

**Final Report**  
**Measurement and Evaluation Study**  
**of the 2002 SCG Diverse Market**  
**Outreach Program**

December 8, 2003

**Prepared for:**



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A handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.

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## 1. Executive Summary

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This document is the final report for the Measurement and Evaluation Study of the 2002 SCG Local Diverse Market Outreach Program (DMOP). This report contains verification of the number of hard-to-reach customers that have been reached by the program through the program's various delivery channels. Additionally, this report contains measures of program effectiveness resulting from a process evaluation.

### **Program Overview**

The Diverse Market Outreach Program (DMOP) is an Energy Efficiency Information Program offered in the service territory of the Southern California Gas Company with goals targeting hard-to-reach residential and commercial customers to help them better manage their energy costs. It provides these customers with useful information on conserving energy, and helps them access other available resources. The program promotes the full range of SoCalGas energy efficiency programs as well as other utility programs, third party energy efficiency programs, and energy efficiency financing and funding resources.

The Diverse Market Outreach Program has two primary delivery channels, which are 1) Awareness Building, and 2) Education and Resource Referral. Each of the two delivery channels has a multitude of delivery mechanisms by which the program implementation goals were approached. These channels and delivery mechanisms formed the foundation by which RLW conducted this evaluation and verification, and assessed the implementation strategies and materials for this program.

Program activity was a two-pronged approach of mass market and direct outreach techniques. One was Mass Market efforts, which consisted of print advertising in a number of languages; two separate press releases sent out in September and December to ethnic language newspapers in Southern California; and bill inserts.

The other, Direct Outreach tasks, were the development of marketing collateral; sponsored and staffed booths at community events; energy efficiency presentations to special interest groups and key community leaders of "Community Based Organizations", or CBOs; Mobile Energy Workshops to small and medium hard-to-reach businesses customers; postcard mailings to targeted hard-to-reach businesses; and fulfillment services for direct customer response to these postcard mailings.

### **Evaluation Overview**

There were two primary objectives for the program evaluation, measurement and verification:

1. Measure indicators of the program effectiveness through a process evaluation; and
2. Coordinate the results with the statewide evaluation of the Crosscutting Information and Education Training Program.

The process evaluation was designed so that as many of the unique delivery methods as possible can be assessed for effectiveness. All available data were statistically analyzed to measure key indicators of program effectiveness. Areas for program refinement and improvement were also identified.

The second objective was dropped after we determined that there was little relevant correlation between the Crosscutting Information and Education Training Program and the Local DMOP program.

Research questions that are addressed in order to assess the program's effectiveness are:

- Determining if the program appeared to reach the target market and the intended fraction of the HTR market;
- What were the primary difficulties encountered;
- What were the most effective and most ineffective delivery mechanisms;
- How well was program participation tracking done;
- How can the delivery mechanisms be improved;
- How effective were the program marketing channels and materials,
- Did the program effectively lead customers to other information and incentive programs, and
- How successful is the program, and identified areas for refinement and improvement.

RLW thoroughly reviewed all program materials made available. After completing the review, the program implementation staff were interviewed. The results of the program implementation staff interviews were used to guide the remainder of the process evaluation.

For the residential component of the program, we conducted an in-language telephone survey in Chinese, Korean, and Vietnamese to measure general program awareness using targeted random sampling in the ethnic neighborhoods. We also summarized attendance and brochure distribution at CBO presentation and booths at community events. For the commercial component of the program, we conducted a telephone survey with a random sample of 77 Mobile Energy Workshop participants. We also reviewed and summarized the Business Energy Efficiency Help Desk records as well as verified the number of customers contacted by postcard and the number of customized packets of information distributed through the Business Telemarketing and Direct Mail Campaign.

### **Major Findings**

**The DMOP program finished within budget and achieved the targeted outreach goals.** The program costs, as shown in the final budgetary spreadsheet, were \$ 1,021,328. Additionally, the program appears to have reached over 200,000 hard-to-reach residential customers and over 40,000 hard-to-reach commercial customers.

**Most Mobile Energy Workshop participants found the provided energy saving information very easy to understand and most participants believe the information.** Over 70% of Mobile Energy Workshop participants found the provided energy saving information very easy to understand, and over 75% stated they believe all of the information. This reinforces the fact that the Mobile Energy Workshops are effectively delivering energy saving information to the small business owners it targets.

**The Mobile Energy Workshops are inducing participants to make energy efficiency improvements.** Over 33% of Mobile Energy Workshop participants recall discussing CFLs during the workshop *and* have already purchased and installed more CFLs as a result. Furthermore, over 15% of participants recall discussing energy efficient lighting other than CFLs *and* have already purchased and installed such lighting as a result. This finding, combined with the previous finding, further reinforces the fact that not only is the DMOP program effectively delivering energy saving information to these hard-to-reach customers, but the program is also effectively inducing such customers to make energy efficiency improvements.

**Mobile Energy Workshop participants had little prior knowledge or experience with utility sponsored energy efficiency.** Over 40% of Mobile Energy Workshop participants state they had no knowledge of utility sponsored energy efficiency and only 4% of workshop participants report participating in a utility energy efficiency program prior to attending the workshop. This finding validates the fact that the workshops are delivering energy saving information to truly hard-to-reach commercial customers.

**Media support targeted to hard-to-reach residential customers appears to be effectively communicating with this customer segment.** Nearly 50% of respondents to the in-language residential surveys state that they do recall reading or hearing about energy saving information provided by SCG. This finding shows that the press releases and ads were successful and cost effective in providing information to the targeted customers. The content of the advertisements and press releases were at an appropriate level for understanding and believability.

**Residential customers who are aware of SCG-provided energy saving information were significantly more likely to take certain energy saving actions.** Residential customers who were aware of the SCG-provided energy saving information were significantly more likely to turn their thermostat cooling set-point down, purchase and install compact fluorescent bulbs, or install weather-stripping around doors or windows than residential customers who were not aware of the information. This finding reinforces the fact that the media support is effectively communicating with the targeted customers; not only do residential customers recall seeing or hearing the information, but they also are taking energy saving actions as a result.

### ***Observations and Recommendations***

Several observations were made about the 2002 Diverse Market Outreach Program through the course of conducting this evaluation. Some of these observations have resulted in recommendations for the program. Our major observations are:

1. Program materials were well written, and the content and language was appropriate for the targeted audiences.
2. Mobile Energy Workshops might be even more effective if the same materials were also presented to property owners.
3. A postcard alerting businesses to the upcoming Mobile Energy Workshop could provide advance notice.
4. Media Support is very effective in communicating with residential customers and inducing them to take energy saving actions.
5. Program is effective in both reaching the intended audiences and making a positive impact on energy savings awareness and behavior.

## Introduction

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This is the final report for the Measurement and Evaluation Study of the 2002 SCG Local Diverse Market Outreach Program. In this chapter, we will describe the 2002 program as well as our general evaluation approach.

### **Program Overview**

The Diverse Market Outreach Program (DMOP) is an Energy Efficiency Information Program offered in the service territory of the Southern California Gas Company targeting hard-to-reach residential and commercial customers to help them better manage their energy costs. It provides these customers with useful information on conserving energy, and helps them access other available resources. The program promotes the full range of SoCalGas energy efficiency programs as well as other utility programs, third party energy efficiency programs, and energy efficiency financing and funding resources. The program also has "hard-to-reach" (HTR) implementation goals. HTR goals are considered to be met if the program reaches 20% of HTR commercial customers, or 40,000 HTR commercial customers, and 10% of HTR residential customers, or 200,000 HTR residential customers.

The Diverse Market Outreach Program has two primary delivery channels by which SCG is coordinating program activities, which are 1) Awareness Building, and 2) Education and Resource Referral. Each of the two delivery channels has a multitude of delivery mechanisms by which the program implementation goals were approached. These channels and delivery mechanisms formed the foundation by which RLW conducted this program EM&V. The implementation strategies RLW assessed for the evaluation are:

- *Workshop presentations*
- *Booths at community events*
- *Business Energy Efficiency Help Desk*
- *Business telemarketing and direct mail campaign*
- *Media relations and press releases*
- *Print ads*
- *Community Alliance*

Program activity was a two-pronged approach of mass market and direct outreach techniques.

Mass Market efforts consisted of:

1. Print advertising created in English, Spanish, Chinese, Korean, and Vietnamese;
2. Two separate press releases sent out in September and December in English, Spanish, Chinese, Korean, and Vietnamese to respective language newspapers in Southern California; and
3. bill inserts in English and Spanish.

Direct Outreach tasks were:

1. Development of "marketing collateral" - multi-language energy efficiency brochures and information kits. These were used in the efforts described further in items #2 to #4.
2. Sponsorship and presence of booths at community events staffed by speakers of the appropriate language(s);

3. Energy efficiency presentations to special interest groups and key community leaders delivered in conjunction with SoCalGas' Public Affairs team (referred in this report as "Community Based Organization, or CBO, Workshop);
4. Mobile Energy Workshops to provide energy efficiency program and resource information to small and medium hard-to-reach businesses customers;
5. Postcard mailings to targeted hard-to-reach businesses;

Fulfillment services were also provided for direct customer response to the above. This consisted of a 1-800 number, free on-line audit tool for businesses, and energy efficiency mail-out packages for residents and businesses.

### **Evaluation Overview**

There were two primary objectives for the program evaluation, measurement and verification:

1. Measure indicators of the program effectiveness through a process evaluation; and
2. Coordinate the results with the statewide evaluation of the Crosscutting Information and Education Training Program.

The process evaluation was designed so that as many of the unique delivery methods as possible can be assessed for effectiveness. Data collection sources include program administration and implementation staff interviews, program marketing material review, participating customer surveys, residential awareness surveys, customer evaluation form analysis, and program reports.

All available data were statistically analyzed to measure key indicators of program effectiveness. We have also identified areas for program refinement and improvement.

The second objective was dropped after we determined that there was little relevant correlation between the Crosscutting Information and Education Training Program and the Local DMOP program. The reasoning behind this conclusion is detailed in the project research plan.

Research questions that are addressed in order to assess the program's effectiveness are:

- Does the program appear to reach the target market,
- Does the program appear to reach the intended fraction of the HTR market,
- What were the primary difficulties encountered that were problematic to program implementation,
- What are the most effective and most ineffective delivery mechanisms,
- How well was program participation information tracked,
- How can the delivery mechanisms be improved,
- What deliver mechanisms should be added for future program implementation,
- How effective were the program marketing channels and materials,
- Did the program effectively lead customers to other information and incentive programs,
- Overall, how successful is the program, and
- Areas for program refinement and improvement.

The process evaluation involved these tasks:

- RLW began the process evaluation by thoroughly reviewing all program materials. The review of program materials was initially used to increase RLW's familiarity with the various components of the program and was instrumental in developing an interview guide for use with the program implementation staff.



- After completing our review of program materials, we interviewed program implementation staff. The interviews ascertained information that allowed us to further assess the delivery channels utilized by the program. The results of the program implementation staff interviews were used to guide the remainder of the process evaluation.
- For the residential component of the program, we conducted a telephone survey measuring general program awareness using targeted random sampling in the ethnic neighborhoods where residents are the most likely to have the opportunity to see and read the ads and press releases (and in a specific case, hear the a morning radio show where the program was promoted). We also summarized attendance and brochure distribution at CBO presentation and booths at community events.
- For the commercial component of the program, we conducted a telephone survey with a random sample of 77 Mobile Energy Workshop participants. We also reviewed and summarized the Business Energy Efficiency Help Desk records as well as verify the number of customers contacted by postcard and the number of customized packets of information distributed through the Business Telemarketing and Direct Mail Campaign.

## 2. Results

### Program Summary

According to the final data provided by SoCalGas, the final budget and served figures were as follows:

	Budgeted/Projected	As Reported in the 4Q Report	As posted in the year-end Budget and Expenditure file
Program Cost	\$1,079,000	\$ 1,035,724	\$ 1,021,328
Commercial Customers Served	40,000	42,400	-
Residential Customers Served	200,000	203,400	-

**Table 1: Program Goals – Budgeted and Actual**

The majority of the program spending was in the marketing, advertising, and outreach tasks, shown in Table 2:

Material	As Reported in the 4Q Report	As posted in the year-end Budget and Expenditure file
Residential Program Brochure (includes design, translation, shipping, printing 100K English, 25K each Spanish, English Chinese, Korean, Vietnamese)	\$ 90,295	\$ 157,912 <sup>a</sup>
Fact Sheets & cover letter (design, layout, translation, printing, shipping)	\$ 39,140	
Fulfillment of EE Info Kit	\$ 16,259	
Media Support	\$ 350,572	\$ 345,952
Outreach (Presentations, Community Events, Press Releases)	\$ 126,392	\$ 237,502
USC curriculum development and workshops	\$ 99,975	
<b>Total Marketing/Advertising/Outreach Costs</b>	<b>\$ 722,632</b>	<b>\$ 741,368</b>

<sup>a</sup> listed as "brochures and booklets"

**Table 2: Final Marketing/Advertising/Outreach Costs**

## **Evaluation of Program Delivery Channels**

### **Mobile Energy Workshops**

According to the program final quarterly report, SoCalGas conducted 84 Mobile Energy Workshops and 919 customers participated in these workshops. According to the program-provided participant lists, a total of 97 Mobile Energy Workshops were conducted, and a total of 1,418 commercial customers participated in the workshops, as shown in Table 3.

	<b># Workshops</b>	<b># Attendees</b>
July	5	80
August	16	225
September	17	225
October	23	299
November	19	277
December	17	312
<b>Total</b>	<b>97</b>	<b>1,418</b>

**Table 3: Number of Mobile Energy Workshops and Participants**

To assess the effectiveness of the Mobile Energy Workshops, we have conducted a telephone survey with 77 participants. The results of these surveys are presented in the following section.

### **Mobile Energy Workshop Survey Results**

Of the 77 participants willing to complete a survey regarding the 2002 Mobile Energy Workshop, 35, or about 45%, state they do not remember the specifics of the workshop well enough to answer the survey questions. These participants state they do recall attending the workshop but they no longer recall any details. The remaining 42 participants were able to successfully complete the survey. The remaining results in this section are based on these 42 participants who could answer the survey questions.

All respondents were asked to rate the level of convenience associated with learning about and attending the Mobile Energy Workshops, using a scale of 1 to 5, where 1 means very inconvenient and 5 means very convenient. Table 4 summarizes the responses. Almost half of participants found it very convenient to learn about the workshops, and approximately 65% of participants found it very convenient to attend the workshop. Over 15% of participants state that learning about the workshop was either somewhat or very inconvenient, suggesting that some workshop participants would prefer to learn about the workshop in advance of the day of the workshop.

	% of Participants	
	Learning About Workshop	Attending Workshop
Very Inconvenient	4.8%	-
Somewhat Inconvenient	11.9%	2.4%
Neither Inconvenient Nor Convenient	28.6%	16.7%
Somewhat Convenient	7.1%	14.3%
Very Convenient	45.2%	64.3%
Don't Know	2.4%	2.4%

**Table 4: Level of Convenience Associated with Learning About & Attending Mobile Energy Workshops**

Participants who rated either learning about or attending the workshop as less than “very convenient” were asked what suggestions they had on how it could be more convenient to learn about and attend the workshop. These participants commented that they would have preferred to learn about the workshop in advance of the day of the workshop either by appointment or advance mailing. Of the comments given by all the respondents, about 30% did mention that the presenter was polite with the recruitment approach and was conscientious about the interruption.

Next, participants were asked how easy or difficult it was to understand the energy saving information provided by the Mobile Energy Workshop. As shown in Table 5, nearly 75% of participants reported it was very easy to understand the energy saving information, and just over 10% found it somewhat easy to understand. No participants thought it was very difficult to understand the information. This demonstrates that the presentation and materials about energy savings were appropriate in their content and language, and were readily understood by the kind of customers the program was targeting.

	% of Participants
Very Difficult	-
Somewhat Difficult	2.4%
Neither Difficult Nor Easy	7.1%
Somewhat Easy	11.9%
Very Easy	71.4%
Don't Know	7.1%

**Table 5: Ease of Understanding Energy Saving Information**

When asked how much they believe the energy saving information provided by the Mobile Energy Workshop, approximately 75% of participants state they believe all of it, as shown in Table 6. Another 12% of participants believe most of the information. This is another useful indicator which demonstrates that a potential barrier of believability about energy efficiency does not readily exist with these participants. Both understanding and believability are equally important in moving customers towards the desired actions of energy efficient behavior.

	<b>% of Participants</b>
It Was Difficult to Believe	-
I Believe A Little of It	-
I Believe Some of It	7.1%
I Believe Most of It	11.9%
I Believe All of It	76.2%
Don't Know	4.8%

**Table 6: Believability of Energy Saving Information**

Table 7 summarizes the responses given when participants were asked what they did with the free CFL they received through the program. Just over 25% of participants do not recall receiving the free CFL. Almost 40% of participants report they installed the CFL in a fixture in their business, while nearly 15% of participants took the CFL home and used it there. This shows that just over half of the participants (52%) actively used the bulb. Whether or not it was a programmatic intent, it is interesting to see that a significant number of participants took the bulb home to use, which would be an indirect benefit from the program.

	<b>% of Participants</b>
Don't Recall Receiving One	28.6%
Installed In Fixture In Business	38.1%
Brought Home & Used It	14.3%
Don't Know	19.0%

**Table 7: Use of Free CFLs Given to Participants**

Participants were then asked an open-ended question on what they recalled discussing during the workshop. Table 8 shows the breakdown of responses recorded. This shows that lighting was obviously the most discussed and remembered item covered in the workshop. Rebates, air conditioning efficiency, and energy savings in general were also significantly remembered. It appears that specialized presentations specific to the owners in attendance (i.e. natural gas savings, refrigeration, kitchen equipment) were brought up by the presenters as needed.

Responses (N = 32)	No. of Responses (multiple responses allowed)	% of Total Responses
Lighting	31	97%
Rebates	13	41%
Energy savings	9	28%
Air conditioning efficiency	8	25%
"natural gas savings", "wanted to learn about residential programs", "refrigeration", "kitchen equipment", "don't remember"	1 each	3% (each)

**Table 8: Participant Recollection of Items Discussed In The Workshop**

Participants were read a list of items that may have been presented to them during the workshop and, for each item, asked to indicate if they recalled discussing that item during the workshop. For each item they recall discussing during the workshop, participants were then asked if they have considered or used the item as a result of the discussion. Table 9 and Table 10 display the results - Table 9 displays results for various physical equipment categories, while Table 10 presents results for energy efficiency programs and financing.

Over 90% of participants recall discussing compact fluorescent bulbs and energy efficient lighting other than CFLs. Approximately 75% of participants recall discussing financing for energy efficient improvements and utility energy efficiency programs. About 33% of participants recall discussing energy efficient air conditioning improvements and non-utility energy efficiency programs.

About 35% of participants report they have already purchased and installed more CFLs as a result of the Mobile Energy Workshop. Over 15% of participants have installed energy efficient lighting other than CFLs.

	% of Participants			
	Recall Discussing	Not Considered	Considering	Already Implemented
Compact Fluorescent Bulbs	90.5%	38.1%	16.7%	35.7%
Energy Efficient Lighting Other Than CFLs	95.2%	50.0%	28.6%	16.7%
Energy Efficient AC Improvements	33.3%	21.4%	4.8%	7.1%
High Efficiency Kitchen Equipment *	11.9%	9.5%	2.4%	-

**Table 9: Incidence of Discussing & Installing Equipment**

	% of Participants				
	Recall Discussing	Not Considered	Considering	Currently Financing / Participating	Already Financed / Participated
Financing for Energy Efficiency Improvements	78.6%	45.2%	28.6%	-	4.8%
Utility Energy Efficiency Programs	76.2%	40.5%	28.6%	-	7.1%
Non-Utility Energy Efficiency Programs	33.3%	19.0%	14.3%	-	-

**Table 10: Incidence of Discussing & Utilizing Energy Efficiency Programs & Financing**

These same results are then calculated further to derive a conversion factor of those who have or are considering taking action based on what they learned. Table 11 below shows that lighting has the highest conversion rate, with about 50% of respondents who recall learning about lighting actually considering or implementing those measures. The conversion factors drop down further for air conditioning improvements and high efficiency kitchen equipment. This would not seem to not unexpected, because these would be considered more high cost capital improvements that owners either would be reluctant or unable to pursue, or feel they don't need to pursue anyway.

Along the same analysis, it is seen that program use hits a roughly 50/50 split with participants.

		"Drop out" factor – NOT CONSIDERING	"Action" factor – CONSIDERING or IMPLEMENTED
<b>Measure</b>	Compact fluorescent bulbs	42%	58%
	Energy efficient lighting	53%	48%
	Energy efficient AC improvements	64%	36%
	High efficiency kitchen equipment	80%	20%
<b>Program</b>	Utility programs	53%	47%
	Non-utility programs	57%	43%
	Financing	58%	42%

**Table 11: Conversion Rates from Receiving to Using Presentation Information**

Participants were asked how much they knew about utility sponsored energy efficiency programs before attending the Mobile Energy Workshop. As shown in Table 12, about 40% of participants knew nothing about utility sponsored energy efficiency programs before attending the Mobile Energy Workshop. Another 25% say they knew only a little. Not one participant stated they were familiar with most or all of the programs.

	<b>% of Participants</b>
None	40.5%
Only A Little	28.6%
Knew They Existed, Didn't Know Much About Them	23.8%
Knew They Existed, Familiar With Some of Them	4.8%
Familiar With Most / All of Them	-
Don't Know	2.4%

**Table 12: Knowledge of Utility Sponsored Energy Efficiency Programs Prior to Mobile Energy Workshop**

Table 13 presents the incidence of participating in a utility sponsored energy efficiency program prior to attending the Mobile Energy Workshop. Only 4% of participants report that they have participated in a utility program before the Mobile Energy Workshop.

	<b>% of Participants</b>
Yes	4.0%
No	80%
Don't Know	16.0%

**Table 13: Incidence of Participating in Utility Sponsored Energy Efficiency Program Prior to Attending Mobile Energy Workshop**

Both of these tables demonstrate positive and clear indications that the targeted goal of conducting outreach to uninformed, hard-to-reach customers was indeed achieved through this program.



All respondents were asked to rate their satisfaction with the Mobile Energy Workshop's method of presenting information on ways to reduce energy consumption and utility costs, using a scale of 1 to 5, where a 1 means Awful and a 5 means Great / Very Good. Table 14 summarizes the results. Nearly 60% of participants thought the workshop's method of presenting energy saving information was great or very good. The mean rating among participants who were able to rate their satisfaction is 4.51, or an overall satisfaction level midway between "Good" and "Great / Very Good".

	<b>% of Participants</b>
Awful	-
Not Good	-
Okay	11.9%
Good	19.0%
Great / Very Good	57.1%
Not Applicable / Not Presented to Me	4.8%
Don't Know	7.1%
<b>Mean Rating</b>	<b>4.51</b>

**Table 14: Satisfaction with Mobile Energy Workshop's Method of Presenting Energy Saving Information**

Next, participants were asked to rate their satisfaction with the Mobile Energy Workshop's method of presenting information on energy efficiency programs and financing. As shown in Table 15, just over 50% of participants thought the workshop's method of presenting information on energy efficiency programs and financing was great or very good. Almost 20% of participants found the presentation method for information on energy efficiency programs and financing okay or not good. The mean rating among participants who were able to rate their satisfaction is 4.35, or an overall satisfaction level between "Good" and "Great / Very Good".

	<b>% of Participants</b>
Awful	-
Not Good	4.8%
Okay	14.3%
Good	9.5%
Great / Very Good	52.4%
Not Applicable / Not Presented to Me	2.4%
Don't Know	16.7%
<b>Mean Rating</b>	<b>4.35</b>

**Table 15: Satisfaction with Mobile Energy Workshop's Method of Presenting Information on Energy Efficiency Programs & Financing**

The impression made here, then, is that the presentation method or materials of energy saving information was perceived as better than the presentation method or materials on energy efficiency programs and financing.

Finally, respondents were asked for any further comments, compliments, or complaints about the program. Table 16 shows the tabulated results from all the responses.

Response Type	Response	Count (N=42) (multiple responses allowed)
<u>General comments</u>	Compliments about the presenter/presentation	20
	None	7
	Should present this program to the landlord/property owner	3
	Make appointment/notify ahead of time	3
	The rebate coupon expiration dates were too close; give out rebate coupons with longer expiration dates	2
	Liked the free bulb	1
<u>Recommendations</u> – "Would have liked to have..." (1 each)	Information about lighting and HVAC maintenance	
	More information on choice between gas and electric hot water heaters	
	More detailed information on refrigerators and air conditioning	
	A list of contractors to contact	
	Further details on energy efficient products	
	More visual displays and sample cost savings	
	Information provided in Chinese	
<u>Complaints</u>	Some language barriers (difficulty understanding presentation)	
	The presenter was okay, not great	
	The price is too high/can't afford to buy these measures (2)	

**Table 16: Final Comments Solicited from Participants**

In general, these final comments show that a significant number of the recipients were clearly impressed with the presenter. There are a number of useful comments about further improving the program, such as presenting the program to the property owners and notifying the targeted participants ahead of time. It is also evident that it would be useful to provide some time of facilitating action by the presenter for interested owners to get further detailed information on the parts of the presentation they were most interested in. As shown, complaints were minimal.

### Demographics

Table 17 presents the participant main line of business. Almost 25% of participants operate a restaurant, with another 20% of participants operating a retail establishment. Nearly 15% of participants operate a beauty salon, and another 15% operate an office. The remaining participants are dry cleaners, medical offices, drug stores, bakeries, florists, and schools.

	% of Participants
Restaurant	23.8%
Retail	19.0%
Beauty Salon	14.3%
Office	14.3%
Dry Cleaners	9.5%
Medical Office	7.1%
Pharmacy / Drug Store	4.8%
Bakery	2.4%
Florist	2.4%
School	2.4%

**Table 17: Participant's Business Type**

Mobile Energy Workshop participants were asked if they were the owner of the business they represent. As shown in Table 18, just over 66% of participants are the owner of the business.

	% of Participants
Yes	68.3%
No	31.7%

**Table 18: Incidence of Business Ownership**

Of those respondents who were not owners, almost all of them identified themselves as a "manager" (12 respondents). Two identified themselves as a receptionist and a director, and one refused.

Table 19 displays the distribution of the number of employees at participant businesses. Over 30% of participants have only one or two employees, nearly 30% of participants have three to five employees. Nearly 10% of participant businesses have eleven or more employees.

	<b>% of Participants</b>
One	9.5%
Two	21.4%
Three	14.3%
Four	7.1%
Five	7.1%
Six - Ten	16.7%
Eleven or More	9.5%
Refused	14.3%

**Table 19: Number of Employees**

These demographics show that the workshops clearly reached the intended targeted customers.

### **Media Support**

An important component of the program delivery to hard-to-reach customers was media support and relations. The media generation was primarily through newspaper ads and press releases. The ads and releases were short and focused primarily on attracting attention, communicating a few energy conservation tips, and providing contact sources for more detailed information. Web programming is also included in media support. The program's final budgetary worksheets suggest that about \$350,000, or about 34% of the total program budget, was dedicated to media support. The ads and press releases were primarily placed in local Chinese, Hispanic<sup>1</sup>, Vietnamese, and Korean newspapers. The circulation rates of the ethnic newspapers used in this element were considered to be the metric to measure the amount of impact towards the hard-to-reach populations. Staff chose to consider the circulation rates alone, and ignore the incidence rates that the papers may have.<sup>2</sup>

### **Print Advertising**

Details were not provided on the advertising purchases made. We reviewed copies of the ads themselves, which were professionally designed and appropriate to the targeted audience.

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1 As mentioned in the 4Q DMOP Report: "**Hispanic Markets** - Print ads continued in the 4th Quarter through the week of 10/6 and ran for 1 week with 1 insertions in 28-community publications with a total circulation of 925,050." However, specific statistics for Hispanic or Spanish-language newspapers were not included in the "DMOP Project Report December 2002" or available to the RLW team. Circulation figures shown here are as reported in that 4Q Report.

<sup>2</sup> "Incidence rate" refers to the estimated amount of people that will read a newspaper above and including the initial buyer or subscriber. For example, if a newspaper assumes that 2 people on average read each paper and has a circulation rate of 25,000, then its incidence rate is 2\*25,000, or 50,000.

### Media Relations

Two press releases were translated and distributed in Chinese, Vietnamese, and Korean communities in Southern California. Table 20 shows the cumulative results below:

News Release Title and release date	Target Market	Media Outlets		Avg. Size-Sq. Inches	Avg. Space Value	Circulation
		Sent To	Printed/Generated Coverage			
Gas Company to Serve as "Energy-Efficiency Clearinghouse" – 9/10	Chinese	11	6	35.40	171.60	205,000
	Vietnamese	8	3	57.67	342.33	36,000
	Korean	3	2	17.50	265.50	83,000
<b>TOTALS</b>		<b>22</b>	<b>11</b>	<b>110.57</b>	<b>779.43</b>	<b>324,000</b>
Southern California Gas Advises Customers [on] Steps to Winterize Home[s] – 12/20	Chinese	11	5	21.60	280.20	165,000
	Vietnamese	8	4	49.50	311.75	45,000
	Korean	3	2	30.00	270.00	18,000
<b>TOTALS</b>		<b>22</b>	<b>11</b>	<b>101.10</b>	<b>861.95</b>	<b>228,000</b>

**Table 20: Final Press Release Statistics**

Along with the press releases that were reproduced in these language newspapers, these submissions also generated the following:

- a 30-minute TV interview on KSCI-TV with a Korean-speaking SoCalGas employee on its television talk show, LA SEOUL.
- a Korean Daily News feature story in December 2002 based on an interview with a SoCalGas employee who discussed the DMOP programs.
- a 90-second mention on KWRM radio in September.

To assess the effectiveness of the print ads and press releases, we conducted a telephone survey with a random sample of 300 SCG residential customers (100 Chinese, 100 Vietnamese, and 100 Korean) targeted by the media campaign to measure media impact and level of program awareness generated by the promotions. The surveys were conducted in the same language types as the newspaper submissions. These results measure general customer awareness of the program.

### **In-Language Asian Residential Survey Results**

All survey respondents were asked if they were aware that SCG offers information and programs about reducing energy costs for residential customers. Table 21 summarizes the responses. About half of respondents are aware that SCG offers such services. There are no statistically significant differences by ethnicity, although there is an indication that Chinese respondents are the most aware of the SCG information and programs, and Vietnamese respondents appear to be the least aware.

	% of Respondents			
	Chinese	Korean	Vietnamese	Total
Yes	55%	47%	41%	47.7%
No	45%	53%	59%	52.3%

**Table 21: Awareness of SCG Offering Energy Saving Information and Programs**

Table 22 presents the incidence of respondents reading or hearing about energy saving information provided by SCG. Overall, nearly 50% of respondents recall reading or hearing about SCG-provided energy saving information.

	% of Respondents			
	Chinese	Korean	Vietnamese	Total
Yes	48%	48%	43%	46.3%
No	52%	52%	57%	53.7%

**Table 22: Incidence of Reading or Hearing About SCG-Provided Energy Saving Information**

Respondents who recalled reading or hearing about SCG-provided energy saving information were then asked how they learned of the information, and Table 23 displays the results. Overall, approximately 33% saw an insert inside their utility bill, over 10% read an article in the newspaper, nearly 20% saw an ad in the newspaper, and 20% heard the information on the radio. The differences by ethnicity are not statistically significant.

	% of Respondents Aware of SCG Info			
	Chinese	Korean	Vietnamese	Total
Insert Inside Utility Bill	37.5%	35.4%	25.6%	33.1%
Picked Up / Given Brochure or Info	2.1%	2.1%	-	1.4%
Read Article In Newspaper	20.8%	8.3%	9.3%	12.9%
Ad In Newspaper	14.6%	22.9%	16.3%	18.0%
Heard On the Radio	12.5%	31.3%	23.3%	22.3%
Friend / Neighbor / Acquaintance	-	-	20.9%	6.5%
Other	-	10.4%	-	3.6%
Television	8.3%	10.4%	2.3%	7.2%
Don't Know	6.3%	-	-	2.2%
Refused	-	-	7.0%	2.2%

**Table 23: Source of SCG-Provided Energy Saving Information**

Respondents who were aware of the SCG-provided energy saving information were asked to rate the ease of understanding the information, using a scale of 1 to 5, where 1 means very

difficult and 5 means very easy. As shown in Table 24, about 25% of respondents found the information very easy to understand, with another 25% stating it was somewhat easy to understand. About 15% of respondents thought the information was either somewhat difficult or very difficult to understand. Chinese respondents were significantly more likely to perceive the information as easy to understand, as evidenced in the mean ratings.

	% of Respondents Aware of SCG Info			
	Chinese	Korean	Vietnamese	Total
Very Difficult	2.1%	8.3%	11.6%	7.2%
Somewhat Difficult	4.2%	12.5%	9.3%	8.6%
Neither Difficult Nor Easy	18.8%	29.2%	11.6%	20.1%
Somewhat Easy	20.8%	22.9%	30.2%	24.5%
Very Easy	37.5%	20.8%	20.9%	26.6%
Don't Know	16.7%	6.3%	11.6%	11.5%
Refused	-	-	4.7%	1.4%
Mean Rating	4.05	3.38	3.47	3.63

**Table 24: Ease of Understanding SCG-Provided Energy Saving Information**

Next, respondents who were aware of the SCG-provided energy saving information were asked to rate the believability of the information, using a scale of 1 to 5, where 1 means very unbelievable and 5 means very believable. Table 25 summarizes the responses. Overall, about 35% of participants found the information very believable, with another 30% stating it was somewhat believable. Less than 10% of respondents thought the information was either somewhat unbelievable or very unbelievable.

	% of Respondents Aware of SCG Info			
	Chinese	Korean	Vietnamese	Total
Very Unbelievable	4.2%	2.1%	2.3%	2.9%
Somewhat Unbelievable	2.1%	6.3%	11.6%	6.5%
Neither Unbelievable Nor Believable	14.6%	20.8%	4.7%	13.7%
Somewhat Believable	29.2%	25.0%	34.9%	29.5%
Very Believable	31.3%	43.8%	30.2%	35.3%
Don't Know	18.8%	2.1%	11.6%	10.8%
Refused	-	-	4.7%	1.4%
Mean Rating	4.00	4.04	3.94	4.00

**Table 25: Believability of SCG-Provided Energy Saving Information**

Table 26 displays the responses given when interviewees were asked to rate how difficult they believe it is to carry out SCG's energy efficiency recommendations, using a scale of 1 to 5, where 1 means very difficult and 5 means very easy. Approximately 20% of respondents believe it is very easy to carry out SCG's recommendations, with another 25% believing it is somewhat easy. Almost 20% of respondent believe it is difficult to carry out the recommendations, with 6% stating it is very difficult. There are no statistically significant differences by ethnicity.

	% of Respondents Aware of SCG Info			
	Chinese	Korean	Vietnamese	Total
Very Difficult	6.3%	6.3%	4.7%	5.8%
Somewhat Difficult	8.3%	10.4%	23.3%	13.7%
Neither Difficult Nor Easy	16.7%	39.6%	14.0%	23.7%
Somewhat Easy	31.3%	20.8%	23.3%	25.2%
Very Easy	25.0%	12.5%	23.3%	20.1%
Don't Know	12.5%	10.4%	7.0%	10.1%
Refused	-	-	4.7%	1.4%
Mean Rating	3.69	3.26	3.42	3.46

**Table 26: Ease of Carrying Out SCG's Energy Efficiency Recommendations**



All survey respondents were asked what, if any, energy saving steps they or their family has taken in the past year or two. Table 27 summarizes the responses by ethnicity. Over 15% of respondents state they have taken no energy saving steps. Almost 25% of respondents report they have turned their thermostat cooling set-point down, and about 25% of respondents have purchased and installed CFLs.

Vietnamese respondents are significantly less likely than either Chinese or Korean respondents to turn their thermostat cooling set-point down, turn their thermostat heating set-point up, purchase and install CFLs, or tune-up their HVAC system. On the other hand, Vietnamese respondents are significantly more likely to state they "are trying to use everything less." Chinese respondents are significantly more likely to report purchasing and installing CFLs than Korean or Vietnamese respondents

	% of Respondents			
	Chinese	Korean	Vietnamese	Total
None	12.0%	17.0%	19.0%	16.0%
Installed Programmable Thermostat	7.0%	7.0%	4.0%	6.0%
Turned Thermostat Cooling Set-Point Down	29.0%	31.0%	12.0%	24.0%
Turned Thermostat Heating Set-Point Up	12.0%	20.0%	5.0%	12.3%
Installed Weatherstripping Around Windows / Doors	10.0%	6.0%	-	5.3%
Installed Attic Insulation	1.0%	7.0%	1.0%	3.0%
Installed New Windows	3.0%	7.0%	-	3.3%
Bought & Installed CFLs	47.0%	18.0%	8.0%	24.3%
Tuned-Up HVAC System	12.0%	15.0%	5.0%	10.7%
Bought High Efficiency or Energy Star Appliance	2.0%	3.0%	-	1.7%
Replaced AC With High Efficiency Unit	8.0%	-	1.0%	3.0%
Replaced Heating System With High Efficiency Unit	3.0%	1.0%	2.0%	2.0%
Turn Off / Don't Use Unnecessary Lights / Appliances	1.0%	3.0%	8.0%	4.0%
Dry Clothes On Clothesline Outside	1.0%	3.0%	-	1.3%
Do Dishes / Laundry in Late Evening / Early Morning	-	7.0%	-	2.3%
Try To Use Everything Less	1.0%	-	15.0%	5.3%
Other	-	1.0%	3.0%	1.3%
Don't Know	5.0%	3.0%	13.0%	7.0%
Refused	1.0%	2.0%	5.0%	2.7%

**Table 27: Energy Saving Steps Taken In Past Year or Two by Ethnicity**

Table 28 presents energy saving steps taken in the past year or two by respondent awareness of SCG-provided energy saving information. Respondents who are aware of the SCG-provided energy saving information are significantly more likely to turn their thermostat cooling set-point down (32% vs. 14%), install weather-stripping around windows or doors (8% vs. 3%), and purchase and install CFLs (29% vs. 20.5%).

These findings suggest that the articles and ads in the in-language newspapers are effectively communicating with customers, as evidenced by the fact that customers who are aware of the information are more likely to have taken certain energy saving steps.

	% of Respondents	
	Aware of SCG Info	Not Aware of SCG Info
None	12.9%	18.6%
Installed Programmable Thermostat	6.5%	5.6%
Turned Thermostat Cooling Set-Point Down	31.7%	17.4%
Turned Thermostat Heating Set-Point Up	15.1%	9.9%
Installed Weatherstripping Around Windows / Doors	7.9%	3.1%
Installed Attic Insulation	1.4%	4.3%
Installed New Windows	3.6%	3.1%
Bought & Installed CFLs	28.8%	20.5%
Tuned-Up HVAC System	10.1%	11.2%
Bought High Efficiency or Energy Star Appliance	3.6%	-
Replaced AC With High Efficiency Unit	5.0%	1.2%
Replaced Heating System With High Efficiency Unit	2.2%	1.9%
Turn Off / Don't Use Unnecessary Lights / Appliances	3.6%	4.3%
Dry Clothes On Clothesline Outside	1.4%	1.2%
Do Dishes / Laundry in Late Evening / Early Morning	2.2%	2.5%
Try To Use Everything Less	5.0%	5.6%
Other	0.7%	1.9%

**Table 28: Energy Saving Steps Taken In Past Year or Two by Awareness of SCG-Provided Energy Saving Information**

### Demographics

Table 29 displays the home ownership status of respondents by ethnicity. Overall, approximately 50% of respondents own their home. Vietnamese respondents were significantly less likely to own their home (37%), while Chinese respondents were most likely (64%).

	% of Respondents			
	Chinese	Korean	Vietnamese	Total
Homeowner	64%	50%	37%	50.3%
Renter	36%	50%	63%	49.7%

**Table 29: Home Ownership Status by Ethnicity**

All renters were asked if the landlord pays the gas and electric bills. As shown in Table 30, approximately 60% of renters pay their own gas and electric bills. Chinese renters are significantly more likely to have a landlord that pays these bills.

	% of Renters			
	Chinese	Korean	Vietnamese	Total
Yes	58.3%	28.0%	30.2%	36.2%
No	36.1%	72.0%	66.7%	61.1%
Don't Know	5.6%	-	3.2%	2.7%

**Table 30: Incidence of Landlord Paying Gas & Electric Bills by Ethnicity**

Table 31 displays the highest level of education completed by ethnicity. Overall, 40% of respondents have completed high school or less, while 38% have completed at least a four-year college degree. Vietnamese respondents are significantly more likely to have only completed high school or less, while Chinese and Korean respondents are significantly more likely to have a four-year college degree or an advanced degree.

	% of Respondents			
	Chinese	Korean	Vietnamese	Total
High School Graduate or Less	36%	27%	58%	40.3%
Some College	15%	17%	18%	16.7%
4-Year College Degree	31%	34%	10%	25.0%
Advanced Degree	15%	20%	4%	13.0%
Don't Know	2%	-	2%	1.3%
Refused	1%	2%	8%	3.7%

**Table 31: Level of Education Completed by Ethnicity**

Table 32 shows the distribution of 2002 household income by ethnicity. Overall, approximately 35% of respondents had a 2002 household income of \$23,000 or less, while nearly 20% had an income of \$43,501 or more. Korean respondents were significantly less likely to have an income of \$23,000 or less, and Vietnamese respondents were significantly less likely to have an income of \$43,501 or more.

	% of Respondents			
	Chinese	Korean	Vietnamese	Total
Less Than \$23,000	42%	20%	45%	35.7%
\$23,001 - \$27,000	8%	7%	5%	6.7%
\$27,001 - \$32,500	4%	10%	4%	6.0%
\$32,501 - \$38,000	4%	11%	2%	5.7%
\$38,001 - \$43,500	3%	10%	-	4.3%
\$43,501 or More	23%	22%	12%	19.0%
Don't Know	11%	11%	21%	14.3%
Refused	5%	9%	11%	8.3%

**Table 32: 2002 Household Income by Ethnicity**

### **Business Telemarketing and Direct Mail Campaign**

The outreach effort to hard-to-reach business customers was conducted in two phases. In Phase I, postcards were mailed to targeted customers, along with a toll-free number and an e-mail address to contact the Help Desk for more customized advice. In Phase II, telemarketing efforts were targeted towards customers that did not respond to the postcard campaign. For both phases, telephone interviews were conducted, following a decision tree to identify the appropriate pieces of energy efficiency information for each respondent. The phone interview results were then used to assemble a customized mail packet of efficiency information.

Direct postcards were sent out to 30,072 targeted businesses with a 1-800 number to call for an over-the-phone energy audit and more information. As shown in Table 33, 9,959 customized efficiency information packets were distributed to commercial customers. Just over 40% of these packets were distributed to offices and another 20% were distributed to schools.

	<b># Packets Mailed</b>
Office	4,235
School	2,000
Hospitals	279
Random	3,445
<b>Total</b>	<b>9,959</b>

**Table 33: Number of Customized Energy Efficiency Information Packets Distributed**

### **Business Energy Efficiency Help Desk**

As described under the "Business Telemarketing and Direct Mail Campaign" delivery channel, postcards were sent to targeted businesses with a 1-800 number to call for an over-the-phone energy audit and more information. This resulted in 56 return phone calls to the businesses and the areas shown below. For each inquiry, an audit was conducted and printed, and the report mailed along with collateral materials back to the customer (Table 34 below):

<b>Companies</b> (n = 56)		<b>Cities</b> (multiples shown)	
Service Businesses	<b>15</b>	Los Angeles	<b>8</b>
Restaurants	<b>8</b>	Santa Ana	<b>4</b>
Sole Proprietors	<b>7</b>	El Monte	<b>3</b>
Cleaners	<b>4</b>	Pomona	<b>3</b>
Retailers	<b>4</b>	Anaheim	<b>2</b>
Hotel / Motels	<b>3</b>	Glendale	<b>2</b>
House of worship	<b>2</b>	Hawthorne	<b>2</b>
Light industrial	<b>2</b>	Huntington Beach	<b>2</b>
Retail service	<b>3</b>	All others	<b>30</b>
Others	<b>8</b>		

**Table 34: Final Business Energy Efficiency Help Desk Statistics**

**CBO Presentations**

The DMOP program staff developed 30- and 60-minute bilingual presentations and workshops that promoted the concept of energy efficiency and available assistance to residential customers. Small group presentations were delivered by bilingual presenters in the 4<sup>th</sup> quarter.

<b>GROUP/EVENT (N = 29)</b>	<b>DATE</b>	<b>4Q Report</b>	<b>Project Report</b>
Asian Pacific Congress Women's Center	10/04		100
Chinese Congress Women: Grace Napolitano	10/04		50
Lien Hoa Temple	10/06		70
Vietnamese Chamber of Commerce of OC	10/08		6
Alhambra Lions Club	10/09		15
Korean Youth & Community Center	10/11		40
Chinese American Cancer Association	10/12		30
Southern California Chinese Cultural Association/PTO	10/13		45
Arcadia Chinese Lions Club	10/15		20
Huntington Realty Estate Group	10/16		15
A3PCON	10/16		15
China Town Service Center	10/18		60
Chung Shan Girls High School	10/20		10
Rosemead Lions Club	10/21		14
Chinese American Museum Association (1)	10/21		15
Monterey Park Lions Club	10/22		12
East Valley Lions Club	10/22		30
Chinese American Museum Association (2)	10/23		15
Tzu-Tzi Chinese School: Parents	10/27		20
Tzu-Tzi Chinese School: Students	10/27		20
Korean Chamber of Commerce	10/31		10
Tao-Ren Senior Club	11/09		15
Tong Hoi Sinh Vien Viet Nam	11/10		20
LAX China Lion County	11/12		18
<b>Sub Total - Attendees</b>			<b>665</b>
<b>Not shown in 4Q report:</b>			
So. CA. Chinese Cultural Assn/Irvine Chinese School	09/29		100
<b>Sub Total</b>			<b>100</b>
<b>Not shown in project report:</b>			
Asian Pacific Community Fund	10/28	32	
Dunbar Economic Development Corp: Home Buyer's Club	11/14	15	
County of LA, Dept. of Health Services (Housing	11/20	70	
Dunbar Economic Development Corp: Home Buyer's Club	11/21	20	
Chinese Chamber of Commerce	12/11	25	
Subtotal- attendees		<b>162</b>	
<b>TOTAL ATTENDEES</b>		<b>927</b>	

Table 35: CBO Presentations

A hard copy version of the presentation was included in the final project report provided by interTrend Communications, which we reviewed. Appropriate language versions of this presentation were also made. We found the content, message, layout, and amount of information provided in the presentation appeared professional, understandable, and appropriate for the intended audiences.

### **Energy Efficiency Curriculum and Workshops (sub-contractor USC)**

In addition to the CBO presentations, SoCalGas also collaborated with the University of Southern California Sustainable Cities Program to create a presentation called "We're All in This Together: Sustainability Starts at Home". USC delivered three of these presentations separately from the CBO presentations reported above.

The presentation itself is a 25-slide Powerpoint show that describes the direct connection between personal energy use and its contributive impacts on energy use, community health, and quality of the water and air. The general theme of the presentation is on sustainability of resources for cities, and in particular for Los Angeles and Los Angeles County.

The presentation illustrates and describes the concepts of sustainability and the impacts of energy usage in a readily clear and understandable manner. Each slide has large, discernable colored graphics. With the isolated exception of a summary slide near the end, all the copy is bold and easy to read.

The concepts were laid out well in the presentation. An effective series of slides was used that reveal a sequential bar graph comparison of appliance energy use by for both renters and homeowners by current totals, projected totals with Energy Star products, and the net savings. Similar bar graph comparisons were also used to depict the amount of air pollution each total represents, followed by slides describing smog and its impacts.

As mentioned above, the summary slide of "What Can YOU Do?" was crowded with 18 lines of copy crowded onto the slide. It can be presumed that these points were likely discussed in length by the presenter, so the layout itself did not likely cause any learning or retention issues. However, since the dual impact of a visual and aural presentation is meant to increase retention, it could be helpful to either turn the sentences into easier-to-read key words, or, break down the copy into two or three separate slides. On the latter suggestion, that could be readily accomplished by breaking the original slide into subtitles, such as "Appliances", "Water Use", "Heating and Cooling Your Home", etc.

A pre- and post-survey of the attendees at one of these events was taken and later summarized in another slide show file, which was also provided to us. This appeared to be the results of a trial test, i.e. a determination of how the presentation could be improved after the first initial showing.

The overall interpretation from the survey results showed that the most of the initial presentation built upon or introduced correct energy efficiency concepts. Some concepts that seemed to already aware to the audience were:

- California uses more energy than any other state, and
- Planting trees improves energy efficiency.

Concepts successfully presented and learned by the audience were:

- Using your air conditioner makes the city warmer
- Energy production is one of the most polluting industries in the U.S.
- Urban heat islands
- Energy production causes lung cancer and asthma
- "I may qualify for appliance and energy use rebates"

In addition, the survey results showed that the presentation also successfully promoted a number of ideas about improving home energy efficiency.

There were a few concepts that appeared to need further adjustment for better presentation, which was evident from incomplete or fuzzy results from the comparison of the pre- and post-survey results. These were concepts on the energy impact of water usage, the Los Angeles ecological footprint, and home inefficiency sources. There also appeared to be some misinterpretation on eligibility for weatherization and furnace replacement measures. It is assumed that the presentation program was then subsequently adjusted to better present these concepts.

**Booths at Community Events and Grassroots Events**

SoCalGas sponsored and staffed booths at a variety of community events from October to December. Bilingual booth staffers distributed in-language and English program materials and answered questions about energy efficiency programs.

<b>EVENT</b>	<b>LOCATION</b>	<b>NO.</b>
<b>October Events:</b>		
<b>SoCalGas SBIA Economic Action Summit</b>	Bacara Resort, Santa Barbara	300
<b>Chino Valley Chamber's Family Faire &amp; Business</b>	Chino Valley	1,000
<b>Nuestra Comunidad</b>	Inglewood	1,000
<b>The Latin Business Association Expo</b>	Los Angeles Convention	5,000
<b>The League of California Cities Conference</b>	Long Beach Convention	5,000
<b>Temecula Business Expo</b>	Temecula	300
<b>Murrieta Business Expo</b>	Murrieta	350
<b>Black Women's Network: Breakfast</b>	Inglewood	500
<b>Diagnosis Critical: Town Hall Mtg. on Health Care</b>	Los Angeles	150
<b>LA Neighborhood Housing Svcs. Awards Luncheon</b>	Los Angeles	400
<b>Inglewood/Airport Area Chamber: Candidates Forum</b>	Inglewood	50
<b>Community Coalition 3<sup>rd</sup> Annual Dinner</b>	Los Angeles	700
<b>LA Community Employment/Disability Resources Fair</b>	Los Angeles	1,500
<b>The Asian Pacific Islander Expo</b>	Los Angeles Asian Chamber of Commerce, Los Angeles	500
<b>Leg. Black Caucus: Faith-Based Econ. Dev</b>	Torrance	700
<b>Orange County Asian Business Assn. Annual</b>	The Double Tree Inn, Orange	300
<b>LA African American Women PAC Quarterly Networking Reception</b>	Leimert Park, Los Angeles	50
<b>Greater Huntington Park Area Chamber of</b>	Huntington Park	50
<b>November Events:</b>		
<b>Community Coalition South Los Angeles</b>	Los Angeles	4,500
<b>Jefferson Park 2<sup>nd</sup> Avenue Block Club</b>	Los Angeles	400
<b>IHACI Conference</b>	Pasadena Convention Center	5,000
<b>Asian Pacific American Legal Center</b>	Los Angeles	23
<b>Little Saigon Expo 2002</b>	Asian Garden, Westminster	20,000
<b>33rd Congressional District Health &amp; Resource</b>	Salesian High School	1,000
<b>Refugee Forum Meeting</b>	Los Angeles	50
<b>December Events:</b>		
<b>OC Asian Business Association (OCABA) mixer</b>	Rancho Santiago, Santa Ana	75
<b>Pediatric Therapy Network Meeting</b>	Los Angeles	25
<b>Crenshaw Chamber of Commerce Mixer</b>	Los Angeles	45
<b>TOTAL</b>		<b>48,968</b>

**Table 36: Sponsored and Booth Staffed Community Events**



In addition to the sponsored community events and the small group presentations, SoCalGas also set up informational packages for distribution at selected ethnic events (Table 37 below):

Event	Package Distribution	Date
KSCI Asian-American Harvest Moon Festival	2,500	09/21
Vietnamese Moon Festival	1,500	09/22
L.A. Korean Festival "Hangawee"	2,700	09/27-28
LA County Fair	2,300	09/27-29
Little Saigon Expo	2,800	10/14

**Table 37: Grass Root Events – Program Information Package Distributions**

### Collateral/Brochure Development and Distribution

For this evaluation, RLW received these marketing pieces to review:

Item	Consisting of:	Description
Non Residential Energy Efficiency Kits	"Dear Business Customer" cover letter (English)	Two paragraph introductory letter in English, Cantonese, Korean, Mandarin, Spanish, and Vietnamese that provides contact information and 1-800 numbers
	"Saving Energy and Money – A California Energy Efficiency Guide" (English)	16-page full color booklet with individual sections on reducing energy costs for all types of building systems and equipment
	"Commercial & Industrial Energy-Saving Tips" (English)	One page informational tip sheet on simple energy cost reduction steps
	"Serious savings for business owners"	1-page informational sheet (one side English, other side Spanish) on how to use the on-line audit tool
	"2003 Business Energy Efficiency Programs"	29-page B/W booklet with comprehensive listings on every energy efficiency programs offered by Southern California utilities, municipalities, and statewide
	"The Energy Savings Guide For Hospitals" "...For Schools" "...For Hotels and Motels" "...For Office Buildings"	20-page full color booklet with energy cost reduction steps for each type of building element and systems – each of the four booklets are similar in layout and content, with specialized information specific to the building types as titled
Residential cover letter (all language versions)		One page letter describing the Energy Information Kit enclosed with the letter and contact information
Rebate information sheets		Four page information sheets about rebates – individualized for nine different utilities

**Table 38: Marketing Collateral Reviewed**

After initial development of these pieces, SoCalGas then translated the components of the Residential Energy Efficiency Kit into Spanish, Chinese, Korean, and Vietnamese.

We reviewed the content of these materials for reasonable applicability, appropriateness, layout, content, and design. Overall, the pieces created for this program were well written, accurate, and professionally designed. All descriptions of energy reduction steps are clearly written and understandable, and none of them appear complex or burdensome in technical details. The general language, graphics, and overall layouts for all the professionally produced pieces are well done and appropriate for a general audience. As a quantitative test, we performed the Flesch-Kincaid tests for readability and grade level on a section of the "Saving Energy and Money" booklet. This section we tested scored 52.6 on the Flesch Reading Ease scale, and a Flesch-Kincaid Grade level of 10.0. This demonstrates that both the readability and sophistication of the material were appropriate for general readers.<sup>3</sup>

We did find that the information on each of the materials provided in the NonResidential Energy Efficiency Information Kits tended to overlap each other. In particular, the material for the "Saving Energy & Money" guide and "The Energy Savings Guide" was similar, and of the eight bulleted points made in the one-page "Energy-Saving Tips" sheet, three are mentioned in both of these guides as well. The perception we had was that it might be more effective, both towards reducing the cost for the utility as well as reducing the reading burden for the customer, to consider eliminating one of these guides in a fulfillment mailing. The "Tips" information sheet was likely developed as a stand-alone piece, but if it was intended to be a supplemental piece for the more detailed guides, it may be useful to indicate, in parentheses, where to find more detailed information sheet within either guide.

The "2003 Business Energy Efficiency Programs" listings is indeed comprehensive and useful. We felt that it might be easier to scan and use if the following were done:

1. On pages 1 – 12, the first column shows a shorthand coding of some sort, and it's not clear what these codes are. It would be useful to either keep and label this column, or, remove it altogether.
2. It's unclear what might be the value to any end use customer to know who the implementer may be for any given program. We would offer that this column could also be eliminated, or, clarified if that would in fact be the entity to contact (in conjunction with item #3 below)
3. It would obviously be of usefulness to have at least a general contact reference for each program. It would be understood that program staff might not be able to maintain accurate detailed contact information; however, it would seem reasonable to either add a new column (or include in an existing one) the general website address and main contact number to find out about each program listed.

In addition, we found some other small items that might be considered by staff to further deliver good information. These are minor in nature, and by no means detract from the high quality layout and appropriate content:

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<sup>3</sup> The *Flesch Reading Ease* computes readability based on the average number of syllables per word and the average number of words per sentence. The higher the score, the greater the number of people who can readily understand the document. Scoring ranges from 0 to 100. Standard writing styles average approximately 60 to 70 points. Complex written material scores at approximately 35 and below.

The *Flesch-Kincaid Grade Level* computes readability based on the average number of syllables per word and the average number of words per sentence. The score in this case indicates an appropriate grade-school level.

- “Energy Savings Guide For Schools” – there was no mention found of the California High Performance Schools (CHPS) program. We thought it would be appropriate to describe this program as well as direct readers to its website and 1-800 contact number.
- “Energy-Saving Tips” information sheet – for the bulleted point on “descale water heaters”, add one more sentence that explains how to descale or what to use for descaling.
- “Serious savings for business owners” information sheet – it may make it easier to capture a casual reader’s attention and make it faster to understand what the main point of the sheet is if the current tagline of “use our free online Energy-Savings Finder” is used in place of the current title.

### Verification of Brochure Distribution

Final reported distribution was as follows (Table 39 below):

Title	Basic Description	Distributed at/through:	No.	Languages
<i>A Few Pointers on Making Your Home More Energy Efficient</i>	energy efficiency tips, Home Energy Efficiency Survey info, business reply card, SoCalGas' customer assistance programs	- Events - Presentations - SoCalGas public affairs managers, service calls, and branch payment offices - Insertion in ethnic language newspapers	200,000	English, Spanish, Chinese, Korean, Vietnamese
<i>Residential Energy Efficiency Kit</i>	Residential Energy Efficiency Resource Guide, List of utility and 3 <sup>rd</sup> party Energy Efficiency Programs, Customer Assistance Brochure, CARE Application	Mailings upon request	1,481 packages mailed	English, Spanish, Chinese, Korean, Vietnamese
<i>Nonresidential Energy Efficiency Information Packet</i>	Nonresidential Energy Efficiency Resource Guide, Energy Savings Guide, List of Local Energy Efficiency Programs, Program applications	Direct mail Workshops Conferences	Direct mail: 9,959 to small businesses under 10,000 therms Workshops: 1,418 Conferences and events: about 300	English
<i>Small C&amp;I Energy Efficiency InfoCenter postcard</i>	Postcard to promote the Energy Efficiency InfoCenter to small business customers	Direct mail	30,072	English

**Table 39: Distribution of Marketing Collateral**

### **3. Observations and Recommendations**

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The overall conclusion our team has made is that this program has performed satisfactorily towards reaching its targeted audience and delivering the program content. As discussed in the first section of this report, the raw quantitative data show that the target number of hard-to-reach customers was reached. As importantly, our empirical analysis showed to what degree the program impacts were made. We do not have comparative data of any similar program to compare how much more or less the impact could have made; however, we can measure the levels of understanding, believability, and motivations to action were impacted by the program, which would give a clear indication of the program effectiveness.

#### **Mobile Energy Workshops**

The results for the Mobile Energy Workshop survey provided insight on where impacts were made towards small businesses, and how much impact was made. Based on the overall results shown in this study, we have made the following observations:

1. Just under half of the Workshop participants stated they could not recall enough of the Workshop to answer the survey questions. However, a reasonable caveat could be made that if we discount for a) the length of time between attending the workshop and this survey (about 14 to 16 months) and b) an expected level of survey non-cooperation, the level of those who said they couldn't recall anything would be much lower. The amount of detail provided by those who stated that they could recall the workshop would support the contention that they made a positive impact.
2. Workshop attendees generally were favorable about the method of the program setup and recruitment. There was feedback from some participants that it would have been better to be notified about the upcoming workshop ahead of time, and that property owners should be included on these presentations as well.
3. Participants generally said that the presentations were understandable and believable.
4. The CFL giveaway was generally a useful gesture, and provided a secondary benefit of introducing an energy efficient product into the recipient's home.
5. Information about lighting was the most useful element, judging by the level of recall and actionable steps by participants. Information about efficient air conditioning and kitchen equipment was also recalled to a lesser degree, and some direct implementation also took place.
6. The Workshops proved effective in delivering information to those small business owners that had little or no previous knowledge or participation about utility programs.
7. Participants freely expressed their compliments about the courtesy and presentation skills of the implementation staff.

Based on the results, our recommendations for the Workshops are:

1. It seems that it would be a worthwhile and cost effective gesture to install two interim steps in setting up the workshops. Although not explicitly stated, it seems obvious that the property owner of each strip mall visited were asked for permission to set up the workshop. In that case, it may be beneficial if, during the set up arrangements, the implementation staff could:

- a. Seek an opportunity to present the same materials to the property owner as well
  - b. Send a postcard to the businesses to notify them of the upcoming event
2. Create a simple follow up mechanism for further inquiries by inquisitive or curious participants. In other words, when an owner expresses a particular interest in an energy efficient measure, the presenter records that query and forwards it to a program staffer or implementation contractor who can best follow up about that query.

### **Media Support**

The results of the Asian language survey provided the insight on what and how much impact was made towards hard-to-reach residential customers. Based on the overall results shown in this study, we have made the following observations:

1. In a typical outreach approach in a busy media marketplace like Southern California, it might be reasonable to assume that about 10 to 30% of the targeted market would recall seeing or hearing about it. The fact that nearly half positively recalled SCG information would be a very positive indicator that the media outreach efforts were successful and cost effective.
2. The content of the advertisements and press releases are shown to be at an appropriate level for understanding and believability. There was shown to be a bit of drop off in those who believe that the energy savings recommendations could be carried out.
3. The most significant energy saving actions are the use of CFLs and the adjustment of air conditioning and heating setpoints on thermostats. As importantly, it was shown that those who were aware of SCG-provided energy saving information were significantly more likely to perform these actions than those who were unaware of the information.

Based on the results, recommendations we would make for the media outreach would be towards further incremental improvements on the past results, which could be:

1. Continue striving towards gaining message exposure, or even better, direct appearances on foreign language TV and radio shows. In particular, it may make further impacts on the use of energy efficiency technologies if a particular appearance, or series of appearances, could focus on a specific element, such as Energy Star appliances, high efficiency residential lighting, or weatherproofing.
2. In the same context, utilize newspaper advertising and press releases to focus on one or two particular elements in depth. This would mean that a series of releases and/or ads would have to be developed and released to create continuity and build upon previous recognition.

## 4. Methodology

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RLW began the process evaluation by collecting and reviewing the program materials, and speaking with program implementation staff. We have prioritized the assessment of the delivery channels utilized by the program. Budgetary information and the final fourth quarter report was also collected to determine where program resources are the greatest and the least to finalize the design of the process evaluation.

The process evaluation involved these tasks:

- RLW began the process evaluation by thoroughly reviewing all program materials. The review of program materials was initially used to increase RLW's familiarity with the various components of the program and was instrumental in developing an interview guide for use with the program implementation staff.
- After completing our review of program materials, we interviewed program implementation staff. The interviews ascertained information that allowed us to further assess the delivery channels utilized by the program. The results of the program implementation staff interviews were used to guide the remainder of the process evaluation.
- For the residential component of the program, we conducted a telephone survey measuring general program awareness using targeted random sampling in the ethnic neighborhoods where residents are the most likely to have the opportunity to see and read the ads and press releases (and in a specific case, hear the a morning radio show where the program was promoted). We also summarized attendance and brochure distribution at CBO presentation and booths at community events.
- For the commercial component of the program, we conducted a telephone survey with a random sample of 77 Mobile Energy Workshop participants. We also reviewed and summarized the Business Energy Efficiency Help Desk records as well as verify the number of customers contacted by postcard and the number of customized packets of information distributed through the Business Telemarketing and Direct Mail Campaign.

The following paragraphs describe the methods we have used to assess each delivery channel.

### ***Mobile Energy Workshops (sub-contractor ADM Associates)***

Mobile Energy Workshops are designed for hard-to-reach commercial customers to address issues such as how to participate in available energy efficiency programs and how to finance energy efficiency upgrades. Furthermore, the Mobile Energy Workshops follow up with participants of the Mobile Energy Clinic (a third party local program) to help them identify and apply for resources to implement energy efficiency upgrades suggested by the Mobile Energy Clinic. The program's final budgetary worksheets show that approximately 110 Mobile Energy Workshops were conducted.

We received comprehensive lists of participants of Mobile Energy Workshops. The lists contain workshop date, business name, contact name, business address, phone number, and fax number. The lists were combined to form a sampling frame for the evaluation.

Using the participant lists, we have verified the number of Mobile Energy Workshops conducted and the number of participants attending those workshops. We used the combined participant

list to select a simple random sample of 77 Mobile Energy Workshop participants and conducted a telephone survey to assess the effectiveness of this program delivery mechanism.

The telephone survey explored the success of the workshops in addressing issues such as how much attendees understood about how to participate in available energy efficiency programs and how to finance energy efficiency upgrades. The survey also explored how effective the workshop was in assisting them to identify resources for upgrades suggested by the clinic.

### **Media Support**

An important component of the program delivery to hard-to-reach customers was media support and relations. The media generation was primarily through newspaper ads and press releases. The ads and releases were short, focused primarily on attracting attention, communicated a few energy conservation tips, and provided contact sources for more detailed information.

The ads and press releases were primarily placed in local Chinese, Vietnamese, and Korean newspapers. The circulation rates of the ethnic newspapers used in this element were considered to be the metric to measure the amount of impact towards the hard-to-reach populations. Program staff chose to consider the circulation rates alone, and ignore the incidence rates that the papers may have.<sup>4</sup>

We have reviewed the content of the ads and press releases for fit and placement. We also conducted a telephone survey with a random sample of 300 SCG residential customers (100 Chinese, 100 Vietnamese, and 100 Korean) targeted by the media campaign to measure media impact and level of program awareness generated by the promotions. The surveys were conducted in the language of the newspaper and measure general customer awareness of the program.

A list of zip codes or cities defining where the newspapers are distributed was not available for this evaluation. The 2000 U.S. Census contains the total number of individuals over the age of 18, the number of individuals whose primary language is Chinese, the number of individuals whose primary language is Vietnamese, and the number of individuals whose primary language is Korean for each zip code in CA. Therefore, we used the 2000 Census data to identify those zip codes in SCG's service territory with the following attributes: 1) the zip code contains a sizable proportion of all Chinese (Vietnamese, Korean) speakers in SCG's territory and 2) within that zip code, the primary language of a sizable proportion of individuals is Chinese (Vietnamese, Korean). The zip codes with these 2 attributes were used as a proxy for the locations where the in-language papers were distributed.

Once we identified the zip codes of interest, we purchased a list of a random sample of residents within the identified zip codes who are thought to speak the language of interest. These lists will be used as a sampling frame for the telephone survey.

Interviewing Service of America<sup>5</sup> (ISA) conducted a total of 300 in-language short telephone surveys – 100 in Chinese, 100 in Vietnamese, and 100 in Korean – to measure general program awareness. RLW staff designed the telephone survey instrument in English. ISA translated the

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<sup>4</sup> "Incidence rate" refers to the estimated amount of people that will read a newspaper above and including the initial buyer or subscriber. For example, if a newspaper assumes that 2 people on average read each paper and has a circulation rate of 25,000, then its incidence rate is  $2 \times 25,000$ , or 50,000.

<sup>5</sup> ISA is a leader in multicultural data collection services, having completed surveys in 65 languages since 1983.

English survey to Chinese, Vietnamese, and Korean, conducted the in-language surveys, and provided the survey data in an English format to RLW for analysis.

The project analyst analyzed the results of the telephone survey. The quantitative process survey analysis was carried out using SPSS, a commonly used statistical software package. RLW calculated frequencies, means, and cross tabulations of data, where appropriate, to provide estimates of population characteristics. All statistical significance tests were conducted at the 90% level of confidence, and statistically significant differences are discussed in the report where appropriate. These tests have been primarily used to make comparisons among the three ethnic groups of interest.

### ***Business Telemarketing and Direct Mail Campaign***

The outreach effort to hard-to-reach business customers was conducted in two phases. In Phase I, postcards were mailed to targeted customers, along with a toll-free number and an e-mail address to contact the Help Desk for more customized advice. In Phase II, telemarketing efforts were targeted towards customers that did not respond to the postcard campaign. For both phases, telephone interviews were conducted, following a decision tree to identify the appropriate pieces of energy efficiency information for each respondent. The phone interview results were then used to assemble a customized mail packet of efficiency information.

We received lists of customers who were mailed postcards in Phase I, and we also received lists of customers who received industry-specific customized energy efficiency information packets. We have used these lists to verify the number of customers contacted by postcard and the number of customized packets of information distributed. This data helps in evaluating the program's success in reaching the HTR commercial market.

### ***Business Energy Efficiency Help Desk***

The program established a Help Desk dedicated to offering energy efficiency information and advice to commercial customers. Help Desk personnel are trained to:

- Identify energy efficiency programs (both gas and electric) that address the customers needs,
- Answer questions about program applications,
- Direct customers to resources and assistance to obtain financing for energy efficiency improvements,
- Provide information about the ENERGY STAR program and its products, and
- Provide in-person assistance by appointment for those customers who need more assistance than can be reasonably delivered by phone.

The program tracking of the Business Energy Efficiency Help Desk primarily consisted of dates of calls and names only. There were about 50 – 100 calls recorded. In light of this, then, we have reviewed the Help Desk records and provided general qualitative assessments on their contributions towards supporting the program. The evaluation also looks at the cost benefit of offering these services.

### ***Community Based Outreach (CBO) Presentations***

The program collaborates with local community and business groups to host workshops, publish articles in their newsletters, and organize informational presentations. Outreach strategies for each group are unique, reflecting the group's particular needs and resources.

We received copies of the presentations used as well as a list of organizations where a presentation occurred. For each CBO presentation, the list shows the name of the organization,



the address of the organization, the language of the presentation, the ethnic group served by the organization, the date of the presentation, the number of attendees, and the number of brochures distributed.

We have reviewed the content of the CBO presentations. We also summarized the number of CBO presentations, the number of attendees, and the number of brochures distributed, both overall as well as by ethnic group. These data were critical in determining if the program was able to meet HTR goals.

### ***Energy Efficiency Curriculum and Workshops (sub-contractor USC)***

The University of Southern California (USC) developed curricula for 30-minute and 60-minute energy efficiency workshops. USC also delivered three energy efficiency workshops. The curricula were envisioned as a pilot program to answer the question, "Does placing energy conservation in a sustainable/environmental health context increase the percentage of people who access the utility rebate programs, update appliances, and or change their personal energy consumption habits?"

The USC curricula were reviewed for content and layout. Workshop attendees were administered a short survey designed to measure their awareness of how energy affects the environment both before and after the workshop presentation. The pre-presentation and post-presentation survey results were compared and contrasted. Differences between the pre-presentation survey results and the post-presentation survey results will be used to measure the effectiveness of the presentation in delivering its messages.

### ***Booths at Community Events***

SCG sponsored and staffed booths at a variety of community events. The bi-lingual booth staffers distributed in-language and English program materials and answered questions about energy efficiency programs.

We received detailed information about the community events attended. For each booth at a community event, we have received the event name, the event date, the event location (city), and the event attendance.

We have reviewed the total number of booths at community events as well as the number of attendees that were recorded as visiting the event. In particular, the number of attendees at the booths, and the number of brochures distributed through these venues are used to assess if the program met residential HTR goals.