## PROGRAM EVALUATION

#### **FOR THE**

# Chinese Language Efficiency Outreach Program (CLEO – 2004, 2005)

**Study ID: GES0001.01** 

CPUC Program #s SCE: 1366-04 PG&E: 1494-04 SCG: 1495-04

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## **Executive Summary**

ASW Engineering has been selected as the program evaluator for the 2004-2005 CLEO program identified under CPUC Contract # 1366-04 for SCE, 1494-04 for PG&E, and 1495-04 for SCG. This evaluation serves to determine the validity of the program theory, the effectiveness at reaching the target population, and the on-going need for this 100% in-language program.

CLEO held seminars in the Chinese language that provided information about investor owned utility energy efficiency rebate programs. CLEO targeted around 1,500,000 Chinese customers with its statewide advertising campaign. Significantly more people than this were actually exposed to CLEO advertising. CLEO intended to provide energy efficiency and audit training in 60 classroom settings and 10 community events. CLEO provided 60 such classroom type seminars serving over 1,700 participants as well as 10 community events. CLEO delivered 222 television advertisements that were instructional as well as informational. Program goals were 200 television advertisements. The program provided 716 radio advertisements instead of the intended 600. 150 half-page newspaper ads were published as intended. CLEO also set-up a toll free number to provide Chinese language Utility program assistance. Phone audits as well as inhome energy audits numbered 627 for the two program years. The program has found synergies with other existing or adopted Local, Utility or Statewide residential and small commercial efficiency programs.

Seminar attendees were randomly selected according to a CPUC approved sampling plan for the purpose of gathering information regarding the success of the program. Examination of program documentation, interviews with program staff, and telephone interviews with the random sample of seminar attendees are the basis for the results contained within this report.

This report demonstrates that the program theory is valid as defined by the CLEO program. Seminar participants confirm that the advertising efforts employed by the utilities for generating participation in their programs is largely overlooked by this population as a whole. CLEO provides outreach to this community that does not occur as part of conventional utility rebate program advertising.

CLEO has effectively reached its target population through the advertising media utilized. CLEO has demonstrated that it serves its target market, and that participants are well served by the program. Program offerings are clearly understood by participants and knowledge delivered through advertisements and seminars is retained and passed on to others not in attendance.

The on-going need for CLEO is demonstrated by the Chinese population's apparent thirst for knowledge regarding utility rebate program offerings. The 100% in-language aspect of CLEO separates it from any other outreach effort, and provides a level of understanding to the target population that is unmatched. Many of the program participants speak only Chinese and cannot be reached through any outreach effort that is delivered in another language.

CLEO program staff is professional and well received by seminar attendees. The goals set forth by the CLEO program have been realized and there exists little room for improvement to this well designed and orchestrated program.

#### Introduction

ASW Engineering has been selected as the program evaluator for the 2004-2005 CLEO program under the guidelines set forth in the energy efficiency policy manual as pertains to public goods funds allocated to third party energy efficiency program implementers. ASW has completed the evaluation process and presents this report as the final evaluation for the 2004-2005 CLEO program identified under CPUC Contract # 1366-04 for SCE, 1494-04 for PG&E, and 1495-04 for SCG.

This report examines the effectiveness of CLEO in meeting its established goals. This report presents the CPUC approved work plan, the CPUC approved evaluation plan, the telephone survey instrument as written in English along with the results of the data collected, and the summary of results. The actual telephone surveys were conducted in Chinese. The following paragraphs serve to introduce the CLEO program, its assumptions, target population, and program theory.

The Chinese Language Efficiency Outreach (CLEO) program is an innovative energy efficiency outreach program targeting residential and small commercial hard-to-reach customers. CLEO is a local, highly targeted residential and small commercial, energy efficiency marketing, outreach, education and training program specifically designed for the hard-to-reach, moderate income Chinese speaking customer. The program has targeted customers of Southern California Edison and Southern California Gas Company in demographic belts with a high concentration of low-income Chinese customers in the Los Angeles County (Cities of Alhambra, Monterey Park, San Gabriel, Rowland Heights etc.). The program has further targeted customers with similar demographics in the San Francisco area.

The program design draws upon the 2000 Census Study and Residential Appliance Saturation Study 1995 (SCERASS & PG&ERASS). The market barriers that prevent rate paying customers from participating in efficiency programs and accessing utility incentives are hard to reach, language barrier, lack of information, inadequate delivery mechanisms, and lack of knowledge on financing mechanisms. CLEO has designed program elements to address these barriers. CLEO has targeted low-income customers whose primary language is Chinese. Language is the most important barrier in serving these hard-to-reach customers. The RASS study establishes that only 50% of the Asian customers in SCE's territory speak English. The study further indicates a high correlation between income levels and language spoken. The language barrier is significant for low-income residential and small commercial customers.

The program was developed by Global Energy Services and California based energy efficiency experts experienced in teaching at Chinese Universities. CLEO also teamed up with local Chinese Community Organizations and Chambers of Commerce to ensure effective delivery and outreach.

CLEO provided marketing of utility programs, energy efficiency education and training using the local media (ethnic TV, radio and newspapers), business organizations and community events. This outreach culminated into targeted residential and small commercial energy audits. CLEO also created a toll free number providing information in Chinese and helping conduct simple phone audits. CLEO delivered information on all available energy efficiency programs to the Chinese community throughout the program process.

## Approved Work Plan

#### Overview

The CLEO program has no energy saving goals. The program evaluation will consist of testing the program theory, media campaign effectiveness, participant satisfaction, non-participant study and operational process review. Further analysis of the success of the program through word-of-mouth propagation of information presented in the workshops and audits will be incorporated into the analysis. This propagation can add significantly to the reach of the program to those eligible parties who might not have been reached through the conventional media campaign employed, or who did not have the time to attend. The evaluation will also measure the success of the media campaign and its effectiveness in empowering customers with information on energy efficiency and utility rebate information. The results of the evaluation will provide feedback to the program implementers and policymakers, and should facilitate incremental improvements to the program process and operations. The evaluation activities will be coordinated with the use of CLEO database, and any other data source within the targeted moderate-income residential and small business Chinese customers.

ASW Engineering's Evaluation Plan addresses the following "core" Evaluation issues – and features the associated approaches – listed in the table below.

Core EM&V Issue	Proposed Approach(es) to Resolving the Issue	Pragmatic Program Impacts
Do verification processes provide adequate quality assurance screens?	Verification of samples of participation paperwork; program document reviews; interviews of program staff; participant telephone interviews	Process evaluation adjustments (e.g., application partial or "fatal" flaws; participant verification of participation); management process adjustment recommendations
Are participants generally well served by the program?	Participant telephone interviews	Management process adjustment recommendations
Does the program serve its intended target markets?	Verification audits of samples of application paperwork; participant telephone interviews; interviews of program staff	Marketing process adjustment recommendations
Does the program theory prove sound	Participant telephone interviews; Interviews with program staff and community leaders	Evaluation of the continuing need for the program

Core EM&V Issue	Proposed Approach(es) to Resolving the Issue	Pragmatic Program Impacts
What barriers to participation exist within the program	Participant telephone interviews; Program staff and community leader Interviews	Recommendations for future marketing outreach to increase participation

Sorted listings of the *process evaluation* approaches utilized in our proposal – and associated linkages to underlying technical issues and Work Plan task – are presented below. In all instances, the potential implication consists of management process adjustment recommendations.

<b>Process Evaluation Approach</b>	Core EM&V Issue
Program documents review	Do verification processes provide adequate quality assurance screens?
Interviews with program staff	Does the program serve its intended target markets?
Community leader interviews	Are there barriers to program participation that still exist with the CLEO program?
Participant telephone interviews	Are participants generally well served by the program?
Marketing approach review	Are the marketing methods employed effective in reaching target market?

## **CPUC Energy Efficiency Policy Manual (EEPM) Requirements**

The following EEPM requirements are addressed by this plan as described in association with each specific policy manual goal. EEPM requirements not addressed in this section are not required for this type of program and have been determined to be "Not Applicable (N/A)".

CPUC/Policy Manual Evaluation Goal	How the plan addresses the Policy Manual or justification for not doing so:
Measure energy and peak savings per year over the life of the measures (kWh, kW & therms for each year)	N/A
Measure cost- effectiveness	N/A

CPUC/Policy Manual Evaluation Goal	How the plan addresses the Policy Manual or justification for not doing so:
Provide upfront market assessment and baseline analysis	This program has no claimed energy savings. Baseline energy is not at issue. The only issue is the knowledge base of the population reached by the program. Question 4 of the interview instrument identifies the participant's base knowledge of utility rebate programs.
Provide ongoing feedback and guidance	The evaluation will provide ongoing feedback to program staff as results become available through the evaluation process.  Evaluation update meetings will be conducted quarterly with program staff. Actionable items will be discussed.
Measure indicators of effectiveness and testing program theory (PT/LM) and approach	Program theory is that the Chinese community is largely underserved and hard-to-reach with a significant language barrier. This theory is tested through interview questions 1 through 6. These address the impact of the CLEO program on the participants.
Assess the overall levels of performance and success (Process eval)	Questions 1, 2, 5, 6, and 9 track the effectiveness of CLEO in delivering the educational aspect of the program to the participants. This plan tracks utility program participation through self reported interview responses. Question 3 addresses the direct crossover from CLEO to utility programs. 68 participants will be interviewed by telephone in their native language. Half of these will be seminar attendees and half will be audit participants.
Inform decisions regarding compensation and final payments (Measure counts)	CLEO intends to reach 1.5 million Chinese customers using 10 seminars, 6 community events, 40 - 10 minute television shows, 1000 radio advertisements, and 150 half-page newspaper ads. This plan will confirm these with advertisers utilized by CLEO.
Help assess the continuing need for the program (Gen assessment)	Interview questions 4, 9, and 10 are designed to extrapolate the continuing need for the CLEO program. Community leader interviews enhance the study by adding insight into the community as a whole. Two community leaders from each territory, San Francisco and Los Angeles, will be interviewed to garner community leadership impressions of the CLEO program and its impacts on the community served. These interviews will also add significant insight to the non-participant aspect of the evaluation. Leaders understanding of community participation triggers is vital to the on-going success of the CLEO program.

## Approved Process Evaluation Plan

Program effectiveness and success will be assessed through a process evaluation. The process evaluation will measure the key elements of the program and will evaluate the overall level of performance of the program. The evaluation will also provide ongoing feedback, and corrective and constructive guidance regarding the implementation of CLEO. The process evaluation will include but is not limited to measuring the program's various implementation aspects. Overall performance of CLEO in terms of its performance and success of the program will result from this process evaluation. The program theory will be tested and the continuing need for the

program will be addressed. Information on Non-participants, people who were exposed to the marketing outreach efforts but chose not to participate, will be examined as well.

The effectiveness of the CLEO campaign on Television, Radio and Newspaper will be measured and the costs and the effectiveness of each Media in reaching the targeted (Hard to Reach) Chinese-speaking customers will be evaluated.

The content and the quality of workshops will be evaluated for their ability to deliver energy efficiency information, rebate information and low Income program information.

The signups and the demonstrative energy audits that empower the customer to take advantage of Utility rebate programs and the Audit report, provided to them in Chinese, will be evaluated with regard to their effectiveness on the program participants desire to implement measures presented therein.

Questions regarding non-participation will be directed at community leaders and telephone interviewed participants.

Program theory testing questions will assess the validity of the program theory, and provide valuable feedback with regard to the continuing need for the program.

Feedback on the program provided by participants will be a critical element in this process evaluation. Feedback through varying means of communication with the target participants will provide the necessary information for determining the success of and continuing need for the CLEO program. Telephonic interviews are intended as the primary information-gathering tool for the program participants.

The process evaluation will assess if CLEO has met its goals of reaching the projected 1,500,000 Chinese customers through its media campaign and empowering them with energy efficiency and rebate information. It will also assess the value of CLEO from the customer's standpoint and evaluate if there is a continuing need for a 100% in-language program.

Each of the proposed benchmarks described in the implementation plan will be evaluated not only to determine whether the specific goal was met, but also to assess the quality and effectiveness of each step.

Changes in practices that may have been affected by the program, or practices that may have been identified as barriers to energy efficiency, but which still need to be addressed will be explored through the process evaluation. Additionally, standard process question feedback, collected by CLEO staff, dealing with whether and how participants liked the program will be examined. Question responses will be reviewed to quantify participant's opinions on the program offerings.

Based on these data collection efforts, a report will be generated that identifies the strengths and weaknesses of the program, program theory and non-participation information and provides recommendations for improvements and enhancements.

Our process evaluation will rely on data obtained from a variety of sources, including 1) program document reviews, 2) interviews with program staff, 3) customers participating in the program, 4) Interviews with community leaders, and 5) study of marketing techniques employed.

**Program document reviews**. Various program documents will be briefly reviewed to establishment a general context for the program's implementation, as well as more specifically for participation processing verification. We also will review quarterly reports, and examine program databases to determine whether there were any significant deviations from the approved program design. The remainder of the program document reviews will focus primarily on participant processing and satisfaction issues.

Formal verification audits of program paperwork. We will begin this step by obtaining and reviewing program documents. We will note/identify any significant variances in these procedures across the IOU service territories. We will augment this knowledge base by interviewing program staff regarding process ambiguities identified from the document reviews. We also will query program staff regarding the internal verifications that occur during the course of the program. Examination of participant 'Hard-To-Reach' status will be incorporated into the process evaluation.

A significant portion of the document reviews will occur at the start of the project, then transition to regular brief updates (e.g., associated with quarterly reports).

**Interviews with program staff.** Following the document reviews, we will conduct interviews with Program staff to answer ambiguity issues. This querying step will be conducted to make sure that we understand exactly how the program was implemented (including changes in strategy or tactics), as well as what verification processes were utilized. This step will facilitate the development of any recommendations about changes in process design or implementation, as well as help us correctly interpret the results of the various evaluations. We also will query program staff regarding issues pertaining to the inter-IOU service territory aspects of the program.

A significant portion of the program staff interviews will occur at the start of the project, then transition to regular updates (e.g., as circumstances warrant them).

**Participant telephone interviews**. In this part of the process evaluation, we will conduct telephone interviews with a random sample of program participants. The interview instrument will be translated into Chinese and the interview will be conducted in Chinese, using the dialect of choice determined by the participant being interviewed. Cantonese and Mandarin have the same written form while each is spoken differently. Half of the interviewed participants will have completed a seminar while the other half will have completed an audit. The telephone interviews are intended to result in a final sample size of 68 completed participant interviews. The sampling plan is designed to provide 90/10 precision and confidence limits. The size of 68 has been chosen as it reflects the number of interviews conducted as part of the previous evaluation effort. That effort provided invaluable insight into the success of the CLEO program. Participant interviews will focus on, but not be limited to, the following information:

- Participants prior knowledge of utility rebate programs
- What participation barriers exist within the standard IOU program Offerings
- What participation barriers exist within the existing program design
- Where they would expect to find information pertaining to these types of energy efficiency measures other than the CLEO program offerings.
- Has the participant contacted any utility rebate programs
- How effective was the interface with utility rebate program personnel, if applicable
- Were any of the measures presented implemented by the participant
- Did they inform others who were not informed through direct program avenues

For a complete interview instrument, refer to Appendix - B at the end of this plan.

Participant interviews have proven to be difficult to complete due to the lack of desire on the part of the Chinese community to participate in such interviews. Interviewers will approach the task by calling the list of participants in random order until 68 interviews are conducted.

Community leader interviews. This element of the process evaluation will incorporate interviews with Chinese community leaders who were involved with the program. Interviews with these leaders will focus on feedback they may have received from people who were exposed to the marketing yet chose not to participate in the program. Examination of these reasons for Non-Participation will enable CLEO staff to implement changes to marketing materials and address these issues. Community leaders will also be a valuable source for the process evaluation. Their exposure to the community can be helpful in determination of the continuing need for the program as well as testing the program theory. Their insight into the populations awareness of utility offerings should prove to be a useful tool in determination of whether the program theory is sound.

Community leader interviews enhance the study by adding insight into the community as a whole. Two community leaders from each territory, San Francisco and Los Angeles, will be interviewed to garner community leadership impressions of the CLEO program and its impacts on the community served. These interviews will also add significant insight to the non-participant aspect of the evaluation. Leaders' understanding of community participation triggers is vital to the on-going success of the CLEO program.

Community leaders are also a source for communication pieces. The community leaders interviewed will be asked to review the program advertising and offer constructive criticism aimed at reaching a larger percentage of their communities. This is the most cost-effective way this aspect could be incorporated into the available budget for this evaluation.

**Marketing Approach Review**. This element of the process review will incorporate a review of marketing material delivery strategies and associated results. Participant responses collected by CLEO outside the process evaluation regarding exposure to program marketing efforts coupled with media rating and circulation data are intended to provide a comprehensive media campaign effectiveness determination.

Media outlet demographics will be utilized towards the marketing effectiveness determination. Times of airings and frequency if impressions will be considered contributing factors as well.

Program implementation teams can utilize such information to better allocate future funding towards the most effective media marketing avenues.

## **Detailed, Task-By-Task Approach**

Detailed Task-By-Task Description of ASW Engineering's Approach

ASW Engineering intends to employ the following series of tasks that will facilitate analysis of the project with respect to its goals and designs:

Task 1 - Develop evaluation plan and submit to CPUC (finalized plan random sampling details and random sample selection to follow plan approval from CPUC).

Deliverable- Approved Research Plan Due: 12/31/04

Task 2 - Review all program documentation and collected information both electronic and hard copy.

Deliverable- Files of Program Offerings Due: 05/01/05

Task 3 - Interview program staff members, document findings and internal assessments of methods and validate program implementation procedures and practices.

Deliverable- Staff Interview Summary Due: 04/01/05

Task 4 - Construct an interview instrument that will facilitate the collection of information from participants in the program as well as identify any issues regarding propagation of results beyond those realized by the direct program participants. Translate the interview instrument into Chinese and validate the translation.

Deliverable- Final Interview Instrument Due: 12/31/05

Task 5 - Conduct the interview of participants, as sampled from the CLEO database, and record all information for inclusion in subsequent stages of the EM&V process. We intend to interview 68 participants distributed among the utility service territories.

Deliverable- Completed Interviews Due: 08/01/05

Task 6 - Utilize the results of the interviews along with the other aspects of the evaluation procedure to determine if CLEO has a valid program theory and has met its goals. Each of the proposed benchmarks described in this plan will be evaluated not only to determine whether the specific goal was met, but also to assess the quality and effectiveness of each step. Non-participation issues will provide valuable feedback to program staff as they move forward with future program implementation.

Deliverable- Interview PT Test Results Due: 10/01/05

Task 7 - The results of the interviews will also be used to evaluate the effectiveness of each of the aspects of the media campaign, the continuing need for the in-language aspects of the program, and the effectiveness of the program in encouraging participants to implement energy efficiency measures recommended under the program.

Deliverable- Media Campaign Effectiveness Due: 10/01/05

Task 8 - Based on the initial process review data analysis a brief interim report will be generated that identifies the strengths and weaknesses of the program and provides recommendations for improvements and enhancements. This reporting will contain a high-level element presenting the extrapolation to the population served within the program territory guidelines incorporating as much of the process review as can be reasonably asserted. This report will be delivered in time to be incorporated into CLEO's third quarter CPUC report.

Deliverable- Brief Interim Summary Report Due: 07/01/05

Task 9 - Based on the process review data analysis a report will be generated that identifies the strengths and weaknesses of the program and provides recommendations for improvements and enhancements. This reporting will contain an element presenting the extrapolation to the population served within the program territory guidelines. This extrapolation will incorporate all aspects of efficiency awareness including direct program offerings as well as word-of-mouth awareness created through the sharing of information by program participants with those members of the target audience not directly impacted by the program offerings. This report will be provided three to four months following the completion of the CLEO program and cessation of mainstream CLEO program activities.

Deliverable- Final Evaluation Report Due: 03/01/06

## Telephone Interview Instrument

The telephone interviews were conducted entirely in Chinese. The following represents the English version of the interview instrument. This instrument was translated into Chinese and administered to the sample population as required by the approved sampling plan.

## **CLEO Participant Telephone Interview Instrument**

	Participant Number: Name: Phone Number:		
1.	Have you installed any energy efficiency measures discussed during the audit? Yes / No (free compact fluorescent light does not count)		
1.1.	IF YES, please identify the measure(s): Lighting   Air Cond   Refrig   Other		
2.	Do you plan to install any presented energy efficiency measures? Yes / No		
2.1.	IF YES, please identify the measure(s): Lighting   Air Cond   Refrig   Other		
3.	Have you contacted any utility rebate programs? Yes / No		
3.1.	. IF YES, have you received rebates from any utility rebate programs? Yes / No		
3.2.	. IF YES, did language barriers with utility program representatives cause problems? Yes / No		
3.3.	IF YES, how effective was the interface with utility rebate program personnel?		
	1-Good 2-Fair 3-Poor 4-Bad		
4.	Were you aware of the utility rebate programs before the audit? Yes / No		
4.1.	. IF NO, can you provide any specific reasons for your being unaware?		
4.2.	. IF YES, did you understand how to use the utility rebate programs before the seminar? Yes / No		
5.	Did you educate others who were not informed through program seminars? Yes / No		
6.	Did they, or do they plan to, implement any of the measures you presented to them? Yes / No		
6.1.	. IF YES, please identify the measure(s): Lighting   Air Cond   Refrig   Other		
7.	Where would you normally expect to find information pertaining to the types of energy efficiency measures recommended by the CLEO program?		
	Please identify the media / other outlet:		
8.	Do you know anyone who was exposed to the marketing materials and who did not wish to participate? Yes / No		
8.1.	IF YES, Can you identify their reason(s)?		
	If the participant has not utilized any utility rebate programs, ask the following:		
9.	Do you understand how to use the utility rebate programs now? Yes / No		
9.1.	IF YES, do you credit CLEO with your understanding of utility rebate programs? Yes / No		
10.	Please identify any roadblocks preventing you from using utility programs:		

## Telephone Interview Data Summary

#### **Participant Selection**

This section presents the telephone interview portion of the study analysis. There are five main areas of concern that are addressed by these data. The program evaluation consists of testing the program theory, media campaign effectiveness, participant satisfaction, non-participant study and operational process review. Further analysis of the success of the program through word-of-mouth propagation of information presented in the workshops and audits is incorporated into the data collection and analysis.

Participants were randomly selected for telephone interviews until such time as there were 68 telephone surveys completed as required by the CPUC approved sampling plan. The population contained more that seventeen-hundred (1,700) seminar attendees with nearly equal parts from both Northern (San Francisco) and Southern California (Los Angeles). Thirty Four telephone interviews were conducted with seminar attendees who did not receive any further support from CLEO. The remaining thirty four calls were conducted with seminar attendees who took advantage of the audit offerings of the program. Seventeen calls were made to seminar attendees who received a phone audit after their seminar attendance. The remaining seventeen calls were conducted with seminar participants receiving a demonstrative home audit.

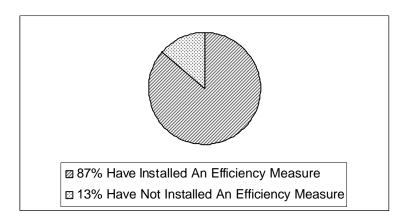
Seminar participants were randomly sorted and contacted in random order until such time as thirty-four (34) seminar attendees were interviewed. Seminar participants utilizing additional program features were interviewed through application of the same methodology.

#### **Interview Data**

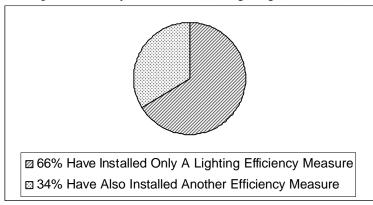
The following is a presentation of the data collected during the telephone surveys. The results for the three different groups are combined to present the population as a whole. The combination is valid due to the relative consistency in responses across the different survey groups. The responses varied little from group to group and therefore, the aggregate analysis is valid.

Question 1 - Have you installed any energy efficiency measures presented during the seminar?

Yes / No

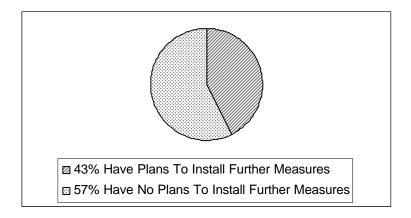


Follow-Up 1 - IF YES, please identify the measure(s): Lighting | Air Cond | Refrig | Other

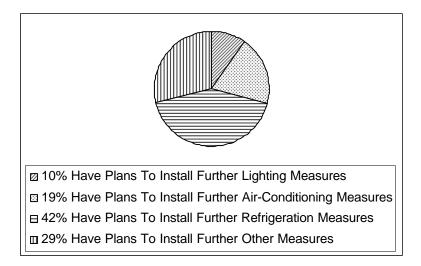


This community is interested in energy efficiency and willing to incorporate energy efficiency into their lives.

Question 2 - Do you plan to install any presented energy efficiency measures? Yes / No

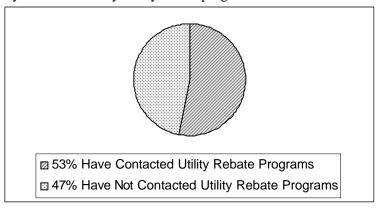


Follow-Up 2 - IF YES, please identify the measure(s): Lighting | Air Cond | Refrig | Other



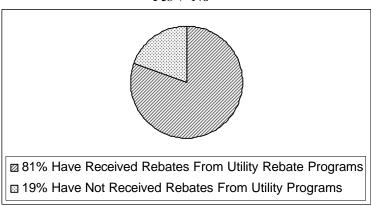
Program participants motivated to pursue energy efficiency for themselves after seminar attendance is 43%. The variety of measures planned indicates that CLEO is reaching across the communities needs and providing information to the community on all efficiency measures incorporated into the seminars. On average, more than 4 out of 5 people exposed to CLEO seminars are motivated to the point of intention to implement measures. As an informational program, this motivation to intent is perceived as an indication that the elements of CLEO are being conveyed thoroughly and to the satisfaction of the target audience.

Question 3 - Have you contacted any utility rebate programs? Yes / No

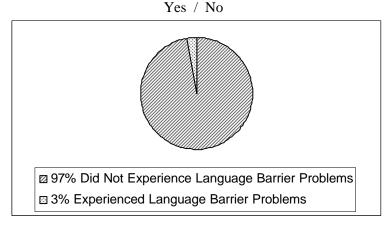


Follow-Up 3a - IF YES, have you received rebates from any utility rebate programs?

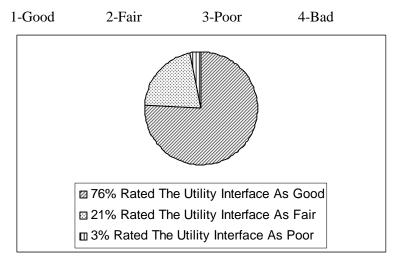
Yes / No



Follow-Up 3b - IF YES, did language barriers with utility program reps. cause problems?



Follow-Up 3c - IF YES, how effective was the interface with utility rebate program personnel?



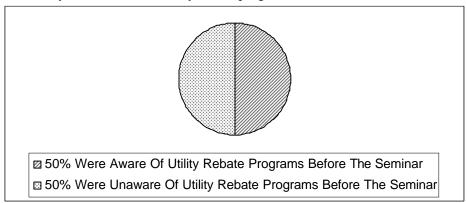
These data are indicative of the utilities ability to field calls from the Chinese community. Clearly there is an acceptable interface for the Chinese community at the utilities within the scope of this study. Their ability to route calls to Chinese speaking representatives is demonstrated within these results. The Chinese representative's ability to interface with the customers is also rated as highly.

This aspect of the evaluation is critical to the on-going success of the CLEO program. Since the utility programs utilize representatives who are capable of interfacing with the Chinese community, the actions initiated by the CLEO program can expect to be well received at the utility through their Chinese speaking representatives. Participants in the CLEO program can rest assured that if they are motivated to implement efficiency measures covered by utility rebate programs, there will be an avenue to that rebate money that does not pose a significant language barrier problem.

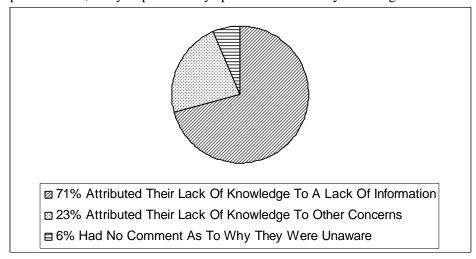
CLEO has largely succeeded with these participants to demonstrate that there exist no language barrier issues within utility rebate programs. Further emphasis on the utility's ability to interface in Chinese could eliminate more of the perception that the language barrier exists. Participants can take this knowledge to the population, through word-of-mouth, and the effect should be an increased participation in utility rebate programs from the Chinese Community.

These types of successful experiences are conducive to greater utility rebate program participation as a whole. CLEO can be credited with providing much of the incentive for the increases that apply to the Chinese community. On-going implementation of the CLEO program provides continued exposure for this community to these types of positive experiences.

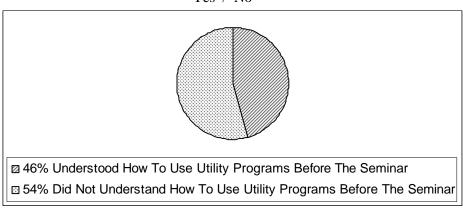
Question 4 - Were you aware of the utility rebate programs before the seminar? Yes / No



Follow-Up 4a - IF NO, can you provide any specific reasons for your being unaware?

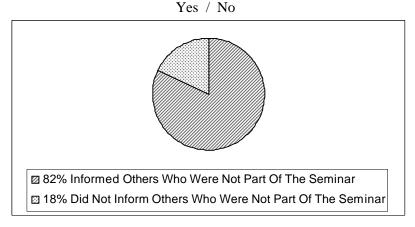


Follow-Up 4b - IF YES, did you understand how to use the utility programs before the seminar? Yes / No



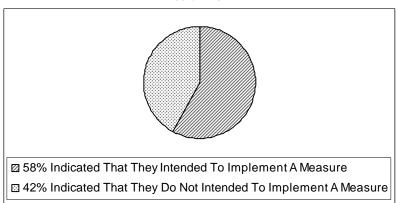
Those who were aware of utility rebate programs prior to the seminar understood how to use these programs. Those who were not aware of these programs predominantly attributed their lack of knowledge to a lack of information regarding these utility rebate programs. CLEO provides outreach and information about utility rebate programs to this community in their native language. Non-English speaking Chinese populations require a specialized outreach effort to motivate them to participation in such programs. Without outreach and education in their native language, the Chinese community cannot be expected to participate in these programs proportionally with regard to the general population.

Question 5 - Did you educate others who were not informed through program seminars?



Question 6 - Did they, or do they plan to, implement any of the measures you presented to them?

Yes / No



These data provide an insight into the word-of-mouth propagation aspect of this program. Nearly all program participants relayed the information to others who did not attend the seminars, and more than half of those secondary exposures intend to implement an energy efficiency measure.

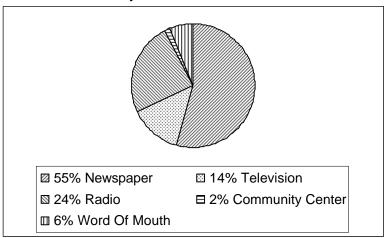
As an informational program, these data are of particular importance in exemplifying the continuous propagation of information provided by a program such as CLEO. It can be inferred from these data that many more people within the Chinese Community have been educated beyond those directly participating in the seminars.

These secondary exposures are indicative of the level of information retention that program participants have attained. Their ability to motivate others to intent to implement energy efficiency measures speaks volumes towards their personal retention of the information presented. Clearly CLEO has educated a great many participants to a level that they are now able to impart the information to others. This type of continuing information exchange strengthens this community's ability to access utility energy efficiency rebates.

These types of secondary training exposures also solidify the information in the mind of the person providing the secondary training. These people are more likely to retain their knowledge after imparting it to another in their own words.

Question 7 - Where would you normally expect to find information pertaining to the types of energy efficiency measures recommended by the CLEO program?

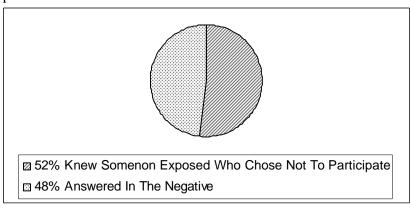
Please identify the media / other outlet:



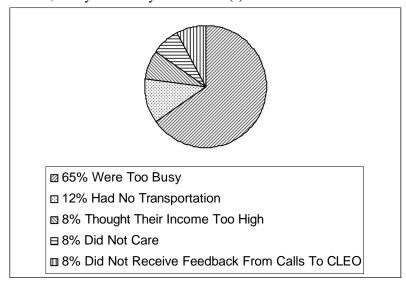
These data provide an insight into the direction that the community looks for such information. It is intended as a measure of the community's general perception as to where these types of advertisements should be posted. The three media outlets rank indicat that advertising on all three of these should reach the majority of the population.

These data speak to the media campaign effectiveness throughout the CLEO program. CLEO has utilized the top avenues for its public information campaign.

Question 8 - Do you know anyone who was exposed to the marketing materials and who did not wish to participate? Yes / No



Follow-Up 8 - IF YES, Can you identify their reason(s)?

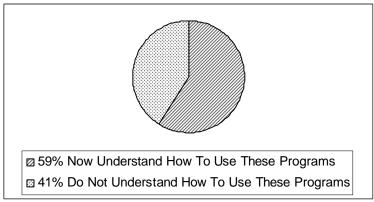


Most non-participants as demonstrated by these results, exposed to marketing materials indicated that they were too busy to learn about energy efficiency programs through the CLEO program. CLEO participation was fully subscribed. This type of question is designed to determine the reason that eligible parties choose not to participate. The fact that only 8% had no interest implies that non-participants, in general, are interested, but simply could not overcome the barriers to participate in the program during this program cycle.

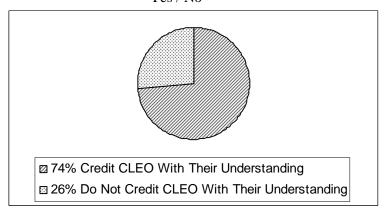
It comes as no surprise that there are a high number of eligible participants who choose not to participate due to time constraints. Programs such as CLEO must compete for people's valuable time. The fact that the main reason for non-participation was given as 'Too Busy' speaks well of the CLEO program advertising. Much of the community is burdened with long work hours during these economic times.

The following pertain only to those participants who had not utilized any utility rebate programs prior to the telephone interview.

Question 9 - Do you understand how to use the utility rebate programs now? Yes / No



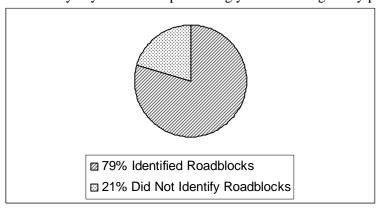
Follow-Up 9 - IF YES, do you credit CLEO with your understanding of utility rebate programs? Yes / No

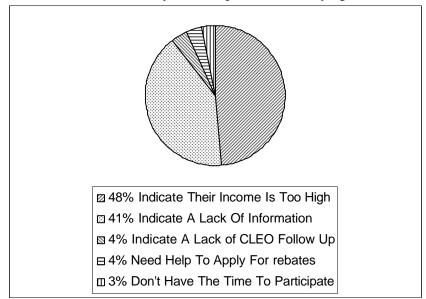


These data demonstrate that most participants, who did not contact any utility rebate program, feel that they now understand how to utilize utility rebate programs, and that the vast majority of those credit CLEO with providing them that understanding. This type of question directly relates to CLEO's underlying goal of educating people about utility rebate programs.

CLEO serves the target audience through education about utility rebate programs. The participants in the CLEO program are educated and what they choose to do with that education is their own decision. While many CLEO participants are motivated to action, many others are educated and serve to educate others. Even though a participant may not be motivated to install an energy efficiency measure or contact a utility rebate program, another member of the community who may have been informed by that participant may be so motivated.

Question 10 - Please identify any roadblocks preventing you from using utility programs.





Follow-Up 10 - Roadblocks identified by those respondents identifying roadblocks.

A large percentage of respondents identified roadblocks preventing them from participating in utility rebate programs. Many of these respondents conveyed a qualification barrier that is not a factor with all utility rebate programs. This perceived roadblock accounts for 48% of the non-participating responding population. Others implied that a lack of information stopped them from participating. This perceived roadblock accounts for 41% of the non-participating responding population. The remaining respondents indicate that they either don't have the time to understand the details, they need help, or their call was not returned. These roadblocks account for 11% of the non-participating responding population.

There are some participants who demonstrate that their understanding of the utility rebate programs is limited and sometimes flawed. This is to be expected in any educational effort. These participants represent a minority of the CLEO participant database. The vast majority of CLEO participants are educated about utility rebate programs and retain much of the knowledge imparted to them during the seminar.

## **Summary of Results**

CLEO is a local, highly targeted residential and small commercial, energy efficiency marketing, outreach, education and training program specifically targeted for the hard-to-reach, moderate income Chinese speaking customer. The market barriers that prevent rate paying customers from participating in efficiency programs and accessing utility incentives are hard to reach, language barrier, lack of information, inadequate delivery mechanisms, and a lack of knowledge on financing mechanisms.

CLEO has succeeded in breaking down these barriers through their media campaign, their seminars, telephone audits, home audits and their toll free assistance number.

#### **Seminars**

CLEO seminars presented utility rebate programs offerings, eligibility, and utilization procedures. Chinese manuals were developed and distributed at seminars so that the participants could access program information, in their native language, after the seminars were completed. Each participant had the opportunity to ask for clarification on any issue pertaining to the utility rebate programs covered by the seminar documentation.

Seminar attendees were largely pleased with the knowledge they received during the presentations, and conveyed this information to others who were not in attendance. This secondary exposure applies to eighty-two percent (82%) of seminar attendees making the exposure realization rate of the CLEO program greater than double the target exposure level.

These secondary exposures were motivated to implement efficiency in fifty-eight percent (58%) of the cases recorded. This data indicates that program participants are educated to the point that they are capable of imparting the information to others.

#### **Utility Rebate Program Contact Rates**

Fifty-three percent (53%) of participants have contacted utility rebate programs, and eighty-one percent (81%) of those have received rebates from those programs. No language barriers were indicated by the participants contacting utility rebate programs. Fifty-nine percent (59%) of seminar participants, who had not utilized utility rebate programs prior to the telephone interview, now understand how to utilize utility rebate programs, and seventy-four percent (74%) of those credit CLEO with their understanding.

Fifty percent (50%) of participants were unaware of utility rebate programs prior to the CLEO seminar, and seventy-one percent (71%) of those attributed their lack of knowledge to a lack of information. CLEO provides in-language information and outreach to this community. Ninety-two percent (92%) of seminar attendees expect to find advertising for these utility rebate programs in either the newspaper, on the radio, or on the television. The split between the media giants is fairly skewed towards newspaper advertising. CLEO has utilized these forms of advertising as predominant means of delivering the seminar advertising.

#### Non-Participant Study

Fifty-two percent (52%) of participants indicated that they knew someone who was exposed to the marketing for CLEO and chose not to participate. Sixty-five percent (65%) of those identified the main reason for the non-participation was a lack of time. These time constraints are common with the moderate to low income Chinese population. The information imparted to them through the media campaign was understood and there was likely some amount of energy efficiency education absorbed as a result of their exposure to it.

Non-participants indicated an interest in energy efficiency and are likely participants during future program years as their time may become more available. Community leaders were also queried about the non-participation issue, and they indicated that the advertising was both informative and entertaining. One executive stated that the entire package was extremely well produced. The general consensus, among responding parties, was that the campaign was concise, educational, enticing, well targeted, and professionally produced.

#### Language Barrier Broken, No Longer a Roadblock to Participation

Seminar participants who contacted utility rebate programs identified no serious roadblocks with regard to their participation in such utility rebate programs. Ninety-seven prevent (97%) of those who contacted the utilities did not experience any language barrier problems and rated the utility interface favorably. The previous CLEO program found this same trend and the utilities respond well to Chinese callers. The previously held view that the utilities did not communicate well with Chinese speaking people has been overcome and the community of seminar participants now understands that there is no language barrier with the utilities. Their understanding of this fact will propagate through the community and ultimately tear down the perceived barrier related to communications. The main indications were that there was a language barrier, that the programs are too complicated, and that individuals do not have the time to figure out these programs. Seminar attendees who contacted utility rebate programs found there was no language barrier issue with the utility representatives handling calls from the Chinese community. CLEO should continue to incorporate this fact into all of its program offerings, media and training alike.

#### Remaining Roadblocks to Utility Rebate Program Participation

It is CLEO's on-going task is to demonstrate to the target Chinese population that energy efficiency efforts are worth their time, and that the process is not as daunting as their perception of it may be. Only through continued exposure to these types of programs can the Chinese population realize that their perceptions of complexity and time consumption are inflated, and that participation in utility rebate programs is a worth while undertaking.

#### Media Campaign

The CLEO marketing campaign employed advertising in both the Chinese Daily News (LA, circulation 90,000 daily) and the Sing Tao Newspaper Ltd. (SF, 85% market share). Each of these newspapers has a tremendous readership and contributed greatly to the Chinese communities embracing the CLEO program. Radio advertising was secured on Radio Networks Asia (LA, 150,000 listeners at air times) and Sing Tao Radio (SF, 87% market share). Television advertising was purchased on LA18 (LA, 8.2 million households reached) and KTSF (SF, 91% market share) for seminar participation recruiting and informational advertising. While quantification of the number of people reached is elusive, this report has found that the media campaign has effectively reached a great many more people than the intended 1.5 million. The advertisers utilized are the mainstream media in the Chinese community and their advertising is viewed by the community at large.

Newspaper advertising was the highest rated media campaign bringing fifty-five percent (55%) of seminar attendees. Radio advertising is credited with bringing twenty-four percent (24%) of attendees, and Television is credited with fourteen percent (14%) of attendees. Other avenues, such as chambers of commerce, and community organizations accounted for eight percent (8%) of seminar attendance. Monies spent on radio, newspaper, and television advertising was highly successful. Chambers of commerce and community organizations are inexpensive and promote community branding recognition as well as improving relationships with community leadership.

#### **Program Theory**

CLEO is based on the premise that these Chinese speaking communities are not targeted by the mainstream of advertising campaigns for utility rebate programs. Seminar participants confirm that the advertising efforts employed by the utilities for generating participation in their programs

does not address them in their own language and is largely overlooked by this population as a whole. Half of the seminar attendees had not heard of utility rebate programs before CLEO. Prior to the first CLEO, this number was higher. The implication is that CLEO has informed this community through their initial offering and the community continues to be educated as CLEO continues to expose the population to their offerings. As community awareness is raised, the number of people utilizing the utility rebate programs increases.

The Chinese community represents a large outreach market segment that under utilizes utility rebate program offerings. CLEO provides outreach to this community that supplements the conventional utility rebate program advertising. The combination of these two distinct efforts offers this ethnic community the knowledge necessary to make an informed decision as to their desire to participate in such programs. Increased utility rebate program participation by the Chinese community as a product of the CLEO program can be expected to continue as long as this program is continued.

#### **In-Language Requirement**

The 100% in-language aspect of this program is a necessity in reaching this population. Many of these rate-paying customers do not speak English and cannot be reached through any language other than their native tongue. CLEO presents the information completely in Chinese and the effect is that the seminar attendees are provided documentation that they can refer to if they have any questions as they pursue energy efficiency. Non-attendees can call in and receive the documentation or verbal assistance as required.

#### **General Observations**

CLEO has demonstrated that it serves its target market, and that participants are well served by the program. Program offerings are clearly understood by participants and knowledge delivered through seminars is retained and passed on to others not in attendance. CLEO provides utility rebate program advertising and education that is not covered by other programs of record as of the time of this reporting. The on-going need for CLEO is demonstrated by the population's thirst for knowledge regarding utility rebate program offerings. The 100% in-language aspect of CLEO separates it from other outreach efforts, and provides a level of understanding to the target population that is unmatched.

CLEO program staff is professional and well received by seminar attendees. The goals set forth by the CLEO program have been realized and there exists little room for improvement to this well designed and orchestrated program.