions that the program managers perform is marketing the program to manufacturers and major retailers. Over time, the program managers have developed an extensive database of high-level strategic contacts for almost all of the big box retailers and manufacturers who supply CFL products. Communication includes periodic phone calls and e-mails to inform the trade allies about program details such as starting and ending dates, product eligibility rules, and incentive levels, along with implementation details such as rebate reservations and goal-setting.

The program managers also spend a fair amount of time communicating with participating retailers and manufacturers to ensure that they will meet their goals. Often, a participating retailer or manufacturer will ask for a certain allotment of rebates at the early stages of the program year. (The program managers solicit these allotments early to mid-year before the rebates are available in the fall.) The program manager will review the requests in sum and approve allotments usually for a lower amount than requested by the participant due to limited incentive budgets. Sometimes the participant will encounter obstacles that will make it very hard for them to meet their revised allotment, and the program manager must stay informed to an extent to be able to increase allotments for other successful retailers or manufacturers to be able to meet the year-end goal. Clearly, the program managers must be in close contact with all the participating retailers and manufacturers on a real-time basis to ensure that program goals will be met.

Tracking of allotments and paid rebates also takes a considerable amount of program manager time. As mentioned previously, prior program years' efforts in developing tracking databases helped the 2002 program since many of the kinks had been worked out.[1] Even so, the program managers spent a fair amount of time improving upon their tracking systems and documentation requirements in 2002. (Tracking is discussed in more detail in Section 6.3.)

As a result of lean in-house operations that rely on prior successful program strategies, effective statewide working relationships, and cumulative efforts to build strategic relationships with the major trade allies active in the state, the program is administered effectively and efficiently statewide. The utility program managers are able to spend most of their efforts on ensuring broad market participation and meeting energy savings goals. Their involvement in national ENERGY STAR activities and their working knowledge of the California lighting market allows the program to stay on the leading edge of lighting technologies and markets. As such, the program implementation strategies maximize energy savings while effectively utilizing incentive budgets.

6.2 COORDINATION

This subsection discusses program process issues related to coordination. The two major coordination challenges the utilities faced in 2002 resulted from their efforts to design a consistent statewide program and overlap with third-party local programs.

[1] SCE's program manager developed a tracking system in 2002 since in prior years they had used a vendor to perform the tracking function.

6.2.1 Statewide Coordination

The 2002 program was officially statewide; that is, all facets of the program were consistent across the three IOUs. In recent years, the utilities had coordinated on program design, so that promotions, timing, and trade ally communication were consistent across the utility service territories. For example, the California Residential Lighting and Appliance Program that the utilities implemented from 1998–2001 was consistent in its program activities and its implementation strategies. However, prior to 2002, measure specifications, rebate levels, and application forms were not always the same across the utilities.

Making the 2002 program truly statewide, while requiring extensive coordination, was a smooth process because the program managers at each of the utilities had worked together closely in 2001 (and in some cases before 2001). Likewise, utility lighting programs going back to 1998 were fairly consistent and coordinated well across the state. The program managers had developed effective working relationships over the years that eased the task of developing consistent materials and program implementation details. In fact, the utilities not only coordinated so that rebate levels, product specifications, and program materials were consistent, but also shared retailer and manufacturer contact data and “spoke with one voice” to their many trade allies. This consistency was key in ensuring that the 2002 program was truly a seamless and standardized statewide program.

6.2.2 Overlap with Third-Party Local Programs

In 2001 the CPUC allowed non-utility entities to submit proposals to administer “local” programs. These third-party programs would run concurrently with the utility statewide programs but would focus on specific areas within the utilities’ service territories. The CPUC ultimately awarded approximately $100 million to over 50 third parties to administer local programs in 2002 and 2003.

Prior to 2002, with a few notable exceptions,[2] non-utility entities had not administered programs in utility service territories that targeted the same end-user or upstream market actor segment with rebates or other support addressing the same measures as the utilities’ statewide programs. As such, coordination issues arose in 2002 due to overlap between the statewide and local programs.

With respect to lighting for residential applications, there was one major local program that directly overlapped with the utilities’ statewide program. In Southern California, Ecos Consulting administered a local program that targeted small rural hardware stores and ethnic grocery stores and offered rebates on CFLs. The target market was similar to the HTR markets that the utilities were required to engage in order to meet their HTR program goals. Moreover,

[2] In 2001, in response to the energy crisis, the State of California and other local governments and community agencies engaged in efforts to raise awareness of energy conservation and to encourage adoption of energy-efficient measures such as CF bulbs and torchieres. In particular, the Powerwalk program delivered CF bulbs door to door to households located in low-income neighborhoods, overlapping with utility low-income programs that also gave away CFLs to income-qualified households.

the Ecos program's incentives were more than double that of the statewide program since the rebate was intended to recover both incentive and marketing costs borne by participating retailers. (Ecos did not do any program marketing, instead the program was designed so that participating retailers would publicize the program using their own resources.)

The impact on the target market was that there was some confusion between the two programs especially due to the different incentive levels. Many of the manufacturers that participated in the statewide program also participated in Ecos' program and we have found some evidence (through the market actor interviews) of their confusion between the two programs. Also, because Ecos' program was implemented full scale early in 2002 before the statewide program had begun offering incentives, many HTR retailers had already signed up for Ecos' program, which, particularly for SDG&E, made it difficult for the statewide program to meet their HTR goals.

The utilities, however, were able to address this coordination challenge proactively because they were administering the local program contracts, so they were aware of the details and contact points of the competing programs. However, retailer competition and confusion certainly impacted statewide program success in 2002. As stated above, particularly for SDG&E, where the HTR goal was set very high relative to market potential, the local program competition directly impacted the amount of program resources that had to be directed to rural retailers to try to meet the HTR goals. (HTR goals are discussed in more detail in Section 6.5.)

6.3 TRACKING

This subsection provides a brief overview of the program tracking function. The upstream nature of the program does not allow for tracking of the actual customer who obtained the rebate. As a result, the program cannot track where the measure is installed (e.g., to verify the utility service territory). In an attempt to limit the number of installations outside the utility service territories, the utilities limit the program to retailers located within their service territories and who sell the majority of their products to customers located within their service territories. The program is also unable to track customer information so that the utilities may conduct research with actual participants to determine how the measures are being used, e.g., installation rates, residential v. nonresidential applications, and hours of usage. [3]

Instead of tracking customer-level information, the program records retailer and manufacturer activity. Each utility has its own system for managing program rebate activity, including rebate allotments and payments. Each program manager is in charge of managing their own system,

[3] The consumer survey that was conducted in support of this evaluation collects self-reported installation rates for CFL purchases for 2002 and 2003, the results of which are presented later in this section. However, the survey does not distinguish between utility-rebated and non-rebated CFLs because customers are not always aware that they have purchased a utility-discounted CFL. On-site surveys are also being conducted to measure hours of usage and on-peak usage for CFL installations. These results will characterize CFLs in general, not necessarily utility-discounted CFLs purchased in 2002.

while they may rely to some extent on their accounting department to help cut checks to participants.

One of the main functions of the tracking system is to manage rebate allotments. As stated previously, it is important for the program managers to maintain up-to-date knowledge of each retailer or manufacturer's goals and accomplishments. When the program manager learns that a participant may not reach their overall goal or their goal for a particular measure class (e.g., higher wattage CFLs), they must assign additional allotments to other participants to ensure they meet their overall savings goals. This function requires foresight on the part of the program manager when they initially assign allotments because they must predict which participants are overestimating what they can actually accomplish. It also requires program managers to stay in touch with participants and their achievements on a real-time basis. There is no explicit penalty for not meeting goals, so participants are not always proactive in informing the utilities about potential shortfalls in their accomplishments. Instead, it is up to the program manager to constantly gauge participants' abilities to meet their goals. This process is more of an art than a science, with the program managers relying on experience with particular retailers and manufacturers and their intimate knowledge of the CFL marketplace to anticipate discrepancies between goals and likely sales.

The other main function of the tracking system is to manage the rebate payment process. The utilities have different reporting requirements for the large statewide retailer component v. the buydown component. While manufacturers are required to provide proof that they shipped discounted product to retailers, retailer participants must show that the discount was applied for each bulb sold. The utilities stay in constant communication with participating retailers and manufacturers to ensure that they understand the program requirements, both formally via the participation agreement and informally through frequent phone and email communications. As to be expected with any rebate payment process, many payments are rejected initially due to insufficient or inaccurate paperwork, and at times the utility program managers can get bogged down enforcing payment requirements.

Market actors' generally high satisfaction scores for the rebate payment process provide indirect evidence that the program tracking function is working well with respect to providing the information that is needed to support rebate payments. (Section 6.7 presents detailed results on participant satisfaction with the program, including with the rebate reservation and rebate payment processes.)

6.4 MARKETING

This subsection describes how the program was marketed both to upstream market actors and to downstream customers. As an upstream program, the program managers focused their efforts on informing all the retailers and manufacturers who are active in the state about the program and encouraging them to participate. Downstream promotions of the program were conducted by participating retailers in their stores through point-of-sale displays and advertisement of the rebate. The program was also supported by mass media statewide and national marketing campaigns that promoted energy-efficient lighting products.

6.4.1 Upstream Program Promotion

As stated above, the major promotional efforts undertaken by the utilities were to make CFL retailers and manufacturers aware of the program and obtain rebate reservations. The utilities, through prior years' efforts, had developed a database of high-level contacts for the major big box and home improvement chains that have a statewide presence. These retailers were contacted and solicited to participate in the large statewide retailer component of the program. Retailers who could not comply with the requirements of that approach could opt to participate in the program via the manufacturer buydown. The utilities solicited participation in the buydown component by contacting the major manufacturers that are active in the state. Interested manufacturers, in turn, promoted the program to the retailers to whom they provide products.

The program managers were very effective in getting most major retailers in the state to participate either through the buydown component or the large statewide retailer approach. Some notable exceptions were Wal-Mart and Home Depot. Both stores did participate in a very limited way through the manufacturer buydown component but did not participate statewide. The utilities had an excellent regional contact at Home Depot with whom they had worked in previous years who was very cooperative in the past. Due to staff turnover and corporate restructuring, Home Depot opted not to participate in the program statewide and did not account for even a fraction of the volume that they had in 2001 through the program. Wal-Mart's corporate philosophy is that temporary discounts do not fit into their "everyday low-price" marketing approach.

The buydown component was also very successful when manufacturers solicited the participation of a diverse array of retailers, including grocery, drug, hardware, home improvement and lighting store chains, franchises, and independents. These retailers were located throughout the state, representing both rural and urban locations. Many of the independent stores located in rural areas and grocery and drug stores had not previously participated, and program managers felt that the 2002 program in particular had opened up these channels for CFL sales.

6.4.2 Downstream Consumer CFL Marketing

The program benefited from consumer marketing campaigns conducted by the Environmental Protection Agency's seasonal Change a Light promotion, Flex Your Power promotions, and activities conducted by the statewide crosscutting marketing and outreach program. These promotions focused on the benefits of energy-efficient lighting and included mass media advertisements timed to the fall lighting season. The program was also supported by utility websites, where the consumer page listed qualifying products and rebate levels and, in some cases, retailer locations where consumers could buy discounted products. Likewise, the utility call centers promoted the program to customers.

The Flex Your Power campaign, in particular, continued successful efforts from 2001 to increase general consumer awareness of conservation and energy efficiency through mass media advertisements. The campaign also partnered with retailers, who "participated by promoting, stocking, and actively selling energy-efficient products in their stores. The 2002 and 2003 campaigns focused on promoting energy efficient products in addition to general conservation, including CFL promotions in the fall.

6.4.3 Retailer Program Promotions

The marketing approach used by the utilities in 2002 differed from the strategies employed in the utilities' California Residential Lighting and Appliance program that they administered from 1998 to 2001. Then, the utilities provided intensive retailer support, including point-of-purchase materials, intensive salesperson training, and cooperative advertising. The 2002 program reflected a shift away from using a significant amount of program budget to support retailers, instead allocating most of the budgets for incentives. With regard to the marketing support that they had provided in previous years, the utility program managers felt their efforts in the past may have not been the most efficient way to meet program objectives and instead felt that using the budget to offer more incentives was a more effective use of program funds. This shift in program design is also reflective of the changing policy climate, which, since the California energy crisis of 2001, has encouraged the utilities to emphasize immediate energy savings through consumer rebates in place of program strategies that were designed to achieve long-term market change.

As stated above, beginning in 2002, the utilities no longer provided retailers with promotional support. The utilities relied on retailers to promote the program by requiring them to advertise the discount that was being applied, whether via a point-of-sale discount or manufacturer buydown. The utilities reviewed many of the displays that were being used by retailers to approve use of the utility logo and ensure that the information being conveyed was accurate. One of the program managers reported that much of the point-of-purchase advertising used by retailers was "low-tech."

Results from interviews with participating retailers suggested that retailers rely on numerous approaches to market CFL products. These approaches differ from how they market standard-efficiency lighting products. Most retailers increase CFL product exposure in their stores through special end-cap displays, in-store signage, and special point-of-purchase displays. Many produce special circulars and advertising copy that mention the ENERGY STAR brand and logo, the rebates available through the statewide program and, in some cases, provide information about the energy and cost savings associated with CFL use. The larger retailers also run television advertisements and radio spots, typically during the fall lighting promotion period. The majority of retailers feel that the availability of rebates and co-branding with ENERGY STAR are the most effective strategies for promoting CFLs to consumers.

6.4.4 Influence of Retailer Promotions on 2002/2003 Consumer Purchases

We asked consumers who purchased CFLs in 2002 and 2003 whether they had noticed any retailer advertising. Then we asked them whether they would have been likely to purchase the CFLs if they had not seen any in-store promotions.

We found that over one-third **(36 percent) of purchasers reportedly noticed retailer advertising**, information or materials related to energy-efficient lighting displayed in the store. This is a slight decrease from 2001, when almost half (46 percent) of purchasers noticed in-store promotions. (Note that, as described in Section 3, in 2001 the program began to transition from prior intensive retailer support functions such as merchandising support and co-operative advertising.)

A similar percentage of torchiere and fixture purchasers noticed in-store displays relating to energy-efficient lighting—16 percent of torchiere purchasers and 27 percent of fixture purchasers. There was no downward movement in the fraction of torchiere/fixture purchasers noticing in-store displays over time, where in 2001, 16 percent and 31 percent noticed retailer advertising.

As shown in Table 6-1, **the in-store displays were influential for about one-quarter (24 percent) of purchasers who noticed the displays**, who would have been "very unlikely" or "not very likely" to have purchased CFLs in absence of the in-store display. Just under half (42 percent) were "very likely" to have made their purchase without having seen the in-store displays.

Table 6-1
Likelihood of Purchased CFLs in Absence of Seeing In-store Displays

Response	Percentage of Respondents
Very likely (8-10)	42%
Somewhat likely (6-7)	33%
Not very likely (4-5)	13%
Very unlikely (1-3)	11%
Don't know	1%
Number of respondents	145

6.5 HARD-TO-REACH OBJECTIVES

This subsection assesses the program's HTR objectives. Specifically, the following topics are discussed:

- **Overview of HTR Goals and Accomplishments:** A description of the program HTR goals and achievements, including a discussion of the methods used to target HTR segments
- **Rural HTR Definitions:** How each utility defines rural HTR
- **Consumer CFL Awareness and Purchases by HTR Segment:** Results from consumer survey
- **Grocery Store CFL Sales:** Results from upstream market actor and consumer surveys regarding the penetration of CFLs among food, drug, and grocery stores
- **Effect of HTR Objectives on Overall Program:** A discussion of how overall program success is affected by HTR objectives.

6.5.1 Overview of HTR Goals and Accomplishments

One of the key features of the program is that up to 25 percent of program incentive budgets are earmarked for HTR consumer segments and retailers. Fifteen percent of the budget was set aside for retailers located in rural areas. Ten percent of the budget was directed towards grocery and drug stores. The intent of establishing these targets was to increase CFL penetration among rural customers, who had not previously benefited from the program as much as urban consumers, who were located near retailers that were more likely to participate in utility programs. The program also sought to increase the exposure and availability and decrease the price of CFLs in grocery, food, and drug stores.

The utilities for the most part relied upon participating manufacturers to promote the program to grocery, drug, and rural retailers. All of the utilities were able to meet the incentive target for the grocery and drug store segments. A few major grocery and drug stores agreed to participate early on, ensuring that at least 10 percent of the incentive budgets would be allocated to this segment. PG&E and SCE were also able to easily exceed their rural goals. SCE conducted two special promotions to reach rural, Spanish, and Chinese communities, involving two retailers that market to these segments. A number of rural retailers participated in PG&E's program in 2002 through the buydown component, stores that had not participated in prior years.

SDG&E had a more difficult time attempting to meet the 15-percent target for rural retailers. There are approximately 150 retailers located in rural areas in SDG&E's territory. One participating manufacturer actively marketed the program to all of these retailers, signing on almost 40 rural retailers. However, in the end the manufacturer did not meet its allotments because they felt the level of effort required to work with this particular segment was not worth the incentive payments. As mentioned previously, the Ecos Consulting local program that was targeting rural retailers in southern California, which offered higher rebates and was rolled out before the statewide program, impacted SDG&E's ability to meet their rural goals. The number of rural lighting retailers in SDG&E territory was so small that when Ecos' head start captured most of the potential in the area, it greatly reduced the probability that SDG&E could meet its rural target.

Table 6-2 presents the program HTR goals and accomplishments. As shown, the utilities easily succeeded in achieving the grocery and drug store goal of 10 percent of program incentives. However, SDG&E in particular experienced trouble in meeting their rural retailer goal of 15 percent, paying out just under 12 percent of incentives to this retail segment. The other utilities clearly exceeded their rural retailer goal.

Table 6-2
2002 Program Hard-to-Reach Goals and Accomplishments[4]

HTR Segment	Goal	Accomplishments		
		PG&E	SCE	SDG&E
Rural retailer	15%	42%	33%	12%
Grocery, food and drug	10%	15%	35%	19%

Source: Verification Study Findings, Appendix A

6.5.2 Rural HTR Definitions

The energy-efficiency policy manual defines geographic HTR as "residents of areas other than the San Francisco Bay Area, San Diego area, Los Angeles Basin and Sacramento." In practice, each utility has developed a set of ZIP codes defining geographic HTR using a different method. PG&E interprets this definition to mean that geographic HTR are retailers serving customers located in ZIP codes that are outside the nine counties of the San Francisco Bay Area and City of Sacramento. SDG&E uses a California Public Utilities Commission(CPUC)-approved list of rural ZIP codes that was developed for their low-income programs, which essentially includes the eastern two-thirds of the territory. SCE used a list of ZIP codes from the Statewide Residential Customer Needs Assessment Study (TecMRKT Works July 2001), which provides a rural ZIP code list based on a methodology used by Federal and State grants programs for defining rural areas.

We used the ZIP code definitions, combined with utility-provided customer information system data, to compute the percentage of utility customers that are "rural" (Table 6-3). As shown, SDG&E's rural population comprises only 5 percent of its population, while SCE's is about 12 percent. PG&E's rural population is almost half (47 percent) of its residential population. We compared the rural population with the fraction of rebates paid to this segment, and shown in the third and fourth columns of the table.

[4] See Appendix A for the results from the verification task, which compared utility tracking databases to reported accomplishments. Note that for SCE, we are presenting the narrower "rural" accomplishments based on rural ZIP codes only. And for PG&E, we are presenting rural rebates paid as a percentage of all rebate dollars, not just non-grocery rebates.

Table 6-3
Percentage of Utility Customers that are "Rural" Customers Compared to "Rural" Rebates Paid

Utility	Percent of the Pop that is "Rural"[1]	Percent Rebates Paid to "Rural" Stores[2]	Difference Between % Rural Customers and % Rural Rebates
PG&E	47%	42%	-5%
SCE	12%	33%	+21%
SDG&E	5%	12%	+7%
Total	27%	35%	+8%

[1]Source: Utility-provide zip code definitions of "rural" HTR combined with utility CIS
[2]Source: Verification Study Findings, Appendix A

6.5.3 Consumer CFL Awareness and Purchases by HTR Segment

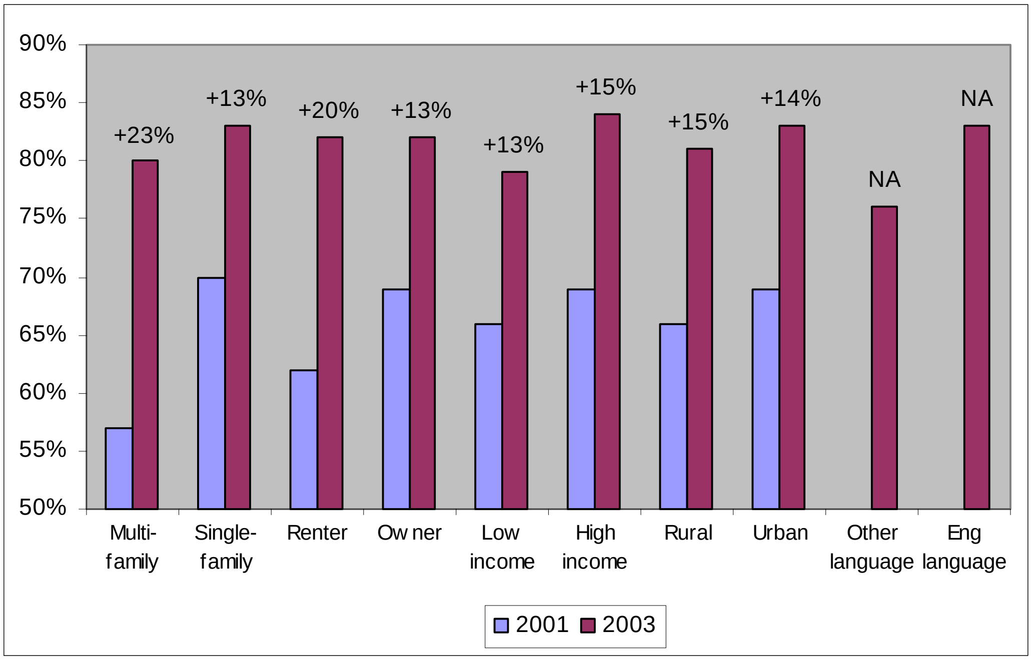
To provide context for interpreting geographic HTR goals and accomplishments, we are presenting CFL awareness and purchase rates by various HTR segments from 2001 and 2003 to illustrate "baseline" levels and changes in awareness and purchases among these groups. The HTR goals were set with the intent of serving customers that were previously underserved, and as such, one would expect to see lower awareness and purchase rates among these customer segments before the program introduced specific HTR strategies in 2003.

One might expect to see a similar or slightly higher percentage change in awareness and purchases for rural customers since **the program paid out 35 percent of its rebates to rural retail stores, but only 27 percent of the population lives in rural areas**.

Figures 6-1 and 6-2 below present CFL awareness and purchases by HTR and non-HTR customer segments. The percentage change from 2001 to 2003 is indicated above the "2003" column for each customer segment (e.g., "+23%" for the multi-family segment). As shown, **2001 levels of CFL awareness and purchases were only slightly lower for rural customers compared with their urban counterparts**. Likewise, CFL awareness and purchases increased slightly more for rural v. urban customers. Notably, CFL awareness and purchase rates for other HTR consumer groups such as renters and households with low to moderate income increased significantly over the same time period, with respect to homeowners and higher-income households.[5]

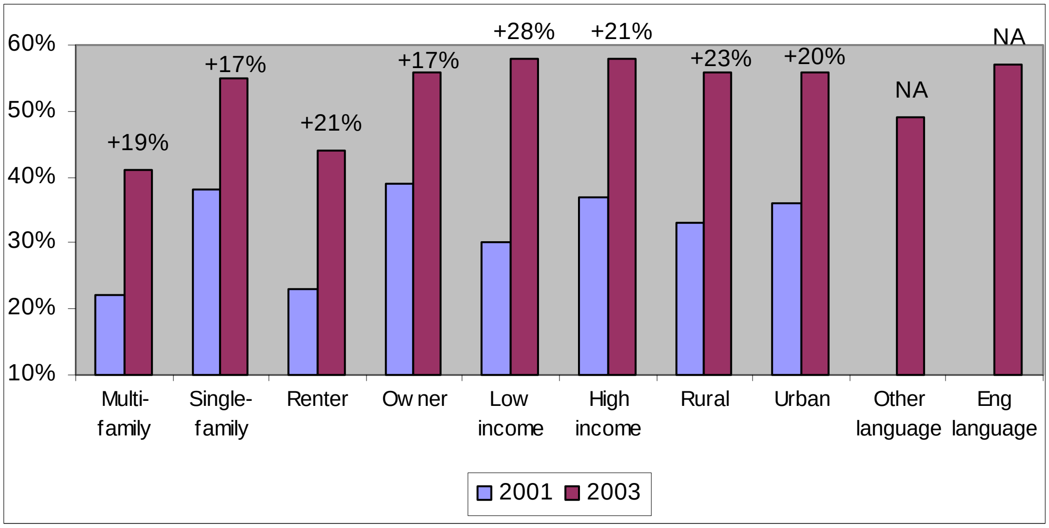
[5] The other HTR categories are: language – primary language spoken is other than English; income – customers who fall into moderate income levels (less than 400 percent of federal poverty guidelines); housing type – multi-family and mobile home tenants; and homeownership – renters.

Figure 6-1
Percentage of Consumers who are Aware of CFLs, by HTR and non-HTR Segments[6]



2001: total N=721, N varies by segment
2003: total N=1,001, N varies by segment

Figure 6-2
Percentage of Consumers who have Purchased CFLs, by HTR and non-HTR Segments



2001: total N=721, N varies by segment
2003: total N=1,001, N varies by segment

[6] All segments besides rural and urban were determined based on consumer self-reported survey data. Respondents were characterized as "rural" based on utility-provided ZIP codes for rural customers. Non-rural customers were characterized as "urban." Note that 2001 "primary language other than English" survey data was unavailable.

6.5.4 Grocery Store CFL Sales

Only a limited number of in-depth surveys were conducted with participating grocery stores. However, the results from the interviews that were conducted with this segment suggest that **the 2002 program increased the share and the total CFL sales for participating grocery stores**. All grocery store owners interviewed would like to see more CFL bulbs available at the discounted price, since they sell quickly and consumers still want them after they are sold out. One grocery store chain that had not sold CFLs prior to participating in the program reported that they quickly sold out of CFLs and would like to see more discounted product available in the future.

As reported previously in Section 5, the most likely store type consumers saw CFLs for sale was home improvement stores. Consumers are not likely to have seen CFLs for sale in grocery or drug stores. However, when compared to where consumers who were surveyed in 1998 thought they could find CFLs for sale, the percentage that are aware that grocery stores sell CFLs has increased fairly significantly—from 2 to 13 percent.

6.5.5 Effect of HTR Objectives on Overall Program

The effect of HTR objectives affected each of the utilities differently. The utilities used different strategies to meet their goals and had a varying level of difficulty achieving their goals. Ultimately, the effect of spending resources on meeting HTR objectives had different outcomes in each service territory.

For PG&E, much of its historic trade ally partnerships have been with San Francisco Bay Area retailers. The majority of the sales of energy-efficient products occurs in this dense, populous area, which accounts for more than 60 percent of PG&E's residential energy consumption. The introduction of rural targets in 2002 helped to expand retailer participation into more remote portions of PG&E territory. Many of the Bay Area chains with which PG&E has existing relationships also have outlets in the central valley and in areas north of San Francisco. Ace and True Value hardware store franchises are also located in smaller towns that do not have the larger home improvement stores. Manufacturers participating in PG&E's buydown component were active in increasing participation in both chain stores located in rural areas, local independent hardware stores, and the Ace and True Value hardware stores. **The definition of "rural" for PG&E is appropriate because it contains areas that have not been traditionally targeted by PG&E's rebate programs**. PG&E exceeded its target by a significant margin and did not negatively impact its core Bay Area retailer base. As shown in Table 6-3 above, PG&E paid out 42 percent of rebates to rural stores, with a population that is about 47 percent rural. That is, **PG&E came close to distributing rebate dollars equally between urban and rural areas.**

As compared to the other California IOUs, SDG&E's territory is geographically compact. While SDG&E does serve some remote areas, these locations are associated with a small number of customers (as shown in Table 6-3, less than 5 percent of SDG&E's residential customer population). **While it is appropriate for SDG&E to attempt to reach retailers in the more remote reaches of its territory, the 15-percent target is probably too high.** The amount of resources that must be spent to try to achieve this goal is likely out of proportion compared with the benefits of serving such a small number of customers. As noted previously, SDG&E struggled to pay out even 12 percent of rebates to its remote stores, and the manufacturer that was responsible for most of the rural rebates was less than enthusiastic about its experience promoting the program to remote retailers. As such, 2003 will likely be even harder for SDG&E to entice manufacturers to promote the program to geographically HTR areas.

SCE's use of the Statewide Needs Assessment study rural zip codes is finer than the CPUC's description of rural, which is "outside the Los Angeles basin." The geographic areas designated in SCE as "rural" are not contiguous and so may be difficult to conceptualize in total, making it a challenge for the program manager to anticipate how difficult it would be to meet goals. As reported previously, SCE offered two specific initiatives to ensure they would meet their goals, and as a result sold over 200,000 CFLs through rural retailers. SCE exceeded their rural HTR goals by a considerable margin, affecting to some degree the number of retailers it could allocate high volumes of CFLs. However, SCE felt that the rural areas in their territory were underserved by the program in prior years and that the initiatives were beneficial in opening up the market for specific groups, such as Asians, Hispanics, and other consumers living in remote areas. However, **since SCE paid out over twice the percentage of rebates to rural stores as compared to the percentage of rural customers in its territories, SCE may consider increasing non-rural retailer allotments since many retailers expressed interest in discounting a higher volume of bulbs.**

At the beginning of the 2003 program, only grocery and drug stores and retailers located in HTR geographic areas were eligible to participate to ensure that the utilities would meet their goals. While this assures that the utilities will meet their HTR goals, it also hinders the programs by delaying the program in the major markets that have consistently accounted for the majority of program activity.

6.6 PRODUCT MIX AND SPECIFICATION

This subsection discusses issues with respect to product mix and specifications. Specifically, the following topics are addressed:

- Overview of Eligible Products
- CF Bulb Wattage Levels
- CFL Fixtures and Torchieres
- ENERGY STAR Ceiling Fans
- ENERGY STAR De-listing of CFL Products

6.6.1 Overview of Eligible Products

The mix of products that were promoted by the program included CF bulbs, fixtures, torchieres, and ceiling fans with CFLs. Table 6-4 shows the rebate levels and number of units rebated for each product type.

Table 6-4
2002 Program Rebate Levels and Number of Units Rebated

Product	2002 Rebate	2002 Units Rebated
CF bulb- 15 watt	$2	2,222,454
CF bulb- 25 watt	$2	1,199,941
CF bulb- 30 watt	$2	80,193
Hardwired CFL fixture- interior	$10	10,732
Hardwired CFL fixture- exterior	$10	14,200
CFL Torchiere	$10	6,736
Ceiling fan	$20	50

As described in Section 3, the utilities came close to meeting their savings goals, even though they shifted their unit goals fairly significantly. As will be discussed below, they encountered some difficulties with promoting and discounting fixtures and torchieres, ceiling fans, and higher-wattage CF bulbs. Moreover, a shipping strike that affected the state right as discounted product was being shipped significantly delayed manufacturer shipments. Adding to a delay in program approval (the program was approved by the CPUC in April of 2002), the West Coast dockworkers strike and resultant shipping bottleneck further delayed the full-scale rollout of the program, affecting some utilities' ability to meet goals for all eligible measures.

Table 6-5 displays the 2003 program plans. As shown, **the utilities plan to rebate almost twice the number of CFL products as compared to 2002.** Most of the increase is through CF bulbs, where the utilities are planning on rebating over 6 million (v. 3.5 million in 2002.) However, the program has ramped up fixture and torchiere goals considerably as well, with plans to discount about 250,000 products as compared to their 2002 accomplishments of just over 30,000.

Note that the 2003 program has instituted tiered rebate levels based on CFL product wattage level. For example, the rebate level for the lowest wattage bulbs (14 Watt) is $1 v. $2 for the other bulb categories. Likewise, for fixtures and torchieres the rebate level for the lower wattage product is $5 v. $10 for the higher wattage category.

Table 6-5
2003 Program Plans: Rebate Levels and Units Goals

Product	2003 Rebate	2003 Unit Goals
CFLs- 14 watt	$1	2,675,707
CFLs- 20 watt	$2	1,911,132
CFLs- 25 watt	$2	936,322
CFLs- 32 watt	$2	733,416
Torchiere- 55 watt	$5	57,653
Torchiere- 70 watt	$10	
Hardwired CFL fixture- interior (16 watt)	$5	46,252
Hardwired CFL fixture- interior (25/30 watt)	$10	70,104
Hardwired CFL fixture- exterior (13 watt)	$5	38,001
Hardwired CFL fixture- exterior (27 watt)	$10	29,681
Ceiling Fan	$20	1,500

6.6.2 CF Bulb Wattage Levels

According to both program managers and participating retailers, **the program was more effective in discounting the 15- and 25-Watt CFLs than the 30-Watt bulbs.** The lower wattage bulbs sell for less than the higher wattage bulbs, so the $2 discount makes more of an impact on the 15-Watt bulb category. Many manufacturers and retailers promoted the smaller wattage bulbs (i.e., mini- or sub-CFLs) as "mini-twists" and sold them in bulk packages with anywhere from 2 to 24 bulbs, sometimes as low as $3 each *before* the discount. Likewise, these smaller wattage CFLs are designed such that they fit into most household applications. The higher wattage CFLs, which also were rebated at $2 each, were not promoted as heavily by retailers. The utilities rebated less than 100,000 of the 30-Watt CFLs, whereas they discounted over 2 million of the 15-Watt and over 1 million of the 25-Watt bulbs.

The program savings were affected by the disparity in sales of the various wattage CFLs because the energy savings for the higher wattage CFLs is relatively higher. Looking forward, the 2003 program has specified a two-tiered rebate structure to encourage sales of the higher wattage CFLs. This will be challenging because the larger CFLs are harder to use in all types of residential fixtures, and they replace incandescent bulbs 100 Watts and greater. These applications are not found as often among residential homes and may be more likely to occur in multi-family common areas and commercial applications.

6.6.3 CFL Fixtures and Torchieres

The utilities rebated over 25,000 ENERGY STAR fixtures and more than 5,000 CFL torchieres through the 2002 program. This represents a small fraction of the market potential for these product categories. To date, the market for CFL torchieres and fixtures has been limited primarily by two factors, namely:

- The incentive level does not cover as high a percentage of the incremental cost as the bulb rebate
- The availability of ENERGY STAR lighting fixtures has not been as great as that for CFLs.

The number of manufacturers in the CFL torchiere and fixture market, while small, is steadily increasing. The number of firms making torchieres and fixtures nearly doubled between 2000 and 2003. The number of different torchiere and fixture models is also rising rapidly. New features such as dimmability and three-way bulb functions should make CFL torchieres and fixtures more acceptable to consumers, leading to increased demands for CFL torchieres and fixtures in the future.

Manufacturers view the CFL fixture market as small but growing. **The number of CFL fixtures available in the market has been limited to date but is steadily increasing, and manufacturers believe the California market has great potential.** One firm commented that Title 24 mandates the use of fluorescents in new construction and that will have a significant influence on the CFL fixture market in the future.

6.6.4 ENERGY STAR Ceiling Fans

The program initially set a goal of discounting almost 5,000 ENERGY STAR ceiling fans. However, a campaign to promote ceiling fans in March of 2002 did not occur since, as previously mentioned, the program was not approved until April 2002. Being a cooling measure, once the cooling season had passed, retailers were unwilling to actively promote the product. Ultimately, the program only discounted 50 ceiling fans.

Going into 2003, the utilities began revising their energy savings claims on ceiling fans to take into account recent research results that became available. These results suggest that ceiling fans might actually add demand, since users might operate the fan in addition to their air conditioners. Likewise, **energy savings potential from using CFLs in ceiling fans was found to be less than initially thought because the hours of operation are lower than regular CFLs.** As shown in Table 6-5, the utilities are still including a limited number of ENERGY STAR ceiling fans in their 2003 program and plan to discount 1,500 units. They have adjusted their savings claims to reflect the recent research results.

6.6.5 ENERGY STAR De-listing of CFL Products

A final issue with respect to product specifications that impacts program implementation is de-listing of CFL products and manufacturers by ENERGY STAR. To further our understanding of the de-listing process, we interviewed a key ENERGY STAR program representative centrally involved with CFL product testing. We asked a series of questions about CFL product testing procedures and schedules, reasons why products can be de-listed, and steps that manufacturers can take to address the problems found.

From this interview, we learned the following:

- To obtain ENERGY STAR certification of CFL bulbs, manufacturers are required to have their bulbs tested by an accredited third-party testing laboratory.
- To qualify as ENERGY STAR lighting, the bulb must have lifetime rated hours equal or greater than 6,000 hours plus meet other criteria. (The average rated lifetime for ENERGY STAR bulbs is 8,000 hours).
- To certify the bulb life, each CFL bulb must pass a series of three tests, conducted at three points in time:
    - At 1,000 hours
    - At 40 percent of rated lifetime
    - At 100 percent of rated lifetime.
- The most common reason why CFL bulbs are de-listed by ENERGY STAR is for failure to pass the second test. CFL bulbs are given the ENERGY STAR endorsement after the first test but if they fail subsequent tests, they no longer qualify for the ENERGY STAR brand.

De-listing may create a problem for participating retailers, who may end up with unwanted CFL products that are no longer eligible for rebates. Interestingly, we did not get any specific feedback from retailers during the market actor interviews that de-listed CFLs had created a hardship for them.

Since rebate eligibility is tied to ENERGY STAR-certified products, the potential is there for CFL product de-listing to sour retailers on the lighting rebate program in general. It is a difficult issue to address, since CFL bulb testing occurs randomly throughout the year, and these tests and failures can occur at any time. The program may be able to work proactively with manufacturers to determine ENERGY STAR testing schedules for products being rebated and their status and communicate the results back to retailers. That increased communication would at least alert retailers to the possibility of CFL products being de-listed in the near term.

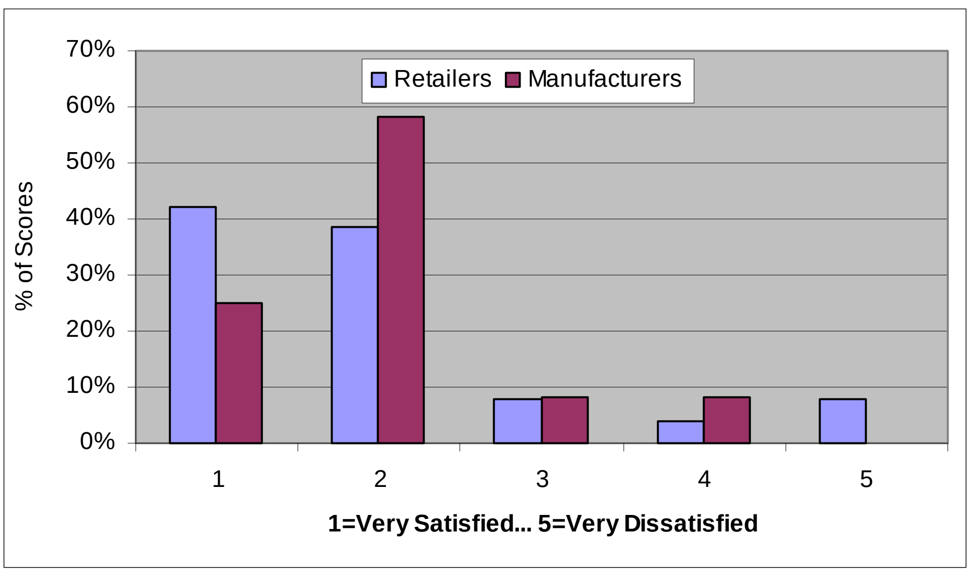
6.7 RETAILER AND MANUFACTURER PARTICIPANT SATISFACTION

Next, we present results from the participating retailer and manufacturer interviews on their satisfaction with the 2002 program. We asked both retailers and manufacturers a series of questions designed to determine their levels of satisfaction with the program in general and with particular administrative functions. They were asked to provide satisfaction scores ranging from 1 to 5 on a scale of 1 to 5, where 1 represents “very satisfied” and 5 represents “very dissatisfied.” We asked them to provide scores representing their level of satisfaction with each of the following:

- The overall program
- The program's enrollment process
- The rebate fund reservation process
- The rebate payment process.

In general, **participating manufacturers and retailers viewed the program very positively and gave it high satisfaction scores.** As shown in Figure 6-3, the vast majority of manufacturers and retailers interviewed rated their overall satisfaction with the program as a 1 or a 2 on a scale of 1 to 5, where 1 represents "very satisfied" and 5 represents "very dissatisfied." Both manufacturers and retailers like the financial incentives offered by the program, viewing them as a critical part of their CFL sales strategy. **An overwhelming majority of manufacturers (10 of 12 interviewed) and retailers (29 of 30 interviewed) cited the various financial incentives offered by the program as their number-1 reason for joining it.** Most likely, their high level of appreciation for program-provided incentives is a key driver behind their high level of overall satisfaction with the program.

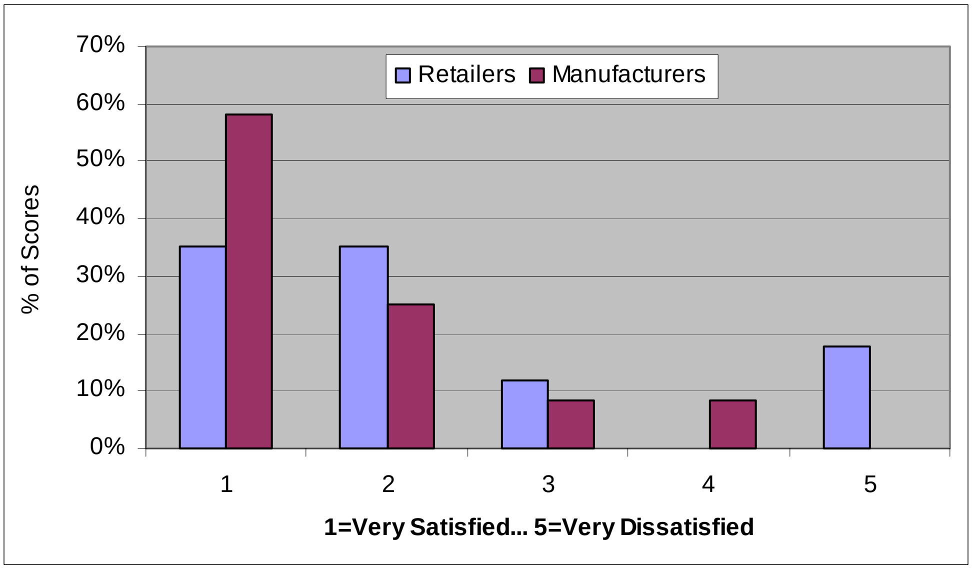
Figure 6-3
Overall Satisfaction With the Program



Manufacturers N=12; Retailers N=23

Likewise, both manufacturer and retailer participants gave high satisfaction scores to the program's enrollment process with over 70 percent, rating it as either a 1 or 2, as shown in Figure 6-4. (The enrollment process involves discussing the program with the utility program manager and completing the retailer participation agreement paperwork.) Manufacturers gave especially high scores to this element of the program. One of the two manufacturers that was less than satisfied felt that the enrollment process has been steadily improving, that the utility staff were great, and that often their "hands were tied by the CPUC." Another big box retailer complained about the length and complexity of the participation agreement, believing it could be made much shorter and yet still address the conditions necessary for participation.

Figure 6-4
Satisfaction with the Enrollment Process



Manufacturers N=12; Retailers N=13

Satisfaction ratings for the rebate fund reservation and rebate payment processes were not as favorable, as shown in Figures 6-5 and 6-6. (The rebate fund reservation process is used by the utility to allocate a set amount of rebate dollars to participating retailers and manufacturers. The rebate payment process is the process of applying for and receiving rebate payments from the utility.) Scores for these two processes were more variable, with the majority reporting a high or moderately high level of satisfaction with these processes and a small but significant minority reporting neutral to high dissatisfaction with either or both of these program elements. For the rebate fund reservation process, the satisfaction levels reported by over 50 percent of retailers and 35 percent of manufacturers ranged from neutral to highly dissatisfied. And, nearly half of retailers and one-fourth of manufacturers were neutral to highly dissatisfied with the rebate payment process. However, it should be noted that the sample size for the retailer results was very small since only a very small number of retailers participated in the large statewide retailer component, which is associated with these two processes.

Figure 6-5
Satisfaction with the Rebate Fund Reservation Process

Manufacturers N=11; Retailers N=12

Figure 6-6
Satisfaction with the Rebate Payment Process

Manufacturers N=12; Retailers N=8

In general, smaller firms tended to report lower satisfaction ratings than larger firms. Both the higher volume manufacturers and the big box store and chain retailers generally gave the program high ratings for both rebate fund reservation and rebate payment processes. One smaller manufacturer was highly dissatisfied with the rebate fund reservation process, after having gotten only 1 percent of their rebate fund request. Another smaller manufacturer complained about the difficulty of determining whether their customers were located in the IOUs' service territories (and therefore rebate eligible). These smaller firms do not have the electronic record keeping and administrative staff that the larger firms do, and that is so necessary to document rebate fund and payment requests.

6.7.1 Suggestions for Improvement

Despite their generally high levels of satisfaction with the program, both manufacturers and retailers still had a number of suggestions for ways to improve it.

The most common suggestion for improving the programs by both manufacturers and retailers was **to allow larger allocations of incentive money to be made available.** Manufacturers believe that greater incentive dollar allocations will lead to ever-greater levels of energy savings, particularly if higher rebate levels can be applied to new, innovative CFL technologies. Retailers have a little different perspective, preferring that no limits be placed on the number of units rebated.

Another common suggestion was to **provide advance notice of program funding and other program details.** Several firms mentioned that under the current approach, in which new program approval is not provided until at least April, retailers lose the opportunity to advertise the program, since there is a 90-day lead time on advertising copy. They acknowledged that multi-year funding would greatly help with this problem.

Firms also made several other suggestions for program improvements. The most common ones are listed below:

- Reduce reporting/documentation requirements
- Shorten the participation agreement
- Provide quicker turnaround on rebate payments
- Provide more frequent communications with participating manufacturers and retailers (possible through a newsletter providing program updates)
- Stop reducing or eliminating rebates on low-wattage (less than 15-Watt) CFLs
- Be more "fair handed" in the distribution of rebate funds
- Raise rebate levels for CFL fixtures
- Provide more funding for the program
- Provide more education and training for end users and retailers
- Have the program administered independent of utility service areas (i.e., make it a true statewide program)

6.8 PROGRAM IMPACT AND INFLUENCE ON PURCHASES

This subsection presents consumer survey results that indicate the percentage of the population that purchased CFLs since January 2002, the installation rate of recent purchases, and the influence of the rebate.

As reported previously, the program does not track customer-level data on participation. Thus, we were unable to survey from a list of participants from 2002. Instead, we conducted random-digit dialing within utility service territories to locate CFL purchasers from 2002. Of the 1,001 completes, a total of 410 respondents reportedly had purchased a CFL since January 2002. (The survey was conducted in June of 2003, so we will refer to “CFL purchases since 2002” as “2002/2003” purchases.)

We asked 2002/2003 purchasers a number of follow-up questions about their purchase experience, including:

- How many were purchased (since January 2002)
- Of those purchased since January 2002, who many are currently installed
- Where CFLs were purchased
- Whether the respondent noticed advertising or information related to energy-efficiency lighting displayed in the store
- The likelihood of their purchase in absence of advertising (if advertising was noticed)
- Whether the respondent recalled receiving a discount or rebate
- The likelihood of their purchase in absence of the rebate (if rebated)
- Whether the rebate encouraged them to purchase more than one CFL.

This battery of questions was intended to provide program managers basic information on CFL purchase behavior in 2002/2003 (i.e., rate of purchases, number of bulbs purchased, installation rates, where CFLs are purchased), general awareness of the rebate, and influence of the rebate on purchases. (We already reported the advertising-related results in Section 6.4, Marketing, which indicated the effectiveness of retailer promotional efforts on CFL purchases.)

6.8.1 2002/2003 CFL Purchaser Behavior

Almost half **(41 percent) of survey respondents reportedly purchased a CFL between the period of January 2002 and June 2003**. When weighted up to the total population, this translates into about 4 million households.[7] Table 6-6 shows the distribution of purchasers and

[7] When combined with the average purchase rate (7.3) and annualized, the results suggest about 20 million CFLs were purchased in 2002. The Market Share Tracking results presented in Section 4 indicate less than 5 million CFLs sold in the state in 2002. However, we noted that those results are conservative because it excludes wholesale

the number of bulbs they purchased for 2002/2003 purchases. As shown, **each household purchased on average 7.3 CFLs** during that same time period. This may reflect an increase in the number of bulbs households are buying as compared to 2001, where the average number of bulbs purchased was 5.8.[8]

Table 6-6
Number of CFLs Purchased from January 2002 – June 2003

Number of CFLs	Percentage of Respondents	Cumulative Percentage
1	4%	4%
2	11%	15%
3	13%	28%
4	10%	38%
5	7%	45%
6	10%	55%
7	3%	58%
8	6%	64%
9	1%	65%
10	13%	78%
11	0%	78%
12	9%	87%
More than 12	10%	97%
Don't know	4%	100%
Mean	7.3	
Number of respondents[1]	243	

[1]N was slightly less than expected for the number of CFLs purchased and installed because of a survey implementation error

Self-Reported Installation Rates

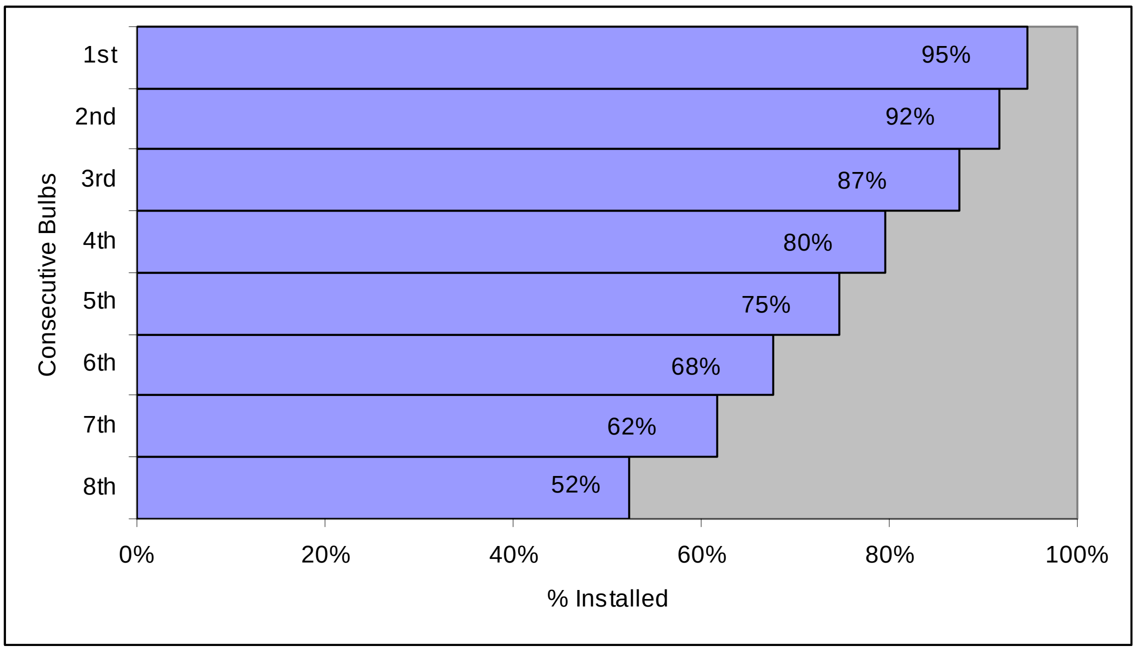
We asked 2002/2003 CFL purchasers, of the bulbs that they purchased since January 2002, how many are currently installed. **The overall self-reported installation rate was 75 percent**. This reflects a fairly significant decrease from the self-reported installation rate from 2001 purchases, which was 88 percent.

clubs such as Costco, smaller channels such as internet based retailers, small independent food stores and direct sales from the manufacturer to the consumer.

[8] However, we asked about the number of CFLs purchased over a 1-1/2-year period, v. the prior survey, which covered only 1 year. The "annualized" average for 2003 is 4.8. However, we are uncertain whether households purchased CFLs once during the 1-1/2-year time period, or several times throughout the period. Therefore, the average number of bulbs purchased in 2002 was somewhere between 4.8 and 7.3 bulbs.

We might expect a lower installation rate as both the saturation of CFLs in homes and the rate of bulk purchasing increases. To further explore this issue, we analyzed installation rates by consecutive bulb, as shown in Figure 6-7. The very first bar or row shows that **95 percent of all purchasers installed at least one bulb. The second bar indicates that 92 percent installed at least two bulbs (where the base = those who purchased two or more bulbs), and the third bar that 87 percent installed at least three bulbs** (base = those who purchased three or more bulbs), etc. There does not appear to be a drop off in installation rates at a certain bulb; instead, the results indicate that people are less and less likely to install consecutive bulbs as the number of bulbs they purchase increases. This figure presents what one would expect intuitively, that there is a finite number of available applications for CFLs, and as the number of bulbs increases people are less and less likely to install all of the bulbs they purchased.

Figure 6-7
Installation Rates by Consecutive Bulb



Where CFLs are Purchased

We asked CFL purchasers where they made their purchase. We found that over half **(52 percent) of CFL purchasers from 2002/2003 purchased their bulbs at a home improvement store**. Nineteen percent purchased CFLs at Costco, 12 percent at a big box retail store, and 4 percent at a drug or grocery store.

6.8.2 Awareness and Influence of Rebate

We asked 2002/2003 CFL purchasers if they recalled receiving a discount or rebate when they bought their bulbs. About one-fifth **(19 percent) said they recalled receiving a discount**.[9]

About **75 percent of 2002/2003 purchasers who recalled receiving a discount were influenced to some degree by the rebate—**either they were only somewhat likely or unlikely to have purchased the CFLs in absence of the discount or they were encouraged to buy more CFLs than they had intended. Tables 6-7 and 6-8 below provide the results for each type of influence question.

Table 6-7
Likelihood of Purchasing CFLs in Absence of the Discount

Likelihood	Percentage of Respondents
Very likely	52%
Somewhat likely	20%
Not very likely	17%
Very unlikely	8%
Number of respondents[1]	101

[1]N=19% of 2002/2003 purchasers who recalled receiving a rebate, or 10% of the population

Table 6-8
Whether the Rebate Encouraged Purchaser to Buy More CFLs

Response	Percentage of Respondents
Yes	61%
No	39%
Don't know	0%
Number of respondents[1]	101

[1]N=19% of 2002/2003 purchasers who recalled receiving a rebate, or 10% of the population

We also asked the limited number of CFL torchiere and fixture purchasers whether they had recalled receiving a rebate, and to what degree did the rebate influence them. Note that we did not distinguish between 2002/2003 and prior purchases since the number of overall purchasers was small. **Only a very small percentage of CFL fixture and torchiere purchasers recall receiving a rebate—**7 percent of torchiere purchasers and 12 percent of fixture purchasers. The number of survey respondents was too low (less than 10) to report the influence of the rebate on purchasers.

[9] If we apply this percentage to the 4 million households that reportedly purchased CFLs since January 2002 and annualize it, the result is that about 500,000 households recall receiving a rebate on CFLs that they recently purchased. When combined with the average purchase rate, about 3.8 million CFLs. This is in line with the total number of CF bulbs rebated by the program (presented in Section 3.)

7 CONCLUSIONS

This section presents conclusions from the measurement and verification study, the market actor analysis, and the process evaluation.

7.1 MEASUREMENT AND VERIFICATION

The measurement and verification component of the study included verification of program accomplishments and an ex post evaluation of program savings assumptions using on-site data collection.

7.1.1 Verification of Program Accomplishments

The verification task results indicated that the program's measure accomplishments reported by the investor-owned utilities in their final report matched almost exactly with the program tracking data [only San Diego Gas & Electric (SDG&E) had a variance, where they under-reported their accomplishments by less than 1 percent]. However, there were some significant variances with the hard-to-reach (HTR) accomplishments between the program tracking data and what was reported in the final fourth quarter report narrative. SDG&E's HTR accomplishments matched. Pacific Gas and Electric used a conservative approach that underestimated the accomplishments. Southern California Edison (SCE) did not update the final reported geographic HTR accomplishments figure in the May Annual Energy Efficiency Report, but mistakenly reported the number from its fourth quarter report. However, these do not affect goal attainment.

7.1.2 Ex Post Savings Analysis

The ex post savings analysis is not yet complete. Lighting loggers were installed at 100 sites during July and August 2002, monitoring on average about 3 fixtures with compact fluorescent (CF) bulbs per home. The loggers will remain installed for 6 months. A report containing the results of the ex post savings analysis will be available in March of 2004.

7.2 MARKET ACTOR FINDINGS

Below we present overall conclusions from the market actor analysis, which was based on upstream market actor interviews and the consumer survey. First, we discuss downstream or consumer findings, followed by upstream or supplier results.

7.2.1 Downstream Findings

The downstream or consumer market findings include attitudes, awareness levels, and behaviors with regard to energy efficiency in general and specifically regarding compact fluorescent lamp (CFL) products. Both the consumer survey and the upstream market actor interview results were used to develop these conclusions.

- **The General Population Energy Efficiency "Climate" Continues to be Positive**

Consumer awareness, knowledge, and attitudes with regard to general energy efficiency and conservation are favorable and have not declined much since the energy crisis has subsided. In some cases, indicators of the general population's awareness of energy efficiency have increased. For example, the percentage of the population that is aware of ENERGY STAR® increased from 42 to 54 percent from 2001 to 2003.

Likewise, conservation and energy efficiency self-reported behavior has either sustained energy crisis rates or has increased. For example, 95 percent of the population is currently conserving energy as compared to 87 percent during the energy crisis. Self-reported market shares of ENERGY STAR appliances have increased about 10 to 15 percent from 2001 levels.

The overall "climate" for promoting energy-efficient purchases in the state is positive. Although California's energy supply situation is not longer front-page news, consumers throughout the state still regard energy conservation and energy efficiency as an important issue. Moreover, energy-efficient product adoption rates, while dropping off slightly post energy crisis, have sustained rates of increase achieved before the crisis. In effect, the crisis helped to focus attention on energy conservation and helped to prime the general public for future messages regarding energy-efficient products such as CFLs.[1]

- **CFL Awareness Has Increased Significantly Over Time and is Currently Very High**

Currently, 82 percent of the population is aware of CF bulbs. This represents an increase of 14 percent since 2001. Furthermore, two-thirds of those who are aware of CF bulbs are also aware that they now cost less than $10 each, and 95 percent have seen them for sale recently. Increasing CFL awareness levels go hand in hand with the increases seen for general energy-efficiency awareness and knowledge. Likewise, cumulative utility interventions in CFL markets through discounting and promoting millions of CFLs over the past 3 years have also helped increase CFL visibility in retail stores. Instead of seeing one or two models of CFLs off to the side of the incandescent bulb display, many retailers in recent years have promoted CFLs with end-cap displays, prominent signage, and in-store ads and circulars. The Flex Your Power advertising campaign that promoted general conservation in 2001 also gave CFL awareness a boost through a CFL promotion timed to coincide with the 2002 program promotion period.

However, there remain opportunities for increasing awareness of CFL fixtures and torchieres. Currently, less than one-quarter of the population was aware of CFL-dedicated fixtures and torchieres. This percentage has remained flat over the last 2 years. Likewise, few consumers are aware that CF bulbs are sold in some grocery and drug stores.

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[1] See "Determining Program Attribution in the Wake of the California Energy Crisis", Rasmussen, Tami, Gaffney, Kathleen, Rubin, Rob (International Energy Program Evaluation Conference, Seattle 2003.)

- **More than Half of Consumers Have Used CFLs**

Fifty-six percent of the state's residents have purchased CFLs sometime in the past, and 10 percent were given CFLs. Of purchasers, the majority first purchased CFLs since 2001. The same percentage (29 percent) tried CFLs for the first time during 2001 as did since January 2002. This result further underscores the finding that energy-efficiency behavior has continued post energy crisis.

CFL fixture and torchiere purchase rates are relatively low and have remained flat over the last few years. Less than 5 percent of the population has purchased or been given either a CFL-dedicated fixture or torchiere in the past.

- **Satisfaction with CFL Performance is Presently Very High**

CFL product diversity and performance have made great strides in the last few years, and customer satisfaction is currently very high. Only 13 percent of CFL adopters were somewhat or very dissatisfied with CFLs they have used in their homes. Over three-quarters (78 percent) of consumers who are aware of CFLs would purchase them in the future. Of those who have been dissatisfied or who are unlikely to purchase CFLs in the future, their concerns are:

- Light quality
- Lack of product diversity (e.g., product fit, look, shape, features)
- Cost
- Lack product knowledge
- Early product burnout
- Slow start.

While first cost is of a lesser concern to most consumers due to recent decreases in CFL prices, opportunities remain for further improving products and increasing consumer awareness with regard to appropriate applications for CFLs and the availability of newer, improved products.

7.2.2 Upstream Findings

The upstream market findings are based on the consumer survey and retailer and manufacturer interviews and cover product diversity, price, availability, and expectations for CFL sales in the future.

- **CFL Diversity has Exploded in Recent Years**

Both retailers and manufacturers reported that CFL product diversity has "exploded" since 2000. All suppliers agree that there has been in influx of new shapes, sizes, and designs of both bulbs and fixtures. New manufacturers have entered the market, and existing producers have expanded their product offerings, leading to greater competition to produce a wide range of CFLs that are acceptable to consumers.

Most manufacturers expected to see continued improvements in CFL product diversity in the near future. In particular, suppliers are focusing on dimmable CFL bulbs and continued improvement to screw-in CFL bulbs (e.g., better sizing, color rendition, and light quality). Likewise, manufacturers expect to see continued improvements in the immature markets for CFL fixtures, torchieres, and ceiling fans, which currently are only available in a limited number of sizes and shapes.

Improvements in product diversity have been key in increasing consumer adoptions. Likewise, the prevalence of ENERGY STAR-certified CFLs has helped to alleviate some of the issues with regard to lower-quality products that burned out early. However, consumers are still concerned about issues such as light quality and brightness. Not only is it important that manufacturers continue to make improvements, but consumers need to be educated that the CFLs available today are different from those they may have tried several years ago.

- **CFL Prices Have Declined Significantly**

Retailer and manufacturers alike reported that CF bulb prices have dropped considerably since 2000. Moreover, most suppliers feel that declining prices are one of the biggest influences on recent increases in CFL sales. Manufacturers agreed that CFL prices have declined because of greater competition among manufacturers and retailers, larger production runs, and large-scale utility rebate programs.

Prices for CFL fixtures and torchieres have also declined over time. CFL torchieres are being sold by some retailers for the same price as halogen torchieres. Some suppliers felt that utility rebates were even more influential on torchiere and fixture pricing due to their higher up-front cost. However, it was also acknowledged that aesthetics and safety issues are almost as important as incremental cost in selling CFL fixtures and torchieres. Likewise, non-CFL components used in the production of fixtures and torchieres have their own pricing dynamics and are also drivers of price.

Manufacturers are hesitant to predict whether wholesale CFL prices will continue to drop in the future. However, with increasing competition from China, India, and other Asian countries, there is likely room for additional wholesale price decreases. On the retail side, manufacturers feel that prices could drop further, particularly warehouse stores that sell CFLs in bulk quantities.

While current CFL prices are significantly lower than they were only a few years ago, initial cost is still a barrier to some consumers. Likewise, many CFL adopters are not convinced that the up-front cost is justified by the energy savings potential. There is opportunity for consumer education on the appropriate installation (e.g., in fixtures with high hours of usage) of CFLs to maximize their investment.

- **CFL Availability Has Expanded**

The Program specifically targeted rural retail stores and grocery and drug stores, locations which previously had not sold CFLs at the same volume as the major big box and home improvement chains. In particular, the independent, smaller chain, and franchise stores we spoke with had a positive experience with the program and experienced “drastic” increases in CFL sales in 2002 as compared to 2001. Moreover, both retailers and manufacturers attributed higher CFL sales in 2002 to greater product availability.

Consumers are not experiencing availability concerns—as evidenced by high awareness and purchase rates, and lack of “availability” being cited as a barrier to future purchases or cause for dissatisfaction. Likewise, all but 4 percent of consumers who are aware of CFLs could cite where they had seen CFLs for sale recently.

There remain opportunities for the program to expand CFL availability further in grocery and drug stores, as only a small fraction of consumers are aware that those outlets sell CFLs. Furthermore, CFL fixture and torchiere availability remains an issue as there are only a limited number of shapes, styles, and features currently produced.

- **Expectations for 2004 CFL Sales are Mixed**

Manufacturers are optimistic that CFL sales will continue to increase in 2004 and beyond. They attribute their predictions to a number of factors: continued price decreases; improved bulb technology, diversity and aesthetics; greater consumer trust and awareness; the untapped potential in the average household; and the natural bulb replacement cycle.

Retailer sentiments depended on their prior levels of CFL sales. The big box stores that had participated in the Program historically and had sold large volumes of CFLs prior to 2002 do not foresee continued growth in CFL product sales. This segment experienced a significant spike in sales in 2001 and has seen declining sales since. However, independent stores and smaller retail chains, which had not participated in prior years’ programs to the degree that the big box stores had, experienced increasing sales from 2001 to 2002 and are upbeat about the potential for even higher sales in the future.

All retailers and manufacturers felt optimistic that CFL torchiere and fixture sales would increase in the near future. There is great potential for these products as far as diversity, availability, and consumer awareness, and most suppliers felt that gains would be made across all these fronts in 2003 and 2004, resulting in higher sales.

The utilities are planning on rebating almost twice the amount of product that they did in 2002, and we can likely expect market shares to sustain the 2002 rate. We can expect that HTR initiatives to reach food and grocery stores and independent/small chains that serve the more remote regions of the state to experience increased sales. It is possible that the big box retailers will be able to increase sales as well, as the utilities may be able to offer them much larger allotments than they could in 2002 with their larger incentive budgets and unit goals.

The utilities are also expecting to rebate a greater number of fixtures and torchieres in 2003. Coupled with the optimistic outlook that suppliers have regarding these products, we can expect to see some progress with regard to availability, diversity, and sales of CFL fixtures and torchieres in 2003 and beyond.

7.3 PROGRAM PROCESS FINDINGS

The program process evaluation findings are based on analysis of program manager interviews, upstream market actor interviews, and the consumer survey.

- **Program Administration is Effective and Efficient Statewide**

The assessment of program administration found that, due to lean in-house operations that rely on prior successful program strategies, effective statewide working relationships, and cumulative efforts to build strategic relationships with the major trade allies in the state, the program is administered effectively and efficiently.

- **Coordination Issues were Minimal in 2002**

Going truly statewide in 2002 was not accompanied by significant coordination problems as the program managers had worked closely together in 2001 to meet unprecedented unit goals. As a result of these prior efforts, the utilities were able to share responsibilities and maximize their knowledge of the lighting markets and speak with one voice to their many trade allies.

The program did experience some difficulty coordinating with overlapping “local” programs, which were implemented by third-party non-utility entities in specific areas of the utilities’ service territories. In particular, a small rural hardware/ethnic grocery store program that operated in Southern California offered more than double the rebate than the statewide program and directly affected the utilities’ ability to meet their HTR goals and caused retailer confusion.

- **Program Implementation Strategies are Effective and Well Received by Program Participants**

The utilities’ involvement in national ENERGY STAR activities and their working knowledge of the California lighting market allows the program to stay on the leading edge of lighting technologies and markets. As such, the program implementation strategies maximize energy savings while effectively utilizing incentive budgets. Program participants are particularly satisfied with the program itself and its processes. Retailers and manufacturers attribute a significant portion of the improvements seen as far as lower CFL prices, expanded product availability, and higher CFL sales to the program.

Program plans for 2003 demonstrate the utilities' understanding of lighting markets and the need to focus on the untapped potential for higher-wattage CF bulbs and fixtures and torchieres. Two-tiered rebates reflect the program's efforts to focus rebate dollars on those products that are lagging as far as price reductions and consumer adoptions. Retailers were extremely successful in promoting and selling the lowest CFL wattage category (14 Watts), and it is clear that a lower rebate level is warranted for this product class.

Furthermore, the doubling of the program incentive budget and unit goals will help address participating retailer and manufacturer concerns regarding low unit allotments. It is crucial for the program to keep the major players interested in the program. Given the hassle factor associated with participating and the declining rebate levels for some of the more popular products, higher unit allotments will be especially critical to sustain participation levels.

- **Customer-level Data is Unavailable, Posing Measurement and Verification (M&V) Issues**

Due to the upstream nature of the program, customer-level data cannot be tracked. The point-of-sale (POS) rebate and manufacturer approach poses M&V challenges because of the inability to identify who is purchasing the product, where it is being installed, and how it is being used. Moreover, with the POS rebate that is accompanied by widespread promotional activities, it is difficult to examine issues such as free-ridership in follow-up surveys since the rebate is invisible to the customer and in some cases they may not realize the impact of utilities' promotional activities on their purchase decision. Nevertheless, free-ridership remains an important issue to consider. The utilities indirectly examine free-ridership issues when they set product rebate levels. They rely on market intelligence to determine the rebate level needed to create the desired effects on lighting markets. For example, the rebate for the lowest wattage CFL category is now $1, from $3 in 2001. Also, a separate free-ridership adjustment is done to the savings claims of the program.

This evaluation attempted to shed light on these important research questions by surveying CFL purchasers in general and probing their awareness of the rebate and its influence on their purchase decision. However, as the program is expanded, and as the POS approach in general is considered by other programs, these M&V issues should be given attention.

- **Retail CFL Promotions are "Low-Tech" and May Not be Very Effective in Influencing Purchases**

Program marketing that is conducted by retailers and manufacturers is one area of program implementation that could be improved. In 2002, the utilities relied primarily on retailers to develop their own promotions. The promotions that retailers used in their stores in 2002 were not very effective in influencing CFL sales, based on consumer survey results. However, it is likely that more prominent CFL product displays and advertising of the discount did play an important role in the increases in CFL awareness seen in 2003. Likewise, in 2000 when the utilities spent significant resources to assist retailers in promotions and advertising, consumer survey results suggested only a slightly higher amount of influence on purchases. So it is not clear that utility program dollars that are directed towards retailer promotions are necessarily more effective than the retailers' own efforts. However, the utilities should continue their efforts to monitor retailer displays and encourage stores to dedicate resources towards effective product promotion. Moreover, providing retailers with enough lead time to allow them to develop effective promotional campaigns would also arguably improve the quality of their advertisements.

- **Rural HTR Goals are Arbitrary and Could Be More Closely Aligned With Demographic and Purchase Rate Data**

The blanket 15-percent rural goal was out of line with the underlying distribution of rural customers located in each utility's service territory. For SCE and SDG&E, the effect of the goal was to direct more than double the percentage of program rebate dollars to rural areas than the percentage of rural customers living in the respective service territories. Moreover, CFL awareness and purchase rates do not differ significantly between rural and urban customer segments. While it is important that the utilities continue their efforts to encourage broad participation among a diversity of retailers, it is not clear that rural customers have been previously underserved and that the Program needs to have specific rural goals.

However, it is clear that the grocery and drug store goals did encourage more active participation among this outlet. Likewise, few consumers are aware that grocery/drug stores sell CFLs and even fewer purchased them from this segment, suggesting that program efforts to expand CFL product availability among this retail segment should be continued.

7.4 Recommendations

We are providing recommendations with regard to consumer marketing and education, product eligibility and rebate levels, HTR goals, and providing lead time to participating retailers and manufacturers. These recommendations were developed based on the results of the market actor analysis and process evaluation. As mentioned previously, the M&V results will be discussed in a subsequent report (available in March 2004) that documents the on-site logger study results.

- **Continue Efforts to Raise Awareness and Educate Consumers on CFLs**

It is clear that although significant gains have been made with regard to CFL awareness and satisfaction, there remain opportunities to further educate consumers on the benefits of CFL products and how to use them appropriately. Continuing successful partnerships with the EPA's Change-a-Light promotion and Flex Your Power mass media advertisements is crucial to sustain interest in CFL products and to expose more consumers to CFLs, particularly to the lesser-known CFL-dedicated fixtures and torchieres. Likewise, working closely with participating retailers to ensure that their promotional materials are educational an effective is also key.

Of particular concern to retailers is consumers' knowledge of gains in CFL performance in recent years. Although product performance is not on the forefront of most consumers' minds as evidenced by the consumer survey results, there are still misconceptions about performance issues such as slow start, light quality, and bulb fit. Furthermore, as more and more CFLs are installed in homes, consumers need to be reminded of the appropriate installations. For example, some consumers cite early burnout as a performance issue, and this result likely demonstrates inappropriate applications such as enclosed fixtures or unprotected outside installations. Additionally, to ensure the expected energy savings, another concern cited by consumers, the public needs to be informed that CFLs should be installed in high-use fixtures. This issue is of increasing importance as the average number of bulbs purchased increases over time and saturation of bulbs in each home increases.

- **Continue to Maximize Incentive Budgets by Using Tiered Rebate Structure**

The program has been proactive in ensuring that incentive budgets are directed towards CFL product categories where price and availability are significant barriers to consumer adoptions. For example, the utilities are offering a $1 rebate for 14-Watt CFLs in 2003, down from $3 in 2001. Non-rebated prices for the lowest wattage CFLs have come down substantially, the products are suitable for most residential applications, and retailers are stocking and promoting them extensively. The higher wattage CF bulbs have not yet taken off to the extent that the lower wattage bulbs have. The utilities are working with retailers and manufacturers to encourage greater availability and competitive pricing of this next tier of CF bulbs, which account for higher savings potential due to the higher wattage incandescent bulb they replace.

The rebate level for lower-wattage torchieres and fixtures has been lowered to $5 from $10 in 2002. The utilities will be monitoring the program's performance with respect to these products and will be able to determine the sensitivity of fixture and torchiere markets to the incentive level.

- **Set HTR Goals that are in Line with Utility-Specific Demographics and Historic Purchase Rates**

As previously stated, the rural HTR goals for 2002 were arbitrarily set without considering the underlying population demographics and historic purchase rates. The utilities spent significant resources in an attempt to meet the rural HTR goal, including rolling out the program only to HTR stores at the beginning of the 2003 program year, and these strategies certainly have an impact on overall program success. There is evidence that at least two major retailers did not participate in the large statewide retailer component in 2002 due to low unit allotments, in part because of HTR goals. While the program has increased its unit goals, which will help entice some of the bigger players to participate in a major capacity, rural HTR goals should certainly be reconsidered in light of this study's consumer research findings.

However, grocery and drug store goals may make sense in expanding CF bulb availability into new channels. This is an area where further research could be conducted to more closely examine the effectiveness of the program in expanding CFL availability among this retail segment.

- **Give Participating Retailers and Manufacturers Adequate Lead Time to Ensure Effective Marketing**

Both retailers and manufacturers need 2 to 3 months to effectively develop advertising campaigns. The 2003 program was not approved until April, significantly impacting participants' abilities to develop effective program promotions. Market participants need consistent signals from the program, and funding lapses and program delays certainly negatively impact the effectiveness of the program in influencing these actors.

A VERIFICATION REPORT

A.1 SUMMARY OF FINDINGS

The objective of this study was to verify the program accomplishments that each IOU claimed in its Final Fourth Quarter Report for the 2002 Statewide Residential Cross-Cutting Lighting Program. Overall, it was found that the measure accomplishments reported by the IOUs in their final report (specifically, in the CPUC workbook in the Program Activities Worksheet, Table - A, column S) matched very well with the program tracking data (only SDG&E had a variance, which was less than 1%). However, there were some significant variances with the Hard-to-Reach (HTR) accomplishments between the program tracking data and what was reported in the Final Fourth Quarter Report narrative. SDG&E's HTR accomplishments matched. PG&E used a conservative approach that underestimated the accomplishments. SCE overstated their Geographic HTR accomplishments and slightly underestimated the Grocery & Drug HTR accomplishments. Even though SCE overestimated their Geographic HTR accomplishment, they still greatly exceeded their goal.

A.2 INTRODUCTION

As discussed, the objective of this study was to verify the program accomplishments that each IOU claimed in its Final Fourth Quarter Report for program year 2002. Two aspects of the accomplishments were verified:

- The total number of units rebated through the program, by measure type, as reported in the Final Fourth Quarter CPUC workbook in the Program Activities Worksheet, Table - A, column S.
- The percent of program incentives that were paid to the two HTR segments (Geographic location and Grocery & Drug) as reported in the Final Fourth Quarter CPUC Report narrative.

A.3 APPROACH

In order to verify these accomplishments, we first obtained the following information from each IOU:

- a sample of retailer and manufacturer invoices
- the program tracking system
- definitions and data sources used to classify retailers as hard-to-reach (geographic location and grocery & drug)
- the final fourth-quarter CPUC workbook and narrative

For each IOU we verified that the sample of invoices was entered correctly into the program tracking system (particularly retailer name, zip code, measure type, measure counts and incentives paid). Once that information was verified, we calculated the number of measures rebated by measure type, by aggregating the program tracking system for each IOU. We then compared this to the final CPUC workbook in the Program Activities Worksheet, Table - A, column S, to determine if these values matched. Next, using the definitions provided by the IOUs, we determined if a given retailer fell into one or both of the HTR segments. We then calculated the amount of incentives paid to each of the two HTR segments. Finally, for each IOU, we compared the percent of the total incentives paid to these two HTR segments to the final CPUC report narrative, to determine if the values matched.

A.4 FINDINGS

A.4.1 Invoice Verification

PG&E: QC selected 33 of PG&E's electronic invoices for verification. The store name, store number, measure description, wholesale price, quantity sold, number of bulbs per package, rebate amount per bulb, and total rebate amount reported on these invoices were compared to those entered into PG&E's tracking database. All invoices were found to be correctly entered into the tracking data.

SCE: Because SCE conducted their own independent verification of the invoicing process, we did not duplicate this effort. Ridge and Associates, the independent reviewer, did not recommend any changes to the database as a result of their analysis.

SDG&E: QC selected 31 of SDG&E's invoices for verification. The site name, address, city, and zip, and the measure description, quantity, and incentive documented on the invoices were compared to the values entered into SDG&E's tracking database. All invoices were found to be correctly entered into the tracking data.

A.4.2 Measure Accomplishments Verification

PG&E and SCE: The reported quantity of light bulbs sold through the program in both PG&E's and SCE's fourth quarter filings matched the actual quantity of bulbs in their tracking databases.

SDG&E The quantity of light bulbs sold through the program reported by SDG&E in their fourth quarter filing was slightly lower than the quantity observed in their tracking database. However, the difference between the actual quantity and the reported quantity was less than one percent.

Table 1 below summarizes the findings of the measure accomplishments verification tasks. Presented are the number of measures, by measure type, (1) found in their program tracking database and (2) reported by each IOU in their Final Fourth Quarter CPUC workbook in the Program Activities Worksheet, Table - A, column S.

Table A-1
Comparison of Measure Accomplishments, by IOU
Tracking Database vs. Final Fourth Quarter Report

Measure Description	SDG&E		SCE		PG&E	
	Database	Reported	Database	Reported	Database	Reported
CFL Bulb (15 watt)	393953	389753	126078	126078	1706623	1706623
CFL Bulb (25 watt)	164017	163945	400005	400005	635991	635991
CFL Bulb (30 watt)	324	324	79722	79722	147	147
Hardwired Fluorescent Lighting Fixtures (ext)	4767	4767	6586	6586	2847	2847
Hardwired Fluorescent Lighting Fixtures (int)	3417	3417	2592	2592	4723	4723
Torchiere - Energy Star	1549	1549	1464	1464	3723	3723
Ceiling Fan	0	0	50	50	0	0
Total	568027	563755	616497	616497	2354054	2354054
Percent Difference		0.75%		0.00%		0.00%

A.4.3 HTR Accomplishments Verification

PG&E: PG&E developed a more conservative approach for reporting their HTR accomplishments. Therefore, we found slightly higher HTR accomplishments in the tracking database for both the Geographic and Grocery & Drug segments.

Grocery & Drug HTR: For the Grocery & Drug HTR segment, PG&E reported that 15.2% of the incentive budget went to this HTR group, compared to 17.3% found in the database. This difference is primarily explained by the fact that PG&E reported their value as a percentage of the original program incentive budget of $5.3 million, not of the $4.8 million in incentives that were actually paid. Furthermore, upon a visual inspection we found some retailers that looked like they were a grocery or drug store, that were not included in PG&E's reported accomplishments. These additional sites contributed another 0.5%. All told, we found that PG&E paid 17.3% of its $4.8 million incentives to the Grocery & Drug HTR segment.

Geographic HTR: For the Geographic HTR segment, PG&E reported that 38.9% of the incentives paid went to this HTR group, compared to 42.1% found in the database. This difference is primarily explained by the fact that PG&E reported its value as a percentage of the incentives paid (not incentives budgeted as above) to the non-grocery HTR customers. In other words, $4.0 million of the $4.8 million of incentives were paid to non-grocery/drug HTR participants. Of that $4.0 million, 38.9% were rural. We looked at the full $4.8 million of incentives paid and found that 42.1% were rural (many of the grocery and drug stores were rural). It is important to note that we were able to match to PG&E's 38.9% by looking only at the non-grocery/drug HTR participants. All told, we found that PG&E paid 42.1% of its $4.8 million incentives to the Geographic HTR segment.

SCE: SCE over-reported their Geographic HTR accomplishments and under-reported their Grocery & Drug accomplishments relative to what was found in the database.

Grocery & Drug HTR: For the Grocery & Drug HTR segment, SCE reported that 35.2% of the incentive budget went to this HTR group, compared to 37.5% found in the database. Upon a visual inspection we found some retailers that looked like they were a grocery or drug store, that were not included in SCE's reported accomplishments, which explained this difference. These additional sites contributed another 2.3%. All told, we found that SCE paid 37.5% of its incentives to the Grocery & Drug HTR segment.

Geographic HTR: For the Geographic HTR segment SCE reported that 55.9% of the incentives paid went to this HTR group, compared to 32.7% found in the database. This difference was attributable to the fact that SCE was using a list of zip codes to define rural customers that included other HTR segments (e.g., low income) that were nonrural. If the zip codes were limited to only the rural areas, it was found that 32.7% of the incentives were paid to the Geographic HTR segment. It is important to note that this accomplishment still greatly exceeds SCE's HTR goal.

SDG&E: The percent of incentives going to HTR segments reported by SDG&E in their fourth quarter filing was consistent with their tracking database.

Table 2 below summarizes the findings of the HTR accomplishments verification tasks. Presented are the percentages of incentives paid to the Geographic and the Grocery & Drug HTR segments that were (1) found in their program tracking database and (2) reported by each IOU in their Final Fourth Quarter CPUC narrative.

Table A-2
Comparison of HTR Accomplishments, by IOU
Tracking Database vs. Final Fourth Quarter Report

HTR segment	SDG&E		SCE		PG&E	
	Database	Reported	Database	Reported	Database	Reported
Geographic	11.8%	11.8%	32.7%	55.9%	42.1%	38.9%
Grocery & Drug	19.3%	19.3%	37.5%	35.2%	17.3%	15.2%

A.5 CONCLUSION

Overall, it was found that the measure accomplishments reported by the IOUs in their final report (specifically, in the CPUC workbook in the Program Activities Worksheet, Table - A, column S) matched very well with the program tracking data. Although, there were some significant variances with the Hard-to-Reach (HTR) accomplishments between the program tracking data and what was reported in the Final Fourth Quarter Report narrative, there was only one instance were HTR accomplishments did not match the tracking data. In this case, the HTR goal was still met after adjustment.

B INCREMENTAL MEASURE COST RESULTS

This section presents a summary of the results of our analyses of CFL incremental measure costs. The final analyses took into account CFL prices recorded in utility program tracking databases, as well as several other sources (e.g., SCE manufacturer and retailer surveys, KEMA-XENERGY retailer survey). The average prices have been weighted to take into account the actual sales volume by product type experienced through the utility programs. Incandescent bulb prices were obtained from the website: www.bulbs.com.

As shown on the following table, the sales-weighted, average incremental measure cost for CFLs amounts to $4.28. This reflects the difference between the sales-weighted average CFL price of $4.94 minus the sales-weighted average incandescent price of $0.66.

Table B-1
Average Incremental Cost for CFLs

	Base Case Wattage	Average CFL Price	Min. CFL Price	Max. CFL Price	Base Case Price	Min. Base Case Price	Max. Base Case Price	Incre-mental Cost	Sales Weight
CFL Open 9-12w	40	$6.04	$2.95	$8.98	$0.69	$0.36	$1.75	$5.35	0%
CFL Open 13-17w	60	$4.82	$1.28	$9.99	$0.66	$0.36	$1.55	$4.16	37%
CFL Open 18-22w	75	$5.18	$0.50	$9.99	$0.48	$0.36	$0.60	$4.70	28%
CFL Open 23-26w	100	$4.78	$0.69	$9.98	$0.55	$0.46	$0.64	$4.23	31%
CFL Open 27-30w	100	$7.28	$3.00	$9.99	$0.55	$0.46	$0.64	$6.73	0%
CFL Open >30w	150	$10.29	$5.90	$13.56	$1.15	$1.12	$1.17	$9.14	0%
CFL Reflectorized 13-17w	65	$5.59	$1.28	$9.89	$2.67	$2.07	$3.09	$2.92	4%
Unweighted Average		$5.32			$0.88			$4.44	
Sales Weighted Average		$4.89			$0.65			$4.28	

Notes:

Average CFL prices determined by analyzing utility program tracking data, utility surveys with manufacturers and retailers, and KEMA-XENERGY's retailer survey (August 2003).

Base case prices based on information obtained from website: www.bulbs.com.

Sales weights determined by analyzing historic sales through utility programs.

C

CONSUMER SURVEY INSTRUMENT

FINAL

General Population and Lighting Purchaser Survey
PY2002 Cross-Cutting Lighting and Single-Family Rebate Program Evaluations- Summer 2003

Hello, my name is _________ from Quantum Consulting. We're conducting a study among California households to learn about attitudes and behaviors concerning energy conservation. Would you have a few minutes to answer some questions regarding energy conservation?

I want to assure you that this is not a sales call and that the information that you provide will be kept strictly confidential. This will only take about 10-15 minutes of your time.

IF SPONSORSHIP NEEDED: This study is being conducted on behalf of the California Public Utilities Commission, and your local utility company.

May I please speak to the person in your household who makes appliance purchase decisions in your household?

[CONTINUE OR ARRANGE FOR CALLBACK]

Screener

Before we get started, let me just ask you a few simple questions to see if you qualify for our survey:

S1. Do you own your home or rent?

1	Own	[SKIP TO S3]
2	Rent	
-8	Don't know	

S2. Do you pay a utility company directly for your electricity, or is it included in your rent?

1	Pay electric bill directly	
2	Included in rent	[THANK AND TERMINATE]
-8	Don't know	[THANK AND TERMINATE]

S3. What is the name of your electric utility company?

1 PG&E
2 SDG&E
3 SCE
4 Other [THANK AND TERMINATE]
-8 Don't know [THANK AND TERMINATE]

DE1 What type of home do you live in? *[DO NOT READ. CHECK ONLY ONE RESPONSE]*

1 Single-family detached
2 Single-family attached (condo/townhouse)
3 Apartment 4 units or less,
4 Apartment 5 units or more,
5 Mobile Home
77 OTHER (Specify)
88 REFUSED
99 DON'T KNOW

(FOR THE BALANCE OF THE SURVEY **UNLESS OTHERWISE NOTED** All questions will have an 88 REFUSED and 99 DON'T KNOW.

[MONITOR COMPLETES OF MULTI-FAMILY CUSTOMERS- MAXIMUM 25%]

OK, you are qualified for the survey.

Battery 1: General Awareness, Knowledge, Attitudes and Behaviors

A1 [A1] **Overall, how would you rate your knowledge of the ways you could save energy in your home ?** On a scale of 1 to 10, with 1 meaning "you are not at all knowledgeable" and 10 meaning "you are extremely knowledgeable," how knowledgeable are you about ways to save energy in your home?

Not At All Knowledgeable									Extremely Knowledgeable	Don't Know
1	2	3	4	5	6	7	8	9	10	99

A2 [A2] **How much of your present knowledge is a direct result of the energy crisis that occurred in California over the summer of 2001? Is it ….**

1 A lot
2 Some
3 A little
4 None
-8 Don't know

A4 [A6] People have different opinions about energy-efficiency and the availability of natural resources such as energy. Using a 10-point scale, with 1 meaning you "Strongly Disagree" and 10 meaning you "Strongly Agree", **please tell me how much you disagree or agree with each of the following statements:** [ROTATE AND RANDOMIZE STATEMENTS.]

Strongly Disagree	Strongly Agree

A4_1 [A6_3] My life is too busy to worry about making energy related improvements in my home.

1 2 3 4 5 6 7 8 9 10

A4_2 [A6_7] It is possible to save energy without sacrificing comfort by being energy efficient.

1 2 3 4 5 6 7 8 9 10

A4_3 [A6_8] It is worth it to me for my household to use less energy in order to help preserve the environment

1 2 3 4 5 6 7 8 9 10

A7 [PGE330.] In 2001, the governor of California promoted an energy conservation and efficiency program called the "20/20 Rebate Program." Households that saved 20% off their electricity bill in June, July, August or September of 2001 as compared to their 1999 bills would qualify for an additional 20% rebate on their bill. **Have you ever heard of the 20/20 Rebate Program?**

1 Yes
2 No [SKIP TO A9]
88 Refused [SKIP TO A9]
99 Don't know [SKIP TO A9]

A8 [PGE340.] **Did you attempt to reduce your electricity bill by 20 percent at that time?**

1 Yes
2 No
88 Refused
99 Don't know

[Now I'm going to talk to you about purchases you may have made in the last year and a half.]

A9 [PGE 090.] **Have you made any major household appliance purchases since January 2002?**

1	Yes	
2	No	SKIP TO A16
88	Refused	SKIP TO A16
99	Don't know	SKIP TO A16

A10 **[PGE 090A.] What did you purchase?**
=> PROMPT for "anything other MAJOR household appliances" after each purchase mentioned.

1	Refrigerator
2	Clothes washer
3	Clothes Dryer
4	Dishwasher
5	Room air conditioner
77	OTHER (specify)
88	Refused
99	Don't know

A11. Have you purchased any new heating, cooling, or water heating equipment since January 2002?

1	Yes	
2	No	SKIP TO A16
88	Refused	SKIP TO A16
99	Don't know	SKIP TO A16

A12. What did you purchase?

=> PROMPT for "any others" after each purchase mentioned.

1	Central air conditioner	
2	Furnace/central heating	
3	Water heater, gas	
4	Water heater, electric	
5	Evaporative cooler/swamp cooler	
6	Whole house fan	
77	OTHER (specify)	
88	Refused	SKIP TO A16
99	Don't know	SKIP TO A16

IF A13 IF **A10_REF**
A10_CW
A10_CD
A10_DW
A10_RAC
A12_CAC
A12_FUR
A12_GWH
A12_EWH
A12_SWP
A13_FAN
A13_OTH

A13. [FOR EACH RESPONSE FROM A10 & A12] **Why did you purchase the new [response from A10 & A12]?**

a. My old equipment broke down
b. I was remodeling my home
c. As an energy efficiency improvement
d. Other [SPECIFY]
e. Don't know

IF A9 = 1 OR A12 = 1-4
[APPLIANCE OR HVAC PURCHASERS]

[FOR APPLIANCES AND HVAC WHERE THERE IS A HIGH EFFICIENCY VERSION OF EQUIPMENT]

A14. [For all responses to A10, and A12 (responses 1-4) **Was the new [response from A10 & A12] that you purchased more energy efficient than standard models available at the time of your purchase?**

a. Yes [CONTINUE]
b. No [SKIP TO A16]
c. Don't know [SKIP TO A16]
Refused [SKIP TO A16]

A15. How do you know your new [response from A10] was energy efficient?

Major Appliance (A10)
1 Energy Guide
2 Energy Star label
3 Utility recommendation
4 Utility rebate
5 Other manufacturer/retailer product information
6 Salesperson

Central Air Conditioning (A12 = CAC)
1 SEER
2 Seasonal Energy Efficiency Rating
3 Utility recommendation
4 Utility rebate
5 Other manufacturer/retailer product information
6 Salesperson

Heating (A12 = Heating/Furnace)
1 FUE
2 Energy Star
3 Utility recommendation
4 Utility rebate
5 Other manufacturer/retailer product information
6 Salesperson

Water heating (A12 = Gas or Electric Water heater)
1 Energy Factor
2 Utility recommendation
3 Utility rebate
4 Other manufacturer/retailer product information
5 Salesperson

[EVERYONE]

A16 [PGE 100.] Other than major appliances and heating and cooling equipment, **have you installed anything else in your home that would assist you in saving energy** such as programmable thermostats, compact fluorescent lights, dual pane windows, weather stripping, or insulation since January 2002?

1	Yes	
2	No	SKIP TO A18
88	Refused	SKIP TO A18
99	Don't know	SKIP TO A18

A17 [PGE 100A.] **What did you install?**
=> PROMPT for "anything more" after each purchase mentioned.

1	Programmable thermostat
2	Windows – Dual Pane or High Efficiency
3	Fluorescent Indoor Fixture
4	Fluorescent Outdoor Fixture
5	Motion sensor
6	CFL
7	CFL Torchiere
8	Dimmer Switch
9	Weatherstripping/Caulking/Weatherization
10	Water Heater/Pipe Wrapping/Insulation
11	Low Flow Showerheads
12	Faucet Aerators
13	Insulation – wall, ceiling or attic
14	Duct Sealing/Repair (NOT CLEANING)
15	Pool Cover
16	Pool pump motor
77	Other [SPECIFY]
88	Refused
99	Don't know

A17B. Where did you buy your [A17 MEASURE]?

1	Directly from a contractor
2	Home improvement store (such as Home Depot, hardware stores, Lowes)
3	Big Box retailer (such as Target, K-Mart, Wal-Mart, Sears)
4	Costco
5	Other [SPECIFY]
6	Don't know

[SF REBATE PROGRAM PURCHASERS, CONTINUE IF A10=1-5; A12=1-6; or A17=1-4, 6, 7, 13, OR 16. ELSE SKIP TO A29]

A18. Did you receive a rebate from [your utility] on your new [RESPONSE FROM A10,A12,A17]?

A18_1, A18_2, A18_3, A18_4, A18_5, A18_6, A18_7, A18_8, A18_9, A18_10, A18_11, A18_11, A18_12, A18_13, A18_14, A18_15, A18_16, A18_77

1	Yes	
2	No	SKIP TO A19
88	Refused	SKIP TO A19
99	Don't know	SKIP TO A19

[CONTRACTOR MEASURE SF REBATE PURCHASE: **IF A12=1-5; or A17=2,13 OR 16; or [A17=1 AND A17B=1**]. ELSE SKIP TO A20]

A19. On a scale of 1 to 10, what influence did the contractor have in your decision to purchase new equipment? [If needed: We'll use a 1-to-10 scale, where 1 means NOT INFLUENTIAL with the statement, and 10 means VERY INFLUENTIAL.]

A20. When shopping for equipment, do you recall seeing any literature, promotions or displays in any store that provided information about the advantages or features of the equipment you purchased?

1	Yes	
2	No	SKIP TO A24
88	Refused	SKIP TO A24
99	Don't know	SKIP TO A24

A23. On a scale of 1 to 10, where a 1 is "Not at all influential" and a 10 is "Very influential", how influential were the advertising materials in your decision to purchase?

Not at all influential Very influential

1 2 3 4 5 6 7 8 9 10 99

A24. When shopping for your equipment, did you talk with a sales person?

1	Yes	
2	No	SKIP TO A28
88	Refused	SKIP TO A28
99	Don't know	SKIP TO A28

A25. Did the salesperson inform you of the benefits of high efficiency equipment?

1	Yes	Continue
2	No	Continue
88	Refused	Continue
99	Don't know	Continue

A26. On a scale of 1 to 10, where a 1 is "Not at all influential" and a 10 is "Very influential", how influential was the sales person in your decision to purchase equipment?

Not at all influential Very influential

1 2 3 4 5 6 7 8 9 10 99

[SF REBATE HVAC/APPLIANCE PURCHASERS WHO REPORTEDLY DID NOT BUY HIGH EFFICIENCY]

A28 [ASK IF A14=NO, ELSE SKIP TO A29.] Based on your responses, you have not installed high efficiency equipment, such as CFLs or insulation. **What would you say is the main reason you haven't installed high efficiency equipment?**

1. Product was not available
2. Could not find a contractor
3. High efficiency unit did not have the features I was looking for
4. High Cost
5. Quality concern
6. Performance concern
7. Concerned equipment would not save enough energy to make it worthwhile ....
8. Time and hassle of comparing costs/brands
9. Not enough information
10. Not aware of high efficiency options

[EVERYONE]

A29. [PGE020] Other than installing new appliances or equipment, **do you regularly take any actions to conserve energy?** [IF NEEDED: You may consider turning off lights or setting the thermostat higher when using the air conditioning or lower when heating your house?]

1	Yes	
2	No	SKIP TO A31
88	Refused	SKIP TO A31
99	Don't know	SKIP TO A31

A30. [PGE030] **What actions have you taken to conserve energy?** [SELECT ALL THAT APPLY]
=> PROMPT for "anything more" after each action mentioned.

1	Turn off appliances when not in not in use
2	Set thermostats lower when heating and higher when using the air conditioning
3	Schedule energy-using processes during off-peak periods where feasible.
4	Turn off any lights that are not being used
5	Use dimmer switches to lower lights
6	Set computer to low power stand bye mode
7	Purchase Energy Star electronics/appliances
8	Dress appropriately for warmer/cooler temperatures
9	Unplug spare Refrigerator or Freezer
10	Remove spare Refrigerator or Freezer
11	Clean Refrigerator Coils
12	Raise Refrigerator or Freezer Temperature Set-point
13	Replace/Clean Heating/cooling system filters more frequently
14	Lower Water Heater Temperature Set-point
15	Line Dry Clothes
16	Do more cold water clothes washes
17	Air Dry Dishes
18	Run Swimming pool sweeper/filter less hours
19	Lower Swimming pool temperature set-point
77	Other (SPECIFY)
88	Refused
99	Don't know

IF A29 = 1

A6 [PGE 040.] **When did you start conserving energy in these ways? Would you say:**

1 I always tried to conserve energy in these ways
2 I started conserving a year or two ago
3 I Just recently started conserving in the past few months
4 I don't currently conserve

A31 **Now that the state's energy situation has improved, would you say that you are doing the same, less, or more than you were during the crisis to save energy in your home?** (READ)

1 We're doing the same amount of conservation as we did during the crisis
2 We're doing less now that the crisis is over
3 We're doing more now than we did during the energy crisis

Battery 2: Energy Efficiency Programs Awareness/ Participation

Now I'd like to talk to you about where you receive information and assistance to help you save energy at home.

PA1 [ES1] **First, have you ever seen or heard of ENERGY STAR?**

1	Yes	
2	No	SKIP TO PA3
88	Refused	SKIP TO PA3
99	Don't know	SKIP TO PA3

PA2 [ES1a] **What does it mean?** *[DO NOT READ. CHECK ALL THAT APPLY]*

1 Saves energy/uses less energy
2 Less harmful to the environment, less pollution
3 Costs less to operate, saves money on electric bill
4 Rebate available if you purchase Energy Star appliance
5 It's a government standard for energy efficient equipment
6 Other [SPECIFY: ____________________]
-8 Don't know

PA8 [G8.] **Have you heard about any programs offered by** [your utility] such as rebate programs, home energy audits, or other programs? [DO NOT READ] Any others?

1 Rebates
2 Product give-away/turn-in event (CFLs, torchieres)
3 2nd refrigerator turn-in/recycling
4 Energy efficient mortgages
5 Energy survey or audit
6 Haven't heard of any
7 Low Income Programs
77 Other [SPECIFY: ________________ **]**

PA9 [PR8.] **Have you participated in any of these programs since January 2002?**

1	Yes	SKIP TO CW1
2	No	SKIP TO PA10
88	Refused	SKIP TO CW1
99	Don't know	SKIP TO CW1

PA10 [PR9.] **Why not?** *[DO NOT READ. CHECK ALL THAT APPLY]*

1 Inconvenient to attend event
2 Not enough time to fill out the rebate application
3 Not worth the time to fill out the rebate form for the amount of $ available
4 Rebate program ended
5 Don't need equipment/appliance program is promoting
6 Don't own equipment/appliance program is promoting
7 Don't own home
8 My income doesn't qualify
77 Other [SPECIFY: ____]
99 Don't know

Battery 3: Utility Rebate Product Awareness, Attitudes, and Knowledge

Now I'm going to ask you some questions about appliances and heating and cooling equipment for your home.

[CLOTHES WASHER- ALL]

Let's say your clothes washer broke and you had to go shopping for a new one.

CW1. How would you identify a clothes washer that is energy efficient, that is, that uses less energy than a standard clothes washer?

a. Energy Star label
b. Utility recommendation, rebate
c. Energy Guide indicating low energy usage
d. Salesperson
e. Technology- horizontal axis, tumble action
f. Other
g. Don't know

[HVAC AND POOLS] IF S1=OWN, CONTINUE. IF S1=RENT, SKIP TO PT1

AC1. Do you have air conditioning in your home?

1. Yes
2. No [SKIP TO AC5]
3. Don't know [SKIP TO AC5]

AC2. What type of air conditioning do you have? [ACCEPT MULTIPLES]

1. Central air conditioning
2. Room/wall unit- air conditioning [SKIP TO AC5]
3. Evaporative cooler [SKIP TO AC5]
4. Don't know [SKIP TO AC5]

AC3. Let's say your central air conditioner broke and you had to replace it. **How would you be able to distinguish between an energy efficient central air conditioner and a standard central air conditioner**? [DON'T READ]

1. Contractor
2. Utility recommendation, rebate
3. SEER/ Seasonal Energy Efficiency Rating
4. Consumer reports
5. Other
6. Don't know

AC4 Before this survey, had you ever heard of a whole house fan? [IF NEEDED] Whole house fans are fans that are permanently installed in your home that move air from the living space into the attic. They typically cut down on central air conditioning usage.

1. Yes
2. No
3. Don't know

AC5. Do you have central heating in your home?

1. Yes
2. No [SKIP TO P1]
3. Don't know [SKIP TO P1]

AC6. Let's say your heater broke and you had to go shopping for a new one. **How would you be able to distinguish between an energy efficient heater and a standard one?**

1. Contractor
2. Utility recommendation, rebate
3. Consumer reports
4. Energy Star
5. AFUE
6. Other
7. Don't know

P1. Do you have a pool at your home?

1	Yes	
2	No	SKIP TO PT1
88	Refused	SKIP TO PT1
99	Don't know	SKIP TO PT1

P4. During the summer, how many hours a day do you typically run your pool pump?

Select 1 to 24 or (88 = refused) or (99 = don't know)

P4_ST. What time do you typically start your pool pump?

P4_END. What time do you typically stop your pool pump?

[PROGRAMMABLE THERMOSTAT] [IF A17= T-STAT, SKIP TO PT2 AND ADD:

"YOU MENTIONED YOU PURCHASED A PROGRAMMABLE THERMOSTAT RECENTLY."]

PT1. Before this survey, had you ever heard of a programmable thermostat? [IF NEEDED…Programmable thermostats are used to control the temperature settings for heating and cooling, and you can program them to make automatic adjustments while you are asleep or away.]

a. Yes
b. No [SKIP TO L1]
c. Don't know [SKIP TO L1]

PT2. When did you first hear of programmable thermostats?

a. Within the past year
b. Within the past two years
c. Over two years ago
d. Don't know

PT3. How did you first become aware of programmable thermostats?
[ALLOW MULTIPLES, RECORD FIRST MENTION]

1 In store point of purchase materials
2 Friends or family
3 Utility bill insert, advertising, call center
4 Advertising on television, on the Internet, in newspapers, in magazines
5 Sales person
6 Consumer reports
7 Department of Energy label
8 Energy Star Label
9 Contractor
10 Already in house (pre-existing)

PT4. Do you currently have a programmable thermostat in your home?

1 Yes
2 No [SKIP TO L1]
3 Don't know [SKIP TO L1]

PT6. Where did you buy your programmable thermostat?

1 Directly from a contractor
2 Home improvement store (such as Home Depot, hardware stores, Lowes, Yardbirds)
3 Big Box retailer (such as Target, K-Mart, Wal-Mart, Sears)
4 Costco
5 already in house/pre-existing
6 Other
7 Don't know

PT8. Why did you buy the programmable thermostat?

a. Replacing heating/cooling equipment
b. To save energy
c. Better technology than my old one
d. Didn't have a thermostat before
e. Old thermostat was broken, didn't work well
f. Don't know

PT9. I'd like to get an idea of how you are using this thermostat to control the temperature of your home. **First, do you usually adjust the temperature settings on your new thermostat manually or do you program it to adjust automatically at different times of the day?**

1 Manual
2 Program
3 DK

PT10A. In general, there may be many benefits from using a programmable thermostat to automatically control the temperature of one's home. **Would you say that using a programmable thermostat makes your home [read answers] than using a regular thermostat?**

i. More comfortable
ii. Just as comfortable, or
iii. Less comfortable

PT10B. Would you say that using a programmable thermostat **[read answers] than using a regular thermostat?**

iv. Is more convenient
v. Not any more or less convenient, or
vi. Less convenient

PT10C. Would you say that using a programmable thermostat has led you to use your

heater and/or air conditioner [read answers] than using a regular thermostat?

vii. More
vii. About the same, or
viii. Less

Battery 4: CFL Product Awareness, Attitudes, Knowledge and Purchases

Now I'd like to talk to you about lighting equipment.

[IF A17=CFL or CFL torchiere, SKIP TO L2]

L1 [QL13] **Before we talked today, had you ever heard of compact fluorescent light bulbs? [IF NEEDED…**Compact fluorescent bulbs are small screw-in fluorescent bulbs that fit in regular light bulb sockets. They look different than standard incandescent bulbs and typically cost a lot more. They are often made out of thin tubes of glass bent into loops.

1	Yes	
2	No	[SKIP TO T1]
-8	Don't Know	[SKIP TO T1]

[AWARE OF CFLs- GENERAL CFL AWARENESS]

[SKIP IF A17=CFL or CFL torchiere]
[SKIP IF L1= 2 OR 99]

L8 [QL13B] **Have you ever purchased or been given compact fluorescent light bulbs?**

1	Purchased	
2	Received/given	
3	Purchased and received/given	
4	No, neither purchased nor received/given	[SKIP TO T1]
-8	Don't Know	[SKIP TO T1]

L24. [ASK IF A17=6 OR 7 OR L8=1-3] [QL13G] **Do you recall receiving a discount or rebate when you bought this/these CFL[s]?**

1. Yes [CONTINUE]
2. No [SKIP TO T1]
-8 Don't Know [SKIP TO T1]
-9 Refused [SKIP TO T1]

L26. [S11] **How likely were you to have purchased [this bulb/these bulbs] if you didn't get the discount?**

1. Very likely
2. Somewhat likely
3. Not very likely
4. Very unlikely
5. Don't know
6. Refused

[ASK IF A24=1]

L27. Did the discount encourage you to buy more CFLs than if there had not been a discount?

1. Yes
2. No
88 Don't know
99 Refused

L9YR [IF A17=6 OR 7 OR L8=1-3] [QL13C] In which year did you purchase or receive your FIRST compact fluorescent light bulb?

2003
2002
2001
2000
1999
1998

L18 [IF A17 ne 6,7 AND L9YR ne 2003 or 2002] **Have you bought any CFLs since January 2002?**

1. Yes
2. No [SKIP TO T1]
3. Don't know [SKIP TO T1]

[MONITOR CFL PURCHASER COMPLETES- 125 FOR PGE, SCE; 100 FOR SDGE=350]

[CFLs PURCHASED SINCE JANUARY 2002- PURCHASE EXPERIENCE]

L19 [IF A17=6,7 OR L18=1 OR L9YR = 1,2] **Where did you buy those CFLs?** [ACCEPT MULTIPLES]

a. Grocery store
b. Drug store
c. Home improvement store (such as Home Depot, hardware stores, Lowes)
d. Big Box retailer (such as Target, K-Mart, Wal-Mart, Sears)
e. Costco
f. Other
g. Don't know

[MONITOR PARTICIPATING RETAILER COMPLETES]

L20. How many CFLs did you purchase [since January 2002]?

____

L21. Of those, how many are currently installed in your home?

____

L4. If you were going to buy a CF bulb today, how much do you think *each* bulb would cost, not including any discounts or rebates? [DON'T READ]

a. Less than $2 each
b. $3-$5 each
c. $6-$10 each
d. More than $10 each
e. Don't know

L5. **Where have you seen CF bulbs for sale?** [ACCEPT MULTIPLES, RECORD FIRST MENTION]

a. Grocery store
b. Drug store
c. Home improvement store (such as Home Depot, hardware stores, Lowes) Big Box retailer (such as Target, K-Mart, Wal-Mart, Sears)
d. Costco
e. Other
f. Haven't seen them
g. Don't know

[HAVE TRIED CFLs- GENERAL CFL PRODUCT SATISFACTION]

L10 [IF A17=6 OR 7 OR L8 ne 1-3] **In general, how satisfied have you been with the compact fluorescent light bulbs you have used in your home?** Have you been… *[READ]*

1 Very satisfied [SKIP TO L12]
2 Somewhat satisfied
3 Somewhat dissatisfied
4 Very dissatisfied
-8 Don't know [DON'T READ. SKIP TO L12]
-9 Refused [DON'T READ. SKIP TO L12]

L11 [IF L10 ne 2-4] **In what ways were you dissatisfied? Any others?** [DON'T READ]

1 Not a wide array of styles, shapes, sizes
2 Light quality is bad
3 Don't like flicker
4 Too expensive
5 Can't use with dimmers
6 Other [SPECIFY]
7 Don't know

L22 [IF A17=6,7 OR L18=1 OR L9YR = 1,2] [QL4] **When you were shopping for your CFLs, did you notice any advertising or information materials related to energy efficient lighting displayed in the store?**

1	Yes	[CONTINUE]
2	No	[SKIP TO L24]
-8	Don't know	[SKIP TO L24]
-9	Refused	[SKIP TO L24]

L23 [IF L22 = 1] [QL13F_5] **How likely would you have been to purchase the CFL[s] if you had not noticed the store display on CFLs?**

1. Very likely
2. Somewhat likely
3. Not very likely
4. Very unlikely
5. Don't know
6. Refused

L28 Do you plan on purchasing CFLs in the future, assuming they cost about $3 each? **Why not?**

L29. [IF L28 = 2] **Why not?**

Battery 5: Torchiere Purchasers

T1. [S3] **Since January 2002, have you purchased any tall floor lamps, or "torchieres"?**

1 Yes [CONTINUE]
2 No [SKIP TO T5]
3 Don't know [SKIP TO T5]

[MONITOR TORCHIERE COMPLETES- 50 FOR PGE, SCE; 25 FOR SDGE=125]

T2 [QL4] **When you were shopping for your torchiere, did you notice any advertising or information materials related to energy efficient lighting displayed in the store?**

1 Yes
2 No
-8 Don't know
-9 Refused

T3 [QL8] **Did you talk with a sales person?**

1	Yes	[CONTINUE]
2	No	[SKIP TO T5]
-8	Don't know	[SKIP TO T5]
-9	Refused	[SKIP TO T5]

T4 [QL9] **Did you discuss energy efficiency with the salesperson?**

1 Yes
7 No
8 Don't know
9 Refused

T5 [QL14] **Before we talked today, had you ever heard of torchieres or floor lamps that use ONLY compact fluorescent bulbs?** [IF NEEDED... Torchieres can use a number of different types of light bulbs - most use halogen bulbs, while others can use compact fluorescent bulbs or incandescent bulbs.]

1	Yes	
2	No	[SKIP TO F1]
-8	Don't Know	[SKIP TO F1]

T6 [QL14B] **Have you ever purchased or been given torchieres or floor lamps that ONLY use compact fluorescent bulbs?**

1	Purchased	
2	Received/given	[SKIP TO F1]
3	Purchased and received/given	
4	No, neither purchased nor received/given	[SKIP TO F1]
-8	Don't Know	[SKIP TO F1]

T7. Do you recall receiving a discount or rebate when you bought your CFL torchiere?

1.	Yes	[CONTINUE]
2.	No	[SKIP TO F1]
-8	Don't Know	[SKIP TO F1]
-9	Refused	[SKIP TO F1]

T9. How likely were you to have purchased your CFL torchiere if you didn't get the discount?

1. Very likely
2. Somewhat likely
3. Not very likely
4. Very unlikely
5. Don't know
6. Refused

Battery 6: Fixture Purchasers

F1. [S3] **Since January 2002, have you purchased a hard-wired lighting fixture, such as a ceiling fixture or a wall-mounted fixture?**

1 Yes [CONTINUE]
2 No [SKIP TO F5]
3 Don't know [SKIP TO F5]

[MONITOR FIXTURE COMPLETES- 50 FOR PGE, SCE; 25 FOR SDGE=125]

F2 [QL4] **When you were shopping for your lighting fixture, did you notice any advertising or information materials related to energy efficient lighting displayed in the store?**

1 Yes
2 No
-8 Don't know
-9 Refused

F3 [QL8] **Did you talk with a sales person?**

1 Yes [CONTINUE]
2 No [SKIP TO F5]
-8 Don't know [SKIP TO F5]
-9 Refused [SKIP TO F5]

F4 [QL9] **Did you discuss energy efficiency with the salesperson?**

1 Yes
2 No -8 Don't know -9 Refused

F5. [Q15] Have you ever heard of wall mounted or ceiling fixtures that are made especially for compact fluorescent bulbs and cannot use regular bulbs?

1 Yes
2 No [SKIP TO DE1]
-8 Don't Know [SKIP TO DE1]

F6 [QL15B] **Have you ever purchased or been given hard-wired fixtures that ONLY use compact fluorescent bulbs?**

1 Purchased
2 Received/given
3 Purchased and received/given
4 No, neither purchased nor received/given [SKIP TO DE1]
-8 Don't Know [SKIP TO DE1]

F7. Do you recall receiving a discount or rebate when you bought your CFL fixture?

1. Yes [CONTINUE]
2. No [SKIP TO DE1]
-8 Don't Know [SKIP TO DE1]
-9 Refused [SKIP TO DE1]

F9. How likely were you to have purchased your CFL fixture if you didn't get the discount?

1. Very likely
2. Somewhat likely
3. Not very likely
4. Very unlikely
5. Don't know
6. Refused

Battery 7: Demographics

Before we finish, I have just a few more questions about your household to make sure we're getting a representative sample of California residents.

[DE2 INTENTIONALLY BLANK. DE1 AT THE VERY BEGINNING TO MONITOR HOME TYPE]

DE3 In what year was your home built?

____________________ Year *[SKIP TO DE4]*
-8 Don't know
-9 Refused *[SKIP TO DE4]*

D3A Was it built …. *[READ RANGE]*?

1 in the last six years (i.e., since 1997)?
2 between 1992 and 1996?
3 between 1987 and 1991?
4 between 1982 and 1986?
5 between 1977 and 1981?
6 between 1960 and 1976?
7 between 1940 and 1959?
8 before 1940
-8 Don't know
-9 Refused

DE4 About how large is your home in terms of total square feet?

_______________ Square feet *[SKIP TO DE5]*
-8 Don't know
-9 Refused *[SKIP TO DE5]*

DE4A Is it …. *[READ RANGE]*?

1 less than 500 square feet
2 500-999 square feet
3 1,000 to 1,499 square feet
4 1,500-1,999 square feet
5 2,000-2,499 square feet
6 2,500-2,999 square feet
7 3,000 or more square feet
-8 Don't know
-9 Refused

DE5 Did you do any remodeling or renovation or additions in 2002?

1. Yes
2. No [SKIP TO DE7]
-8 Don't Know [SKIP TO DE7]
-9 Refused [SKIP TO DE7]

DE6 Has the square footage of your house changed?

1. Yes, it has increased
2. Yes, it has decreased
3. No change
-8 Don't Know
-9 Refused

DE7 How many people live in your home year-round of the following age groups?

_____ Less than 18 years old
_____ 19-34
_____ 35-59
_____ 60 or older
-8 Don't know
-9 Refused

DE8 Did the number of people in your household changed in 2002?

1. Yes, the number of people increased [SPECIFY BY HOW MANY]
2. Yes, the number of people decreased [SPECIFY BY HOW MANY]
3. No change
-8 Don't Know
-9 Refused

DE9 Which of the following describes your educational background?

1 Some high school
2 High school graduate
3 Trade or technical school
4 Some college
5 College graduate
6 Some graduate school
7 Graduate degree
-8 Don't know
-9 Refused

DE10 Which of the following best represents your annual household income from all sources in 2000, before taxes? *[READ]*

1 Less than $20,000 per year
2 $20,000-49,999
3 $50,000-74,999
4 $75,000-99,999
5 $100,000 or more
-8 Don't know
-9 Refused

DE11 Which of the following best describes your racial or ethnic background? *[READ]*

1 Hispanic
2 African American
3 Caucasian
4 Asian American
5 Native American
6 Interracial
7 Other [SPECIFY: ______________________]
-8 Don't know
-9 Refused

DE12 What is the primary language spoken in your home?

a. English
b. Spanish
c. Mandarin
d. Cantonese
e. Tagalog
f. Korean
g. Vietnamese
h. Russian
i. Japanese
j. Other _____________

RECORD RESPONDENT GENDER

1 Female
2 Male

END- Thank you for taking the time to complete this important survey! Have a great day/night!

D PROGRAM MANAGER INTERVIEW GUIDE

Upstream Lighting Program Staff Interview Guide

I. Introductions

- Evaluation overview
- Interview objectives
    - Clarify our understanding of the 2002 program
    - Explore areas for program improvement
- Program staff identification and roles/responsibilities
- Overview of 2002 program goals v. accomplishments

II. Internal Administration, Communication, and Coordination

- How is the program administered within the utility? Is administration effective internally (e.g., staff coordination, communication, resources)?
- Is the program well-coordinated and cross-promoted with the other energy efficiency programs offered by your utility? (e.g., multi-family programs, residential energy audits, non-residential programs) With local programs?
- What coordination activities have taken place with the other utilities? How effective has this level of coordination been?
- How might program administration, communications, and coordination be improved going forward?

III. Market Actor Overview and Program Participation

- Who are the major players in the retail sales market for CFL products? What about major distributors or buying groups? Who are the major manufacturers? How do these differ for bulbs v. fixtures?
- Is the POS approach more or less effective in achieving the program's objectives (e.g., decreasing the cost of CFLs, increasing availability) than the manufacturer buydown? Why?
- How were retailers and manufacturers notified about the program? What level of the organization was contacted (for retailers and manufacturers), e.g., store level or corporate level?
- What was required to participate? What barriers did market actors experience when exploring whether to participate? (e.g., POS)

- What fraction of retailers and manufacturers are participating? Which significant players are not participating and why? What kinds of retail outlets are participating? (e.g., food and drug stores, home improvement stores, and independent v. chain)
- What other strategies might be used to increase the number of participating retailers and manufacturers?

IV. Program Implementation

- What is the process for tracking discounted product with participating retailers and manufacturers? (e.g., reservations, allotments of product)
- Are there any problems with obtaining and verifying documentation (e.g., POS data, invoices) from participating retailers and manufacturers?
- When did the program begin in 2002? Did the lapse in program funding from the end of 2001 to the beginning of 2002 have any effect on the program? What effect does program timing have on the overall market activity for CFL products?
- Is there a limit on the number of discounts an individual customer may receive? Are any efforts made to track non-residential applications, or overlap with other utility discount programs such as the multi-family program?
- How might program implementation be improved going forward?

V. CFL Product Background- Bulbs, Torchieres, and Fixtures

- What was the range of CFL products (e.g., wattages, fixture types) on the retail market in 2002? How has that changed over time? What products were part of the program and what is likely to be the focus of future programs?
- What was the range of price for the various types of CFL products on the market in 2002? How does that compare to the price offered in 2001? Does the price vary by retailer? (e.g., drug/food store v. home improvement store)

VI. CFL Market and Program Effects

- What effect did the program have on the non-discounted price at participating retailers in 2002 (e.g., were discounts offered during program lapse)? What about prior years?
- Did the program influence prices offered by non-participating retailers and manufacturers?
- Has the number of manufacturers who produce CFL products increased over time? Has the range of products manufactured increased (e.g., various wattages, configurations)? How has the program affected this? (for CF bulbs, torchieres, and fixtures)

- Has the number of retailers who sell CFL products increased over time? The types of retailers? (e.g., food and drug stores, home improvement) The range of products sold? How has the program affected this? (for CF bulbs, torchieres, and fixtures)
- What has had the greatest influence on current CFL prices and rates of production? What is likely to be needed to maintain (or improve) current market conditions for these products)? What are future program plans regarding increasing supply and consumer demand?
- What are the most important lessons learned from implementing the upstream lighting program over the last few years?

VII. Program Marketing

- What type of promotional support did the program provide to retailers? (e.g., promotional support, field visits, co-operative advertising) What did retailers find the most useful?
- What promotional activities did retailers and manufacturers undertake on their own? Did the program influence any of that activity?
- What type of CFL awareness and program information was disseminated to consumers in 2002? (e.g., CFL awareness, information on proper/effective installations) How was it disseminated? (e.g., bill stuffers, web sites, phone line) Were these methods effective?
- How was the program promoted through the EPA Change a Light and Flex Your Power campaigns? Were these promotions effective?
- What improvements might be made to increase the effectiveness of program marketing?

VIII. Hard-to-Reach (HTR)

- How are HTR segments defined? Are these definitions appropriate? How might they be modified to better address the “spirit” of the HTR requirements?
- What strategies were used in 2002 to meet the HTR objectives? (i.e., percentage of discounted product sold through rural retail channels and food and drug stores) Were these new strategies for 2002? i.e., did prior program strategies reach these markets?
- Have HTR strategies been effective in increasing CFL penetration among targeted markets? How might these efforts be expanded upon or improved to continue to serve HTR customers?
- Do HTR efforts have any negative effects on the overall program? (e.g., on overall program cost-effectiveness)

IX. Next Evaluation Tasks

- Market actor interviews- key vendors to contact?
- Consumer surveys- key issues to cover, research questions needing answers?

E

RETAILER INTERVIEW GUIDE

Contact Name:____

Company: ____

Address:____

City, State, Zip: ____

Telephone:____

Retailer Category: ____

Survey ID Number: ____

LEAD-IN: Hello, my name is ___________________ and I am calling from KEMA-XENERGY Inc. We are conducting a study of retailers on behalf of California's investor-owned utilities to assess attitudes and practices regarding the stocking, marketing and selling of Compact Fluorescent (CFL) lighting products.

[Use screener if we do not have a contact name.] May I speak with the person who is most responsible for decisions concerning the stocking, marketing and selling of Compact Fluorescent (CFL) lighting products in this store?

IF SPONSORSHIP NEEDED: This study is being conducted on behalf of the California Public Utilities Commission and the California investor-owned utilities.

IF CONTACT IS NOT AVAILABLE, ASK FOR BEST TIME TO CALL BACK.

CALL BACK DATE/TIME: ___________________________

REPEAT LEAD-IN FOR RESPONDENT IF NEEDED. We would like to interview you concerning your recent experience and views on supplying, promoting and selling of Compact Fluorescent (CFL) lighting products. The interview will take between 30 and 45 minutes, depending on your responses. All responses you provide will be confidential.

UTILITY CONTACT NAMES IF NEEDED TO VERIFY STUDY:
SDG&E – Rob Rubin, 858-654-1244
SCE – Shahana Samiullah, 626-302-8293

PG&E – Kenneth James, 415-973-0246

ESTABLISHMENT DATA

Before we get started, let me ask you a few questions about your company.

1. What is your title and overall responsibilities?

---

2. Are you part of a local, regional, or national chain – or is your store independent?

   1 Local chain
   2 Regional chain
   3 National chain
   4 Independent
   5 Other [SPECIFY: ____________________]

3. Approximately how many employees work at this location? ________________

4. What are your approximate gross revenues on an annual basis? _________________

PRODUCT SALES, DIVERSITY AND SUPPLY

As I mentioned, this study is about compact fluorescent lighting products.

5. What general categories of lighting products do you currently sell? (CHECK ALL THAT APPLY)

   1 Light bulbs
   2 Torchieres, floor lamps
   3 Hard-wired lighting fixtures
   4 Lighted ceiling fans

6. Which categories of compact fluorescent lighting products do you sell?

   1 Compact fluorescent light bulbs
   2 Compact fluorescent torchieres or floor lamps
   3 Hard-wired compact fluorescent fixtures
   4 Ceiling fans with compact fluorescent light bulbs
   5 Other [SPECIFY: _____________________________________]

7. What percent of your light bulb sales do compact fluorescent light bulbs represent? What about… (REPEAT FOR ALL PRODUCTS SOLD)

Record Percent:	
	CFL sales, as a percent of total light bulb sales
	CFL torchiere sales, as a percent of total torchiere/floor lamp sales
	CFL fixture sales, as a percent of hard-wired wall and ceiling mounted fixtures
	CFL ceiling fan sales, as a percent of all lighted ceiling fan sales

8. Have you noticed a change in compact fluorescent lighting product sales over time? For example, are sales of CFLs in 2003 about the same, moderately different, or drastically different than they were in 2002? (IF DIFFERENT, ASK HIGHER OR LOWER. REPEAT FOR ALL PRODUCTS SOLD) What about the difference between last year and 2001?

2003 v. 2002					
		Moderately Different		**Drastically Different**	
	Same	*Higher*	*Lower*	*Higher*	*Lower*
CFLs					
CFL torchieres					
CFL fixtures					
CFL ceiling fans					

2002 v. 2001					
		Moderately Different		**Drastically Different**	
	Same	*Higher*	*Lower*	*Higher*	*Lower*
CFLs					
CFL torchieres					
CFL fixtures					
CFL ceiling fans					

9. What different manufacturers or brands of compact fluorescent lighting products do you represent? (FOR EACH PRODUCT SOLD, RECORD NAMES OF MANUFACTURERS REPRESENTED)

	List Manufacturers/Brands Represented:
CF bulbs	
CFL floor lamps or torchieres	
CFL wall/ceiling fixtures	
Ceiling fans that use CF bulbs	

10. Do you purchase directly from the manufacturer, from a regional buyer, from a distributor, or some other supply channel? (REPEAT FOR ALL PRODUCTS SOLD)

	Describe Product Supply Channel:
CF bulbs	
CFL floor lamps or torchieres	
CFL wall/ceiling fixtures	
Ceiling fans that use CF bulbs	

11. Over the past year and a half, have you experienced any disruptions or shortages in the supply of compact fluorescent lighting products?

    1 Yes
    2 No (SKIP TO 14)

12. Approximately, when did these disruptions or shortages occur?

    __________ Month
    __________ Year

13. What were the main reasons for these disruptions or shortages?

    1 Unexpected rise in consumer demand
    2 Shipping/ordering error
    3 Dock strike
    4 Other [SPECIFY: ____]

14. Have you noticed a change in the *diversity* of compact fluorescent lighting products sold over the past five years? That is, are there now more or less manufacturers supplying the product? Are there about the same, more or less models available in different shapes and sizes? (REPEAT FOR ALL PRODUCTS SOLD. DESCRIBE TYPE AND MAGNITUDE OF CHANGE IN SPACE PROVIDED)

	Describe Change (if any) in Product Diversity:
CF bulbs	
CFL floor lamps or torchieres	
CFL wall/ceiling fixtures	
Ceiling fans that use CF bulbs	

PRODUCT MARKETING AND PROMOTION

Now I'd like to ask a few questions about product marketing and promotion.

15. Does your store actively market or promote compact fluorescent lighting products? That is, are CFLs marketed or promoted any differently than lighting products in general? What about… (REPEAT FOR ALL PRODUCTS SOLD) Please describe your marketing strategy for CFLs – i.e., is it seasonal? is it tied to other promotions, such as EPA's Change-a-Light program, or a utility or manufacturer discount program?

	Is Product Marketed or Promoted Differently?	**Describe Product Marketing/Promotional Strategy:**
CF bulbs		
CFL floor lamps or torchieres		
CFL wall/ceiling fixtures		
Ceiling fans that use CF bulbs		

16. What have been some of the most effective strategies or methods for promoting compact fluorescent lighting products? What has been less effective? What suggestions do you have for improving marketing or advertising effectiveness? (Probe specifically for whether they use Energy Star specification as a sales pitch to their customers.)

TRAINING AND SALES INCENTIVES

17. Do you provide on-going training to sales staff regarding lighting products, including compact fluorescent lighting products?

    1 Yes
    2 No (SKIP TO 26)

18. Who provides the training – do you use your own staff, manufacturers reps, etc.?

    1 Retailer staff
    2 Manufacturer reps
    3 Utility staff
    4 Other (SPECIFY: ________________________________)

19. How often is the training provided – when someone is hired, on a set schedule (such as quarterly or annually), or "as needed" when new products or information becomes available? (CHECK ALL THAT APPLY)

    1 New hires
    2 Ongoing schedule
    3 As needed
    4 Other (SPECIFY: ________________________________)

20. Have you or your sales staff received any formal training regarding the benefits of compact fluorescent lighting products?

    1 Yes
    2 No (SKIP TO 26)

21. Who provided this training?

    1 Retailer staff
    2 Manufacturer reps
    3 Utility staff
    4 Other (SPECIFY: ________________________________)

22. When and how often was it / is it provided? (PROBE FOR UTILITY-SPONSORED TRAINING PROVIDED PRIOR TO 2001)

---

23. Would you say this training was/is very, somewhat or not at all effective in encouraging sales of compact fluorescent lighting products?

1 Very effective
2 Somewhat effective
3 Not at all effective

24. Why do you say that?

---

25. How might this type of training be improved to encourage greater sales of compact fluorescent lighting products?

---

26. Do you provide staff with incentives or bonuses tied to lighting product sales, including compact fluorescent lighting products?

1 Yes
2 No (SKIP TO 31)

27. What is the incentive or bonus structure – i.e., is it a dollar amount per unit sold, a percent of base salary, etc.?

1 $/unit
2 % of salary
3 Other (SPECIFY: ________________________________)

28. Would you say this type of incentive or bonus strategy is very, somewhat or not at all effective in encouraging sales of compact fluorescent lighting products?

1 Very effective
2 Somewhat effective
3 Not at all effective

29. Why do you say that?

---

30. How might this strategy be improved to encourage greater sales of compact fluorescent lighting products?

RETAILER ATTITUDES TOWARD CFL PRODUCTS

Now, I have a few questions to gauge your awareness of compact fluorescent lighting product benefits and barriers.

31. First, how would you characterize the most important benefits of compact fluorescent lighting products? That is, if you were making a pitch to your customers, what would be the main selling points you'd use to try to get them to purchase compact fluorescent lighting products over incandescent or halogen lighting products?

    1 Reduced energy costs, lower energy bill
    2 Energy savings, conservation
    3 Longer bulb life
    4 Less frequent bulb replacement
    5 Produce less heat, safer
    6 Other (SPECIFY: ____)

32. Are your retail sales staff very likely, somewhat likely, or not at all likely to make this type of pitch to customers shopping for lighting products?

    1 Very likely
    2 Somewhat likely
    3 Not at all likely

33. What are your customers main concerns regarding compact fluorescent lighting products? For example, what are their main concerns regarding CFLs? What about… (REPEAT FOR EACH PRODUCT SOLD. CHECK ALL THAT APPLY.)

	CFL	**CFL Torchiere**	**CFL Fixture**	**CFL Ceiling Fan**
Too expensive				
Not attractive				
Limited sizes/shapes available				
Limited wattages available				
Poor quality of light				
Color of the light				
Takes too long to warm up, flicker				
Early burn-out				

Other (SPECIFY BY PRODUCT TYPE)

34. How have customers concerns influenced your decisions regarding the *range of different* compact fluorescent lighting products you offer? Would you say these concerns have significantly limited the range of products you offer, somewhat limited the range of products you offer, increased the range of products you offer, or had no effect on the range of products you offer?

1 Significantly limited the range of products offered
2 Somewhat limited the ranges of products offered
3 Increased the range of products offered
4 Had no effect on range of products offered

35. From your perspective, what are the main barriers limiting increased sales of compact fluorescent lighting products? For example, what do you see as the main product-related or marketplace barriers to increased sales of CFLs? What about … (REPEAT FOR EACH PRODUCT SOLD. PROBE FOR FULL RANGE OF BARRIERS, INCLUDING PRODUCT-RELATED BARRIERS AS WELL AS SUPPLY- AND DEMAND-SIDE BARRIERS)

	CFL	**CFL Torchiere**	**CFL Fixture**	**CFL Ceiling Fan**
Too expensive				
Not attractive				
Limited sizes/shapes available				
Limited wattages available				
Poor quality of light				
Color of the light				
Takes too long to warm up, flicker				
Lack of consumer awareness/demand				
Supply is limited by manufacturers				

Other (SPECIFY BY PRODUCT TYPE)

---

36. Again, from your perspective, what is your outlook on the future for sales of compact fluorescent lighting products? For example, over the next year or two, do you see sales of CFLs increasing dramatically, rising steadily, flattening out, or decreasing? Why do you say that? (PROBE FOR OUTLOOK ON DIFFERENT BARRIERS – EG: PRICE, AVAILABILITY/SUPPLY, AWARENESS/ACCEPTANCE) What about… (REPEAT FOR ALL PRODUCTS SOLD)

	Describe Expected Sales Trend:	**Explanation for Expected Sales Trend:**
CFLs		
CFL Torchieres		
CFL Fixtures		
CFL Ceiling Fans		

PROGRAM AWARENESS AND PARTICIPATION

37. Are you aware of any programs sponsored by California electric utility companies that promote compact fluorescent lighting products?

    1 Yes
    2 No (PROMPT WITH MORE DETAIL; ASK IF SOMEONE ELSE MAY BE AWARE)

38. What about these programs do you recall? What did the program offer? (CHECK ALL THAT APPLY) (IF UNAWARE PROMPT)

39. What aspects of the program did your store/company take part in? (CHECK ALL THAT APPLY)

40. During what periods of time did you participate in these aspects of the program? (IF UNAWARE PROMPT FOR PARTICIPATION DURING 2002 AND 2003)

	Aware?	**Participated?**	**Timeframe(s) of Participation?**
Rebates (mail-in, coupon, application)			
Manufacturer discounts			
Point-of-sale rebates, instant discounts			
Salesperson training			
Salesperson incentives, SPIFS			
Point-of-purchase displays, signage			
Merchandising support			
Co-operative advertising			
OTHER:			

41. What were your primary reasons for getting involved with this program? Any others? (CHECK ALL THAT APPLY)

1 Financial incentives, discounted products
2 Salesperson training, incentives
3 Merchandising support, POP displays/signage
4 Co-operative advertising
5 Increase sales
6 Increase traffic to/in store
7 Because competitors were participating, gain market share
8 To meet consumer demand, consumers were asking for CFLs
9 Because energy conservation "sells"
10 Other (SPECIFY: ____)

42. Generally speaking, has the program lived up to your expectations in these areas? Please explain.

FOR RETAILERS WHO ONLY PARTICIPATED VIA BUYDOWN, ASK GENERAL SATISFACTION QUESTION 43 AND THEN SKIP TO 48.

43. Now I'm going to ask you how satisfied you've been with specific aspects of the program – some of which you may not have been involved in. If that's the case, I'll just note "NA" and move on. OK? Overall, how would you rate your level of satisfaction with the program in general. I'm using a scale of 1 to 5, where 1 means "very satisfied" and 5 means "very dissatisfied." How would you rate your overall level of satisfaction with the program?

_____ (USE 1 – 5, OR NA)

44. …How satisfied were you with *the enrollment process* – that is, the process of discussing the program with the utility program manager and completing the retailer participation agreement paperwork?

_____ (USE 1 – 5, OR NA)

45. …How satisfied were you with *the rebate fund reservation process* – that is, the process used by the utility to allocate a set amount of rebate dollars to participating stores?

_____ (USE 1 – 5, OR NA)

46. …How satisfied were you with *the rebate payment process* – that is, the process of applying for and receiving rebate payments from the utility?

_____ (USE 1 – 5, OR NA)

47. …Overall, how satisfied were you with *the utility program manager and other staff* involved in the program?

_____ (USE 1 – 5, OR NA)

48. In what way could the program processes be improved?

1 No suggestions, processes are fine
2 Reduce reporting/documentation requirements
3 Eliminate reservation process
4 Allow larger allocations
5 Quicker turn-around on rebate payments
6 Better responsiveness from utility program manager
7 Other (SPECIFY: ____)

49. Are you planning to participate in the program going forward?

1 Yes (SKIP TO 51)
2 No

50. Why do you say that?

51. As it is currently designed, the program offers two different types of financial incentives that ultimately result in lower-priced compact fluorescent lighting products being offered to consumers. The first allows the retailer to take the discount at the register – that is, the customer gets the rebate at the point-of-purchase. The second gives the incentive to manufacturers who then provide discounted products directly to the retailer. Each method has distinct advantages and disadvantages – for example, having the discount applied at the point-of-sale gives the retailer greater in-store promotional exposure, but it also means the retailer has to provide the utility with documentation to verify sales and collect incentives. When the discount is provided directly to the manufacturer, the paperwork requirements for retailers is significantly reduced if not eliminated. Hearing about the different options now, do you have a preference for one method or another? Why do you say that?

ASSESSMENT OF INFLUENCES

The market for compact fluorescent lighting products has changed over time and a number of important factors have helped to bring about these changes. I'm interested in your opinions about how the market has changed and what has been influential in bringing about these changes.

52. Let's talk about *product sales* – that is, the absolute quantity of compact fluorescent lighting products that have been sold to consumers through retail establishments such as yours. In your opinion, what has had the most influence on changes in product sales over the past two to three years? (CHECK ALL THAT APPLY)

1 Improvements in product quality and performance factors (e.g., color of light, flickering)
2 Improvements in product diversity (e.g., more/different products available, smaller bulb size)
3 Reductions in product prices (even without discounts/rebates)
4 Improvements in product distribution/supply channels
5 Improvements in product availability/exposure (e.g., more stores carry them)
6 Promotional/advertising support from utility programs
7 Financial incentive programs offered by utilities
8 Promotional/advertising support from manufacturers and/or retailers
9 Discounted prices/sales supported by manufacturers and/or retailers
10 The "energy crisis" (e.g., consumer demand, conservation actions)
11 The ENERGY STAR program and related promotional support
12 The Flex Your Power program and related advertising
13 Other (SPECIFY: ____)

53. (ASK IF MORE THAN ONE FACTOR MENTIONED) Can you rank these factors for me – that is, what do you think has had the greatest influence on product sales? And after that? (REPEAT FOR TOP FIVE FACTORS)

1 Improvements in product quality and performance factors (e.g., color of light, flickering)

2 Improvements in product diversity (e.g., more/different products available, smaller bulb size)
3 Reductions in product prices (even without discounts/rebates)
4 Improvements in product distribution/supply channels
5 Improvements in product availability/exposure (e.g., more stores carry them)
6 Promotional/advertising support from utility programs
7 Financial incentive programs offered by utilities
8 Promotional/advertising support from manufacturers and/or retailers
9 Discounted prices/sales supported by manufacturers and/or retailers
10 The “energy crisis” (e.g., consumer demand, conservation actions)
11 The ENERGY STAR program and related promotional support
12 The Flex Your Power program and related advertising
13 Other (SPECIFY: ____)

54. (ASK IF UTILITY INCENTIVES/SUPPORT NOT MENTIONED) You didn’t mention utility programs offering financial incentives and promotional support. Do you not feel as if these programs had any influence on product sales, or just not as significant as the other factors you mentioned?

1 Utility programs have had no influence
2 Utility programs not as influential as other factors
3 Other (SPECIFY: _____________________________________)

55. Do you have any final suggestions for the utilities to help them improve the programs they offer and encourage greater sales of compact fluorescent lighting programs?

OK. Those are all of the questions I have for you. Thank you for your time and cooperation.

F

MANUFACTURER INTERVIEW GUIDE

Contact Name:____

Company: ____

Address:____

City, State, Zip: ____

Telephone:____

Retailer Category: ____

Survey ID Number: ____

Hello, my name is __________________ and I am calling from KEMA-XENERGY Inc. May I speak with (READ CONTACT NAME)?

IF CONTACT IS NOT AVAILABLE, ASK FOR BEST TIME TO CALL BACK.

CALL BACK DATE/TIME: ___________________________

We are conducting a study of lighting manufacturers and distributors and we'd like to interview you concerning your recent experience and views on producing, supplying, promoting and selling of compact fluorescent lighting products. We estimate the interview will take between 30 and 45 minutes. All responses you provide will be confidential.

This study is being conducted on behalf of the California investor-owned electric utilities and the California Public Utilities Commission.

UTILITY CONTACT NAMES IF NEEDED TO VERIFY STUDY:
SDG&E – Rob Rubin, 858-654-1244
SCE – Shahana Samiullah, 626-302-8293
PG&E – Kenneth James, 415-973-0246

Market and Product Data

Before we get started, let me ask you a few questions about your company and the market for compact fluorescent lighting products.

1. What is your title and overall responsibilities?

---

2. What general categories of lighting products are produced by your firm? (CHECK ALL THAT APPLY)

    1 Light bulbs
    2 Torchieres, floor lamps
    3 Hard-wired lighting fixtures
    4 Lighted ceiling fans

3. Which categories of compact fluorescent lighting products are produced by your firm?

    1 Compact fluorescent light bulbs
    2 Compact fluorescent torchieres or floor lamps
    3 Hard-wired compact fluorescent fixtures
    4 Ceiling fans with compact fluorescent light bulbs
    5 Other [SPECIFY: ___________________________________]

4. What different names or brands do you sell compact fluorescent lighting products under?

	Brand Names:
CFLs	
CFL Torchieres	
CFL Fixtures	
CFL Ceiling Fans	

5. How do you distribute your compact fluorescent lighting products? For example, do you sell directly to retailers? Which ones? Do you sell through regional buyer's groups or other distributor networks? Which ones?

	Distribution Methods:
CFLs	
CFL Torchieres	
CFL Fixtures	
CFL Ceiling Fans	

6. How would you characterize the current market for compact fluorescent lighting products in California? That is, are there a few major players responsible for the major share of product sales, or are there a large number of major players? Where would you characterize your firm in terms of market share? (PROBE CAREFULLY SINCE SAMPLE CONTAINS RELATIVELY SMALL MANUFACTURERS AND SOME OF THE MAJOR ONES)

	Market Characterization (e.g., major players, market share):
CFLs	
CFL Torchieres	
CFL Fixtures	
CFL Ceiling Fans	

7. What percent of your light bulb sales do compact fluorescent light bulbs represent? What about… (REPEAT FOR ALL PRODUCTS SOLD)

Record Percent:	
	CFL sales, as a percent of total light bulb sales
	CFL torchiere sales, as a percent of total torchiere/floor lamp sales
	CFL fixture sales, as a percent of hard-wired wall and ceiling mounted fixtures
	CFL ceiling fan sales, as a percent of all lighted ceiling fan sales

8. Can you tell me approximately how many CFLs you estimate will be produced by your company and shipped for sale in California this year? What about 2002? And 2001? (REPEAT FOR ALL PRODUCTS SOLD)

	Total Quantity Produced/Shipped to California		
	2003	**2002**	**2001**
CFLs			
CFL Torchieres			
CFL Fixtures			
CFL Ceiling Fans			

9. What are your expectations for product sales in 2004 and beyond?

10. Which of the following product types do you manufacture: (READ LIST)

11. Which of these models did you manufacture three years ago?

Manufacture in 2003?	Manufactured in 2000?	CFLs
		Bare bulbs, screw-in base
		<15W
		15W+
		Bare bulbs, pin-type
		< 15W
		15W+
		Circline bulbs
		Covered lamp (no reflector)
		15W<
		>15W – 25W
		>25W
		Covered lamp (with reflector)
		<20W
		20W+
		Fixtures
		Ceiling fixtures with CFL screw-in or pin-type
		Ceiling fixtures with CFL circline bulbs
		Wall fixtures
		CFL torchieres
		Outdoor CFL fixtures
		Ceiling fans with CFLs

Product Pricing

12. Now I'd like to get your take on product pricing for California retail markets, including changes over time and expectations for the future. In general, how would you characterize the change in retail prices for CFLs from 2002 to 2003? What about 2000 to 2003? What are your expectations for CFLs in 2005 and beyond? (REPEAT FOR EACH PRODUCT)

	Characterization of Product Pricing in California		
	2002 v. 2003	**2000 v. 2003**	**2005+**
CFLs			
CFL Torchieres			
CFL Fixtures			
CFL Ceiling Fans			

Production and Market Barriers

13. In your opinion, are there factors inherent in the manufacturing, importing or distributing processes that have restricted the production and supply of compact fluorescent lighting products in the past year or so? Examples might include shortages of inputs used in manufacturing processes (labor, capital, raw materials), inadequate infrastructure to produce or import products, or bring them to market, etc. Please describe.

---

14. What needs to happen to overcome these supply-side restrictions?

---

15. What are the most important factors that are limiting customer demand? Examples include lack of awareness, product pricing, and perceptions regarding product performance, bulb fit, appearance, early burn-out,etc. Please describe.

16. What needs to happen to overcome these demand-side constraints?

17. Now I'd like to talk to you about ENERGY STAR. Approximately what percent of the CFLs you produce are ENERGY STAR certified? What about…? (REPEAT FOR ALL PRODUCTS SOLD)

	% ENERGY STAR Certified
CFLs	
CFL Torchieres	
CFL Fixtures	
CFL Ceiling Fans	

18. Does the need to comply with ENERGY STAR specifications introduce any barriers to the large scale manufacturing of compact fluorescent lighting products? How, if at all, can these barriers be overcome?

Program Awareness and Participation

19. Are you aware of any programs sponsored by California electric utility companies that promote compact fluorescent lighting products?

    1 Yes
    2 No (SKIP TO 34)

20. What about these programs do you recall? What did the program offer? (CHECK ALL THAT APPLY) (IF UNAWARE PROMPT)

21. Has your company participated in the manufacturer buydown aspect of this program? Any other aspects of the program that your company has actively taken part in? (CHECK ALL THAT APPLY)

22. During what periods of time did you participate in these aspects of the program? (IF UNAWARE PROMPT FOR PARTICIPATION DURING 2002 AND 2003)

	Aware?	Participated?	Timeframe(s) of Participation?
Rebates (mail-in, coupon, application)			
Manufacturer buydown			
Point-of-sale rebates, instant discounts			
Salesperson training			
Salesperson incentives, SPIFS			
Point-of-purchase displays, signage			
Merchandising support			
Co-operative advertising			
OTHER:			

23. What were your primary reasons for getting involved with this program? Any others? (CHECK ALL THAT APPLY)

    1 Financial incentives, discounted products
    2 Salesperson training, incentives
    3 Merchandising support, POP displays/signage
    4 Co-operative advertising
    5 Increase sales
    6 Increase traffic to/in store
    7 Manufacturer convinced me
    8 Because competitors were participating, gain market share
    9 To meet consumer demand, consumers were asking for CFLs
    10 Because energy conservation “sells”
    11 Other (SPECIFY: ____)

24. Generally speaking, has the program lived up to your expectations in these areas? Please explain.

---

25. Now I’m going to ask you how satisfied you’ve been with specific aspects of the program – some of which you may not have been involved in. If that’s the case, I’ll just note “NA” and move on. OK? Overall, how would you rate your level of satisfaction with the program in general. I’m using a scale of 1 to 5, where 1 means “very satisfied” and 5 means “very dissatisfied.” How would you rate your overall level of satisfaction with the program?

    _____ (USE 1 – 5, OR NA)

26. …How satisfied were you with *the enrollment process* – that is, the process of discussing the program with the utility program manager and agreeing to participate?

    _____ (USE 1 – 5, OR NA)

27. …How satisfied were you with *the rebate fund reservation process* – that is, the process used by the utility to allocate a set amount of rebate dollars to participating stores?

    _____ (USE 1 – 5, OR NA)

28. …How satisfied were you with *the rebate payment process* – that is, the process of applying for and receiving rebate payments from the utility?

    _____ (USE 1 – 5, OR NA)

29. …Overall, how satisfied were you with *the utility program manager and other staff* involved in the program?

_____ (USE 1 – 5, OR NA)

30. In what way could the program processes be improved?

1 No suggestions, processes are fine
2 Reduce reporting/documentation requirements
3 Eliminate reservation process
4 Allow larger allocations
5 Quicker turn-around on rebate payments
6 Better responsiveness from utility program manager
7 Other (SPECIFY: ____________________________________)

31. Are you planning to participate in the program going forward?

1 Yes (SKIP TO 33)
2 No

32. Why do you say that?

---

33. As it is currently designed, the program offers two different types of financial incentives that ultimately result in lower-priced compact fluorescent lighting products being offered to consumers. The first allows the retailer to take the discount at the register – that is, the customer gets the rebate at the point-of-purchase. The second gives the incentive to manufacturers who then provide discounted products directly to the retailer. Each method has distinct advantages and disadvantages – for example, having the discount applied at the point-of-sale gives the retailer greater in-store promotional exposure, but it also means the retailer has to provide the utility with documentation to verify sales and collect incentives. When the discount is provided directly to the manufacturer, the paperwork requirements for retailers is significantly reduced if not eliminated. Hearing about the different options now, do you have a preference for one method or another? Why do you say that?

Assessment of Influences

34. Finally, let's talk about *influences on product sales* – that is, factors that have had influence on the absolute quantity of compact fluorescent lighting products sold to consumers through retail establishments. In your opinion, what has had the most influence on changes in product sales over the past two to three years? (CHECK ALL THAT APPLY)

    1 Improvements in product quality and performance factors (e.g., color of light, flickering)
    2 Improvements in product diversity (e.g., more/different products available, smaller bulb size)
    3 Reductions in product prices (even without discounts/rebates)
    4 Improvements in product distribution/supply channels
    5 Improvements in product availability/exposure (e.g., more stores carry them)
    6 Promotional/advertising support from utility programs
    7 Financial incentive programs offered by utilities
    8 Promotional/advertising support from manufacturers and/or retailers
    9 Discounted prices/sales supported by manufacturers and/or retailers
    10 The "energy crisis" (e.g., consumer demand, conservation actions)
    11 The ENERGY STAR program and related promotional support
    12 The Flex Your Power program and related advertising
    13 Other (SPECIFY: ____)

35. (ASK IF MORE THAN ONE FACTOR MENTIONED) Can you rank these factors for me – that is, what do you think has had the greatest influence on product sales? And after that? (REPEAT FOR TOP FIVE FACTORS)

    1 Improvements in product quality and performance factors (e.g., color of light, flickering)
    2 Improvements in product diversity (e.g., more/different products available, smaller bulb size)
    3 Reductions in product prices (even without discounts/rebates)
    4 Improvements in product distribution/supply channels
    5 Improvements in product availability/exposure (e.g., more stores carry them)
    6 Promotional/advertising support from utility programs
    7 Financial incentive programs offered by utilities
    8 Promotional/advertising support from manufacturers and/or retailers
    9 Discounted prices/sales supported by manufacturers and/or retailers
    10 The "energy crisis" (e.g., consumer demand, conservation actions)
    11 The ENERGY STAR program and related promotional support
    12 The Flex Your Power program and related advertising
    13 Other (SPECIFY: ____)

36. (ASK IF UTILITY INCENTIVES/SUPPORT NOT MENTIONED) You didn't mention utility programs offering financial incentives and promotional support. Do you not feel as if these programs had any influence on product sales, or just not as significant as the other factors you mentioned?

    1 Utility programs have had no influence
    2 Utility programs not as influential as other factors
    3 Other (SPECIFY: ____)

37. Do you have any final suggestions for the utilities to help them improve the programs they offer and encourage greater sales of compact fluorescent lighting programs?

OK. Those are all of the questions I have for you. Thank you for your time and cooperation.

G

SURVEY METHODOLOGY

This appendix presents the methodologies used to conduct the primary research associated with this evaluation:

- Consumer survey
- Upstream market actor interviews
- Program staff interviews

Note that as part of measurement and verification activities, an on-site lighting logger study is currently underway. A report containing the results of the ex post savings analysis, including a description of the study methodology, will be available in March of 2004.

G.1 CONSUMER SURVEY

The consumer survey built upon previous efforts to track awareness, attitudes, and behaviors with respect to energy efficiency in general and CFL products. A total of 1,001 residential customers located in the three electric IOU service territories were surveyed by telephone in June of 2003.

G.1.1 Sample Design

The sample frame used for the consumer survey was the residential customer population of the three electric IOUs- Pacific Gas and Electric Company, San Diego Gas and Electric Company, and Southern California Edison. The utilities provided a list of zip codes that comprise their service territory and we selected a random sample (using random digit dialing) for each utility. Table F-1 provides the population counts for each utility service territory.

Table G-1
Consumer Survey Sample Frame

Utility	Number of Residential Accounts
PG&E	5,397,227
SCE	3,874,807
SDG&E	1,151,243

Source: Utility CIS data

We set initial targets for CFL product purchasers to ensure adequate sample sizes, but ultimately did not need to oversample CFL purchasers because we found them in sufficient numbers using random sampling.

Table F-2 provides the initial consumer survey target allocation. Note that as mentioned, we specified targets by utility service territory and CFL lighting product.

Table G-2
Consumer Survey Target Allocation

Purchaser Targets	PG&E	SCE/SCG	SDG&E	Total
CF bulb	150	150	125	425
Floor Lamp	50	50	50	150
Fixture	50	50	50	150
Total purchasers[1]				550
Total non-purchasers	170	170	85	425
Total Overall	370	370	260	1,000

[1]Because respondents may purchase more than one CFL product, we did not establish overall purchaser targets by utility

G.1.2 Questionnaire Design

Our approach to developing the consumer behavior survey instrument included the following three survey batteries, which are discussed below. It should be noted that the consumer survey was designed to support a concurrent evaluation of the IOU's 2002 Single-Family Rebate Program. The general population portion of the survey included a separate battery on energy efficient product purchases and awareness, which was analyzed and presented in the Single-Family Rebate Program evaluation report.[1]

- **General awareness, attitudes, knowledge, and behaviors**. The first consumer survey battery gathered data on general energy efficiency awareness, attitudes, knowledge, and behaviors. This type of survey battery was included in two of the phases of the four-phased California Lighting and Appliance Program Evaluation, allowing for tracking of these indicators over time.
- **CFL product awareness, attitudes, knowledge, and purchases**. The second survey battery focused on determining CFL product-specific attitudes, knowledge, and purchases. This portion of the survey attempted to find out how much consumers presently know about CFL equipment—are they aware of CFL technology, do they understand the benefits of it, what are their perceptions about the price differential. It also determined self-reported CFL/lighting product purchases. This type of survey battery was also included in the California Lighting and Appliance Program Evaluation, allowing for analysis of the changes over time in CFL product awareness and self-reported behavior.

[1] Quantum Consulting and KEMA-XENERGY, 2003.

- **CFL/lighting product purchaser experience**. This final survey battery was conducted with consumers who have purchased a compact fluorescent bulb, torchiere, or fixture during the period of January 2002 through June 2003 (when the survey was implemented).[2] This battery focused on determining the effect of the Program on actual CF bulb purchases during the program year (2002). We probed what motivated consumers to purchase CF bulbs, including point-of-purchase displays, salesperson discussion, and retailer advertisements. We also focused on how Program incentives reduced the price of CFL products and how the consumer's purchase decision was impacted by CFL price. For non-CFL purchasers of floor lamps and fixtures, we will focus on CFL awareness and other factors that are important to the decision-making process, such as the price differential and exposure to CFL product messages.

The consumer questionnaire is included as Appendix B. We conducted a pre-test on the instrument in early June of 2003, and as a result we re-organized the instrument and modified the wording of some questions. To decrease the length of the survey, some questions that were designed to address secondary objectives were dropped.

G.1.3 Survey Implementation

The consumer survey was implemented over the period of June 6 through July 20, 2003 using Quantum Consulting's in-house Computer-Aided Telephone Interview facility. We surveyed households randomly within IOU service territory zip codes using random digit dialing. Quantum Consulting's method for survey implementation and quality assurance includes the following steps:

- Maintain a high supervisor-to-interviewer ratio, permitting close supervision of the data collection process, including daily call audits and tracking of interviewer production rates
- Familiarize interviewers with energy-efficient equipment and services through training
- Provide on-going interviewer training in survey research methods to reduce inter-interviewer differences and nonsampling error
- Employ specialized techniques for reducing survey nonresponse error before and during data collection and teach techniques for converting situational refusers
- Reconcile call dispositions with sample design objectives, ensuring that HTR market segments are adequately represented in the survey sample
- Involve the principal investigator throughout the data collection process.

[2] We surveyed purchasers of CFLs from 2002 to directly assess the effects of the 2002 Program. However, for fixture and floor lamps, we indirectly assessed the Program's effects. We sampled *any* type of fixture and floor lamp purchasers over the past 2 years because purchase incidences of these products are relatively low, and finding a significant number of CFL-dedicated fixture and floor lamp purchasers is extremely cost-prohibitive. However, CFL-dedicated fixtures and floor lamps were addressed through market actor surveys and process evaluation activities.

As shown in Table F-3, a total of 1,001 surveys were conducted, over half of these with lighting purchasers. As mentioned above, we did not over-sample CFL purchasers, so the proportions that are shown below reflect purchase incidences among the target population.

Table G-3
Consumer Survey Actual Allocation

Utility	PG&E	SCE	SDG&E	Total
CF bulb purchaser	162	138	110	410
Torchiere purchaser	53	48	39	140
Fixture purchaser	72	70	56	198
Total purchasers	211	200	146	557
Total non-purchasers	159	171	114	444
Total overall	370	371	260	1,001

G.1.4 Weights

We developed population and relative weights to address the utility service territory-specific targets that were met. Table F-4 presents the weights.

Table G-4
Consumer Survey Weights

Utility	Population	Number of survey respondents	Population weight	Relative weight
PGE	5,397,227	370	14,587.10	1.40087
SCE	3,874,807	371	10,444.22	1.00301
SDGE	1,151,243	260	4,427.86	0.42523

G.2 UPSTREAM MARKET ACTOR INTERVIEWS

The market actor survey included a sample of retailers and manufacturers of CFL products. We assessed retailer stocking and exposure of CFL products, manufacturer shares of CFL products, and market actor awareness of and participation in the Program. We also generally probed on awareness and attitudes towards CFL products, allowing for a characterization of market actor behaviors and motivations for producing and providing CFL products to retailers and consumers.

Sample Design

Our approach to conducting market actor surveys included 31 retailer, 12 manufacturer, and 4 "other market actor" surveys. We attempted a census of participating manufacturers and big box or chain retailers, and selected a sample of franchise and single-location independent retailers. The source used for the retailer and manufacturer surveys was a comprehensive list of participating manufacturers and retailers aggregated from high-level contact lists provided by the IOU program managers for the major retailers and for all participating manufacturers. We also used program tracking databases that the utilities provided, which contained many of the smaller participating retailers. We had considered augmenting our sample frame with other major market actors, but after a review of the database we determined that most of the major players in the state were participating in the program and that our survey would focus on participating retailers and manufacturers.

The other market actor surveys were conducted with the following entities:

- Flex Your Power- utility contract manager and Flex Your Power director
- D&R International- ENERGY STAR® contractor
- Ecos Consulting- third-party program implementer

Survey Design

The retailer survey was comprised of the following five batteries, which are each discussed below:

- **Product availability**. The first retailer survey battery focused on CFL product availability. We first queried retailers as to how many models of various lighting products are currently stocked and on display, and approximately what percentage of those products are CFL-dedicated. We determineed if retailers have recently experienced any shortages in availability of CFL-dedicated equipment. Finally, we assessed changes in the demand for and the stocking of CFL products over the past year.
- **Product exposure**. The second survey battery will focused on CFL product exposure. This battery focused on store advertising and promotion of CFL products. Additionally, we asked retailers whether they provide training to their salespeople on energy efficiency in general and on CFL products in particular and whether they offer any compensation for CFL product sales and/or set goals for such sales.
- **Retailer attitudes toward CFL products**. The third survey battery focused on any performance concerns that retailers may have towards CFL products. The purpose of this battery was to determine whether decision-makers at retail outlets have certain opinions towards CFL technologies that might inhibit their subsequent stocking, exposure, and sales. We will determineed whether retailers are concerned about the

incremental price, availability of the products, applicability of products (i.e., broad array of desired features and applications), and product performance.

- **Ordering/source of CFL products**. The fourth survey battery focused on the ordering process. We determined whether the lead-time varies between CFL and standard products and determine the source of CFL products.
- **Program awareness and influence**. The final retailer survey battery contained questions regarding awareness of and participation in the 2002 Program. Additionally, determined the influence of the current program on retailer stocking and promotional behaviors. Finally, we included questions to help characterize the cumulative effects of prior years' programs on customer demand and retailer behaviors.

The manufacturer/distributor survey was comprised of the following five batteries, which are each discussed below:

- **Market structure and size**. The first survey battery seeks to obtain an update on the current CFL product market structure. We determined manufacturer and retailer relationships, and any variances in CFL product shipping to stores that are part of larger, regional chains (e.g., based on location, size of store). We also focused on assessing the size of the CFL product market from the supplier's side, for example, the approximate number of CFL products that are manufactured and distributed to retailers and CFL product shares. We also assessed perceptions of future expected growth in CFL product shares—with and without the current level of utility program activity.
- **Product diversity**. We provided an update to product diversity assumptions in this survey battery. We determined the range of product offering in terms of wattage, shape, style, and brand.
- **Product-related barriers**. In this battery, we determined whether there are production-related barriers to manufacturing CFL products. For example, regarding the ENERGY STAR specification, are there specific difficulties associated with meeting the specification. From a consumer adoption perspective, are there product-related barriers associated with CFL products that inhibit large-scale manufacturing. We also asked about specific CFL products, for example, we will determine why manufacturers are not producing a large volume of CFL-dedicated fixtures.
- **Market barriers**. We solicited upstream actors' opinions regarding supply-side and consumer-side barriers to increased CFL product sales. We also determined perceptions of where the markets for CFL products are likely headed, i.e., market shares of CFL products, projections for the number of CFLs sold, etc.
- **Program awareness/influence**. The final survey battery focused on supply-side awareness of the Program. This battery also assessed the influence of the Program on suppliers, how it influenced their behavior in 2002, and how their future behavior will likely be affected based on their perceptions of the 2003 Program. Finally, we

solicited suggestions for improving the Program's efforts at increasing CFL product sales in the marketplace.

The retailer interview guide is included in this report as Appendix D, and the manufacturer interview guide is Appendix E. The other market actor surveys were conducted by a KEMA-XENERGY senior project manager, and were less structured than the retailer and manufacturer interviews. These surveys helped provide background on a number of key issues, namely:

- The role of the Flex Your Power campaign in promoting energy efficient lighting products
- The coordination issues that arose between the utilities' statewide program and Ecos Consulting's overlapping third-party program
- How ENERGY STAR testing and de-listing affects the program.

Data Collection

The upstream market actor surveys were conducted by KEMA-XENERGY analysts during the months of June, July and August of 2003. Each interview lasted approximately 1-2 hours. As mentioned above, a total of 47 interviews were conducted with participating retailers, manufacturers, and other market actors, as shown in Table F-5 below.

Table G-5
Upstream Market Actor Survey Completions

Category	Number of Interviews Conducted
Big Box retailers	4
Manufacturers	12
Single-location retailers	11
Franchise retailers	6
Chain retailers	10
Other market actors	4
Total	**47**

G.3 PROGRAM STAFF INTERVIEWS

Program staff interviews were conducted to support the process evaluation. The process evaluation was designed to evaluate the program's implementation strategies, assess satisfaction with the program, and identify areas for program improvement. The KEMA-XENERGY project manager conducted a series of on-site interviews with each utility's program manager in May of 2003. These interviews lasted about 2 hours and provided an opportunity to learn in-depth about program implementation strategies. The program staff interview guide is included as Appendix C.

H

CONSUMER SURVEY CROSS-TABULATIONS

H.1 GENERAL AWARENESS, KNOWLEDGE, ATTITUDES AND BEHAVIORS

	GENERAL POPULATION																							
A1. How would you rate your knowledge of the ways you could save energy in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Average rating	7.2	7.2	7.3	7.3	7.4	7.1	0.0	7.2	7.2	7.3	6.4	7.0	7.3	7.0	7.3	7.3	6.8	7.3	6.7	7.5	6.9	7.5	7.3	7.4
N	991	625	366	366	256	369	0	251	740	878	106	375	616	281	710	824	165	815	176	557	258	410	167	148

	GENERAL POPULATION																							
A2. How much of your present knowledge is a direct result of the energy crisis that occurred in California over the summer of 2001?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
A lot	26%	27%	22%	23%	25%	30%	0%	25%	26%	25%	29%	32%	22%	33%	23%	25%	31%	27%	19%	29%	23%	29%	30%	38%
Some	35%	34%	37%	37%	34%	32%	0%	35%	35%	35%	35%	34%	36%	29%	37%	36%	29%	34%	38%	33%	37%	35%	35%	31%
Little	23%	23%	22%	26%	19%	20%	0%	25%	22%	23%	25%	21%	24%	21%	24%	23%	21%	22%	26%	21%	24%	20%	18%	19%
None	15%	14%	16%	13%	20%	16%	0%	13%	15%	16%	8%	12%	17%	14%	15%	15%	15%	15%	13%	16%	14%	15%	16%	11%
REFUSED	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%
DON'T KNOW	2%	2%	1%	1%	1%	2%	0%	2%	2%	1%	2%	2%	1%	3%	1%	1%	3%	1%	4%	1%	1%	1%	1%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

	GENERAL POPULATION																							
A4. Average ratings - Tell me how much you disagree or agree with each of these statements (1 means strongly disagree, 10 means strongly agree)	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
My life is too busy to worry about making energy related improvements in my home	2.9	3.1	2.7	2.8	2.8	3.2	0.0	3.0	2.9	2.8	4.1	3.2	2.8	3.1	2.9	2.9	3.2	2.8	3.5	2.8	2.9	2.8	3.0	2.7
It is possible to save energy without sacrificing comfort by being energy efficient	8.1	8.0	8.3	8.1	8.1	8.0	0.0	8.1	8.1	8.0	8.5	7.9	8.2	8.2	8.0	8.1	8.1	8.2	7.6	8.2	8.1	8.2	8.1	8.1
It is worth it to me for my household to use less energy in order to help preserve the environment	8.3	8.3	8.1	8.4	8.4	8.1	0.0	8.2	8.3	8.2	8.8	8.4	8.2	8.5	8.2	8.2	8.6	8.3	8.2	8.3	8.3	8.3	8.1	8.4
N	1001	632	369	370	260	371	0	249	742	878	106	375	616	280	711	825	165	817	174	557	260	408	165	149

	GENERAL POPULATION																								
A7. Have you ever heard of the 20/20 Rebate program?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	52%	49%	60%	51%	56%	53%	0%	49%	54%	53%	46%	44%	58%	48%	54%	54%	46%	56%	36%	58%	52%	59%	51%	60%	61%
No	47%	50%	39%	48%	42%	45%	0%	50%	45%	46%	51%	55%	41%	51%	45%	45%	52%	43%	64%	41%	48%	40%	48%	39%	38%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	1%	1%	1%	1%	2%	1%	0%	1%	1%	1%	3%	1%	1%	1%	1%	1%	2%	1%	0%	2%	1%	1%	1%	1%	2%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																								
A8. Did you attempt to reduce your electricity bill by 20 percent at that time?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	66%	69%	63%	65%	62%	69%	0%	66%	67%	66%	74%	70%	65%	69%	66%	66%	71%	68%	58%	69%	65%	70%	69%	66%	76%
No	31%	29%	34%	32%	35%	28%	0%	32%	30%	32%	21%	27%	33%	28%	32%	32%	26%	30%	36%	29%	34%	28%	30%	31%	23%
REFUSED	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	0%	0%	0%	0%
DON'T KNOW	2%	2%	3%	2%	3%	2%	0%	1%	3%	2%	5%	2%	2%	3%	2%	2%	3%	2%	7%	1%	2%	2%	1%	3%	1%
N	531	309	222	188	145	198	0	126	405	476	51	168	363	139	392	454	77	464	67	327	137	250	91	89	73

A9. Have you made any major household appliance purchases since January 2002?	GENERAL POPULATION Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	33%	30%	40%	32%	32%	36%	0%	31%	35%	34%	28%	31%	35%	20%	39%	37%	15%	34%	30%	37%	27%	38%	37%	35%	41%
No	66%	69%	60%	67%	68%	64%	0%	68%	65%	65%	71%	69%	64%	79%	61%	62%	84%	65%	69%	62%	73%	61%	61%	65%	58%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	1%	1%	1%	1%	0%	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	1%	2%	0%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

A10C. What major appliance did you purchase?	Annualized Total	GENERAL POPULATION Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Refrigerator	12.5%	18.8%	18%	21%	18%	17%	21%	0%	18%	19%	19%	17%	18%	19%	11%	22%	21%	9%	19%	16%	22%	14%	22%	22%	17%	26%
Clothes washer	6.5%	9.7%	8%	12%	11%	10%	8%	0%	10%	10%	9%	11%	8%	11%	6%	11%	11%	5%	9%	11%	10%	8%	11%	11%	10%	10%
Clothes Dryer	5.6%	8.3%	7%	11%	8%	8%	8%	0%	8%	8%	9%	6%	7%	9%	5%	10%	9%	4%	9%	7%	9%	8%	11%	11%	8%	10%
Dishwasher	4.9%	7.3%	7%	8%	8%	9%	6%	0%	8%	7%	8%	2%	6%	8%	3%	9%	8%	3%	8%	5%	8%	6%	8%	8%	8%	6%
Room air conditioner	1.4%	2.0%	2%	2%	2%	1%	2%	0%	2%	2%	2%	1%	2%	2%	2%	2%	2%	2%	2%	1%	3%	1%	3%	4%	2%	1%
Central air conditioner	0.8%	1.3%	1%	2%	2%	1%	1%	0%	1%	1%	1%	0%	0%	2%	1%	1%	1%	1%	1%	1%	2%	1%	2%	4%	0%	2%
Furnace/Central heating	1.3%	1.9%	1%	4%	2%	1%	2%	0%	1%	2%	2%	1%	1%	3%	0%	3%	2%	1%	2%	1%	3%	1%	3%	3%	2%	2%
Water heater, GAS	2.5%	3.8%	4%	4%	4%	3%	4%	0%	4%	4%	4%	5%	3%	4%	2%	4%	5%	0%	4%	4%	4%	2%	3%	2%	3%	8%
Water heater, ELECTRIC	0.4%	0.6%	0%	1%	0%	2%	1%	0%	0%	1%	0%	1%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	1%	0%	1%
Evaporative/Swamp cooler	0.3%	0.5%	1%	0%	1%	0%	0%	0%	1%	0%	1%	0%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	1%	2%	0%
Whole house fan	0.2%	0.3%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	1%
Stove (elect/gas)	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Microwave	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Freezer	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trash compactor	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Oven	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Dual-pane windows	7.7%	11.6%	10%	15%	15%	12%	7%	0%	12%	11%	12%	9%	10%	13%	3%	15%	13%	3%	12%	10%	13%	9%	15%	14%	14%	13%
Thermostat	4.6%	6.9%	5%	11%	7%	8%	6%	0%	7%	7%	8%	2%	4%	9%	3%	8%	8%	3%	7%	7%	9%	3%	10%	11%	5%	10%
Pool Pump	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ceiling fan	0.5%	0.7%	0%	1%	1%	1%	1%	0%	0%	1%	1%	1%	0%	1%	0%	1%	1%	0%	1%	1%	1%	1%	1%	2%	1%	0%
Computer	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AC/HEAT	0.2%	0.2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Electric Fan	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pool Heater	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Other	0.1%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Refused	0.7%	1.0%	1%	2%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	0%	1%	1%	0%	1%	1%	1%	1%	1%	0%	1%	2%
Don't know	1.1%	1.7%	1%	2%	2%	2%	2%	0%	2%	2%	2%	1%	2%	1%	0%	2%	2%	1%	2%	2%	2%	1%	2%	2%	4%	2%
N	1001	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

A10_REF. Why did you purchase the new refrigerator?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
My old equipment broke down	36%	34%	38%	37%	40%	33%	0%	32%	37%	36%	33%	41%	32%	42%	34%	36%	30%	36%	33%	36%	37%	34%	34%	41%	35%
I was remodeling my home	14%	15%	14%	18%	16%	9%	0%	12%	16%	12%	35%	8%	18%	12%	15%	15%	10%	15%	12%	14%	19%	17%	11%	17%	5%
As an energy efficiency improvement	26%	23%	31%	26%	26%	26%	0%	28%	25%	28%	15%	24%	27%	15%	29%	26%	26%	29%	11%	31%	24%	29%	28%	32%	35%
To Lower my Utility Bill	1%	2%	0%	2%	2%	0%	0%	3%	0%	1%	0%	1%	1%	0%	1%	1%	0%	1%	0%	2%	0%	2%	0%	5%	1%
Did not own one before/new home	12%	17%	5%	11%	14%	13%	0%	17%	10%	12%	12%	13%	12%	21%	10%	11%	27%	10%	25%	9%	11%	10%	16%	0%	9%
Needed a larger one	4%	4%	5%	3%	0%	7%	0%	4%	4%	4%	5%	6%	3%	0%	5%	5%	0%	4%	7%	5%	0%	4%	7%	0%	8%
Needed a new one	2%	2%	1%	2%	0%	3%	0%	2%	2%	2%	0%	3%	1%	4%	1%	2%	0%	1%	8%	1%	0%	0%	0%	0%	3%
Wanted a new one	1%	0%	1%	0%	0%	1%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	0%
Last one was OLD	2%	1%	3%	0%	0%	4%	0%	0%	2%	2%	0%	1%	2%	3%	1%	1%	7%	1%	4%	1%	3%	1%	3%	0%	0%
Other	3%	3%	2%	2%	2%	4%	0%	3%	3%	3%	0%	3%	2%	3%	3%	3%	0%	3%	0%	2%	6%	2%	1%	4%	3%
N	184	108	76	65	43	76	0	43	141	165	19	69	115	33	151	169	15	158	26	119	39	92	37	24	30

A10_CW. Why did you purchase the new clothes washer?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
My old equipment broke down	53%	41%	70%	58%	46%	48%	0%	47%	56%	51%	66%	44%	58%	34%	58%	57%	12%	53%	55%	57%	41%	56%	59%	57%	55%
I was remodeling my home	7%	10%	2%	5%	8%	10%	0%	8%	6%	4%	26%	8%	6%	13%	5%	4%	33%	5%	12%	4%	10%	5%	10%	0%	0%
As an energy efficiency improvement	15%	23%	4%	13%	31%	13%	0%	26%	10%	16%	8%	18%	13%	8%	16%	16%	0%	18%	2%	20%	11%	15%	6%	34%	26%
Did not own one before/new home	15%	20%	8%	13%	12%	19%	0%	15%	14%	17%	0%	18%	13%	24%	12%	13%	28%	16%	10%	9%	34%	11%	10%	0%	19%
To match the washer	1%	0%	2%	0%	0%	3%	0%	0%	1%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	2%	6%	0%	0%
Needed a new one	4%	0%	9%	5%	0%	3%	0%	0%	6%	5%	0%	0%	6%	0%	5%	4%	0%	4%	5%	5%	0%	6%	8%	0%	0%
Wanted a stackable one	1%	2%	0%	0%	0%	3%	0%	0%	1%	1%	0%	3%	0%	5%	0%	0%	12%	1%	0%	0%	5%	0%	0%	0%	0%
Other	5%	5%	4%	8%	4%	0%	0%	5%	5%	6%	0%	9%	3%	15%	2%	4%	16%	2%	15%	3%	0%	4%	2%	9%	0%
N	97	51	46	40	26	31	0	24	73	85	11	29	68	16	81	90	7	78	19	56	22	45	18	13	12

GENERAL POPULATION

A10_CD. Why did you purchase the new clothes dryer?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
My old equipment broke down	49%	36%	65%	52%	38%	48%	0%	42%	52%	51%	28%	32%	57%	13%	57%	50%	33%	49%	48%	50%	48%	47%	66%	36%	59%
I was remodeling my home	10%	13%	6%	10%	14%	10%	0%	9%	11%	6%	53%	10%	10%	16%	9%	9%	19%	9%	18%	10%	5%	11%	2%	11%	0%
As an energy efficiency improvement	12%	18%	4%	13%	24%	6%	0%	22%	7%	11%	19%	24%	6%	21%	10%	13%	0%	14%	0%	17%	6%	16%	8%	42%	8%
To Lower my Utility Bill	1%	0%	1%	0%	5%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	0%	0%	0%	3%
Did not own one before/new home	20%	22%	16%	19%	10%	23%	0%	12%	23%	21%	0%	25%	17%	35%	16%	18%	33%	18%	26%	15%	26%	17%	16%	0%	30%
Needed a larger one	1%	0%	3%	0%	0%	3%	0%	0%	2%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	2%	0%	0%	0%
To match the washer	2%	3%	0%	3%	0%	0%	0%	5%	0%	2%	0%	0%	2%	0%	2%	2%	0%	2%	0%	0%	7%	0%	0%	0%	0%
Needed a new one	2%	2%	3%	0%	0%	6%	0%	4%	2%	3%	0%	0%	4%	0%	3%	3%	0%	1%	8%	2%	0%	2%	6%	0%	0%
Wanted a stackable one	1%	2%	0%	0%	0%	3%	0%	0%	2%	1%	0%	4%	0%	6%	0%	0%	14%	1%	0%	0%	5%	0%	0%	0%	0%
Other	3%	3%	2%	3%	10%	0%	0%	5%	1%	3%	0%	5%	2%	9%	1%	3%	0%	3%	0%	4%	2%	4%	2%	11%	0%
N	83	43	40	31	21	31	0	20	63	76	7	25	58	14	69	77	6	70	13	48	22	41	17	12	11

GENERAL POPULATION

A10_DW. Why did you purchase the new dish washer?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
My old equipment broke down	44%	41%	48%	43%	52%	42%	0%	41%	45%	43%	58%	44%	44%	50%	43%	44%	43%	45%	34%	43%	51%	43%	62%	28%	62%
I was remodeling my home	23%	20%	27%	29%	26%	13%	0%	19%	25%	22%	42%	16%	27%	18%	23%	25%	0%	25%	10%	22%	32%	30%	15%	28%	6%
As an energy efficiency improvement	9%	8%	9%	4%	9%	17%	0%	7%	9%	9%	0%	4%	11%	0%	10%	8%	19%	8%	10%	8%	9%	8%	20%	0%	13%
Did not own one before/new home	12%	13%	9%	11%	13%	13%	0%	11%	12%	12%	0%	21%	7%	13%	11%	10%	38%	10%	21%	11%	9%	8%	3%	24%	6%
Needed a new one	3%	3%	4%	4%	0%	4%	0%	0%	5%	3%	0%	6%	2%	18%	2%	4%	0%	0%	25%	0%	0%	0%	0%	0%	0%
Wanted a new one	4%	6%	0%	7%	0%	0%	0%	11%	0%	4%	0%	0%	6%	0%	4%	4%	0%	4%	0%	6%	0%	8%	0%	0%	0%
Last one was OLD	6%	7%	4%	4%	0%	13%	0%	10%	4%	6%	0%	10%	4%	0%	7%	7%	0%	7%	0%	9%	0%	3%	0%	21%	13%
N	75	43	32	28	23	24	0	21	54	73	2	22	53	6	69	69	6	65	10	48	17	36	12	11	9

GENERAL POPULATION

A10_RAC. Why did you purchase the new room air conditioner?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
My old equipment broke down	35%	34%	38%	25%	33%	50%	0%	35%	36%	34%	100%	14%	47%	23%	41%	35%	37%	34%	42%	27%	63%	26%	22%	0%	100%
I was remodeling my home	14%	11%	19%	25%	0%	0%	0%	24%	10%	15%	0%	0%	21%	0%	20%	17%	0%	15%	0%	10%	37%	11%	0%	0%	0%
As an energy efficiency improvement	14%	18%	6%	13%	33%	13%	0%	17%	12%	15%	0%	33%	3%	0%	20%	17%	0%	8%	58%	10%	0%	11%	16%	15%	0%
Did not own one before/new home	26%	26%	24%	25%	33%	25%	0%	24%	26%	28%	0%	33%	21%	55%	13%	17%	63%	29%	0%	37%	0%	41%	61%	0%	0%
Other	12%	11%	13%	13%	0%	13%	0%	0%	16%	8%	0%	19%	8%	23%	7%	14%	0%	13%	0%	17%	0%	11%	0%	85%	0%
N	19	11	8	8	3	8	0	5	14	17	1	6	13	5	14	16	3	17	2	14	3	12	6	3	1

	GENERAL POPULATION																								
A11. Have you purchased any new heating, cooling, or water heating equipment since January 2002?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	7%	6%	9%	7%	7%	7%	0%	7%	8%	7%	5%	6%	8%	4%	9%	8%	2%	8%	5%	9%	4%	9%	9%	9%	12%
No	93%	94%	91%	93%	93%	93%	0%	93%	92%	93%	95%	94%	92%	96%	91%	92%	98%	92%	95%	91%	96%	91%	91%	91%	88%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																								
A12_CAC. Why did you purchase the new central air conditioner?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
My old equipment broke down	12%	0%	24%	0%	50%	100%	0%	0%	16%	12%	0%	0%	14%	0%	16%	14%	0%	14%	0%	16%	0%	16%	25%	0%	0%
I was remodeling my home	52%	75%	30%	57%	50%	0%	0%	50%	52%	52%	0%	100%	45%	100%	36%	45%	100%	45%	100%	36%	100%	36%	50%	100%	0%
As an energy efficiency improvement	12%	0%	23%	14%	0%	0%	0%	0%	16%	12%	0%	0%	14%	0%	16%	14%	0%	14%	0%	16%	0%	16%	25%	0%	0%
Did not own one before/new home	24%	25%	23%	29%	0%	0%	0%	50%	16%	24%	0%	0%	27%	0%	32%	27%	0%	27%	0%	32%	0%	32%	0%	0%	100%
N	10	4	6	7	2	1	0	2	8	10	0	1	9	2	8	9	1	9	1	8	1	8	5	1	2

	GENERAL POPULATION																								
A12_FUR. Why did you purchase the new furnace/central heating?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
My old equipment broke down	36%	50%	28%	22%	100%	60%	0%	42%	35%	34%	0%	50%	34%	100%	31%	31%	100%	34%	50%	23%	100%	16%	39%	37%	0%
I was remodeling my home	13%	15%	12%	11%	0%	20%	0%	0%	15%	9%	100%	0%	15%	0%	14%	14%	0%	9%	50%	10%	0%	12%	0%	0%	0%
As an energy efficiency improvement	38%	21%	48%	56%	0%	0%	0%	58%	35%	43%	0%	0%	43%	0%	41%	41%	0%	43%	0%	50%	0%	50%	61%	37%	100%
To Lower my Utility Bill	8%	0%	12%	11%	0%	0%	0%	0%	9%	9%	0%	0%	9%	0%	8%	8%	0%	9%	0%	10%	0%	12%	0%	0%	0%
Last one was OLD	5%	15%	0%	0%	0%	20%	0%	0%	6%	6%	0%	50%	0%	0%	6%	6%	0%	6%	0%	7%	0%	9%	0%	26%	0%
N	16	6	10	9	2	5	0	2	14	14	1	2	14	1	15	15	1	14	2	12	2	9	4	4	2

	GENERAL POPULATION																								
A12_GWH. Why did you purchase the new gas water heater?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
My old equipment broke down	58%	67%	44%	46%	75%	69%	0%	69%	53%	55%	81%	76%	50%	64%	57%	58%	0%	56%	71%	58%	45%	50%	50%	46%	74%
I was remodeling my home	18%	13%	27%	15%	0%	25%	0%	8%	23%	18%	19%	8%	23%	15%	19%	18%	0%	19%	15%	15%	32%	22%	50%	0%	11%
As an energy efficiency improvement	9%	8%	10%	15%	13%	0%	0%	11%	7%	10%	0%	15%	5%	0%	10%	9%	0%	10%	0%	13%	0%	14%	0%	27%	0%
To Lower my Utility Bill	11%	6%	20%	15%	13%	6%	0%	0%	17%	13%	0%	0%	16%	21%	9%	11%	0%	10%	15%	7%	22%	3%	0%	27%	0%
Did not own one before/new home	4%	6%	0%	8%	0%	0%	0%	11%	0%	4%	0%	0%	5%	0%	5%	4%	0%	5%	0%	6%	0%	11%	0%	0%	15%
N	37	23	14	13	8	16	0	10	27	30	7	13	24	6	31	37	0	30	7	24	6	14	3	4	8

	GENERAL POPULATION																								
A12_EWH. Why did you purchase the new electric water heater?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
My old equipment broke down	73%	56%	100%	0%	100%	50%	0%	100%	69%	100%	0%	100%	65%	0%	73%	73%	0%	73%	0%	69%	100%	65%	50%	100%	100%
Other	27%	44%	0%	0%	0%	50%	0%	0%	31%	0%	100%	0%	35%	0%	27%	27%	0%	27%	0%	31%	0%	35%	50%	0%	0%
N	6	4	2	0	4	2	0	1	5	5	1	2	4	0	6	6	0	6	0	5	1	4	2	1	2

	GENERAL POPULATION																								
A12_SWP. Why did you purchase the new evaporative cooler/swamp cooler?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
To Lower my Utility Bill	50%	50%	0%	50%	0%	0%	0%	50%	0%	50%	0%	50%	0%	0%	100%	50%	0%	50%	0%	50%	0%	50%	0%	50%	0%
DON'T KNOW	50%	50%	0%	50%	0%	0%	0%	50%	0%	50%	0%	50%	0%	100%	0%	50%	0%	50%	0%	50%	0%	50%	0%	50%	0%
N	2	2	0	2	0	0	0	2	0	2	0	2	0	1	1	2	0	2	0	2	0	2	0	2	0

	GENERAL POPULATION																								
A13_FAN. Why did you purchase a new whole house fan?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
As an energy efficiency improvement	100%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	0%	100%	0%	100%	100%	0%	100%	0%	100%	0%	100%	100%	0%	0%
N	1	0	1	1	0	0	0	0	1	1	0	0	1	0	1	1	0	1	0	1	0	1	1	0	0

A13_OTH. Why did you purchase the new equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
	GENERAL POPULATION																							
My old equipment broke down	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	0%	100%	0%	100%	100%	0%
N	3	2	1	1	1	1	0	1	2	3	0	2	1	0	3	3	0	3	0	3	0	3	1	0

A14. Was the new equipment you purchased more energy efficient than standard models available at the time of your purchase? (% that said yes)	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
	GENERAL POPULATION																							
Refrigerator	96%	96%	94%	98%	97%	92%	0%	100%	94%	96%	94%	96%	95%	94%	96%	96%	93%	95%	100%	95%	93%	96%	97%	100%
Clothes washer	90%	86%	94%	89%	96%	89%	0%	85%	92%	91%	77%	81%	94%	83%	91%	90%	81%	91%	86%	88%	98%	91%	85%	90%
Clothes dryer	87%	85%	89%	89%	94%	81%	0%	88%	86%	89%	61%	72%	93%	71%	90%	88%	76%	88%	80%	85%	97%	85%	80%	77%
Dishwasher	94%	94%	95%	96%	95%	91%	0%	88%	97%	94%	100%	90%	97%	100%	93%	94%	100%	93%	100%	91%	100%	99%	100%	87%
Room air conditioner	92%	87%	100%	86%	100%	100%	0%	100%	89%	91%	100%	77%	100%	77%	100%	89%	100%	91%	100%	89%	100%	88%	100%	50%
Other	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Central air conditioner	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	.	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Furnace	100%	100%	100%	100%	100%	100%	0%	.	100%	100%	.	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Gas water heater	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	.	100%	100%	100%	100%	100%	100%	100%
Electric water heater	39%	46%	30%	.	100%	0%	0%	.	39%	56%	0%	100%	17%	.	39%	39%	.	39%	.	30%	100%	30%	0%	.

A15_REF. How do you know your new refrigerator was energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
	GENERAL POPULATION																								
Energy Guide	22%	18%	29%	17%	35%	25%	0%	18%	24%	23%	7%	25%	20%	20%	22%	23%	13%	22%	23%	25%	12%	27%	12%	42%	30%
Energy Star Label	40%	43%	36%	45%	22%	39%	0%	53%	35%	43%	16%	33%	45%	25%	44%	41%	32%	43%	25%	43%	42%	42%	52%	30%	46%
Utility recommendation	1%	0%	2%	2%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	2%	4%	0%	0%
Utility rebate	2%	1%	3%	2%	3%	1%	0%	0%	2%	2%	0%	2%	2%	3%	1%	1%	7%	2%	0%	2%	3%	1%	1%	0%	0%
Other Manufacturer/retailer product info	8%	9%	6%	7%	14%	7%	0%	8%	7%	7%	9%	7%	8%	10%	7%	7%	18%	6%	19%	6%	5%	6%	7%	4%	3%
Salesperson	17%	21%	12%	17%	14%	19%	0%	13%	20%	14%	47%	26%	12%	35%	14%	17%	22%	15%	32%	12%	25%	14%	20%	6%	10%
consumer reports/research/internet	5%	3%	8%	8%	0%	1%	0%	3%	6%	4%	9%	0%	8%	0%	6%	5%	0%	6%	0%	6%	4%	5%	0%	10%	5%
bill savings	2%	3%	1%	0%	11%	3%	0%	0%	3%	2%	3%	3%	2%	6%	1%	2%	7%	2%	2%	1%	5%	0%	0%	4%	2%
newer technology	1%	0%	2%	0%	3%	1%	0%	1%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	2%	4%	0%	0%
brand	1%	2%	0%	2%	0%	1%	0%	5%	0%	2%	0%	2%	1%	0%	2%	2%	0%	2%	0%	1%	3%	0%	0%	0%	5%
OTHER	1%	1%	0%	2%	0%	0%	0%	0%	1%	0%	9%	2%	0%	0%	1%	1%	0%	1%	0%	1%	0%	2%	0%	6%	0%
N	164	97	67	60	37	67	0	40	124	149	15	63	101	29	135	150	14	142	22	107	35	82	34	23	27

A15_CW. How do you know your new clothes washer was energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Energy Guide	18%	22%	14%	23%	14%	12%	0%	24%	16%	21%	0%	29%	14%	12%	19%	18%	24%	18%	19%	22%	8%	18%	0%	35%	41%
Energy Star Label	41%	30%	52%	39%	41%	44%	0%	40%	41%	44%	0%	17%	50%	28%	43%	39%	59%	42%	33%	48%	28%	51%	63%	34%	37%
Utility recommendation	4%	0%	8%	6%	0%	0%	0%	0%	5%	4%	0%	0%	5%	0%	4%	4%	0%	4%	0%	6%	0%	8%	10%	0%	0%
Utility rebate	1%	0%	1%	0%	5%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	3%	0%	0%
Other Manufacturer/retailer product info	8%	10%	6%	6%	18%	8%	0%	6%	9%	8%	12%	13%	7%	4%	9%	9%	0%	6%	17%	5%	10%	6%	3%	0%	4%
Salesperson	13%	20%	7%	10%	14%	20%	0%	18%	12%	8%	59%	26%	9%	20%	12%	15%	0%	12%	21%	6%	27%	8%	0%	20%	4%
consumer reports/research	9%	7%	11%	13%	5%	4%	0%	12%	8%	10%	0%	6%	10%	12%	9%	10%	0%	9%	10%	9%	8%	8%	21%	11%	0%
newer technology	1%	2%	0%	0%	0%	4%	0%	0%	2%	1%	0%	0%	2%	8%	0%	1%	0%	2%	0%	0%	6%	0%	0%	0%	0%
OTHER	2%	3%	0%	3%	0%	0%	0%	0%	3%	0%	17%	0%	2%	0%	2%	2%	0%	2%	0%	3%	0%	0%	0%	0%	14%
DON'T KNOW	3%	5%	1%	0%	5%	8%	0%	0%	4%	2%	12%	9%	1%	17%	1%	2%	17%	4%	0%	0%	14%	0%	0%	0%	0%
N	78	38	40	31	22	25	0	18	60	70	7	21	57	11	67	73	5	63	15	45	18	36	13	10	10

A15_CD. How do you know your new clothes dryer was energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Energy Guide	19%	20%	18%	13%	24%	27%	0%	18%	19%	20%	0%	37%	13%	0%	22%	20%	0%	22%	4%	25%	13%	24%	7%	48%	29%
Energy Star Label	42%	35%	51%	46%	41%	36%	0%	42%	42%	43%	26%	15%	51%	54%	40%	39%	77%	38%	64%	44%	23%	48%	58%	30%	28%
Utility recommendation	2%	0%	5%	4%	0%	0%	0%	0%	3%	2%	0%	0%	3%	0%	3%	2%	0%	3%	0%	4%	0%	4%	10%	0%	0%
Other Manufacturer/retailer product info	3%	5%	0%	4%	6%	0%	0%	7%	1%	3%	0%	9%	1%	5%	3%	3%	0%	3%	0%	0%	11%	0%	0%	0%	0%
Salesperson	14%	16%	11%	21%	12%	5%	0%	20%	11%	13%	37%	18%	13%	17%	14%	15%	0%	17%	0%	15%	20%	13%	0%	17%	43%
consumer reports/research	8%	7%	10%	8%	6%	9%	0%	7%	9%	9%	0%	6%	9%	12%	8%	7%	23%	10%	0%	8%	15%	8%	17%	0%	0%
newer technology	4%	4%	4%	0%	6%	9%	0%	0%	6%	3%	11%	3%	4%	12%	3%	4%	0%	3%	10%	1%	6%	0%	0%	5%	0%
brand	3%	6%	0%	0%	0%	9%	0%	0%	5%	2%	26%	6%	2%	0%	4%	3%	0%	2%	10%	3%	0%	3%	7%	0%	0%
gas	2%	3%	0%	0%	0%	5%	0%	0%	2%	2%	0%	6%	0%	0%	2%	2%	0%	0%	10%	0%	0%	0%	0%	0%	0%
DON'T KNOW	3%	4%	1%	4%	6%	0%	0%	7%	1%	3%	0%	0%	4%	0%	3%	3%	0%	3%	0%	0%	11%	0%	0%	0%	0%
N	63	31	32	24	17	22	0	16	47	59	4	15	48	8	55	59	4	53	10	35	18	29	12	8	8

A15_DW. How do you know your new dishwasher was energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Energy Guide	19%	16%	25%	13%	20%	30%	0%	14%	21%	20%	0%	24%	17%	18%	19%	21%	0%	22%	0%	26%	10%	23%	17%	20%	86%
Energy Star Label	35%	45%	21%	33%	45%	35%	0%	38%	34%	34%	100%	39%	34%	32%	36%	36%	27%	37%	24%	33%	49%	38%	47%	45%	0%
Utility recommendation	2%	0%	6%	4%	0%	0%	0%	0%	3%	2%	0%	0%	3%	0%	3%	2%	0%	3%	0%	4%	0%	5%	12%	0%	0%
Utility rebate	1%	0%	2%	0%	5%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	4%	0%	0%
Other Manufacturer/retailer product info	14%	11%	17%	13%	15%	15%	0%	17%	12%	14%	0%	12%	15%	13%	14%	12%	27%	12%	26%	9%	19%	7%	0%	5%	7%
Salesperson	16%	14%	19%	21%	10%	10%	0%	14%	16%	16%	0%	12%	18%	37%	13%	15%	27%	11%	50%	7%	22%	9%	0%	15%	7%
Consumer reports/research	7%	6%	7%	8%	5%	5%	0%	8%	6%	7%	0%	0%	10%	0%	8%	6%	19%	8%	0%	11%	0%	9%	12%	0%	0%
Bill savings	2%	4%	0%	4%	0%	0%	0%	0%	3%	2%	0%	7%	0%	0%	3%	2%	0%	3%	0%	4%	0%	5%	0%	0%	0%
Newer technology	2%	4%	0%	4%	0%	0%	0%	8%	0%	2%	0%	7%	0%	0%	3%	2%	0%	3%	0%	4%	0%	0%	0%	15%	0%
DON'T KNOW	2%	0%	4%	0%	0%	5%	0%	0%	2%	2%	0%	0%	2%	0%	2%	2%	0%	2%	0%	3%	0%	3%	8%	0%	0%
N	64	36	28	24	20	20	0	15	49	63	1	19	45	6	58	58	6	56	8	41	15	31	11	10	7

	GENERAL POPULATION																								
A15_RAC. How do you know your new room air conditioner was energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Energy Guide	40%	25%	63%	33%	33%	50%	0%	50%	35%	31%	100%	29%	44%	29%	44%	41%	37%	44%	0%	54%	0%	52%	52%	70%	100%
Energy Star Label	12%	15%	7%	17%	33%	0%	0%	29%	4%	13%	0%	0%	17%	0%	17%	15%	0%	13%	0%	16%	0%	18%	0%	30%	0%
Utility rebate	3%	0%	7%	0%	33%	0%	0%	0%	4%	3%	0%	0%	4%	0%	4%	4%	0%	3%	0%	4%	0%	0%	0%	0%	0%
Other Manufacturer/retailer product info	28%	46%	0%	17%	0%	50%	0%	21%	31%	32%	0%	71%	9%	42%	22%	29%	26%	21%	100%	26%	0%	30%	48%	0%	0%
consumer reports/research	9%	0%	23%	17%	0%	0%	0%	0%	13%	10%	0%	0%	13%	0%	13%	12%	0%	10%	0%	0%	50%	0%	0%	0%	0%
DON'T KNOW	9%	15%	0%	17%	0%	0%	0%	0%	13%	10%	0%	0%	13%	29%	0%	0%	37%	10%	0%	0%	50%	0%	0%	0%	0%
N	15%	8%	7%	6%	3%	6%	0%	4%	11%	13%	1%	4%	11%	4%	11%	12%	3%	14%	1%	12%	2%	10%	6%	2%	1%

	GENERAL POPULATION																								
A16. Other than major appliances and heating and cooling equipment, have you installed anything else in your home that would assist you in saving energy?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	41%	39%	45%	42%	42%	40%	0%	40%	42%	43%	31%	40%	42%	34%	44%	42%	36%	45%	22%	58%	19%	70%	69%	60%	51%
No	59%	61%	55%	58%	58%	60%	0%	60%	58%	57%	68%	60%	58%	66%	56%	57%	64%	54%	78%	42%	81%	30%	31%	40%	48%
DON'T KNOW	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

		GENERAL POPULATION																				
A17. What other energy saving equipment have you installed in your home?	Annualized Total	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002
Fluorescent Indoor Fixture	2.8%	4.2%	4%	5%	4%	8%	3%	0%	4%	4%	5%	0%	4%	4%	2%	5%	4%	3%	4%	5%	5%	1%	6%
Fluorescent Outdoor Fixture	0.9%	1.3%	1%	2%	1%	2%	2%	0%	1%	1%	2%	0%	1%	1%	2%	1%	1%	1%	2%	0%	2%	1%	2%
Motion sensor	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CFL	13.0%	19.6%	20%	18%	20%	19%	19%	0%	19%	20%	20%	18%	23%	17%	23%	18%	19%	23%	24%	0%	35%	0%	47%
CFL Torchiere	0.1%	0.2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dimmer Switch	0.2%	0.2%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Weatherstripping/ Caulking/ Weatherization	4.0%	6.0%	5%	7%	7%	4%	5%	0%	6%	6%	7%	1%	6%	6%	3%	7%	6%	5%	6%	4%	8%	3%	9%
Water Heater/Pipe Wrapping/ Insulation	1.5%	2.3%	2%	3%	4%	1%	1%	0%	3%	2%	3%	0%	2%	3%	1%	3%	2%	2%	2%	2%	3%	1%	4%
Low Flow Showerheads	0.2%	0.3%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%
Faucet Aerators	0.1%	0.2%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Insulation-wall, ceiling or attic	1.7%	2.5%	2%	3%	4%	2%	1%	0%	3%	2%	3%	0%	1%	3%	0%	4%	3%	1%	3%	1%	3%	2%	4%
Duct Sealing/Repair (NOT CLEANING)	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pool Cover	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Attic vent	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
New roof/sealing	0.2%	0.2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
Low wattage incandescent bulb	0.2%	0.2%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Solar	0.2%	0.3%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%
Heavy curtains	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Tinted windows	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0.6%	0.9%	1%	1%	1%	0%	1%	0%	2%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	2%	1%	0%	1%
Refused	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	0.2%	0.2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
N	1001	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410

	GENERAL POPULATION																						
A17B_1. Where did you buy your programmable thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Directly from contractor	17%	15%	20%	19%	24%	13%	0%	15%	19%	18%	0%	19%	17%	15%	18%	19%	0%	20%	8%	17%	32%	19%	13%
Home Improvement store(Home Depot,Hardwa	57%	49%	64%	54%	52%	63%	0%	52%	59%	55%	100%	51%	59%	46%	58%	55%	76%	54%	69%	52%	63%	47%	45%
Big Box retailer(Target,K-Mart,Wal-Mart,	2%	3%	1%	0%	5%	4%	0%	0%	3%	2%	0%	6%	1%	0%	2%	2%	0%	3%	0%	2%	5%	2%	6%
Manufacturer	1%	0%	1%	0%	5%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	2%
Gift/free	3%	6%	0%	0%	0%	8%	0%	5%	2%	3%	0%	6%	2%	10%	2%	3%	0%	4%	0%	4%	0%	5%	6%
Utility	2%	1%	3%	0%	5%	4%	0%	2%	2%	2%	0%	0%	3%	0%	2%	2%	0%	1%	8%	1%	0%	1%	2%
Other	2%	4%	0%	4%	0%	0%	0%	7%	0%	2%	0%	0%	3%	0%	2%	2%	0%	2%	0%	3%	0%	3%	0%
DON'T KNOW	16%	22%	11%	23%	10%	8%	0%	20%	15%	17%	0%	18%	16%	29%	14%	16%	24%	17%	15%	20%	0%	21%	26%
N	71	31	40	26	21	24	0	18	53	69	2	17	54	8	63	66	5	60	11	51	9	42	20

	GENERAL POPULATION																						
A17B_2. Where did you buy your dual-pane windows?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Directly from contractor	28%	26%	32%	20%	37%	48%	0%	15%	35%	27%	39%	29%	28%	6%	30%	30%	0%	30%	18%	29%	33%	27%	26%
Home Improvement store(Home Depot,Hardwa	25%	32%	17%	28%	30%	16%	0%	35%	20%	28%	4%	43%	16%	19%	26%	25%	25%	27%	16%	31%	14%	34%	22%
Big Box retailer(Target,K-Mart,Wal-Mart,	2%	2%	3%	4%	0%	0%	0%	4%	2%	3%	0%	0%	4%	0%	3%	3%	0%	3%	0%	2%	6%	2%	6%
Local retailer	3%	3%	4%	2%	10%	4%	0%	4%	3%	3%	4%	0%	5%	0%	3%	3%	0%	3%	2%	4%	2%	5%	2%
Specialty retailer	22%	15%	30%	24%	10%	20%	0%	21%	22%	23%	14%	5%	30%	0%	23%	21%	25%	20%	29%	19%	25%	19%	22%
Manufacturer	3%	0%	7%	4%	7%	0%	0%	0%	5%	4%	0%	0%	5%	0%	3%	3%	0%	4%	0%	1%	14%	1%	0%
Utility	1%	2%	0%	2%	0%	0%	0%	4%	0%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	0%	0%
HUD/city	1%	0%	3%	2%	0%	0%	0%	0%	2%	1%	0%	0%	2%	0%	1%	1%	0%	0%	8%	0%	0%	0%	0%
Other	1%	2%	0%	2%	0%	0%	0%	4%	0%	1%	0%	4%	0%	0%	1%	0%	25%	1%	0%	2%	0%	2%	0%
DON'T KNOW	12%	18%	5%	13%	7%	12%	0%	15%	11%	10%	38%	19%	9%	75%	8%	11%	25%	9%	27%	10%	6%	10%	21%
N	109	54	55	54	30	25	0	28	81	98	10	34	75	6	103	105	4	93	16	72	21	57	21

	GENERAL POPULATION																						
A17B_3. Where did you buy your fluorescent indoor fixture?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Directly from contractor	5%	4%	8%	0%	14%	9%	0%	0%	7%	5%	0%	3%	7%	7%	5%	4%	14%	5%	5%	6%	0%	4%	18%
Home Improvement store(Home Depot,Hardwa	59%	45%	79%	50%	67%	73%	0%	40%	67%	60%	0%	43%	69%	44%	62%	63%	40%	59%	60%	60%	50%	60%	67%
Big Box retailer(Target,K-Mart,Wal-Mart,	6%	11%	0%	6%	14%	0%	0%	12%	4%	5%	100%	8%	5%	7%	6%	7%	0%	8%	0%	7%	12%	9%	8%
Costco	13%	23%	0%	25%	0%	0%	0%	36%	5%	13%	0%	27%	5%	22%	12%	12%	23%	16%	0%	18%	0%	17%	0%
Local retailer	2%	0%	6%	0%	0%	9%	0%	0%	3%	2%	0%	0%	4%	0%	3%	3%	0%	3%	0%	3%	0%	4%	0%
Specialty retailer	3%	6%	0%	6%	0%	0%	0%	12%	0%	3%	0%	9%	0%	0%	4%	4%	0%	0%	17%	0%	0%	0%	0%
Gift/free	6%	6%	6%	6%	0%	9%	0%	0%	8%	6%	0%	0%	9%	0%	7%	3%	23%	7%	0%	3%	38%	4%	0%
DON'T KNOW	4%	6%	2%	6%	5%	0%	0%	0%	6%	4%	0%	9%	2%	22%	1%	5%	0%	1%	17%	1%	0%	2%	8%
N	48	24	24	16	21	11	0	9	39	47	1	16	32	7	41	42	6	40	8	35	5	25	8

	GENERAL POPULATION																							
A17B_4. Where did you buy your fluorescent outdoor fixtures?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Home Improvement store(Home Depot,Hardwa	56%	29%	100%	50%	100%	50%	0%	37%	64%	56%	0%	55%	57%	0%	84%	69%	0%	56%	0%	66%	0%	63%	100%	82%
Big Box retailer(Target,K-Mart,Wal-Mart,	8%	12%	0%	0%	0%	17%	0%	0%	11%	8%	0%	23%	0%	23%	0%	9%	0%	8%	0%	0%	50%	0%	0%	0%
Costco	11%	17%	0%	25%	0%	0%	0%	0%	15%	11%	0%	0%	16%	32%	0%	0%	58%	11%	0%	12%	0%	18%	0%	0%
Utility	8%	12%	0%	0%	0%	17%	0%	0%	11%	8%	0%	23%	0%	23%	0%	0%	42%	8%	0%	0%	50%	0%	0%	0%
DON'T KNOW	18%	29%	0%	25%	0%	17%	0%	63%	0%	18%	0%	0%	27%	23%	16%	22%	0%	18%	0%	21%	0%	18%	0%	18%
N	14	7	7	4	4	6	0	3	11	14	0	4	10	4	10	12	2	14	0	12	2	7	1	6

	GENERAL POPULATION																							
A17B_5. Where did you buy your motion sensors?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Home Improvement store(Home Depot,Hardwa	100%	100%	0%	100%	0%	0%	0%	0%	100%	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	100%	0%
N	1	1	0	1	0	0	0	0	1	1	0	1	0	1	0	1	0	1	0	1	0	1	1	0

	GENERAL POPULATION																						
A17B_6. Where did you buy your CFL?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Directly from contractor	3%	3%	5%	5%	0%	1%	0%	5%	3%	4%	0%	4%	3%	2%	4%	3%	6%	3%	0%	3%	0%	3%	5%
Home Improvement store(Home Depot,Hardwa	48%	45%	56%	37%	56%	63%	0%	45%	50%	48%	48%	43%	53%	40%	53%	50%	43%	48%	0%	48%	0%	48%	47%
Big Box retailer(Target,K-Mart,Wal-Mart,	17%	22%	6%	18%	14%	17%	0%	23%	14%	17%	19%	24%	11%	27%	12%	15%	26%	17%	0%	17%	0%	17%	21%
Costco	18%	15%	24%	25%	14%	10%	0%	18%	18%	17%	25%	15%	21%	13%	21%	21%	6%	18%	0%	18%	0%	18%	13%
Local retailer	4%	4%	2%	5%	2%	1%	0%	5%	3%	4%	0%	4%	4%	8%	1%	2%	8%	4%	0%	4%	0%	4%	6%
Specialty retailer	1%	1%	0%	1%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%
Gift/free	1%	1%	2%	1%	2%	1%	0%	1%	2%	2%	0%	0%	3%	2%	1%	1%	2%	1%	0%	1%	0%	1%	2%
Utility	2%	3%	0%	3%	2%	1%	0%	2%	2%	2%	7%	5%	0%	2%	3%	2%	2%	2%	0%	2%	0%	2%	1%
Landlord	1%	1%	0%	1%	0%	0%	0%	0%	1%	1%	0%	2%	0%	2%	0%	0%	3%	1%	0%	1%	0%	1%	2%
DON'T KNOW	5%	4%	5%	3%	10%	6%	0%	0%	7%	5%	0%	4%	5%	5%	4%	5%	2%	5%	0%	5%	0%	5%	3%
N	195	128	67	73	50	72	0	48	147	175	20	85	110	65	130	158	37	195	0	195	0	195	74

	GENERAL POPULATION																						
A17B_7. Where did you buy your CFL torchier?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Home Improvement store(Home Depot,Hardwa	50%	50%	0%	0%	0%	50%	0%	100%	0%	100%	0%	0%	50%	0%	50%	50%	0%	50%	0%	50%	0%	50%	50%
Costco	50%	50%	0%	0%	0%	50%	0%	0%	100%	0%	100%	0%	50%	0%	50%	50%	0%	50%	0%	50%	0%	50%	50%
N	2	2	0	0	0	2	0	1	1	1	1	0	2	0	2	2	0	2	0	2	0	2	2

	GENERAL POPULATION																						
A17B_8. Where did you buy your dimmer switch?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Directly from contractor	44%	0%	44%	0%	0%	100%	0%	0%	44%	44%	0%	0%	44%	0%	44%	44%	0%	0%	100%	0%	0%	0%	0%
Home Improvement store(Home Depot,Hardwa	56%	0%	56%	0%	100%	0%	0%	0%	56%	56%	0%	0%	56%	0%	56%	56%	0%	100%	0%	100%	100%	100%	100%
N	4	0	4	0	3	1	0	0	4	4	0	0	4	0	4	4	0	3	1	2	1	2	1

	GENERAL POPULATION																						
A17B_9. Where did you buy your weatherstripping?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Directly from contractor	12%	7%	20%	12%	0%	15%	0%	12%	12%	12%	0%	6%	16%	0%	14%	14%	0%	12%	16%	11%	13%	11%	0%
Home Improvement store(Home Depot,Hardwa	73%	72%	75%	68%	82%	80%	0%	58%	80%	73%	100%	75%	72%	58%	75%	71%	85%	76%	47%	74%	87%	76%	83%
Specialty retailer	2%	4%	0%	4%	0%	0%	0%	7%	0%	2%	0%	0%	4%	0%	3%	3%	0%	0%	22%	0%	0%	0%	0%
Gift/free	2%	4%	0%	4%	0%	0%	0%	7%	0%	2%	0%	6%	0%	18%	0%	3%	0%	3%	0%	3%	0%	4%	17%
Utility	2%	4%	0%	4%	0%	0%	0%	7%	0%	2%	0%	6%	0%	0%	3%	3%	0%	3%	0%	3%	0%	0%	0%
HUD/city	2%	4%	0%	4%	0%	0%	0%	0%	3%	2%	0%	6%	0%	18%	0%	0%	15%	3%	0%	3%	0%	4%	0%
Landlord	1%	1%	0%	0%	9%	0%	0%	0%	1%	1%	0%	0%	1%	6%	0%	1%	0%	1%	0%	1%	0%	1%	0%
DON'T KNOW	5%	4%	6%	4%	9%	5%	0%	7%	4%	5%	0%	0%	8%	0%	5%	6%	0%	3%	16%	4%	0%	4%	0%
N	56	32	24	25	11	20	0	15	41	55	1	20	36	7	49	48	8	50	6	43	7	32	9

A17B_10. Where did you buy your water heater?	GENERAL POPULATION																						
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Directly from contractor	24%	11%	43%	23%	50%	25%	0%	14%	32%	24%	0%	0%	33%	0%	29%	29%	0%	21%	50%	23%	0%	23%	0%
Home Improvement store(Home Depot,Hardwa	53%	61%	43%	62%	0%	25%	0%	71%	39%	53%	0%	61%	50%	37%	56%	56%	37%	53%	50%	51%	77%	51%	58%
Specialty retailer	4%	0%	10%	0%	0%	25%	0%	0%	8%	4%	0%	0%	6%	0%	5%	5%	0%	5%	0%	5%	0%	5%	21%
HUD/city	6%	11%	0%	8%	0%	0%	0%	0%	11%	6%	0%	23%	0%	37%	0%	0%	37%	7%	0%	8%	0%	8%	0%
REFUSED	2%	0%	4%	0%	50%	0%	0%	0%	3%	2%	0%	0%	3%	0%	2%	2%	0%	2%	0%	0%	23%	0%	0%
DON'T KNOW	10%	18%	0%	8%	0%	25%	0%	14%	8%	10%	0%	16%	8%	26%	7%	7%	26%	12%	0%	13%	0%	13%	21%
N	19	10	9	13	2	4	0	7	12	19	0	5	14	3	16	16	3	16	3	14	2	14	4

A17B_11. Where did you buy your low flow shower head?	GENERAL POPULATION																						
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Home Improvement store(Home Depot,Hardwa	15%	0%	15%	0%	100%	0%	0%	0%	15%	15%	0%	0%	15%	0%	15%	15%	0%	15%	0%	15%	0%	15%	0%
Costco	35%	0%	35%	0%	0%	100%	0%	0%	35%	35%	0%	0%	35%	0%	35%	35%	0%	35%	0%	35%	0%	35%	0%
Specialty retailer	50%	0%	50%	100%	0%	0%	0%	0%	50%	50%	0%	0%	50%	0%	50%	50%	0%	50%	0%	50%	0%	50%	0%
N	3	0	3	1	1	1	0	0	3	3	0	0	3	0	3	3	0	3	0	3	0	3	0

A17B_12. Where did you buy your faucet aerator?	GENERAL POPULATION																						
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Home Improvement store(Home Depot,Hardwa	23%	0%	23%	0%	100%	0%	0%	0%	23%	23%	0%	0%	23%	0%	23%	23%	0%	23%	0%	23%	0%	23%	100%
Specialty retailer	77%	0%	77%	100%	0%	0%	0%	0%	77%	77%	0%	0%	77%	0%	77%	77%	0%	77%	0%	77%	0%	77%	0%
N	2	0	2	1	1	0	0	0	2	2	0	0	2	0	2	2	0	2	0	2	0	2	1

	GENERAL POPULATION																						
A17B_13. Where did you buy your insulation?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Directly from contractor	40%	19%	69%	40%	80%	0%	0%	26%	51%	40%	0%	0%	51%	0%	40%	43%	0%	44%	0%	47%	33%	51%	56%
Home Improvement store(Home Depot,Hardwa	43%	52%	31%	40%	20%	100%	0%	35%	49%	43%	0%	100%	28%	0%	43%	46%	0%	37%	100%	38%	33%	33%	44%
Local retailer	6%	10%	0%	7%	0%	0%	0%	13%	0%	6%	0%	0%	7%	0%	6%	6%	0%	6%	0%	0%	33%	0%	0%
Gift/free	6%	10%	0%	7%	0%	0%	0%	13%	0%	6%	0%	0%	7%	0%	6%	0%	100%	6%	0%	8%	0%	8%	0%
DON'T KNOW	6%	10%	0%	7%	0%	0%	0%	13%	0%	6%	0%	0%	7%	0%	6%	6%	0%	6%	0%	8%	0%	8%	0%
N	22	11	11	15	5	2	0	8	14	22	0	4	18	0	22	21	1	20	2	17	3	16	7

	GENERAL POPULATION																						
A17B_77. Where did you buy your other equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Directly from contractor	23%	16%	31%	21%	17%	27%	0%	22%	23%	25%	0%	18%	26%	30%	22%	27%	0%	27%	0%	23%	43%	27%	37%
Home Improvement store(Home Depot,Hardwa	34%	30%	39%	29%	58%	33%	0%	39%	32%	34%	42%	27%	38%	9%	38%	34%	32%	33%	41%	31%	42%	19%	13%
Big Box retailer(Target,K-Mart,Wal-Mart,	12%	15%	8%	21%	8%	0%	0%	0%	16%	13%	0%	24%	5%	39%	8%	9%	25%	14%	0%	15%	7%	14%	18%
Costco	5%	5%	5%	0%	0%	13%	0%	0%	7%	6%	0%	0%	8%	22%	3%	6%	0%	6%	0%	7%	0%	10%	13%
Local retailer	4%	0%	8%	7%	0%	0%	0%	0%	5%	4%	0%	0%	5%	0%	4%	4%	0%	4%	0%	5%	0%	7%	0%
Specialty retailer	7%	7%	8%	7%	8%	7%	0%	4%	8%	4%	29%	7%	7%	0%	8%	8%	0%	5%	17%	5%	7%	7%	0%
Manufacturer	1%	0%	2%	0%	8%	0%	0%	0%	1%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	2%	0%
Gift/free	5%	9%	0%	0%	0%	13%	0%	0%	7%	3%	29%	7%	4%	0%	6%	3%	18%	3%	17%	4%	0%	0%	0%
Other	3%	5%	0%	0%	0%	7%	0%	9%	0%	3%	0%	7%	0%	0%	3%	3%	0%	3%	0%	4%	0%	5%	0%
DON'T KNOW	7%	13%	0%	14%	0%	0%	0%	26%	0%	8%	0%	10%	5%	0%	8%	4%	25%	4%	24%	5%	0%	7%	18%
N	41	21	20	14	12	15	0	9	32	36	4	13	28	5	36	36	5	36	5	29	7	18	6

	GENERAL POPULATION																							
A18. Did you receive a rebate from your utility on your new…	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Programmable thermostat	14%	13%	15%	8%	20%	22%	0%	13%	15%	14%	0%	12%	15%	15%	14%	11%	41%	17%	0%	20%	0%	20%	12%	33%
Windows - Dual Pane or High Efficiency	20%	23%	17%	18%	30%	21%	0%	29%	15%	20%	19%	20%	20%	0%	21%	21%	0%	20%	18%	21%	19%	20%	25%	21%
Fluorescent Indoor Fixture	8%	12%	2%	13%	5%	0%	0%	24%	1%	8%	0%	9%	7%	0%	9%	9%	0%	9%	0%	11%	0%	6%	0%	24%
Fluorescent Outdoor Fixture	19%	19%	18%	25%	67%	0%	0%	37%	11%	19%	.	41%	10%	0%	27%	24%	0%	19%	.	21%	0%	0%	0%	35%
CFL	11%	10%	13%	16%	4%	6%	0%	11%	11%	10%	22%	10%	12%	10%	12%	10%	14%	11%	.	11%	.	11%	5%	16%
CFL Torchiere	0%	0%	.	.	.	0%	0%	.	0%	.	0%	.	0%	.	0%	0%	.	0%	.	0%	.	0%	0%	.
Dimmer Switch	0%	.	0%	.	0%	.	0%	.	0%	0%	.	.	0%	.	0%	0%	.	0%	.	0%	.	0%	0%	.
Weatherstripping/ Caulking/ Weatherization	3%	0%	8%	0%	0%	17%	0%	0%	5%	3%	0%	0%	5%	0%	3%	3%	0%	3%	0%	3%	0%	4%	0%	0%
Water Heater/Pipe Wrapping/ Insulation	9%	18%	0%	11%	0%	0%	0%	25%	0%	9%	.	41%	0%	0%	10%	10%	0%	10%	0%	10%	.	10%	37%	0%
Low Flow Showerheads	0%	.	0%	0%	0%	0%	0%	.	0%	0%	.	.	0%	.	0%	0%	.	0%	.	0%	.	0%	.	0%
Faucet Aerators	0%	.	0%	0%	0%	.	0%	.	0%	0%	.	.	0%	.	0%	0%	.	0%	.	0%	.	0%	0%	.
Insulation-wall, ceiling or attic	14%	0%	31%	14%	20%	0%	0%	0%	23%	14%	.	0%	17%	.	14%	14%	0%	15%	0%	19%	0%	21%	22%	100%
Other	5%	0%	9%	0%	33%	0%	0%	0%	6%	5%	0%	0%	8%	0%	5%	6%	0%	5%	0%	3%	23%	4%	0%	8%
Refrigerator	27%	24%	31%	32%	28%	21%	0%	26%	27%	28%	18%	21%	30%	15%	29%	27%	18%	25%	33%	28%	17%	29%	26%	41%
Clothes washer	28%	20%	38%	32%	36%	17%	0%	14%	34%	28%	29%	19%	32%	8%	32%	30%	0%	28%	24%	34%	14%	33%	36%	37%
Clothes dryer	21%	9%	38%	31%	21%	7%	0%	11%	26%	23%	0%	11%	26%	9%	24%	23%	0%	22%	15%	27%	10%	25%	23%	21%
Dishwasher	25%	26%	23%	32%	24%	14%	0%	24%	26%	26%	0%	29%	23%	23%	25%	27%	0%	28%	0%	31%	20%	33%	33%	15%
Room air conditioner	10%	11%	7%	14%	33%	0%	0%	24%	3%	11%	0%	0%	15%	0%	14%	12%	0%	11%	0%	13%	0%	11%	0%	0%
Central air conditioner	14%	0%	23%	17%	0%	0%	0%	0%	19%	14%	.	.	14%	0%	16%	16%	0%	14%	.	16%	0%	16%	0%	0%
Furnace	11%	0%	17%	17%	0%	0%	0%	0%	12%	12%	.	0%	13%	0%	12%	12%	0%	12%	0%	15%	0%	17%	0%	0%
Gas water heater	9%	7%	11%	8%	17%	8%	0%	10%	8%	10%	0%	4%	11%	0%	10%	9%	.	5%	24%	7%	0%	4%	0%	0%
Electric water heater	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	.	0%	.	0%	0%	0%	0%	0%
Swamp cooler	0%	0%	.	0%	.	.	0%	0%	.	0%	.	0%	.	0%	0%	0%	.	0%	.	0%	.	0%	.	0%
Fan	0%	.	0%	0%	.	.	0%	.	0%	0%	.	.	0%	.	0%	0%	.	0%	.	0%	.	0%	0%	.

	GENERAL POPULATION																								
A19. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the contractor in your decision to purchase equipment? Average rating.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	4.7	6.0	4.1	4.8	3.4	5.6	0.0	5.6	4.5	4.6	7.6	5.9	4.5	1.0	4.7	4.6	10.0	4.7	4.4	4.5	5.4	4.4	4.9	3.8	4.2
N	66	26	40	27	18	21	0	12	54	61	4	16	50	4	62	62	4	61	5	48	13	37	16	15	11

	GENERAL POPULATION																								
A20. When shopping for equipment, do you recall seeing any literature, promotions or displays in any store that provided information about the advantages or features of the equipment you purchased?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	46%	44%	50%	47%	55%	42%	0%	41%	49%	45%	62%	49%	45%	42%	48%	48%	40%	48%	24%	48%	51%	46%	40%	54%	64%
No	46%	48%	42%	47%	37%	47%	0%	52%	43%	47%	38%	47%	45%	51%	44%	45%	50%	46%	51%	45%	49%	46%	52%	41%	28%
DON'T KNOW	8%	8%	8%	5%	9%	11%	0%	7%	8%	8%	0%	4%	10%	6%	8%	7%	11%	6%	25%	7%	0%	8%	9%	5%	8%
N	279	160	119	97	82	100	0	66	213	256	23	104	175	66	213	242	37	261	18	237	24	209	76	68	50

	GENERAL POPULATION																								
A23. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential were the advertising materials in your decision to purchase?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	6.2	6.3	5.9	6.4	6.4	5.6	0.0	6.4	6.1	6.1	6.2	6.8	5.7	6.8	6.0	6.1	6.5	6.2	6.2	6.0	7.2	6.2	5.4	5.4	7.0
N	133	72	61	45	46	42	0	25	108	119	14	52	81	30	103	117	16	129	4	117	12	99	30	39	31

	GENERAL POPULATION																								
A24. When shopping for your equipment, did you talk with a salesperson?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	31%	27%	37%	36%	40%	21%	0%	30%	31%	32%	17%	30%	32%	19%	35%	31%	29%	30%	43%	28%	55%	26%	20%	27%	37%
No	65%	70%	58%	63%	54%	73%	0%	67%	65%	64%	82%	69%	63%	79%	61%	65%	69%	67%	47%	70%	39%	72%	76%	71%	62%
DON'T KNOW	4%	2%	5%	1%	6%	6%	0%	2%	4%	4%	2%	0%	6%	2%	4%	4%	3%	3%	10%	3%	6%	3%	3%	3%	1%
N	279	160	119	97	82	100	0	66	213	256	23	104	175	66	213	242	37	261	18	237	24	209	76	68	50

	GENERAL POPULATION																								
A25. Did the sales person inform you of the benefits of high efficiency equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	65%	62%	69%	63%	79%	62%	0%	68%	64%	64%	89%	72%	61%	62%	66%	63%	79%	64%	72%	67%	51%	62%	57%	55%	93%
No	29%	33%	25%	34%	21%	24%	0%	28%	30%	30%	11%	25%	32%	30%	29%	31%	21%	31%	16%	29%	41%	34%	36%	38%	7%
DON'T KNOW	5%	4%	6%	3%	0%	14%	0%	4%	6%	5%	0%	3%	7%	8%	5%	6%	0%	5%	12%	4%	8%	5%	7%	7%	0%
N	89	45	44	35	33	21	0	19	70	83	6	33	56	13	76	79	10	82	7	70	12	58	17	19	20

	GENERAL POPULATION																								
A26. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the salesperson in your decision to purchase equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	5.2	5.7	4.7	5.1	4.5	6.1	0.0	5.5	5.1	5.1	8.3	6.7	4.3	6.8	5.0	5.0	6.6	5.2	5.7	5.4	4.4	5.2	6.6	5.2	6.0
N	86	45	41	34	32	20	0	19	67	80	6	33	53	13	73	76	10	79	7	67	12	55	16	18	20

	GENERAL POPULATION																							
A28. What would you say is the main reason you haven't installed high efficiency equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Product was not available	7%	6%	9%	0%	0%	14%	0%	0%	10%	8%	0%	7%	7%	14%	5%	8%	0%	8%	0%	9%	0%	12%	15%	15%
High efficiency unit didn't have featur	11%	12%	9%	0%	0%	21%	0%	13%	10%	8%	29%	7%	14%	0%	15%	12%	0%	12%	0%	13%	0%	12%	15%	0%
High Cost	42%	37%	49%	44%	0%	43%	0%	52%	37%	47%	0%	39%	44%	14%	51%	42%	42%	42%	42%	36%	85%	34%	35%	42%
Not aware of high efficiency options	9%	14%	0%	11%	0%	7%	0%	0%	12%	0%	71%	18%	0%	33%	0%	4%	58%	4%	58%	4%	0%	6%	15%	0%
Other	20%	14%	29%	22%	67%	14%	0%	0%	28%	23%	0%	18%	22%	19%	21%	22%	0%	22%	0%	23%	15%	19%	21%	21%
DON'T KNOW	12%	17%	4%	22%	33%	0%	0%	35%	2%	13%	0%	10%	13%	19%	9%	13%	0%	13%	0%	14%	0%	19%	0%	21%
N	26	14	12	9	3	14	0	6	20	23	3	11	15	6	20	24	2	24	2	21	3	16	6	5

	GENERAL POPULATION																								
A29. Do you regularly take any actions to conserve energy?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	95%	95%	95%	94%	95%	96%	0%	95%	95%	95%	89%	93%	96%	93%	95%	95%	93%	96%	89%	97%	94%	97%	95%	97%	99%
No	5%	5%	5%	6%	5%	3%	0%	5%	5%	4%	11%	7%	4%	7%	5%	5%	7%	4%	10%	3%	6%	3%	5%	3%	1%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																							
A30. What actions have you taken to conserve energy?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Turn off appliances when not in not in u	45%	46%	43%	44%	41%	48%	0%	41%	47%	43%	58%	49%	42%	46%	45%	45%	44%	46%	43%	46%	46%	43%	44%	49%
Set thermostats lower when heating and h	39%	37%	44%	39%	38%	40%	0%	43%	37%	42%	15%	33%	43%	30%	43%	41%	30%	39%	42%	41%	34%	40%	38%	35%
Schedule energy-using processes during o	23%	23%	24%	25%	17%	23%	0%	28%	21%	23%	23%	24%	22%	22%	24%	25%	15%	24%	20%	24%	24%	24%	20%	24%
Turn off any lights that are not being u	76%	76%	78%	75%	77%	78%	0%	74%	77%	76%	79%	73%	78%	76%	76%	76%	79%	76%	79%	74%	80%	74%	69%	82%
Use dimmer switches to lower lights	4%	3%	7%	3%	2%	7%	0%	2%	5%	5%	1%	3%	5%	3%	5%	5%	2%	4%	4%	5%	4%	5%	4%	7%
Set computer to low power stand bye mode	5%	5%	7%	5%	6%	5%	0%	3%	6%	5%	4%	4%	6%	6%	5%	5%	5%	6%	4%	6%	5%	5%	6%	6%
Purchase Energy Star electronics/applian	7%	6%	8%	5%	4%	9%	0%	5%	8%	7%	5%	5%	8%	4%	7%	7%	7%	7%	5%	7%	6%	7%	5%	4%
Dress appropriately for warmer/cooler te	4%	5%	4%	5%	7%	3%	0%	4%	5%	4%	8%	4%	5%	5%	4%	4%	6%	5%	4%	4%	6%	4%	5%	4%
Unplug spare Refrigerator or Freezer	1%	1%	0%	1%	0%	0%	0%	1%	0%	1%	0%	0%	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	0%	2%
Remove spare Refrigerator or Freezer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Clean Refrigerator Coils	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	1%	1%	0%	1%	0%	0%	0%	0%	0%	1%	0%	1%	0%	1%
Raise Refrigerator or Freezer Temperatur	0%	1%	0%	1%	2%	0%	0%	1%	0%	0%	0%	1%	0%	1%	0%	0%	1%	0%	1%	0%	0%	1%	1%	0%
Replace/Clean Heating/cooling system fil	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	0%	0%	1%	1%	1%	1%	0%	1%	0%	2%	0%	1%	1%	1%
Lower Water Heater Temperature Set-point	1%	1%	3%	1%	2%	1%	0%	1%	1%	1%	0%	1%	2%	1%	1%	2%	0%	1%	0%	2%	0%	3%	3%	2%
Line Dry Clothes	5%	5%	5%	6%	4%	3%	0%	5%	5%	4%	13%	3%	6%	2%	6%	5%	2%	5%	3%	5%	4%	4%	2%	6%
Do more cold water clothes washes	5%	5%	4%	6%	4%	3%	0%	7%	4%	4%	12%	5%	5%	3%	6%	5%	3%	5%	3%	6%	4%	5%	4%	6%
Air Dry Dishes	2%	3%	1%	1%	2%	3%	0%	3%	2%	1%	7%	4%	1%	3%	2%	2%	2%	2%	2%	2%	3%	2%	3%	1%
Run Swimming pool sweeper/filter less ho	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
Lower Swimming pool temperature set-poin	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shut blinds close drapes	12%	13%	11%	14%	4%	11%	0%	14%	12%	11%	19%	12%	12%	14%	11%	12%	11%	12%	12%	13%	11%	13%	13%	16%
Purchase CFLs	4%	3%	4%	3%	3%	4%	0%	4%	3%	3%	6%	2%	4%	3%	4%	4%	2%	4%	1%	5%	2%	6%	6%	6%
Only run AC when needed	12%	12%	12%	12%	7%	14%	0%	16%	10%	12%	8%	9%	14%	9%	13%	12%	11%	13%	8%	13%	12%	13%	11%	12%
Use less/no heat	2%	2%	2%	3%	5%	1%	0%	3%	2%	3%	0%	2%	3%	3%	2%	2%	4%	2%	2%	2%	4%	1%	1%	3%
Use less AC	2%	2%	2%	2%	2%	1%	0%	2%	2%	2%	1%	2%	2%	2%	2%	2%	1%	2%	2%	1%	4%	1%	1%	2%
Use fan instead of AC	3%	2%	3%	3%	3%	3%	0%	3%	3%	3%	0%	2%	3%	2%	3%	3%	2%	3%	1%	2%	5%	3%	2%	1%
Cut appliance usage	3%	3%	3%	3%	3%	2%	0%	3%	3%	3%	2%	2%	3%	3%	3%	2%	5%	3%	4%	3%	2%	3%	2%	4%
Close windows in day/open at night	3%	2%	4%	3%	4%	2%	0%	2%	3%	2%	4%	2%	3%	1%	3%	3%	1%	3%	1%	3%	3%	2%	4%	3%
Use less water	1%	1%	1%	0%	2%	2%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	1%	2%	1%	0%	2%	1%	1%
Use timers	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	1%	0%	1%	0%	1%	1%	0%	0%	0%
Insulation	1%	0%	1%	1%	0%	1%	0%	0%	1%	1%	0%	1%	0%	0%	1%	1%	0%	1%	0%	1%	1%	1%	0%	2%
Dual paned windows	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Solar	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Other	1%	1%	1%	1%	3%	1%	0%	1%	1%	1%	0%	1%	2%	1%	1%	1%	1%	1%	0%	1%	2%	1%	1%	1%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	950	599	351	346	247	357	0	242	708	846	97	355	595	266	684	794	154	791	159	542	249	397	157	145

A6. When did you start conserving energy in these ways? Would you say:	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002
	GENERAL POPULATION																					
I always tried to conserve energy in these ways	77%	76%	80%	78%	76%	76%	0%	77%	77%	78%	71%	73%	80%	74%	78%	78%	76%	78%	74%	77%	80%	74%
I started conserving a year or two ago	21%	22%	18%	21%	22%	21%	0%	21%	21%	20%	27%	25%	19%	23%	20%	21%	22%	21%	22%	22%	18%	25%
I Just recently started conserving in the past few months	2%	2%	1%	1%	2%	3%	0%	1%	2%	2%	2%	2%	1%	3%	1%	1%	2%	1%	4%	1%	2%	1%
I don't currently conserve	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	950	599	351	346	247	357	0	242	708	846	97	355	595	266	684	794	154	791	159	542	249	397

A31. Now that the state's energy situation has improved, would you say that you are doing the same, less, or more than you were during the crisis to save energy in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
	GENERAL POPULATION																							
We're doing the same amount of conservation as we did during the crisis	75%	72%	81%	75%	80%	74%	0%	71%	78%	77%	61%	68%	80%	69%	78%	76%	72%	76%	71%	75%	80%	73%	70%	79%
We're doing less now that the crisis is over	4%	4%	5%	5%	4%	3%	0%	4%	4%	4%	4%	5%	4%	3%	5%	5%	3%	4%	5%	4%	5%	4%	4%	2%
We're doing more now than we did during the energy crisis	20%	23%	14%	19%	15%	22%	0%	25%	17%	18%	32%	26%	16%	25%	17%	19%	22%	19%	23%	21%	14%	23%	25%	18%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	1%	1%	0%	1%	1%	1%	0%	0%	1%	0%	3%	1%	0%	2%	0%	0%	2%	1%	1%	0%	1%	0%	1%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

H.2 ENERGY EFFICIENCY PROGRAMS AWARENESS/ PARTICIPATIONS

	GENERAL POPULATION																								
PA1. Have you ever seen or heard of ENERGY STAR?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	54%	52%	57%	64%	48%	42%	0%	56%	53%	55%	43%	49%	57%	49%	56%	55%	46%	58%	34%	60%	53%	63%	55%	61%	72%
No	45%	47%	40%	36%	52%	56%	0%	43%	46%	44%	55%	50%	42%	50%	43%	43%	53%	41%	65%	38%	46%	36%	43%	37%	28%
DON'T KNOW	1%	1%	3%	1%	0%	2%	0%	0%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	1%	2%	2%	2%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																						
PA2. What does ENERGY STAR mean?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002
Saves energy/uses less energy	76%	76%	77%	78%	68%	75%	0%	78%	75%	76%	74%	73%	78%	74%	77%	77%	72%	76%	75%	77%	76%	78%
Less harmful to the environment, less pollution	2%	2%	1%	2%	2%	1%	0%	2%	2%	2%	0%	2%	2%	1%	2%	2%	2%	2%	2%	2%	1%	2%
Costs less to operate, saves money on electric bill	6%	4%	8%	6%	5%	5%	0%	4%	6%	6%	3%	4%	7%	7%	5%	5%	9%	6%	2%	5%	8%	6%
Rebate available if you purchase Energy Star appliance	5%	5%	4%	6%	6%	1%	0%	6%	4%	5%	6%	5%	4%	3%	5%	4%	6%	5%	2%	5%	5%	4%
It's a government standard for energy efficient equipment	6%	7%	5%	6%	6%	6%	0%	8%	5%	7%	0%	5%	7%	8%	6%	6%	5%	6%	6%	6%	8%	6%
Energy saving appliances	3%	3%	3%	3%	6%	3%	0%	3%	3%	3%	0%	3%	3%	4%	2%	3%	5%	3%	2%	4%	1%	3%
Efficiency rating	1%	1%	2%	1%	2%	2%	0%	1%	2%	1%	2%	1%	2%	0%	2%	2%	0%	2%	0%	2%	1%	2%
Other	3%	3%	1%	3%	5%	0%	0%	4%	2%	3%	3%	4%	2%	4%	2%	2%	6%	3%	0%	2%	5%	2%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	9%	9%	10%	7%	13%	13%	0%	7%	10%	8%	18%	10%	9%	9%	9%	9%	8%	8%	16%	8%	9%	7%
N	515	308	207	235	125	155	0	138	377	463	47	177	338	127	388	445	70	462	53	331	131	253

	GENERAL POPULATION																					
PA8. Have you heard about programs offered by your utility?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002
Rebates	41%	36%	51%	43%	40%	39%	0%	40%	41%	44%	17%	31%	47%	28%	46%	44%	26%	44%	29%	46%	39%	43%
Product give-away/turn-in events	2%	2%	2%	2%	2%	2%	0%	1%	2%	2%	2%	1%	2%	2%	2%	2%	3%	2%	1%	2%	3%	2%
Second refrigerator turn-in/recycling	2%	2%	3%	2%	3%	2%	0%	2%	2%	2%	0%	1%	3%	3%	2%	2%	1%	3%	0%	2%	4%	2%
Energy efficient mortgages	1%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%
Energy survey or audit	16%	14%	21%	20%	18%	11%	0%	20%	15%	18%	4%	10%	21%	9%	19%	18%	11%	18%	10%	20%	14%	22%
Haven't heard of any	30%	34%	24%	27%	35%	34%	0%	30%	30%	28%	50%	37%	26%	39%	27%	27%	43%	27%	45%	24%	33%	25%
Low income programs	8%	11%	3%	8%	5%	10%	0%	9%	8%	6%	27%	15%	4%	15%	6%	7%	13%	8%	7%	8%	9%	9%
20/20 program	1%	1%	1%	1%	2%	1%	0%	0%	1%	1%	0%	1%	0%	1%	0%	0%	1%	1%	1%	1%	1%	1%
On call/peak load	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Info in bill insert/education	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	1%	1%	2%	0%	1%
Pool pumps	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
Bill averaging	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Home improvement rebates	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pilot light	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Senior Citizen Lifeline Rate	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rates/TOU/peak	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pool saver program	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Solar power program	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Low flow toilets	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	2%	2%	2%	2%	1%	3%	0%	1%	3%	2%	1%	2%	3%	3%	2%	2%	1%	2%	1%	2%	3%	2%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	9%	9%	10%	11%	7%	7%	0%	9%	9%	10%	3%	8%	9%	9%	9%	9%	9%	9%	9%	10%	7%	9%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410

	GENERAL POPULATION																							
PA9. Have you participated in any of these programs since January 2002?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Rebate	9%	7%	13%	9%	12%	9%	0%	6%	11%	10%	4%	9%	10%	6%	11%	10%	6%	10%	6%	12%	7%	11%	9%	9%
Product give away/turn in events	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Second refrigerator turn-in/recycling	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Energy efficient mortagages	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Energy survey or audit	1%	2%	0%	1%	2%	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	3%	1%	1%	1%	2%	2%	0%	1%
Low income	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	1%	2%	1%	1%	2%	2%	0%	2%	1%	2%	1%	2%	1%	3%	1%	1%	3%	2%	1%	1%	2%	1%	1%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

	GENERAL POPULATION																						
PA10. Why haven't you participated in any of these programs since 2002?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
Inconvenient to attend event	4%	2%	6%	4%	8%	2%	0%	3%	4%	4%	3%	2%	4%	1%	4%	4%	3%	4%	1%	4%	3%	4%	6%
Not enough time to fill out the rebate application	7%	7%	6%	5%	4%	9%	0%	2%	9%	6%	19%	11%	5%	13%	5%	7%	6%	6%	9%	5%	9%	5%	8%
Not worth the time to fill out the rebate application	3%	3%	3%	4%	3%	2%	0%	4%	3%	4%	0%	2%	4%	2%	4%	3%	2%	4%	1%	3%	5%	4%	2%
Rebate program ended	2%	0%	4%	2%	2%	1%	0%	1%	2%	2%	0%	0%	3%	0%	2%	2%	0%	2%	2%	1%	2%	2%	2%
Don't need equipment/appliance program …	32%	33%	31%	31%	28%	35%	0%	35%	31%	32%	37%	22%	37%	25%	34%	32%	36%	33%	29%	33%	31%	32%	27%
Don't own equipment/appliance program …	4%	5%	2%	4%	2%	4%	0%	6%	3%	4%	5%	6%	3%	9%	2%	4%	6%	4%	6%	3%	4%	3%	4%
Don't own home	3%	5%	0%	4%	4%	2%	0%	3%	3%	3%	0%	5%	2%	14%	0%	2%	16%	3%	4%	3%	3%	4%	9%
My income doesn't qualify	9%	10%	6%	6%	8%	12%	0%	11%	7%	8%	21%	12%	7%	9%	8%	8%	9%	9%	7%	10%	6%	11%	10%
Already energy efficient/conserving	9%	7%	12%	9%	14%	7%	0%	7%	10%	10%	0%	7%	10%	4%	10%	10%	3%	9%	7%	10%	7%	12%	11%
Cost	2%	2%	3%	3%	1%	2%	0%	3%	2%	3%	0%	2%	3%	0%	3%	3%	0%	3%	2%	3%	2%	1%	2%
Considering/intention/in process	2%	1%	4%	1%	1%	4%	0%	1%	2%	2%	0%	1%	2%	0%	2%	2%	0%	1%	9%	1%	1%	1%	1%
Unaware/lack information	8%	8%	9%	10%	8%	6%	0%	8%	8%	9%	1%	10%	7%	5%	9%	8%	9%	8%	9%	8%	8%	8%	3%
Don't qualify	2%	0%	4%	1%	2%	3%	0%	1%	2%	2%	0%	0%	3%	0%	2%	2%	1%	2%	3%	2%	2%	2%	2%
Other	7%	8%	6%	6%	8%	8%	0%	8%	7%	7%	5%	10%	6%	4%	8%	7%	5%	7%	6%	7%	7%	5%	5%
Refused	1%	1%	1%	2%	1%	0%	0%	2%	1%	1%	1%	1%	1%	2%	1%	1%	0%	1%	0%	1%	2%	1%	2%
Don't know	9%	11%	7%	12%	8%	6%	0%	10%	9%	9%	8%	12%	8%	19%	7%	9%	11%	9%	11%	8%	12%	9%	11%
N	476	278	198	186	118	172	0	133	343	444	29	142	334	102	374	428	48	417	59	298	119	217	77

H.3 UTILITY REBATE PRODUCT AWARENESS, ATTITUDES, AND KNOWLEDGE

H.3.1 Clothes Washer

	GENERAL POPULATION																							
CW1. How would you indentify a clothes washer that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Energy Star label	41%	39%	45%	49%	32%	32%	0%	42%	40%	42%	33%	37%	44%	36%	43%	42%	36%	43%	32%	44%	41%	46%	44%	40%
Utility recommendation, rebate	2%	1%	3%	2%	2%	2%	0%	2%	2%	2%	2%	1%	2%	1%	2%	2%	2%	2%	1%	3%	1%	2%	2%	3%
Energy Guide indicating low energy usage	32%	29%	37%	28%	38%	35%	0%	29%	33%	34%	14%	27%	35%	27%	34%	34%	20%	33%	25%	37%	25%	34%	32%	40%
Salesperson	19%	20%	16%	18%	19%	19%	0%	19%	18%	18%	21%	22%	16%	22%	17%	18%	23%	18%	21%	17%	20%	18%	13%	26%
Technology- horizontal axis, tumble acti	2%	3%	2%	2%	2%	3%	0%	3%	2%	2%	4%	3%	2%	2%	2%	2%	1%	2%	4%	2%	2%	1%	2%	1%
Brand	1%	2%	0%	2%	2%	1%	0%	2%	1%	2%	1%	2%	1%	2%	1%	1%	2%	1%	2%	1%	3%	1%	0%	1%
In-store literature/advertising	1%	1%	1%	1%	2%	1%	0%	0%	1%	1%	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Research - consumer report	5%	4%	8%	5%	8%	4%	0%	5%	5%	6%	0%	1%	8%	2%	6%	6%	2%	5%	4%	7%	3%	7%	7%	6%
Size/bigger loads	1%	1%	0%	1%	0%	2%	0%	1%	1%	1%	0%	2%	0%	2%	1%	1%	2%	1%	1%	0%	2%	0%	1%	0%
Water savings	0%	1%	0%	0%	1%	1%	0%	0%	1%	0%	0%	1%	0%	0%	0%	1%	0%	1%	0%	1%	1%	0%	1%	0%
First cost/not interested in EE	1%	1%	1%	1%	2%	1%	0%	1%	1%	1%	0%	1%	1%	2%	1%	1%	1%	1%	2%	1%	0%	1%	1%	1%
Bill savings/energy reduction	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%
Friends/family/word of mouth	1%	1%	0%	1%	1%	1%	0%	1%	1%	1%	2%	1%	1%	0%	1%	1%	0%	0%	2%	0%	1%	0%	0%	0%
No clotheswasher/renter	1%	1%	1%	1%	1%	1%	0%	0%	1%	1%	1%	1%	1%	2%	0%	0%	4%	1%	1%	1%	2%	1%	1%	0%
Research - Internet	2%	2%	4%	2%	3%	2%	0%	2%	3%	3%	0%	1%	3%	1%	3%	3%	1%	3%	1%	2%	4%	2%	2%	2%
Research	3%	2%	5%	3%	3%	2%	0%	3%	3%	3%	0%	1%	4%	1%	3%	3%	2%	3%	0%	4%	3%	3%	2%	3%
BTUs/SEER/volts/wattage	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Manufacturer information	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Label/rating	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Machine specifications	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	1%	1%	1%	1%	1%	1%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	1%	0%	0%	0%
Refused	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Don't know	10%	13%	5%	9%	10%	12%	0%	11%	9%	8%	29%	14%	7%	15%	8%	8%	17%	8%	19%	7%	11%	8%	10%	6%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

H.3.2 Air Conditioning

	GENERAL POPULATION																							
AC3. How would you indentify an air conditioner that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Contractor	13%	14%	12%	10%	16%	15%	0%	13%	13%	14%	0%	14%	13%	.	13%	13%	21%	13%	12%	12%	17%	12%	14%	10%
Utility recommendation, rebate	3%	1%	4%	2%	1%	4%	0%	1%	3%	3%	0%	0%	3%	.	3%	2%	16%	3%	0%	3%	4%	3%	6%	2%
Energy Efficiency Rating/SEER	10%	12%	9%	14%	5%	8%	0%	15%	7%	10%	19%	8%	11%	.	10%	11%	0%	11%	6%	12%	10%	12%	3%	11%
Consumer reports	12%	9%	15%	12%	21%	9%	0%	11%	13%	12%	11%	3%	15%	.	12%	12%	21%	12%	10%	12%	14%	11%	14%	6%
Energy Star	21%	21%	21%	28%	7%	17%	0%	22%	21%	21%	24%	17%	23%	.	21%	21%	16%	23%	15%	21%	26%	23%	22%	14%
Salesperson	20%	22%	17%	14%	19%	26%	0%	18%	21%	19%	33%	25%	18%	.	20%	20%	0%	20%	19%	20%	21%	20%	19%	22%
In-store literature/advertising	1%	1%	1%	1%	1%	1%	0%	0%	1%	1%	0%	2%	0%	.	1%	1%	0%	0%	2%	1%	0%	1%	0%	2%
Technology	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	1%	0%	.	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%
Manufacturer info	1%	2%	1%	1%	5%	1%	0%	2%	1%	1%	0%	1%	2%	.	1%	1%	0%	1%	3%	1%	1%	1%	1%	3%
Rating/label	9%	9%	8%	10%	21%	4%	0%	10%	8%	9%	0%	10%	8%	.	9%	8%	16%	10%	3%	11%	8%	9%	11%	12%
First cost/not interested in EE	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bill savings/energy reduction	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Friends/family/word of mouth	3%	1%	5%	2%	4%	4%	0%	1%	4%	3%	0%	1%	3%	.	3%	3%	0%	3%	3%	3%	2%	2%	3%	1%
Renter	1%	0%	1%	0%	0%	1%	0%	0%	1%	1%	0%	0%	1%	.	1%	1%	0%	1%	0%	1%	0%	1%	0%	2%
Research - Internet	4%	1%	8%	3%	6%	5%	0%	1%	6%	5%	0%	2%	5%	.	4%	4%	0%	5%	2%	4%	6%	4%	8%	4%
Research - other	5%	7%	4%	8%	2%	3%	0%	9%	4%	6%	0%	6%	5%	.	5%	6%	0%	6%	4%	7%	1%	9%	6%	9%
BTUs/SEER/volts/wattage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Brand	1%	1%	0%	1%	1%	0%	0%	1%	0%	1%	0%	0%	1%	.	1%	1%	0%	1%	0%	0%	2%	0%	0%	0%
Energy Guide	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	2%	2%	1%	2%	1%	3%	0%	3%	2%	2%	0%	3%	2%	.	2%	2%	0%	2%	3%	1%	3%	1%	0%	4%
Refused	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Don't know	16%	16%	17%	13%	20%	18%	0%	13%	18%	15%	33%	22%	14%	.	16%	16%	27%	14%	26%	14%	12%	15%	21%	18%
N	364	175	189	121	85	158	0	114	250	344	17	87	277	0	364	356	8	294	70	217	77	159	65	57

	GENERAL POPULATION																							
AC4. Before this survey, had you ever heard of a whole house fan?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	52%	51%	53%	63%	42%	42%	0%	63%	45%	53%	31%	38%	57%	0%	52%	53%	0%	57%	29%	59%	52%	60%	47%	57%	70%
No	47%	49%	46%	36%	58%	57%	0%	36%	54%	46%	69%	60%	43%	0%	47%	47%	84%	42%	71%	40%	48%	38%	49%	43%	30%
Don't know	1%	1%	1%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	0%	1%	0%	16%	1%	0%	1%	0%	2%	4%	0%	0%
N	364	175	189	121	85	158	0	114	250	344	17	87	277	0	364	356	8	294	70	217	77	159	65	57	44

	GENERAL POPULATION																						
AC6. How would you indentify a heater that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Contractor	12%	13%	11%	12%	20%	10%	0%	14%	12%	13%	6%	13%	12%	.	12%	12%	24%	12%	12%	12%	14%	13%	14%	8%
Utility recommendation, rebate	5%	5%	5%	4%	4%	7%	0%	5%	5%	5%	4%	4%	5%	.	5%	5%	20%	5%	3%	6%	4%	7%	7%	5%
Consumer reports	13%	10%	16%	12%	20%	11%	0%	10%	14%	13%	11%	9%	14%	.	13%	13%	16%	13%	12%	14%	11%	13%	11%	11%
Energy Star	27%	28%	26%	34%	27%	18%	0%	29%	26%	27%	32%	24%	28%	.	27%	27%	28%	30%	16%	30%	29%	33%	27%	28%
AFUE/Efficiency rating	10%	10%	10%	9%	8%	11%	0%	12%	9%	10%	8%	8%	10%	.	10%	10%	18%	11%	5%	11%	11%	10%	9%	9%
Salesperson	19%	20%	18%	16%	18%	24%	0%	18%	20%	20%	14%	23%	18%	.	19%	19%	20%	19%	19%	18%	23%	19%	19%	15%
In-store literature/advertising	2%	2%	1%	3%	1%	0%	0%	3%	1%	2%	3%	3%	1%	.	2%	2%	0%	2%	1%	2%	2%	2%	2%	4%
Technology	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	.	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Manufacturer info	1%	2%	1%	1%	4%	1%	0%	1%	1%	1%	0%	2%	1%	.	1%	1%	0%	1%	1%	1%	1%	0%	1%	3%
Rating/label	6%	5%	7%	6%	7%	5%	0%	5%	6%	6%	0%	5%	6%	.	6%	6%	0%	6%	3%	7%	5%	5%	8%	6%
First cost/not interested in EE	1%	0%	1%	0%	0%	1%	0%	1%	0%	1%	0%	0%	1%	.	1%	1%	0%	0%	1%	0%	1%	1%	0%	0%
Bill savings/energy reduction	1%	1%	0%	1%	0%	0%	0%	1%	1%	1%	2%	1%	0%	.	1%	1%	0%	1%	0%	1%	0%	1%	3%	0%
Friends/family/word of mouth	2%	2%	3%	3%	2%	2%	0%	3%	2%	3%	0%	2%	2%	.	2%	2%	0%	3%	1%	2%	3%	1%	1%	5%
Renter	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Research - Internet	4%	3%	4%	4%	4%	4%	0%	3%	4%	4%	1%	2%	4%	.	4%	4%	0%	4%	1%	4%	5%	4%	6%	2%
Research - other	5%	4%	6%	6%	2%	4%	0%	5%	4%	5%	0%	3%	5%	.	5%	5%	0%	4%	6%	5%	3%	5%	3%	6%
BTUs/SEER/volts/wattage	1%	1%	1%	2%	1%	0%	0%	2%	0%	1%	0%	2%	1%	.	1%	1%	0%	1%	1%	1%	0%	1%	0%	2%
Brand	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Energy Guide	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	2%	1%	3%	1%	1%	4%	0%	2%	2%	2%	0%	1%	3%	0%	2%	2%	10%	2%	1%	2%	3%	3%	3%	3%
Refused	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	.	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%
Don't know	14%	16%	12%	13%	13%	17%	0%	13%	15%	12%	34%	20%	12%	.	14%	14%	22%	12%	24%	12%	13%	12%	12%	15%
N	600	274	326	226	163	211	0	156	444	552	43	155	445	0	600	587	13	496	104	359	137	262	100	100

H.3.3 Pool

	GENERAL POPULATION																								
P1. Do you have a pool at your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	17%	16%	17%	16%	14%	17%	0%	21%	15%	18%	1%	12%	18%	0%	17%	17%	11%	17%	13%	20%	11%	19%	23%	18%	24%
No	83%	84%	83%	84%	86%	83%	0%	79%	85%	82%	99%	88%	82%	0%	83%	83%	89%	83%	87%	80%	89%	81%	77%	82%	76%
N	717	348	369	267	195	255	0	188	529	654	58	204	513	0	717	693	24	593	124	428	165	304	112	120	98

	GENERAL POPULATION																							
P4. Summer pool pump operation	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Average number of hours pool pump typically runs d	4.7	4.8	4.5	5.0	4.1	4.4	0.0	4.9	4.5	4.7	.	5.5	4.5	.	4.7	4.7	3.0	4.8	3.8	4.9	4.0	5.4	5.1	6.9
Average typical start time for pool pump	10.3	11.5	9.2	11.1	9.8	9.6	0.0	12.2	9.2	10.4	.	11.0	10.1	.	10.3	10.1	24.0	10.2	11.0	10.5	8.7	10.2	9.1	8.9
Average typical stop time for pool pump	10.4	10.6	10.2	10.2	11.3	10.4	0.0	10.7	10.2	10.4	.	11.7	10.0	.	10.4	10.5	4.0	10.0	13.2	9.9	10.8	8.6	8.9	10.9
N	99	45	54	37	24	38	0	32	67	98	0	22	77	0	99	97	2	85	14	73	12	51	26	19

	GENERAL POPULATION																								
P4_HR. During the summer, how many hours a day do you typically run your pool pump?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
1	9%	11%	7%	7%	14%	11%	0%	11%	8%	9%	0%	6%	10%	0%	9%	10%	0%	9%	13%	9%	6%	7%	2%	12%	15%
2	13%	13%	13%	18%	4%	9%	0%	15%	12%	13%	0%	15%	13%	0%	13%	12%	50%	14%	9%	13%	19%	9%	16%	12%	12%
3	14%	20%	8%	16%	25%	9%	0%	23%	8%	14%	0%	13%	15%	0%	14%	15%	0%	15%	11%	17%	5%	19%	19%	9%	20%
4	18%	14%	22%	16%	29%	18%	0%	15%	20%	18%	0%	17%	18%	0%	18%	17%	50%	19%	14%	20%	13%	24%	17%	12%	24%
5	7%	2%	11%	5%	7%	9%	0%	0%	11%	7%	0%	6%	7%	0%	7%	7%	0%	6%	9%	6%	6%	3%	0%	6%	17%
6	10%	10%	11%	9%	4%	14%	0%	8%	12%	10%	0%	12%	10%	0%	10%	10%	0%	10%	12%	10%	10%	10%	14%	10%	6%
7	2%	3%	0%	0%	0%	5%	0%	0%	3%	2%	0%	8%	0%	0%	2%	2%	0%	2%	0%	2%	0%	3%	8%	0%	0%
8	7%	6%	8%	7%	0%	9%	0%	8%	6%	7%	0%	6%	7%	0%	7%	7%	0%	7%	6%	7%	8%	5%	8%	16%	0%
10	2%	0%	4%	2%	0%	2%	0%	0%	3%	2%	0%	0%	3%	0%	2%	2%	0%	2%	0%	3%	0%	2%	6%	0%	4%
12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
24	3%	5%	1%	5%	4%	0%	0%	6%	1%	3%	0%	6%	2%	0%	3%	3%	0%	3%	0%	4%	0%	6%	2%	12%	0%
REFUSED	2%	2%	2%	5%	0%	0%	0%	3%	2%	2%	0%	0%	3%	0%	2%	2%	0%	3%	0%	3%	0%	5%	0%	6%	0%
DON'T KNOW	13%	13%	12%	11%	14%	14%	0%	12%	13%	12%	100%	13%	12%	0%	13%	13%	0%	10%	26%	5%	34%	7%	8%	4%	2%
N	116	53	63	44	28	44	0	37	79	114	1	25	91	0	116	114	2	98	18	80	18	58	28	21	21

	GENERAL POPULATION																								
P4_ST. What time do you typically start your pool pump?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
1	6%	4%	7%	7%	4%	5%	0%	2%	8%	6%	0%	10%	5%	0%	6%	6%	0%	6%	3%	6%	8%	8%	10%	6%	0%
2	1%	1%	2%	0%	4%	2%	0%	0%	2%	1%	0%	2%	1%	0%	1%	1%	0%	1%	0%	1%	2%	2%	4%	0%	0%
3	3%	0%	5%	0%	0%	7%	0%	0%	4%	3%	0%	0%	3%	0%	3%	3%	0%	2%	6%	2%	0%	3%	4%	4%	0%
4	7%	6%	8%	7%	0%	9%	0%	3%	10%	7%	0%	8%	7%	0%	7%	7%	0%	7%	6%	6%	13%	0%	0%	0%	16%
5	4%	5%	3%	5%	4%	5%	0%	7%	3%	5%	0%	0%	6%	0%	4%	5%	0%	5%	0%	6%	0%	7%	6%	6%	10%
6	5%	7%	3%	5%	18%	2%	0%	6%	4%	4%	0%	11%	4%	0%	5%	5%	0%	5%	8%	5%	2%	3%	0%	12%	6%
7	10%	11%	9%	9%	11%	11%	0%	14%	8%	10%	0%	4%	12%	0%	10%	10%	0%	10%	8%	11%	6%	14%	24%	10%	0%
8	6%	6%	6%	7%	7%	5%	0%	6%	6%	6%	0%	4%	7%	0%	6%	6%	0%	7%	0%	7%	8%	5%	10%	8%	6%
9	5%	2%	8%	5%	0%	7%	0%	3%	6%	5%	0%	6%	5%	0%	5%	5%	0%	6%	0%	6%	6%	8%	4%	4%	6%
10	7%	5%	9%	7%	14%	5%	0%	6%	7%	7%	0%	11%	6%	0%	7%	7%	0%	7%	6%	8%	2%	8%	2%	12%	8%
11	3%	2%	4%	0%	4%	7%	0%	0%	5%	3%	0%	4%	3%	0%	3%	3%	0%	2%	6%	3%	0%	1%	2%	4%	4%
12	1%	2%	0%	0%	0%	2%	0%	0%	1%	1%	0%	4%	0%	0%	1%	1%	0%	0%	6%	0%	0%	0%	0%	0%	0%
13	1%	0%	1%	0%	7%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	0%	3%	1%	0%	1%	2%	0%	0%
14	1%	0%	2%	2%	0%	0%	0%	0%	2%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	2%	0%	6%	0%
15	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
16	1%	0%	2%	0%	0%	2%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	0%	0%	0%	0%
18	3%	6%	0%	5%	0%	2%	0%	6%	1%	3%	0%	10%	2%	0%	3%	3%	0%	2%	8%	3%	0%	2%	4%	0%	6%
19	6%	6%	7%	7%	4%	7%	0%	8%	5%	7%	0%	11%	5%	0%	6%	7%	0%	6%	8%	6%	6%	6%	0%	10%	12%
20	2%	2%	2%	2%	0%	2%	0%	3%	1%	2%	0%	6%	1%	0%	2%	2%	0%	2%	0%	3%	0%	2%	4%	0%	6%
21	4%	6%	1%	2%	7%	5%	0%	5%	3%	4%	0%	4%	4%	0%	4%	4%	0%	3%	6%	2%	8%	1%	2%	0%	6%
22	3%	3%	2%	5%	4%	0%	0%	3%	3%	3%	0%	2%	3%	0%	3%	3%	0%	3%	0%	4%	0%	3%	2%	0%	6%
23	1%	2%	0%	2%	0%	0%	0%	3%	0%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	2%	6%	0%	0%
24	2%	2%	2%	2%	0%	2%	0%	3%	1%	2%	0%	0%	3%	0%	2%	1%	50%	2%	0%	3%	0%	4%	0%	0%	4%
REFUSED	2%	5%	0%	5%	0%	0%	0%	6%	0%	2%	0%	0%	3%	0%	2%	1%	50%	3%	0%	3%	0%	5%	6%	6%	0%
DON'T KNOW	16%	17%	15%	18%	14%	14%	0%	18%	15%	16%	100%	6%	19%	0%	16%	16%	0%	14%	26%	9%	39%	13%	9%	10%	2%
N	116	53	63	44	28	44	0	37	79	114	1	25	91	0	116	114	2	98	18	80	18	58	28	21	21

	GENERAL POPULATION																									
P4_END. What time do you typically stop your pool pump?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
1	5%	6%	3%	5%	7%	5%	0%	6%	4%	5%	0%	9%	4%	0%	5%	5%	0%	5%	3%	6%	0%	7%	2%	4%	10%
2	3%	4%	2%	5%	0%	2%	0%	3%	3%	3%	0%	4%	3%	0%	3%	3%	0%	4%	0%	3%	6%	5%	6%	0%	6%
3	2%	0%	5%	2%	4%	2%	0%	0%	4%	2%	0%	0%	3%	0%	2%	2%	0%	3%	0%	3%	0%	5%	10%	0%	2%
4	7%	5%	10%	9%	0%	7%	0%	6%	8%	7%	0%	0%	9%	0%	7%	6%	50%	9%	0%	10%	0%	11%	14%	0%	10%
5	1%	2%	0%	0%	4%	2%	0%	2%	1%	1%	0%	2%	1%	0%	1%	1%	0%	0%	6%	0%	2%	0%	0%	0%	0%
6	10%	10%	9%	9%	0%	14%	0%	11%	9%	10%	0%	14%	9%	0%	10%	10%	0%	11%	6%	12%	6%	13%	0%	22%	15%
7	5%	4%	7%	5%	4%	7%	0%	3%	7%	5%	0%	4%	6%	0%	5%	5%	0%	6%	3%	5%	8%	5%	12%	0%	6%
8	3%	4%	1%	2%	7%	2%	0%	3%	3%	3%	0%	10%	1%	0%	3%	3%	0%	3%	3%	3%	0%	1%	2%	6%	0%
9	5%	5%	4%	7%	4%	2%	0%	7%	3%	5%	0%	0%	6%	0%	5%	5%	0%	6%	0%	7%	0%	7%	6%	6%	12%
10	3%	4%	2%	2%	11%	2%	0%	4%	3%	3%	0%	2%	4%	0%	3%	3%	0%	2%	8%	2%	6%	2%	2%	4%	0%
11	5%	4%	5%	2%	18%	5%	0%	4%	5%	5%	0%	6%	4%	0%	5%	5%	0%	5%	3%	6%	0%	7%	12%	6%	4%
12	4%	4%	4%	5%	0%	5%	0%	3%	5%	3%	0%	4%	4%	0%	4%	4%	0%	5%	0%	2%	16%	0%	0%	9%	0%
13	3%	2%	4%	5%	0%	2%	0%	3%	3%	3%	0%	6%	3%	0%	3%	3%	0%	4%	0%	3%	6%	5%	0%	0%	6%
14	1%	0%	1%	0%	7%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	4%	0%	0%
15	1%	0%	2%	0%	4%	2%	0%	0%	2%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	1%	2%	2%	0%	4%	0%
16	5%	2%	8%	2%	4%	9%	0%	0%	8%	5%	0%	4%	5%	0%	5%	5%	0%	3%	15%	4%	0%	6%	8%	6%	0%
17	2%	2%	2%	0%	4%	5%	0%	0%	3%	2%	0%	4%	2%	0%	2%	2%	0%	1%	6%	2%	0%	1%	2%	0%	0%
18	2%	2%	2%	2%	0%	2%	0%	3%	1%	2%	0%	6%	1%	0%	2%	2%	0%	2%	0%	3%	0%	2%	0%	10%	0%
19	1%	2%	0%	2%	0%	0%	0%	3%	0%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	0%	0%	0%	0%
20	4%	9%	0%	7%	0%	2%	0%	11%	0%	4%	0%	6%	4%	0%	4%	5%	0%	4%	8%	3%	6%	0%	0%	6%	6%
21	4%	5%	2%	5%	4%	2%	0%	6%	2%	4%	0%	11%	2%	0%	4%	4%	0%	3%	8%	3%	0%	0%	0%	0%	12%
22	1%	0%	2%	0%	0%	2%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	0%	0%	0%	4%
23	1%	0%	2%	2%	0%	0%	0%	0%	2%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	2%	0%	0%	6%
24	2%	2%	1%	0%	7%	2%	0%	0%	3%	2%	0%	4%	1%	0%	2%	2%	0%	2%	0%	2%	2%	2%	6%	0%	0%
REFUSED	2%	5%	0%	5%	0%	0%	0%	6%	0%	2%	0%	0%	3%	0%	2%	1%	50%	3%	0%	3%	0%	5%	6%	6%	0%
DON'T KNOW	17%	18%	16%	18%	14%	16%	0%	18%	17%	17%	100%	7%	20%	0%	17%	17%	0%	14%	32%	9%	42%	12%	9%	10%	0%
N	116	53	63	44	28	44	0	37	79	114	1	25	91	0	116	114	2	98	18	80	18	58	28	21	21

H.3.4 Programmable Thermostats

	GENERAL POPULATION																								
PT1. Before this survey had you ever heard of a programmable thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	73%	67%	84%	76%	73%	68%	0%	75%	72%	77%	42%	61%	81%	60%	78%	76%	57%	77%	53%	81%	70%	83%	79%	81%	83%
No	26%	32%	16%	23%	27%	31%	0%	25%	27%	22%	57%	38%	19%	38%	22%	23%	42%	22%	47%	18%	29%	17%	21%	18%	16%
DON'T KNOW	1%	1%	0%	1%	0%	1%	0%	0%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%	0%	1%	0%	1%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																								
PT2. When did you first hear of programmable thermostats?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Within the past year	10%	12%	7%	9%	10%	11%	0%	11%	9%	9%	24%	15%	7%	16%	8%	9%	15%	10%	11%	9%	10%	10%	14%	9%	9%
Within the past two years	12%	13%	10%	10%	17%	13%	0%	10%	13%	12%	14%	16%	10%	17%	10%	11%	17%	11%	15%	11%	13%	13%	16%	15%	7%
Over two years ago	74%	70%	80%	75%	70%	74%	0%	74%	74%	75%	54%	64%	79%	62%	78%	76%	65%	75%	72%	76%	71%	72%	64%	71%	82%
DON'T KNOW	4%	5%	3%	6%	2%	2%	0%	6%	3%	4%	8%	5%	4%	5%	4%	4%	3%	5%	1%	4%	6%	4%	6%	5%	2%
N	726	420	306	281	191	254	0	190	536	673	48	230	496	172	554	631	95	633	93	448	185	337	132	119	98

PT3. How did you first become aware of programmable thermostats?	GENERAL POPULATION																						
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
In store point of purchase materials	8%	5%	13%	8%	8%	8%	0%	5%	9%	8%	4%	4%	10%	5%	9%	9%	4%	8%	7%	9%	5%	8%	11%
Friends or family	33%	36%	30%	32%	27%	37%	0%	36%	32%	34%	30%	35%	33%	41%	31%	33%	38%	33%	35%	32%	35%	32%	38%
Utility (bill insert, advertising, call)	6%	6%	4%	4%	7%	8%	0%	4%	6%	5%	11%	6%	5%	8%	5%	6%	6%	6%	6%	5%	6%	5%	4%
Ads on TV, Internet, newspapers , magazines	15%	16%	13%	12%	19%	18%	0%	14%	15%	14%	25%	20%	13%	17%	14%	14%	18%	16%	9%	14%	21%	14%	12%
Sales person	3%	2%	5%	5%	2%	2%	0%	3%	3%	4%	1%	2%	4%	0%	4%	4%	0%	3%	4%	4%	2%	4%	1%
Consumer reports	1%	0%	1%	0%	2%	0%	0%	1%	0%	1%	0%	0%	1%	0%	1%	1%	0%	0%	3%	0%	0%	0%	0%
Department of Energy label	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Energy Star label	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Contractor	4%	4%	4%	5%	4%	3%	0%	5%	4%	4%	5%	4%	4%	1%	5%	5%	0%	4%	4%	4%	4%	6%	6%
Came with the house	12%	12%	12%	14%	14%	10%	0%	15%	11%	12%	10%	11%	13%	7%	14%	13%	9%	12%	12%	13%	11%	13%	7%
Came with new AC/heater	2%	2%	2%	2%	1%	2%	0%	2%	2%	2%	0%	3%	1%	1%	2%	2%	0%	2%	1%	2%	1%	3%	5%
Work/business	7%	7%	7%	7%	10%	6%	0%	6%	7%	7%	11%	8%	6%	10%	6%	6%	13%	7%	8%	7%	5%	6%	9%
Friends/family/word of mouth	1%	1%	0%	0%	0%	2%	0%	0%	1%	1%	0%	2%	0%	1%	1%	1%	2%	0%	4%	0%	1%	1%	0%
Research	1%	1%	2%	2%	1%	0%	0%	1%	2%	1%	3%	1%	2%	2%	1%	1%	2%	2%	0%	2%	1%	2%	3%
Other	1%	1%	1%	1%	0%	1%	0%	1%	1%	1%	0%	0%	1%	1%	1%	1%	1%	1%	1%	0%	2%	0%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	6%	6%	6%	7%	6%	4%	0%	7%	5%	6%	1%	3%	7%	5%	6%	6%	6%	6%	4%	6%	6%	6%	4%
N	726	420	306	281	191	254	0	190	536	673	48	230	496	172	554	631	95	633	93	448	185	337	132

PT4. Do you currently have a programmable thermostat in your home?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	56%	48%	68%	59%	45%	55%	0%	57%	55%	57%	39%	44%	62%	29%	65%	61%	27%	55%	65%	59%	45%	58%	60%	56%	59%
No	44%	51%	32%	40%	55%	45%	0%	42%	45%	43%	56%	56%	38%	71%	35%	39%	72%	45%	35%	41%	54%	42%	40%	44%	41%
DON'T KNOW	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	6%	1%	0%	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%
N	726	420	306	281	191	254	0	190	536	673	48	230	496	172	554	631	95	633	93	448	185	337	132	119	98

PT6. Where did you buy your programmable thermostat?	GENERAL POPULATION																							
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Directly from a contractor	21%	18%	24%	22%	16%	21%	0%	19%	22%	22%	7%	19%	22%	6%	23%	22%	5%	22%	17%	22%	20%	23%	24%	19%
Home improvement store(Home Depot/hardwa	21%	21%	20%	20%	20%	22%	0%	19%	21%	20%	43%	22%	20%	23%	20%	20%	31%	20%	23%	22%	15%	21%	20%	24%
Big Box retailer (Target K-Mart Wal-Mart	2%	2%	2%	2%	1%	1%	0%	1%	2%	2%	0%	5%	1%	2%	2%	2%	0%	2%	0%	3%	1%	3%	1%	5%
Costco	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
Already in house (pre-existing)	42%	43%	41%	43%	52%	39%	0%	48%	39%	42%	42%	39%	43%	46%	42%	42%	44%	43%	37%	40%	54%	40%	36%	45%
Came with ne AC/heater	1%	1%	1%	0%	1%	4%	0%	1%	1%	1%	5%	1%	1%	0%	2%	1%	0%	1%	3%	1%	1%	1%	3%	0%
Manufacturer	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Gift/free	0%	1%	0%	0%	0%	1%	0%	1%	0%	1%	0%	1%	0%	2%	0%	1%	0%	1%	0%	1%	0%	1%	1%	0%
Utility	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%	0%
Other	2%	4%	1%	3%	0%	1%	0%	4%	1%	2%	0%	4%	2%	8%	1%	2%	9%	2%	5%	1%	3%	1%	0%	1%
Don't know	9%	8%	10%	10%	7%	9%	0%	6%	11%	10%	2%	11%	9%	11%	9%	9%	10%	9%	13%	9%	6%	9%	11%	5%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62

PT8. Why did you buy the programmable thermostat?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Replacing heating/cooling equipment	7%	5%	9%	7%	6%	7%	0%	6%	8%	7%	13%	2%	9%	0%	8%	7%	10%	7%	6%	7%	9%	7%	7%	5%	8%
To save energy	19%	18%	21%	18%	28%	19%	0%	16%	21%	20%	17%	13%	21%	15%	20%	20%	5%	20%	16%	22%	13%	22%	24%	26%	19%
Better technology than my old one	11%	10%	13%	10%	6%	16%	0%	11%	12%	11%	13%	13%	11%	12%	11%	12%	9%	11%	11%	12%	9%	13%	10%	9%	16%
Didn't have a thermostat before	2%	2%	2%	3%	1%	1%	0%	3%	2%	2%	0%	4%	2%	0%	2%	2%	0%	1%	7%	1%	1%	1%	2%	1%	2%
Old thermostat was broken, didn't work	5%	6%	4%	5%	1%	6%	0%	5%	5%	5%	7%	7%	5%	4%	5%	5%	11%	5%	6%	6%	1%	7%	7%	2%	9%
Already in house (pre-existing)	32%	33%	31%	31%	46%	30%	0%	36%	30%	32%	34%	35%	31%	36%	32%	32%	41%	32%	31%	29%	43%	31%	23%	33%	28%
Contractor recommendation	3%	3%	2%	2%	1%	4%	0%	2%	3%	3%	0%	5%	2%	6%	2%	3%	0%	3%	2%	3%	3%	3%	6%	1%	0%
Control environment	4%	4%	3%	4%	2%	4%	0%	4%	4%	4%	0%	4%	4%	5%	4%	4%	5%	4%	2%	4%	5%	2%	1%	7%	4%
Convenience/flexibility	3%	4%	3%	4%	2%	4%	0%	4%	3%	4%	0%	3%	4%	5%	3%	4%	0%	3%	5%	3%	3%	3%	3%	2%	5%
Remodeling	1%	1%	1%	1%	0%	1%	0%	0%	1%	1%	7%	3%	0%	0%	1%	1%	0%	1%	0%	1%	0%	1%	1%	4%	0%
Free/gift	1%	2%	0%	1%	0%	1%	0%	2%	1%	1%	0%	3%	0%	3%	1%	1%	5%	1%	0%	1%	2%	1%	3%	0%	0%
Required to have one in CA	1%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	2%	1%	0%	0%	0%
OTHER	2%	2%	3%	4%	1%	1%	0%	2%	3%	3%	0%	1%	3%	3%	2%	3%	0%	2%	5%	2%	2%	1%	4%	1%	2%
REFUSED	2%	2%	1%	2%	0%	2%	0%	2%	2%	2%	7%	0%	2%	6%	1%	2%	0%	2%	2%	1%	3%	2%	3%	2%	0%
DON'T KNOW	6%	7%	5%	6%	5%	6%	0%	8%	5%	6%	0%	7%	6%	7%	6%	6%	13%	6%	8%	6%	5%	5%	6%	7%	7%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

	GENERAL POPULATION																								
PT9. Do you usually adjust the temperature settings on your new thermostat manually or do you program it to adjust automatically at different times of the day?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Manual	34%	35%	32%	36%	38%	29%	0%	40%	31%	35%	17%	31%	35%	29%	35%	34%	30%	32%	44%	31%	37%	30%	40%	21%	25%
Program	62%	60%	65%	60%	61%	67%	0%	57%	65%	62%	68%	62%	62%	63%	62%	62%	61%	64%	54%	66%	58%	68%	60%	69%	73%
REFUSED	1%	2%	0%	2%	0%	0%	0%	1%	1%	1%	7%	3%	0%	6%	0%	1%	5%	1%	0%	2%	0%	1%	0%	4%	2%
DON'T KNOW	3%	3%	3%	2%	1%	4%	0%	2%	3%	2%	7%	4%	2%	2%	3%	3%	4%	3%	2%	2%	5%	1%	0%	6%	0%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

	GENERAL POPULATION																								
PT10B. Would you say that using a programmable thermostat is more convenient, not any more or less convenient, or less convenient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Is more convenient	73%	74%	72%	74%	74%	71%	0%	74%	73%	73%	72%	79%	71%	77%	72%	73%	69%	72%	81%	75%	61%	75%	68%	83%	75%
Not any more or less convenient, or	19%	16%	22%	17%	19%	21%	0%	15%	20%	18%	20%	14%	20%	13%	19%	19%	18%	20%	13%	17%	27%	16%	25%	11%	17%
Less convenient	5%	7%	3%	6%	4%	4%	0%	9%	3%	6%	0%	3%	6%	6%	5%	5%	5%	5%	4%	6%	5%	6%	5%	5%	5%
REFUSED	1%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	0%	3%	0%	0%	0%	0%
DON'T KNOW	3%	4%	1%	2%	4%	4%	0%	2%	3%	2%	7%	4%	2%	4%	2%	2%	8%	3%	2%	2%	5%	3%	2%	0%	2%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

	GENERAL POPULATION																								
PT10A. Would you say that using a programmable thermostat makes your home more comfortable, just as comfortable, or less comfortable than using a regular thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
More comfortable	48%	49%	47%	49%	44%	47%	0%	48%	48%	48%	50%	52%	47%	62%	46%	47%	60%	48%	48%	48%	49%	46%	37%	58%	43%
Just as comfortable, or	43%	43%	44%	42%	46%	45%	0%	43%	44%	43%	50%	39%	45%	30%	45%	45%	29%	45%	35%	46%	41%	47%	55%	41%	53%
Less comfortable	3%	3%	2%	5%	0%	0%	0%	4%	2%	3%	0%	3%	3%	3%	3%	3%	0%	1%	11%	1%	2%	1%	0%	0%	2%
REFUSED	0%	0%	1%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
DON'T KNOW	5%	5%	5%	3%	11%	8%	0%	5%	6%	5%	0%	7%	5%	5%	5%	5%	11%	5%	6%	5%	7%	5%	8%	1%	2%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

	GENERAL POPULATION																								
PT10B. Would you say that using a programmable thermostat is more convenient, not any more or less convenient, or less convenient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Is more convenient	73%	74%	72%	74%	74%	71%	0%	74%	73%	73%	72%	79%	71%	77%	72%	73%	69%	72%	81%	75%	61%	75%	68%	83%	75%
Not any more or less convenient, or	19%	16%	22%	17%	19%	21%	0%	15%	20%	18%	20%	14%	20%	13%	19%	19%	18%	20%	13%	17%	27%	16%	25%	11%	17%
Less convenient	5%	7%	3%	6%	4%	4%	0%	9%	3%	6%	0%	3%	6%	6%	5%	5%	5%	5%	4%	6%	5%	6%	5%	5%	5%
REFUSED	1%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	0%	3%	0%	0%	0%	0%
DON'T KNOW	3%	4%	1%	2%	4%	4%	0%	2%	3%	2%	7%	4%	2%	4%	2%	2%	8%	3%	2%	2%	5%	3%	2%	0%	2%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

	GENERAL POPULATION																								
PT10C. Would you say that using a programmable thermostat has led you to use your heater and/or air conditioner more, about the same, or less than using a regular thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
More	7%	9%	5%	7%	8%	6%	0%	9%	6%	7%	2%	7%	7%	6%	7%	8%	0%	7%	8%	6%	9%	4%	4%	7%	1%
About the same, or	30%	29%	32%	28%	28%	34%	0%	33%	29%	30%	31%	29%	30%	20%	32%	30%	25%	29%	38%	29%	30%	27%	36%	22%	34%
Less	55%	54%	55%	58%	59%	48%	0%	52%	56%	55%	44%	55%	55%	61%	54%	54%	62%	56%	47%	58%	49%	62%	48%	70%	64%
REFUSED	1%	1%	2%	1%	0%	1%	0%	0%	2%	1%	0%	1%	1%	0%	1%	1%	0%	1%	0%	1%	2%	1%	3%	1%	0%
DON'T KNOW	7%	8%	6%	5%	5%	11%	0%	6%	7%	6%	22%	7%	7%	13%	6%	6%	13%	7%	8%	6%	10%	6%	8%	0%	2%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

H.4 CFL PRODUCT AWARENESS, ATTITUDES, KNOWLEDGE AND PURCHASES

	GENERAL POPULATION																								
L1. Before we talked today, had you ever heard of CFL bulbs?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	82%	81%	85%	84%	85%	78%	0%	81%	83%	83%	76%	79%	84%	82%	82%	83%	80%	100%	0%	100%	100%	100%	100%	100%	100%
No	17%	19%	14%	15%	14%	21%	0%	19%	16%	16%	24%	21%	15%	18%	17%	17%	19%	0%	97%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	1%	0%	0%	1%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	0%	3%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																							
L8. Have you ever purchased or been given CFL bulbs?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Purchased	52%	49%	58%	53%	52%	51%	0%	50%	53%	54%	41%	48%	55%	44%	56%	55%	41%	64%	0%	93%	0%	96%	95%	93%
Received/given	6%	7%	3%	5%	7%	6%	0%	7%	5%	5%	12%	7%	5%	8%	5%	5%	10%	7%	0%	0%	21%	0%	0%	0%
Purchased and received/given	4%	5%	2%	5%	5%	2%	0%	6%	3%	3%	8%	4%	3%	4%	4%	4%	3%	5%	0%	7%	0%	4%	5%	7%
No, neither purchased nor received/given	37%	39%	34%	36%	35%	39%	0%	37%	37%	37%	39%	40%	36%	44%	34%	36%	45%	24%	97%	0%	76%	0%	0%	0%
DON'T KNOW	1%	1%	2%	1%	0%	2%	0%	0%	2%	1%	0%	1%	1%	0%	1%	1%	1%	1%	3%	0%	2%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

	GENERAL POPULATION																								
L24. Do you recall receiving a discount or rebate when you bought this/these CFL's?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	19%	20%	19%	27%	18%	8%	0%	23%	18%	19%	26%	17%	21%	12%	22%	20%	15%	19%	0%	19%	0%	19%	12%	24%	21%
No	71%	71%	71%	64%	74%	82%	0%	67%	73%	71%	69%	76%	69%	83%	67%	70%	77%	71%	0%	71%	0%	73%	82%	67%	69%
DON'T KNOW	9%	9%	10%	9%	8%	11%	0%	10%	9%	10%	5%	7%	11%	5%	11%	10%	8%	9%	0%	9%	0%	7%	6%	9%	10%
N	560	334	226	215	149	196	0	141	419	505	52	196	364	132	428	488	72	560	0	560	0	410	167	149	120

	GENERAL POPULATION																								
L26. How likely were you to have purchased this/these CFL bulb(s) if you didn't get the discount?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Very likely	52%	51%	53%	53%	63%	40%	0%	44%	57%	50%	61%	67%	45%	66%	49%	52%	48%	52%	0%	52%	0%	59%	55%	46%	51%
Somewhat likely	20%	20%	20%	19%	22%	27%	0%	26%	17%	22%	10%	5%	27%	5%	23%	22%	7%	20%	0%	20%	0%	21%	25%	19%	31%
Not very likely	17%	18%	17%	20%	11%	7%	0%	25%	13%	17%	19%	17%	18%	3%	20%	20%	0%	17%	0%	17%	0%	14%	8%	19%	16%
Very unlikely	8%	9%	6%	5%	4%	27%	0%	6%	9%	9%	0%	7%	8%	17%	6%	5%	33%	8%	0%	8%	0%	6%	13%	12%	2%
DON'T KNOW	3%	2%	4%	3%	0%	0%	0%	0%	4%	2%	10%	4%	2%	9%	2%	1%	12%	3%	0%	3%	0%	0%	0%	4%	0%
N	101	61	40	59	27	15	0	32	69	88	12	31	70	16	85	90	11	101	0	101	0	74	19	34	22

	GENERAL POPULATION																								
L27. Did the discount encourage you to buy more CFL's than if there had not been a discount?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	61%	68%	48%	61%	59%	60%	0%	66%	57%	57%	90%	69%	56%	77%	58%	56%	96%	61%	0%	61%	0%	65%	58%	67%	52%
No	39%	32%	51%	39%	37%	40%	0%	34%	42%	43%	10%	31%	43%	23%	42%	43%	4%	39%	0%	39%	0%	35%	42%	32%	48%
DON'T KNOW	0%	0%	1%	0%	4%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
N	101	61	40	59	27	15	0	32	69	88	12	31	70	16	85	90	11	101	0	101	0	74	19	34	22

	GENERAL POPULATION																								
L9YR. In which year did you purchase or receive your first CFL bulb?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
2003	7%	8%	6%	6%	9%	9%	0%	5%	8%	6%	12%	10%	5%	14%	5%	6%	15%	7%	0%	7%	0%	10%	25%	0%	0%
2002	22%	21%	22%	18%	25%	27%	0%	19%	23%	21%	26%	26%	19%	27%	20%	20%	31%	22%	0%	22%	0%	29%	75%	0%	0%
2001	29%	29%	29%	33%	21%	24%	0%	34%	27%	29%	32%	29%	29%	25%	30%	30%	23%	29%	0%	29%	0%	27%	0%	100%	0%
2000	12%	13%	10%	14%	9%	9%	0%	15%	10%	13%	3%	13%	11%	11%	12%	12%	9%	12%	0%	12%	0%	10%	0%	0%	53%
1999	7%	7%	5%	7%	11%	6%	0%	6%	7%	6%	15%	6%	7%	5%	7%	7%	6%	7%	0%	7%	0%	6%	0%	0%	31%
1998	4%	3%	5%	4%	5%	2%	0%	5%	3%	4%	0%	0%	5%	1%	4%	4%	0%	4%	0%	4%	0%	2%	0%	0%	16%
1997	2%	2%	3%	1%	1%	4%	0%	1%	2%	2%	2%	1%	3%	1%	3%	2%	3%	2%	0%	2%	0%	2%	0%	0%	0%
1996	2%	2%	2%	1%	6%	2%	0%	2%	2%	2%	2%	1%	3%	3%	2%	2%	4%	2%	0%	2%	0%	1%	0%	0%	0%
prior to 1996	7%	7%	7%	6%	6%	10%	0%	6%	7%	8%	3%	6%	7%	8%	7%	7%	5%	7%	0%	7%	0%	7%	0%	0%	0%
DON'T KNOW	9%	8%	11%	11%	6%	8%	0%	7%	10%	9%	5%	7%	11%	4%	11%	10%	5%	9%	0%	9%	0%	7%	0%	0%	0%
N	550	329	221	215	139	196	0	141	409	495	52	193	357	128	422	482	68	550	0	550	0	409	167	149	120

	GENERAL POPULATION																								
L18. Have you bought any CFL's since January 2002?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	58%	58%	59%	60%	63%	53%	0%	53%	60%	59%	52%	63%	55%	69%	55%	56%	68%	58%	0%	58%	0%	100%	100%	45%	45%
No	39%	40%	39%	37%	35%	45%	0%	44%	37%	38%	44%	36%	41%	26%	43%	41%	26%	39%	0%	39%	0%	0%	0%	52%	52%
DON'T KNOW	3%	3%	3%	3%	2%	2%	0%	3%	2%	3%	4%	1%	4%	4%	2%	2%	6%	3%	0%	3%	0%	0%	0%	3%	3%
N	338	204	134	134	81	123	0	88	250	305	31	112	226	77	261	295	43	338	0	338	0	197	75	88	89

	GENERAL POPULATION																								
L19. Where did you buy those CFL's?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Grocerey store	3%	2%	4%	2%	3%	4%	0%	1%	4%	3%	0%	1%	4%	3%	3%	3%	2%	3%	.	3%	.	3%	3%	3%	1%
Drug store	0%	1%	0%	1%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	.	0%	.	0%	1%	0%	0%
Home improvement	42%	38%	49%	35%	57%	47%	0%	35%	45%	43%	32%	33%	47%	38%	43%	44%	26%	42%	.	42%	.	42%	38%	43%	35%
Big Box retailer	8%	10%	2%	6%	6%	10%	0%	14%	5%	7%	9%	13%	4%	15%	5%	6%	17%	8%	.	8%	.	8%	10%	7%	6%
Costco	19%	18%	21%	23%	15%	14%	0%	17%	20%	18%	30%	19%	19%	15%	20%	20%	11%	19%	.	19%	.	19%	17%	22%	21%
Orchard Supply	2%	2%	2%	4%	0%	0%	0%	2%	2%	2%	0%	3%	1%	4%	1%	2%	2%	2%	.	2%	.	2%	1%	3%	2%
SaveMart	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	1%	0%	1%	0%	0%	2%	0%	.	0%	.	0%	1%	0%	0%
K-Mart	2%	2%	1%	2%	0%	1%	0%	2%	1%	1%	2%	2%	1%	5%	0%	1%	6%	2%	.	2%	.	2%	0%	5%	1%
Sam's Club	2%	3%	0%	2%	0%	3%	0%	3%	1%	2%	2%	3%	2%	5%	1%	2%	5%	2%	.	2%	.	2%	2%	3%	0%
Longs	0%	1%	0%	1%	1%	0%	0%	0%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	.	0%	.	0%	1%	0%	1%
Ace Hardware	3%	4%	3%	5%	1%	1%	0%	1%	4%	3%	10%	2%	4%	5%	3%	3%	3%	3%	.	3%	.	3%	3%	1%	11%
Smart & Final	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
Albertson's	1%	1%	1%	1%	0%	0%	0%	0%	1%	1%	0%	1%	1%	1%	0%	1%	0%	1%	.	1%	.	1%	1%	1%	0%
Yardbirds	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
Fry's	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
True Value	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	1%	0%	0%
Willits	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
Food Maxx	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
Dollar Tree	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
Home Depot	11%	11%	10%	11%	7%	12%	0%	15%	9%	12%	2%	12%	10%	4%	13%	11%	10%	11%	.	11%	.	11%	12%	8%	10%
Lamps Plus	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
Dixieline Lumber	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	1%
Cal DO IT Center	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
Lowe's	3%	4%	2%	2%	2%	5%	0%	5%	2%	3%	2%	1%	4%	2%	4%	3%	3%	3%	.	3%	.	3%	3%	0%	6%
99 Cent Store	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
Valley Supermarket	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
Contractors' Warehouse	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
99 Ranch Market	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
Free/gift	2%	3%	0%	2%	2%	1%	0%	3%	1%	1%	6%	4%	0%	2%	2%	2%	2%	2%	.	2%	.	2%	2%	1%	1%
Other	5%	4%	7%	7%	4%	2%	0%	6%	4%	5%	4%	4%	6%	3%	6%	5%	6%	5%	.	5%	.	5%	6%	3%	6%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%
Don't know	3%	3%	4%	2%	5%	4%	0%	1%	4%	3%	3%	2%	4%	5%	3%	3%	6%	3%	.	3%	.	3%	3%	3%	2%
N	410	245	165	162	110	138	0	101	309	371	38	151	259	106	304	355	55	410	0	410	0	410	167	101	69

	GENERAL POPULATION																								
L20. How many CFLs has your household…	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
1	4%	4%	6%	5%	3%	4%	0%	4%	5%	5%	0%	5%	4%	5%	4%	4%	4%	4%	0%	4%	0%	4%	8%	4%	3%
2	11%	12%	9%	9%	10%	14%	0%	12%	10%	11%	5%	16%	8%	12%	10%	10%	15%	11%	0%	11%	0%	11%	17%	1%	8%
3	13%	16%	10%	12%	22%	12%	0%	11%	14%	14%	7%	15%	12%	20%	11%	12%	24%	13%	0%	13%	0%	13%	16%	11%	16%
4	10%	12%	5%	12%	6%	6%	0%	17%	6%	8%	17%	12%	9%	14%	8%	11%	0%	10%	0%	10%	0%	10%	8%	8%	12%
5	7%	5%	11%	5%	7%	12%	0%	4%	9%	8%	5%	3%	10%	6%	8%	8%	1%	7%	0%	7%	0%	7%	6%	9%	4%
6	10%	11%	9%	10%	12%	9%	0%	14%	8%	9%	18%	9%	10%	7%	11%	10%	9%	10%	0%	10%	0%	10%	5%	11%	7%
7	3%	3%	2%	2%	1%	4%	0%	3%	3%	3%	2%	3%	2%	2%	3%	2%	4%	3%	0%	3%	0%	3%	3%	4%	0%
8	6%	7%	5%	5%	4%	9%	0%	6%	6%	6%	10%	11%	4%	5%	7%	6%	11%	6%	0%	6%	0%	6%	11%	4%	6%
9	1%	1%	0%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	0%
10	13%	11%	16%	13%	13%	12%	0%	11%	14%	14%	0%	5%	17%	14%	12%	12%	17%	13%	0%	13%	0%	13%	9%	14%	22%
12	9%	5%	14%	10%	0%	9%	0%	5%	10%	8%	13%	8%	9%	0%	11%	10%	0%	9%	0%	9%	0%	9%	6%	16%	6%
14	1%	2%	0%	2%	1%	0%	0%	2%	1%	1%	0%	2%	1%	0%	2%	2%	0%	1%	0%	1%	0%	1%	2%	2%	0%
15	1%	2%	0%	2%	1%	0%	0%	2%	1%	1%	7%	2%	1%	2%	1%	1%	4%	1%	0%	1%	0%	1%	0%	2%	3%
16	2%	2%	1%	1%	0%	4%	0%	2%	2%	2%	5%	4%	1%	6%	1%	2%	0%	2%	0%	2%	0%	2%	1%	5%	0%
18	1%	1%	0%	1%	1%	0%	0%	2%	0%	1%	0%	1%	1%	1%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	3%
20	1%	1%	2%	2%	3%	0%	0%	0%	2%	1%	10%	2%	1%	2%	1%	1%	4%	1%	0%	1%	0%	1%	4%	1%	0%
23	1%	1%	0%	1%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	2%	0%
24	1%	0%	2%	1%	0%	1%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	4%	0%
25	1%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	2%	0%	0%
30	1%	1%	0%	1%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	0%
36	0%	0%	0%	0%	3%	0%	0%	0%	1%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Don't know	4%	2%	7%	4%	7%	3%	0%	2%	5%	4%	0%	2%	5%	2%	4%	4%	4%	4%	0%	4%	0%	4%	3%	2%	8%
Avg purchased	7.3	6.9	7.8	7.7	7.1	6.5	-	7.0	7.4	7.1	8.7	6.5	7.7	6.5	7.5	7.4	6.4	7.3	.	7.3	.	7.3	6.3	9.0	6.9
Avg installed	5.4	5.4	5.5	5.6	5.5	5.0	-	5.6	5.3	5.4	5.5	5.0	5.6	4.6	5.7	5.6	4.5	5.4	.	5.4	.	5.4	4.7	7.3	4.4
Install rate	75%	78%	71%	73%	78%	77%		80%	72%	76%	63%	77%	74%	71%	76%	75%	70%	75%		75%		75%	75%	80%	64%
N	243	136	107	99	67	77	0	64	179	223	19	78	165	56	187	217	26	243	0	243	0	243	91	63	42
N bulbs	1660																								

L20. How many CFLs has your household…	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
	GENERAL POPULATION																								
1	4%	4%	6%	5%	3%	4%	0%	4%	5%	5%	0%	5%	4%	5%	4%	4%	4%	4%	0%	4%	0%	4%	8%	4%	3%
2	11%	12%	9%	9%	10%	14%	0%	12%	10%	11%	5%	16%	8%	12%	10%	10%	15%	11%	0%	11%	0%	11%	17%	1%	8%
3	13%	16%	10%	12%	22%	12%	0%	11%	14%	14%	7%	15%	12%	20%	11%	12%	24%	13%	0%	13%	0%	13%	16%	11%	16%
4	10%	12%	5%	12%	6%	6%	0%	17%	6%	8%	17%	12%	9%	14%	8%	11%	0%	10%	0%	10%	0%	10%	8%	8%	12%
5	7%	5%	11%	5%	7%	12%	0%	4%	9%	8%	5%	3%	10%	6%	8%	8%	1%	7%	0%	7%	0%	7%	6%	9%	4%
6	10%	11%	9%	10%	12%	9%	0%	14%	8%	9%	18%	9%	10%	7%	11%	10%	9%	10%	0%	10%	0%	10%	5%	11%	7%
7	3%	3%	2%	2%	1%	4%	0%	3%	3%	3%	2%	3%	2%	2%	3%	2%	4%	3%	0%	3%	0%	3%	3%	4%	0%
8	6%	7%	5%	5%	4%	9%	0%	6%	6%	6%	10%	11%	4%	5%	7%	6%	11%	6%	0%	6%	0%	6%	11%	4%	6%
9	1%	1%	0%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	0%
10	13%	11%	16%	13%	13%	12%	0%	11%	14%	14%	0%	5%	17%	14%	12%	12%	17%	13%	0%	13%	0%	13%	9%	14%	22%
12	9%	5%	14%	10%	0%	9%	0%	5%	10%	8%	13%	8%	9%	0%	11%	10%	0%	9%	0%	9%	0%	9%	6%	16%	6%
14	1%	2%	0%	2%	1%	0%	0%	2%	1%	1%	0%	2%	1%	0%	2%	2%	0%	1%	0%	1%	0%	1%	2%	2%	0%
15	1%	2%	0%	2%	1%	0%	0%	2%	1%	1%	7%	2%	1%	2%	1%	1%	4%	1%	0%	1%	0%	1%	0%	2%	3%
16	2%	2%	1%	1%	0%	4%	0%	2%	2%	2%	5%	4%	1%	6%	1%	2%	0%	2%	0%	2%	0%	2%	1%	5%	0%
18	1%	1%	0%	1%	1%	0%	0%	2%	0%	1%	0%	1%	1%	1%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	3%
20	1%	1%	2%	2%	3%	0%	0%	0%	2%	1%	10%	2%	1%	2%	1%	1%	4%	1%	0%	1%	0%	1%	4%	1%	0%
23	1%	1%	0%	1%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	2%	0%
24	1%	0%	2%	1%	0%	1%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	4%	0%
25	1%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	2%	0%	0%
30	1%	1%	0%	1%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	0%
36	0%	0%	0%	0%	3%	0%	0%	0%	1%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Don't know	4%	2%	7%	4%	7%	3%	0%	2%	5%	4%	0%	2%	5%	2%	4%	4%	4%	4%	0%	4%	0%	4%	3%	2%	8%
Avg purchased	7.3	6.9	7.8	7.7	7.1	6.5	-	7.0	7.4	7.1	8.7	6.5	7.7	6.5	7.5	7.4	6.4	7.3	.	7.3	.	7.3	6.3	9.0	6.9
Avg installed	5.4	5.4	5.5	5.6	5.5	5.0	-	5.6	5.3	5.4	5.5	5.0	5.6	4.6	5.7	5.6	4.5	5.4	.	5.4	.	5.4	4.7	7.3	4.4
Install rate	75%	78%	71%	73%	78%	77%		80%	72%	76%	63%	77%	74%	71%	76%	75%	70%	75%		75%		75%	75%	80%	64%
N	243	136	107	99	67	77	0	64	179	223	19	78	165	56	187	217	26	243	0	243	0	243	91	63	42
N bulbs	1660																								

	GENERAL POPULATION																								
L21. Of those, how many are currently…	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
0	6%	4%	8%	7%	6%	3%	0%	5%	6%	5%	7%	2%	8%	3%	6%	6%	0%	6%	0%	6%	0%	6%	5%	4%	6%
1	7%	9%	4%	6%	3%	10%	0%	5%	8%	7%	5%	12%	4%	15%	5%	5%	19%	7%	0%	7%	0%	7%	13%	4%	4%
2	13%	14%	11%	11%	18%	14%	0%	15%	12%	13%	10%	17%	11%	11%	13%	13%	14%	13%	0%	13%	0%	13%	14%	6%	17%
3	17%	17%	18%	16%	16%	19%	0%	16%	18%	18%	15%	15%	19%	22%	16%	16%	24%	17%	0%	17%	0%	17%	18%	12%	22%
4	10%	13%	7%	12%	6%	9%	0%	15%	8%	9%	22%	15%	8%	12%	10%	12%	0%	10%	0%	10%	0%	10%	11%	14%	6%
5	7%	3%	12%	4%	12%	9%	0%	2%	9%	7%	0%	3%	8%	7%	7%	7%	6%	7%	0%	7%	0%	7%	6%	4%	8%
6	10%	11%	9%	13%	13%	4%	0%	12%	9%	11%	7%	9%	11%	6%	12%	10%	9%	10%	0%	10%	0%	10%	7%	11%	14%
7	4%	5%	3%	3%	3%	6%	0%	4%	4%	3%	15%	7%	3%	7%	3%	3%	12%	4%	0%	4%	0%	4%	4%	6%	2%
8	4%	6%	3%	4%	4%	5%	0%	4%	5%	5%	0%	6%	4%	5%	4%	5%	3%	4%	0%	4%	0%	4%	4%	4%	6%
9	2%	1%	2%	0%	0%	5%	0%	3%	1%	2%	0%	2%	1%	0%	2%	2%	0%	2%	0%	2%	0%	2%	1%	3%	0%
10	7%	8%	5%	7%	4%	6%	0%	6%	7%	7%	5%	4%	8%	8%	6%	6%	13%	7%	0%	7%	0%	7%	10%	5%	6%
12	6%	4%	8%	7%	0%	5%	0%	5%	6%	6%	5%	5%	6%	0%	7%	6%	0%	6%	0%	6%	0%	6%	3%	12%	3%
13	0%	0%	1%	0%	0%	1%	0%	0%	1%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
14	1%	1%	0%	1%	1%	0%	0%	2%	0%	1%	0%	1%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	2%	0%
15	1%	0%	1%	1%	1%	0%	0%	0%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	2%	0%	0%
16	1%	2%	0%	1%	0%	1%	0%	2%	1%	1%	5%	3%	0%	4%	0%	1%	0%	1%	0%	1%	0%	1%	1%	2%	0%
18	0%	0%	0%	0%	3%	0%	0%	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
19	1%	1%	0%	1%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	0%
20	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
23	1%	1%	0%	1%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	2%	0%
24	1%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	2%	0%
30	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Don't know	2%	0%	5%	3%	4%	0%	0%	0%	3%	2%	0%	1%	3%	0%	3%	3%	0%	2%	0%	2%	0%	2%	0%	2%	4%
Average	5.4	5.4	5.5	5.6	5.5	5.0	-	5.6	5.3	5.4	5.5	5.0	5.6	4.6	5.7	5.6	4.5	5.4	.	5.4	.	5.4	4.7	7.3	4.4
N	243	136	107	99	67	77	0	64	179	223	19	78	165	56	187	217	26	243	0	243	0	243	91	63	42
N bulbs	1278																								

	GENERAL POPULATION																								
L4. If you were going to buy a CFL bulb today, how much do you think each bulb would cost, not including any discounts or rebates?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Less than $2 each	7%	8%	5%	7%	6%	8%	0%	7%	8%	7%	11%	10%	6%	9%	7%	7%	10%	7%	0%	9%	4%	9%	11%	9%	9%
$3-$5 each	30%	30%	30%	31%	30%	29%	0%	32%	29%	30%	34%	29%	31%	33%	29%	30%	31%	30%	0%	30%	31%	32%	26%	31%	41%
$6-$10 each	30%	31%	27%	29%	33%	29%	0%	34%	28%	30%	27%	32%	28%	30%	30%	30%	26%	30%	0%	31%	28%	31%	31%	29%	30%
More than $10 each	9%	8%	9%	8%	8%	11%	0%	8%	9%	9%	9%	10%	8%	11%	8%	8%	12%	9%	0%	8%	10%	7%	11%	7%	8%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	24%	21%	29%	25%	23%	23%	0%	20%	26%	25%	18%	20%	26%	17%	27%	25%	20%	24%	0%	22%	27%	21%	21%	24%	12%
N	824	505	319	312	222	290	0	203	621	736	83	300	524	231	593	692	132	824	0	560	264	410	167	149	120

	GENERAL POPULATION																								
L5. Where have you seen CFL bulbs for sale?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Grocery store	13%	14%	11%	13%	14%	13%	0%	12%	14%	13%	13%	14%	12%	17%	11%	14%	11%	13%	.	16%	6%	19%	19%	21%	14%
Drug store	7%	8%	4%	8%	4%	6%	0%	7%	6%	6%	16%	10%	5%	8%	6%	7%	6%	7%	.	8%	4%	10%	11%	8%	8%
Home improvement store	66%	62%	74%	65%	68%	67%	0%	61%	68%	66%	62%	59%	70%	55%	71%	70%	47%	66%	.	72%	54%	71%	67%	72%	79%
Big Box retailer	26%	31%	16%	27%	24%	24%	0%	37%	20%	25%	33%	35%	20%	35%	22%	23%	36%	26%	.	26%	25%	27%	31%	28%	24%
Costco	16%	17%	15%	20%	14%	10%	0%	18%	15%	15%	22%	17%	16%	12%	18%	17%	12%	16%	.	21%	6%	22%	20%	21%	23%
Haven't seen them	12%	13%	9%	10%	12%	13%	0%	13%	11%	11%	19%	14%	10%	16%	10%	10%	18%	12%	.	7%	22%	6%	7%	8%	2%
Everywhere	1%	1%	1%	1%	0%	0%	0%	1%	1%	1%	0%	0%	1%	1%	1%	1%	0%	1%	.	1%	1%	0%	0%	0%	3%
Other	3%	3%	2%	3%	0%	3%	0%	2%	3%	3%	0%	3%	2%	3%	2%	2%	4%	3%	.	2%	3%	2%	2%	1%	7%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%
Don't know	4%	3%	6%	5%	6%	3%	0%	3%	5%	5%	0%	3%	5%	4%	5%	5%	2%	4%	.	3%	7%	3%	2%	4%	2%
N	824	505	319	312	222	290	0	203	621	736	83	300	524	231	593	692	132	824	0	560	264	410	167	149	120

L10. How satisfied have you been with the CFL bulb(s) you have used in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
	GENERAL POPULATION																								
Very satisfied	54%	58%	47%	57%	50%	51%	0%	59%	52%	51%	76%	61%	50%	66%	50%	52%	66%	54%	0%	54%	58%	52%	51%	57%	52%
Somewhat satisfied	33%	31%	37%	30%	33%	36%	0%	30%	34%	34%	20%	28%	35%	24%	36%	35%	20%	33%	0%	34%	21%	36%	34%	33%	37%
Somewhat dissatisfied	8%	7%	11%	9%	9%	6%	0%	8%	8%	9%	1%	6%	10%	7%	9%	8%	9%	8%	0%	8%	14%	7%	8%	7%	9%
Very dissatisfied	3%	3%	4%	3%	5%	3%	0%	1%	4%	3%	2%	3%	3%	2%	3%	3%	3%	3%	0%	3%	3%	3%	3%	2%	3%
Not installed	1%	1%	1%	0%	1%	1%	0%	1%	1%	1%	0%	0%	1%	0%	1%	1%	1%	1%	0%	0%	4%	0%	1%	0%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	1%	1%	1%	0%	2%	2%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	1%	0%	1%	0%	1%	2%	1%	0%
N	620	378	242	232	168	220	0	157	463	552	65	225	395	156	464	530	90	620	0	560	60	410	167	149	120

L11. In what ways were you dissatisfied with the CFL bulbs used in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
	GENERAL POPULATION																						
Not a wide array of styles, shapes, size	6%	6%	6%	7%	1%	5%	0%	9%	4%	6%	0%	4%	6%	7%	5%	6%	0%	6%	.	6%	0%	7%	7%
Light quality is bad	56%	56%	57%	61%	53%	50%	0%	59%	55%	57%	47%	56%	56%	57%	56%	56%	55%	56%	.	56%	55%	56%	48%
Don't like flicker	4%	4%	5%	3%	4%	6%	0%	4%	4%	4%	6%	2%	5%	2%	5%	4%	3%	4%	.	4%	2%	4%	5%
Too expensive	4%	4%	4%	4%	5%	3%	0%	3%	4%	4%	0%	3%	4%	4%	4%	4%	3%	4%	.	4%	7%	3%	2%
Can't use with dimmers	2%	2%	3%	3%	1%	2%	0%	2%	3%	3%	0%	2%	3%	2%	3%	2%	3%	2%	.	3%	0%	3%	3%
Can't use with timers	1%	0%	1%	0%	1%	1%	0%	1%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	.	1%	0%	1%	1%
Bill savings less than expected/not different	2%	2%	2%	1%	3%	3%	0%	1%	2%	2%	0%	3%	2%	3%	2%	2%	0%	2%	.	1%	9%	2%	3%
Defect/broke	2%	2%	1%	1%	3%	3%	0%	2%	2%	2%	0%	1%	2%	5%	1%	2%	3%	2%	.	2%	0%	1%	1%
Slow start	9%	9%	8%	8%	11%	9%	0%	9%	9%	9%	9%	11%	8%	6%	10%	9%	5%	9%	.	8%	18%	9%	6%
Didn't last as long as expected	10%	13%	6%	12%	11%	7%	0%	13%	9%	9%	26%	13%	9%	13%	10%	10%	13%	10%	.	11%	0%	12%	10%
Not bright enough	5%	5%	4%	5%	10%	2%	0%	6%	4%	5%	0%	4%	5%	3%	5%	4%	6%	5%	.	5%	2%	4%	6%
Not dissatisfied	1%	0%	3%	0%	3%	3%	0%	1%	2%	2%	0%	0%	2%	0%	2%	2%	0%	1%	.	1%	5%	1%	2%
Light color	2%	2%	2%	3%	0%	2%	0%	5%	1%	2%	0%	0%	3%	3%	2%	3%	0%	2%	.	2%	0%	3%	0%
Size/won't fit	2%	1%	2%	0%	4%	3%	0%	1%	2%	2%	0%	2%	2%	2%	2%	2%	0%	2%	.	2%	2%	1%	1%
Other	3%	3%	3%	3%	3%	3%	0%	0%	4%	3%	0%	5%	2%	1%	3%	3%	1%	3%	.	3%	2%	3%	5%
Refused	1%	0%	1%	0%	1%	1%	0%	0%	1%	0%	3%	0%	1%	0%	1%	1%	0%	1%	.	1%	0%	1%	1%
Don't know	8%	8%	7%	6%	4%	11%	0%	10%	7%	7%	15%	8%	8%	8%	7%	7%	11%	8%	.	7%	16%	6%	11%
N	277	153	124	98	79	100	0	64	213	260	15	84	193	51	226	248	29	277	0	251	26	190	78

	GENERAL POPULATION																								
L22. When you were shopping for your CFL's did you notice any advertising or information materials related to energy efficient lighting displayed in the store?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	36%	40%	30%	39%	35%	32%	0%	44%	32%	36%	36%	35%	37%	33%	37%	36%	35%	36%	0%	36%	0%	36%	30%	31%	48%
No	50%	48%	54%	46%	54%	55%	0%	44%	53%	50%	49%	50%	50%	56%	48%	50%	53%	50%	0%	50%	0%	50%	56%	50%	46%
REFUSED	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
DON'T KNOW	14%	13%	15%	14%	12%	13%	0%	12%	14%	14%	14%	15%	13%	11%	14%	14%	12%	14%	0%	14%	0%	14%	14%	18%	6%
N	410	245	165	162	110	138	0	101	309	371	38	151	259	106	304	355	55	410	0	410	0	410	167	101	69

	GENERAL POPULATION																								
L23. How likely would you have been to purchase the CFL(s) if you had not noticed the store display on CFL's?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Very likely	42%	38%	52%	40%	53%	43%	0%	30%	49%	43%	38%	32%	49%	47%	41%	43%	36%	42%	0%	42%	0%	42%	44%	44%	36%
Somewhat likely	33%	35%	28%	33%	26%	34%	0%	37%	30%	32%	42%	41%	28%	34%	32%	33%	34%	33%	0%	33%	0%	33%	30%	26%	41%
Not very likely	13%	12%	15%	16%	8%	9%	0%	16%	11%	12%	19%	12%	13%	7%	15%	13%	11%	13%	0%	13%	0%	13%	12%	19%	5%
Very unlikely	11%	14%	5%	10%	13%	14%	0%	14%	9%	12%	0%	15%	9%	12%	11%	11%	11%	11%	0%	11%	0%	11%	14%	10%	18%
DON'T KNOW	1%	1%	0%	2%	0%	0%	0%	3%	0%	1%	0%	0%	2%	0%	1%	0%	7%	1%	0%	1%	0%	1%	0%	0%	0%
N	145	92	53	63	38	44	0	45	100	133	12	52	93	34	111	126	19	145	0	145	0	145	49	33	30

	GENERAL POPULATION																								
L28. Do you plan on purchasing CFL's in the future, assuming they cost about $3 each?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	78%	79%	75%	79%	75%	77%	0%	79%	77%	77%	83%	82%	75%	80%	77%	79%	73%	78%	0%	87%	59%	88%	84%	86%	90%
No	16%	15%	18%	15%	18%	16%	0%	14%	16%	16%	9%	12%	18%	14%	16%	15%	21%	16%	0%	9%	30%	8%	10%	8%	8%
REFUSED	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
DON'T KNOW	6%	6%	7%	6%	7%	7%	0%	6%	6%	6%	8%	5%	7%	6%	7%	6%	6%	6%	0%	4%	11%	3%	5%	5%	2%
N	824	505	319	312	222	290	0	203	621	736	83	300	524	231	593	692	132	824	0	560	264	410	167	149	120

L29. Why do you not plan on purchasing CFL's in the future?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003
	GENERAL POPULATION																						
Costs too much to purchase	15%	16%	14%	6%	20%	26%	0%	12%	17%	15%	23%	25%	11%	11%	17%	16%	13%	15%	.	13%	17%	12%	15%
Won't save enough energy to make it worth it	6%	8%	2%	9%	0%	4%	0%	15%	2%	6%	0%	10%	4%	7%	5%	7%	3%	6%	.	8%	5%	11%	9%
Couldn't find the type/style/size I wanted	18%	16%	22%	17%	15%	22%	0%	21%	18%	19%	0%	10%	22%	15%	20%	19%	15%	18%	.	17%	20%	20%	12%
Couldn't find the brand I wanted	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%
Don't like to try new high-tech product	2%	1%	4%	2%	3%	2%	0%	0%	3%	2%	0%	3%	2%	0%	3%	3%	0%	2%	.	0%	4%	0%	0%
Didn't know the product well enough	10%	12%	5%	6%	13%	13%	0%	10%	9%	10%	0%	16%	7%	15%	8%	9%	13%	10%	.	2%	14%	0%	0%
Worried that CFLs would not work as well	6%	8%	3%	6%	3%	7%	0%	8%	5%	6%	0%	3%	7%	3%	7%	5%	8%	6%	.	4%	7%	6%	6%
Didn't have enough information to make a decision	3%	2%	6%	6%	0%	0%	0%	4%	3%	3%	0%	0%	5%	0%	4%	4%	0%	3%	.	0%	5%	0%	0%
Not fully confident that I could trust the product	1%	0%	3%	2%	0%	0%	0%	0%	2%	1%	0%	0%	2%	0%	1%	1%	0%	1%	.	0%	2%	0%	0%
Didn't last as long as expected	4%	4%	4%	4%	8%	2%	0%	8%	2%	4%	0%	1%	5%	0%	5%	5%	0%	4%	.	10%	0%	8%	9%
Don't like the light	17%	16%	18%	15%	23%	17%	0%	12%	19%	16%	23%	19%	16%	21%	15%	15%	21%	17%	.	17%	17%	17%	17%
No need	8%	8%	8%	11%	5%	4%	0%	9%	7%	7%	18%	7%	8%	8%	7%	7%	10%	8%	.	13%	4%	16%	15%
Other	15%	19%	8%	19%	10%	11%	0%	19%	13%	14%	36%	16%	15%	23%	12%	15%	16%	15%	.	15%	15%	8%	17%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%
Don't know	3%	0%	6%	4%	3%	0%	0%	0%	3%	3%	0%	0%	4%	0%	3%	3%	0%	3%	.	4%	2%	4%	0%
N	133	75	58	47	40	46	0	29	104	124	7	40	93	33	100	106	27	133	0	50	83	31	17

H.5 TORCHIERE PURCHASES

	GENERAL POPULATION																								
T1. Since January 2002, have you purchased any tall floor lamps, or "torchiers"?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	14%	14%	13%	14%	15%	13%	0%	15%	14%	15%	10%	15%	13%	14%	14%	14%	15%	14%	15%	15%	12%	17%	15%	10%	16%
No	86%	85%	86%	85%	85%	87%	0%	85%	86%	85%	90%	84%	86%	85%	86%	86%	83%	86%	84%	85%	88%	82%	85%	87%	84%
DON'T KNOW	1%	1%	0%	1%	0%	0%	0%	1%	0%	1%	0%	1%	0%	1%	0%	0%	1%	0%	1%	1%	0%	0%	0%	2%	0%
N	999	630	369	370	260	369	0	253	746	884	108	381	618	284	715	831	166	822	177	558	264	408	165	149	120

	GENERAL POPULATION																								
T2. When you were shopping for your torchiere, did you notice any advertising or information materials related to energy efficient lighting displayed in the store?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	16%	19%	10%	19%	15%	12%	0%	22%	13%	15%	24%	24%	11%	17%	15%	17%	11%	17%	12%	19%	13%	19%	12%	37%	20%
No	78%	75%	84%	77%	74%	80%	0%	73%	80%	78%	76%	72%	82%	77%	78%	76%	88%	76%	85%	75%	81%	73%	82%	63%	80%
DON'T KNOW	6%	6%	6%	4%	10%	8%	0%	5%	6%	7%	0%	4%	7%	5%	6%	7%	2%	7%	4%	7%	6%	7%	5%	0%	0%
N	142	91	51	53	39	50	0	37	105	130	11	53	89	44	98	115	27	112	30	83	29	72	26	16	18

	GENERAL POPULATION																								
T3. Did you talk with a salesperson?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	13%	9%	21%	13%	8%	14%	0%	11%	14%	13%	12%	9%	15%	2%	17%	16%	0%	15%	5%	16%	11%	17%	2%	34%	14%
No	83%	88%	73%	85%	87%	80%	0%	87%	82%	83%	88%	89%	80%	94%	79%	80%	100%	81%	95%	78%	87%	76%	95%	60%	83%
DON'T KNOW	4%	2%	6%	2%	5%	6%	0%	2%	5%	4%	0%	2%	5%	3%	4%	5%	0%	5%	0%	6%	1%	7%	4%	6%	2%
N	142	91	51	53	39	50	0	37	105	130	11	53	89	44	98	115	27	112	30	83	29	72	26	16	18

	GENERAL POPULATION																								
T4. Did you discuss energy efficiency with the salesperson?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	21%	31%	11%	14%	33%	29%	0%	27%	19%	14%	100%	54%	8%	100%	17%	21%	0%	23%	0%	29%	0%	31%	0%	59%	0%
No	71%	53%	89%	71%	67%	71%	0%	46%	81%	77%	0%	46%	81%	0%	75%	71%	0%	69%	100%	61%	100%	57%	100%	41%	100%
DON'T KNOW	8%	16%	0%	14%	0%	0%	0%	27%	0%	8%	0%	0%	11%	0%	8%	8%	0%	8%	0%	11%	0%	11%	0%	0%	0%
N	17	8	9	7	3	7	0	4	13	15	2	5	12	1	16	17	0	16	1	12	4	11	1	5	2

	GENERAL POPULATION																								
T5. Before we talked today, had you ever heard of torchieres or floor lamps that use only CFL bulbs?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	22%	21%	23%	24%	21%	18%	0%	21%	22%	22%	21%	19%	24%	19%	23%	22%	20%	25%	6%	26%	24%	24%	21%	18%	34%
No	77%	77%	77%	73%	78%	81%	0%	76%	77%	77%	74%	80%	75%	79%	76%	77%	76%	73%	93%	72%	75%	74%	79%	78%	65%
DON'T KNOW	1%	2%	0%	2%	1%	0%	0%	3%	1%	1%	5%	1%	2%	2%	1%	1%	4%	2%	1%	2%	1%	1%	0%	3%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																							
T6. Have you ever purchased or been given torchieres or floor lamps that only use CFL bulbs?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Purchased	5%	4%	7%	5%	5%	5%	0%	3%	6%	5%	7%	4%	6%	5%	5%	5%	4%	6%	2%	6%	5%	6%	5%	4%
Received/Given	1%	1%	1%	2%	2%	0%	0%	1%	1%	1%	2%	1%	1%	0%	1%	1%	0%	1%	1%	1%	1%	2%	2%	2%
Purchased and received/Given	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
No, neither purchased nor received/given	93%	94%	92%	92%	92%	95%	0%	95%	92%	93%	92%	94%	92%	94%	93%	93%	95%	93%	96%	92%	93%	92%	92%	94%
DON'T KNOW	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

	POPULATION AWARE OF CFLs																							
T6. Have you ever purchased or been given torchieres or floor lamps that only use CFL bulbs?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Purchased	5%	4%	7%	5%	5%	5%	0%	3%	6%	5%	7%	4%	6%	5%	5%	5%	4%	6%	2%	6%	5%	6%	5%	4%
Received/Given	1%	1%	1%	2%	2%	0%	0%	1%	1%	1%	2%	1%	1%	0%	1%	1%	0%	1%	1%	1%	1%	2%	2%	2%
Purchased and received/Given	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
No, neither purchased nor received/given	93%	94%	92%	92%	92%	95%	0%	95%	92%	93%	92%	94%	92%	94%	93%	93%	95%	93%	96%	92%	93%	92%	92%	94%
DON'T KNOW	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

	GENERAL POPULATION																								
T7. Do you recall receiving a discount or rebate when you bought your CFL torchiere?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	7%	8%	6%	5%	6%	11%	0%	0%	9%	7%	6%	15%	4%	12%	5%	6%	12%	8%	0%	4%	15%	2%	0%	0%	9%
No	85%	83%	89%	95%	94%	68%	0%	81%	87%	86%	81%	79%	88%	82%	87%	87%	75%	84%	100%	90%	72%	90%	89%	100%	91%
DON'T KNOW	7%	9%	5%	0%	0%	21%	0%	19%	5%	7%	13%	6%	8%	6%	8%	7%	12%	8%	0%	6%	13%	8%	11%	0%	0%
N	55	30	25	20	16	19	0	8	47	48	7	17	38	16	39	47	8	51	4	36	15	26	9	7	10

	GENERAL POPULATION																								
T9. How likely were you to have purchased your CFL torchiere if you didn't get the discount?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Very likely	37%	59%	0%	0%	100%	50%	0%	0%	37%	29%	100%	59%	0%	50%	23%	50%	0%	37%	0%	30%	42%	100%	0%	0%	0%
Somewhat likely	26%	41%	0%	0%	0%	50%	0%	0%	26%	29%	0%	41%	0%	50%	0%	0%	100%	26%	0%	70%	0%	0%	0%	0%	100%
Not very likely	37%	0%	100%	100%	0%	0%	0%	0%	37%	41%	0%	0%	100%	0%	77%	50%	0%	37%	0%	0%	58%	0%	0%	0%	0%
N	4	3	1	1	1	2	0	0	4	3	1	3	1	2	2	3	1	4	0	2	2	1	0	0	1

H.6 FIXTURE PURCHASERS

F1. Since January 2002, have you purchased any hard-wired lighting fixtures, such as ceiling fixures or wall mounted fixtures?	GENERAL POPULATION																							
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Yes	19%	18%	23%	19%	22%	19%	0%	22%	18%	20%	13%	16%	22%	11%	23%	23%	5%	20%	17%	22%	15%	24%	21%	22%
No	80%	82%	76%	80%	78%	81%	0%	78%	81%	79%	86%	83%	78%	88%	77%	77%	94%	80%	83%	77%	85%	76%	79%	76%
DON'T KNOW	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

F2. When you were shopping for your lighting fixture, did you notice any advertising or information materials related to energy efficient lighting displayed in the store?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	27%	33%	18%	28%	25%	27%	0%	31%	25%	27%	36%	28%	27%	25%	28%	28%	20%	29%	20%	25%	40%	20%	18%	32%	22%
No	65%	58%	75%	63%	68%	67%	0%	64%	65%	66%	47%	63%	66%	56%	67%	64%	76%	66%	59%	70%	53%	75%	67%	68%	78%
DON'T KNOW	8%	9%	7%	10%	7%	6%	0%	5%	9%	7%	17%	9%	8%	19%	6%	8%	5%	6%	21%	5%	7%	6%	15%	0%	0%
N	198	111	87	72	56	70	0	56	142	182	15	64	134	31	167	188	10	169	29	132	37	103	35	36	35

F3. Did you talk with a salesperson?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	29%	29%	28%	35%	16%	24%	0%	30%	28%	29%	26%	34%	26%	24%	30%	27%	56%	30%	20%	32%	26%	30%	21%	38%	29%
No	66%	63%	71%	58%	84%	71%	0%	63%	68%	66%	67%	59%	70%	58%	68%	67%	44%	67%	61%	66%	70%	67%	79%	55%	71%
DON'T KNOW	5%	8%	1%	7%	0%	4%	0%	7%	4%	5%	7%	7%	4%	17%	3%	5%	0%	3%	20%	2%	4%	3%	0%	8%	0%
N	198	111	87	72	56	70	0	56	142	182	15	64	134	31	167	188	10	169	29	132	37	103	35	36	35

	GENERAL POPULATION																								
F4. Did you discuss energy efficiency with the salesperson?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	40%	42%	37%	40%	33%	41%	0%	32%	45%	35%	100%	35%	43%	18%	43%	40%	35%	39%	52%	31%	67%	27%	0%	59%	15%
No	58%	56%	61%	60%	56%	53%	0%	68%	51%	62%	0%	61%	55%	69%	56%	57%	65%	59%	48%	65%	33%	69%	94%	34%	85%
DON'T KNOW	3%	3%	2%	0%	11%	6%	0%	0%	4%	3%	0%	5%	1%	13%	1%	3%	0%	3%	0%	4%	0%	5%	6%	7%	0%
N	51	30	21	25	9	17	0	16	35	47	4	21	30	8	43	46	5	45	6	36	9	27	7	12	8

	GENERAL POPULATION																								
F5. Have you ever heard of wall mounted or ceiling fixtures that are made especially for CFL bulbs and cannot use regular bulbs?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	13%	13%	13%	16%	14%	9%	0%	15%	12%	13%	15%	12%	14%	9%	15%	14%	8%	15%	6%	16%	12%	16%	14%	13%	17%
No	85%	85%	86%	82%	86%	90%	0%	83%	87%	86%	83%	87%	85%	90%	83%	84%	89%	83%	94%	82%	86%	83%	85%	85%	82%
DON'T KNOW	2%	2%	1%	2%	0%	1%	0%	2%	1%	1%	2%	1%	2%	1%	2%	1%	3%	2%	0%	2%	2%	2%	1%	2%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																							
F6. Have you ever purchased or been given hard-wired fixtures that only use CFL bulbs?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Purchased	2%	2%	3%	3%	3%	1%	0%	3%	2%	3%	0%	1%	3%	1%	3%	3%	1%	3%	1%	3%	1%	4%	3%	3%
Received/Given	0%	1%	0%	1%	0%	0%	0%	0%	1%	0%	2%	1%	0%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Purchased and received/Given	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No, neither purchased nor received/given	97%	97%	97%	96%	96%	99%	0%	97%	97%	97%	98%	98%	96%	98%	97%	97%	98%	97%	98%	96%	97%	96%	97%	97%
DON'T KNOW	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

F6. Have you ever purchased or been given hard-wired fixtures that only use CFL bulbs?	POPULATION AWARE OF CFLs																							
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Purchased	17%	13%	26%	19%	22%	12%	0%	16%	18%	20%	0%	7%	23%	10%	19%	18%	11%	18%	13%	22%	7%	23%	19%	24%
Received/Given	3%	4%	0%	3%	0%	3%	0%	0%	5%	1%	14%	5%	2%	9%	1%	1%	18%	3%	0%	0%	12%	0%	0%	0%
Purchased and received/Given	0%	0%	1%	0%	3%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
No, neither purchased nor received/given	77%	79%	73%	75%	72%	85%	0%	81%	75%	75%	86%	84%	73%	75%	77%	78%	71%	77%	74%	77%	76%	76%	81%	76%
DON'T KNOW	2%	4%	0%	3%	3%	0%	0%	3%	2%	3%	0%	4%	2%	5%	2%	3%	0%	2%	13%	0%	4%	1%	0%	0%
N	128	81	47	59	36	33	0	38	90	110	17	46	82	27	101	114	14	118	10	89	29	64	23	20

F7. Do you recall receiving a discount or rebate when you bought your CFL fixture?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	12%	19%	4%	0%	44%	25%	0%	13%	11%	12%	0%	13%	11%	48%	7%	10%	30%	12%	0%	9%	42%	11%	0%	8%	0%
No	88%	81%	96%	100%	56%	75%	0%	87%	89%	88%	0%	87%	89%	52%	93%	90%	70%	88%	100%	91%	58%	89%	100%	92%	100%
N	24	11	13	11	9	4	0	6	18	24	0	3	21	4	20	22	2	23	1	21	2	17	4	5	5

F9. How likely were you to have purchased your CFL fixture if you didn't get the discount?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Very likely	100%	100%	100%	0%	100%	100%	0%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	0%	100%	0%
N	5	4	1	0	4	1	0	1	4	5	0	1	4	3	2	4	1	5	0	4	1	4	0	1	0

H.7 DEMOGRAPHICS

	GENERAL POPULATION																							
DE3. In what year was your home built?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
in the last six years (i.e. since 1997)	30%	37%	17%	28%	23%	35%	0%	32%	29%	27%	53%	39%	24%	58%	19%	23%	62%	28%	40%	25%	34%	27%	24%	28%
between 1992 and 1996	6%	6%	6%	5%	3%	7%	0%	8%	5%	6%	1%	5%	6%	4%	7%	6%	4%	7%	3%	7%	7%	6%	6%	5%
between 1987 and 1991	7%	6%	8%	7%	9%	6%	0%	11%	5%	8%	2%	4%	9%	2%	9%	8%	2%	7%	6%	8%	6%	7%	7%	6%
between 1982 and 1986	7%	6%	8%	6%	10%	6%	0%	8%	6%	6%	8%	4%	9%	3%	8%	7%	3%	6%	8%	7%	6%	6%	9%	5%
between 1977 and 1981	6%	5%	8%	6%	7%	6%	0%	7%	6%	7%	4%	5%	7%	3%	8%	7%	4%	6%	7%	7%	4%	7%	7%	5%
between 1960 and 1976	23%	22%	25%	23%	26%	22%	0%	18%	25%	24%	17%	23%	23%	17%	25%	24%	19%	24%	19%	25%	21%	25%	22%	27%
between 1940 and 1959	17%	13%	23%	16%	17%	17%	0%	12%	19%	18%	8%	16%	17%	10%	19%	20%	2%	17%	15%	17%	17%	16%	20%	20%
before 1940	5%	5%	4%	7%	5%	2%	0%	4%	5%	5%	6%	5%	5%	4%	5%	5%	5%	5%	3%	6%	5%	6%	4%	3%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

	GENERAL POPULATION																								
DE4. About how large is your home in terms of total square feet?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
less than 500 square feet	1%	1%	0%	1%	0%	2%	0%	1%	1%	1%	3%	1%	1%	3%	0%	0%	4%	1%	0%	1%	1%	1%	3%	0%	0%
500-999 square feet	6%	7%	2%	4%	7%	7%	0%	4%	6%	6%	3%	6%	5%	12%	3%	3%	16%	6%	4%	5%	7%	5%	4%	5%	7%
1,000 to 1,499 square feet	20%	22%	17%	21%	25%	18%	0%	20%	20%	21%	16%	24%	18%	21%	20%	21%	18%	19%	24%	20%	19%	20%	18%	20%	25%
1,500 - 1,999 square feet	24%	19%	33%	24%	24%	24%	0%	24%	24%	25%	18%	18%	27%	11%	29%	27%	8%	24%	26%	26%	19%	24%	22%	28%	25%
2,000 - 2,499 square feet	14%	11%	20%	13%	17%	15%	0%	12%	15%	15%	6%	9%	17%	4%	18%	17%	2%	15%	8%	16%	15%	18%	19%	15%	15%
2,500 - 2,999 square feet	5%	4%	8%	5%	6%	5%	0%	6%	5%	6%	2%	2%	8%	3%	6%	6%	0%	5%	5%	7%	3%	7%	5%	6%	8%
3,000 or more square feet	30%	35%	20%	32%	20%	29%	0%	33%	28%	27%	52%	38%	24%	46%	23%	25%	53%	29%	33%	26%	36%	25%	29%	26%	21%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																								
DE5. Did you do any remodeling or renovation or additions in 2002?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	16%	16%	17%	17%	17%	15%	0%	17%	16%	16%	15%	17%	16%	10%	19%	17%	11%	17%	14%	19%	12%	21%	22%	18%	20%
No	83%	84%	82%	83%	83%	84%	0%	83%	84%	83%	84%	82%	84%	89%	81%	82%	87%	83%	86%	80%	88%	79%	78%	79%	80%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
DON'T KNOW	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	2%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																								
DE6. Has the square footage of your house changed?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes, it has increased	13%	13%	14%	13%	14%	14%	0%	12%	14%	14%	11%	14%	13%	5%	15%	15%	0%	15%	4%	16%	11%	16%	18%	19%	10%
Yes, it has decreased	1%	0%	3%	2%	2%	0%	0%	0%	2%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	0%	1%	5%	0%
No change	85%	86%	83%	84%	84%	86%	0%	88%	83%	84%	89%	86%	84%	91%	83%	83%	100%	84%	90%	82%	89%	83%	81%	76%	90%
DON'T KNOW	1%	1%	0%	2%	0%	0%	0%	0%	1%	1%	0%	0%	1%	5%	0%	0%	0%	0%	6%	0%	0%	0%	0%	0%	0%
N	163	98	65	62	44	57	0	44	119	145	17	62	101	28	135	144	18	140	23	110	30	85	34	28	25

	GENERAL POPULATION																								
DE7. How many people live in your home year-round?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
0	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%
1	15%	14%	16%	15%	16%	14%	0%	12%	16%	16%	6%	9%	18%	19%	13%	11%	31%	15%	13%	13%	20%	11%	9%	14%	7%
2	31%	28%	37%	33%	40%	25%	0%	34%	29%	33%	9%	23%	36%	22%	34%	32%	26%	31%	28%	31%	31%	29%	26%	31%	35%
3	15%	14%	18%	13%	16%	18%	0%	12%	17%	15%	16%	11%	18%	16%	15%	15%	15%	15%	15%	16%	14%	16%	18%	14%	14%
4	20%	22%	17%	20%	15%	22%	0%	22%	19%	19%	25%	25%	17%	19%	21%	22%	10%	19%	24%	19%	19%	19%	18%	21%	21%
5	11%	13%	9%	13%	8%	10%	0%	13%	11%	10%	18%	17%	8%	16%	10%	11%	13%	12%	11%	14%	7%	15%	17%	11%	17%
6	4%	5%	3%	4%	2%	6%	0%	3%	5%	3%	14%	7%	2%	3%	5%	4%	4%	4%	5%	4%	4%	5%	6%	3%	5%
7	2%	3%	0%	2%	1%	3%	0%	2%	2%	2%	5%	4%	0%	3%	2%	2%	1%	2%	2%	2%	1%	2%	3%	4%	1%
8	1%	2%	0%	1%	1%	1%	0%	1%	1%	1%	3%	2%	0%	1%	1%	1%	0%	1%	2%	1%	2%	1%	1%	1%	0%
9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
14	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
15	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%
16	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
18	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
28	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	993	628	365	368	256	369	0	251	742	879	109	381	612	283	710	825	166	816	177	553	263	404	167	144	120

	GENERAL POPULATION																								
DE7_18. How many people live in your home year-round that are less than 18 years old?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	55%	51%	63%	54%	68%	52%	0%	53%	56%	57%	36%	39%	65%	47%	58%	53%	62%	56%	50%	55%	57%	52%	45%	58%	49%
1	14%	15%	12%	13%	11%	17%	0%	13%	15%	14%	14%	16%	13%	17%	13%	14%	12%	14%	15%	14%	14%	16%	20%	12%	17%
2	19%	20%	18%	21%	13%	18%	0%	21%	18%	18%	27%	24%	16%	19%	19%	21%	13%	19%	19%	19%	21%	19%	21%	20%	18%
3	7%	9%	5%	8%	6%	7%	0%	9%	7%	7%	14%	13%	4%	10%	6%	7%	9%	7%	10%	8%	5%	9%	10%	5%	12%
4	3%	4%	2%	2%	1%	5%	0%	2%	3%	3%	6%	5%	1%	4%	3%	3%	2%	3%	4%	3%	3%	3%	3%	3%	3%
5	1%	1%	0%	1%	1%	1%	0%	1%	1%	1%	2%	2%	0%	1%	1%	1%	0%	1%	0%	1%	1%	1%	1%	2%	1%
6	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	1%	0%
11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%
13	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																								
DE7_34. How many people live in your home year-round that are 19-34 years old?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	60%	54%	74%	61%	62%	59%	0%	59%	61%	64%	32%	48%	68%	43%	67%	63%	47%	61%	56%	62%	61%	61%	49%	65%	60%
1	20%	21%	17%	20%	21%	19%	0%	20%	20%	20%	21%	22%	19%	24%	18%	19%	23%	20%	20%	19%	21%	18%	25%	15%	21%
2	17%	21%	8%	16%	14%	18%	0%	19%	15%	14%	35%	25%	11%	26%	13%	15%	25%	16%	20%	16%	16%	18%	21%	17%	15%
3	2%	3%	2%	2%	2%	3%	0%	1%	3%	1%	7%	3%	2%	5%	1%	2%	5%	2%	2%	2%	2%	3%	3%	1%	4%
4	1%	2%	0%	1%	1%	1%	0%	1%	1%	1%	3%	2%	0%	2%	1%	1%	1%	1%	2%	1%	1%	1%	2%	1%	0%
6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
13	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

DE7_59. How many people live in your home year-round that are 35-59 years old?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
D	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	36%	38%	34%	38%	39%	34%	0%	37%	36%	36%	38%	36%	36%	41%	34%	32%	54%	36%	40%	35%	36%	33%	30%	33%	39%
1	24%	26%	21%	24%	23%	25%	0%	23%	25%	25%	20%	29%	21%	31%	21%	23%	30%	24%	24%	21%	31%	21%	24%	19%	18%
2	38%	34%	45%	38%	36%	38%	0%	39%	38%	38%	39%	32%	42%	26%	43%	43%	14%	39%	35%	42%	31%	44%	44%	47%	43%
3	1%	2%	0%	1%	3%	2%	0%	1%	1%	1%	4%	2%	1%	2%	1%	1%	2%	1%	1%	1%	1%	1%	2%	1%	0%
4	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%
6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

DE7_60. How many people live in your home year-round that are 60 years old or older?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
D	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	68%	71%	63%	68%	68%	68%	0%	72%	66%	67%	77%	71%	66%	85%	61%	66%	79%	68%	69%	67%	71%	69%	74%	68%	68%
1	17%	16%	20%	16%	17%	19%	0%	13%	19%	18%	9%	16%	18%	10%	20%	17%	15%	17%	17%	16%	19%	15%	13%	16%	13%
2	15%	13%	17%	16%	14%	13%	0%	15%	14%	15%	11%	12%	16%	4%	19%	16%	6%	15%	13%	17%	10%	16%	13%	15%	19%
3	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	3%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	1%
7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																								
DE8. Did the number of people in your household change in 2002?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes - INCREASED	8%	8%	7%	8%	6%	9%	0%	7%	9%	8%	7%	10%	7%	9%	7%	8%	6%	7%	11%	7%	9%	6%	6%	6%	7%
Yes - DECREASED	7%	8%	5%	7%	8%	7%	0%	10%	6%	8%	5%	8%	7%	9%	7%	7%	6%	7%	10%	5%	10%	6%	7%	5%	5%
No change	84%	83%	87%	84%	85%	84%	0%	83%	85%	84%	87%	82%	86%	82%	85%	84%	87%	85%	79%	88%	80%	87%	86%	86%	88%
REFUSED	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	2%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																								
DE9. Which of the following describes your educational background?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Some high school	6%	9%	1%	6%	4%	6%	0%	10%	4%	3%	31%	12%	2%	10%	4%	4%	14%	6%	7%	6%	6%	5%	7%	6%	6%
High school graduate	15%	18%	9%	12%	15%	18%	0%	16%	14%	13%	26%	22%	10%	20%	13%	14%	19%	14%	19%	12%	17%	13%	19%	12%	7%
Trade or technical school	5%	6%	2%	5%	5%	5%	0%	6%	4%	5%	2%	6%	4%	6%	4%	4%	5%	5%	4%	4%	5%	5%	5%	4%	4%
Some college	32%	35%	27%	35%	28%	30%	0%	38%	30%	35%	17%	40%	27%	34%	32%	33%	31%	31%	36%	32%	30%	32%	30%	36%	35%
College graduate	23%	18%	31%	21%	24%	24%	0%	16%	25%	25%	7%	13%	29%	18%	24%	23%	22%	23%	20%	23%	24%	23%	22%	17%	25%
Some graduate school	5%	4%	5%	6%	4%	3%	0%	5%	5%	5%	1%	3%	6%	5%	5%	5%	2%	5%	3%	6%	4%	6%	5%	6%	7%
Graduate degree	14%	10%	23%	14%	18%	14%	0%	10%	17%	15%	13%	4%	21%	7%	17%	16%	6%	16%	9%	16%	14%	16%	13%	19%	17%
REFUSED	1%	0%	1%	0%	2%	1%	0%	0%	1%	0%	1%	0%	1%	0%	1%	1%	0%	0%	1%	1%	0%	0%	0%	1%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

DE10. Which of the following best represents your annual household income in 2002, before taxes?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Less than $20,000 per year	11%	17%	0%	13%	7%	10%	0%	18%	9%	9%	34%	29%	0%	25%	6%	7%	31%	10%	19%	8%	14%	9%	11%	8%	6%
$20,000 - $49,999	25%	35%	6%	25%	24%	27%	0%	31%	23%	24%	33%	50%	9%	42%	19%	22%	42%	26%	22%	25%	30%	24%	29%	26%	18%
$50,000 - $74,999	19%	20%	15%	16%	21%	21%	0%	16%	20%	20%	6%	18%	19%	16%	20%	20%	10%	19%	16%	20%	17%	19%	16%	17%	28%
$75,000 - $99,999	13%	9%	22%	13%	16%	12%	0%	11%	14%	14%	8%	3%	20%	5%	16%	15%	4%	13%	12%	14%	13%	14%	13%	17%	10%
$100,000 or more	19%	10%	37%	19%	18%	18%	0%	14%	21%	20%	8%	0%	31%	5%	24%	22%	6%	20%	15%	21%	16%	22%	21%	19%	28%
REFUSED	9%	6%	14%	10%	11%	6%	0%	8%	9%	9%	7%	0%	14%	4%	11%	10%	4%	8%	10%	9%	7%	7%	7%	8%	6%
DON'T KNOW	4%	3%	6%	3%	3%	5%	0%	3%	5%	4%	4%	0%	6%	4%	4%	4%	3%	4%	6%	4%	3%	4%	3%	4%	4%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

DE11. Which of the following best describes your racial or ethnic background?	GENERAL POPULATION																								
	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Hispanic	17%	22%	7%	13%	15%	23%	0%	17%	17%	10%	70%	30%	8%	29%	12%	15%	26%	16%	21%	15%	18%	16%	20%	17%	13%
African American	5%	5%	4%	5%	3%	5%	0%	3%	6%	5%	0%	7%	4%	8%	3%	4%	7%	4%	7%	4%	4%	5%	6%	3%	5%
Caucasian	63%	59%	71%	66%	67%	57%	0%	68%	61%	70%	9%	51%	71%	51%	68%	65%	53%	65%	52%	64%	67%	62%	61%	61%	66%
Asian American	6%	6%	6%	7%	7%	4%	0%	3%	7%	4%	19%	5%	7%	5%	6%	6%	5%	5%	9%	7%	2%	7%	5%	8%	7%
Native American	1%	1%	0%	1%	1%	1%	0%	2%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	0%	1%
Interracial	4%	4%	4%	4%	2%	5%	0%	4%	4%	5%	1%	5%	4%	5%	4%	4%	7%	4%	5%	5%	2%	4%	3%	10%	2%
Other	1%	1%	1%	1%	2%	1%	0%	0%	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	1%
REFUSED	3%	2%	4%	3%	3%	2%	0%	3%	3%	3%	0%	1%	4%	1%	4%	3%	1%	3%	3%	3%	3%	2%	3%	1%	2%
DON'T KNOW	1%	1%	1%	1%	0%	1%	0%	0%	1%	1%	0%	0%	1%	1%	1%	1%	0%	1%	2%	1%	0%	1%	0%	1%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	GENERAL POPULATION																								
DE12. What is the primary language spoken in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
English	88%	82%	99%	87%	91%	88%	0%	88%	88%	100%	0%	79%	93%	80%	91%	90%	79%	89%	84%	89%	88%	90%	86%	88%	92%
Spanish	8%	12%	0%	8%	7%	9%	0%	9%	8%	0%	72%	18%	2%	17%	5%	7%	17%	8%	11%	7%	10%	7%	10%	9%	5%
Mandarin	1%	1%	0%	1%	1%	0%	0%	0%	1%	0%	5%	0%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%
Cantonese	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tagalog	1%	1%	0%	1%	0%	0%	0%	0%	1%	0%	6%	0%	1%	0%	1%	1%	1%	1%	1%	1%	0%	1%	2%	0%	1%
Korean	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%
Vietnamese	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Russian	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Japanese	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	1%	1%	0%	1%
Other	1%	2%	0%	2%	0%	1%	0%	1%	1%	0%	11%	1%	1%	1%	1%	1%	3%	1%	1%	1%	2%	0%	0%	1%	0%
REFUSED	1%	0%	1%	0%	1%	1%	0%	1%	1%	0%	0%	0%	1%	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	1%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120