Final EM&V Report for South Bay energyrewards™ Program

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Exe	ecutive Summary	ES-1
	MFD Program Results	ES-2
	Coupon Program Results	
	Regional Delivery through Local Cities	
	Conclusions & Recommendations	ES-4
I.	Introduction	I-1
	Program Description	I-1
	Evaluation Goals	
	Data Collection	
	Impact Evaluation (Verification of Savings)	1-4
II.	Program Development	II-1
	The Pilot	II-1
	Program Implementation	
	Role of Cities: Summary	II-5
III.	Delivery through Cities Results	III-1
	Summary of Key Results	III-1
	Summary	III-6
IV.	Coupon Program Results	IV-1
	Coupon Overview	
	Process Results	
	Involving the Hard-to-Reach	IV-12
	Verification of Savings	IV-12
ν.	MFD Program: Results	V-1
	Profile	V-1
	Process	V-1
	Involving the Hard-to-Reach	
	Impacts	V-5
VI.	Summary & Conclusions	VI-1
Арр	pendix A. Focus Group Discussion Guide	A-1
Арр	oendix B. Retailer Surveys	B-1
	pendix C. Resident Coupon Surveys	
	bendix D. Multi-Family Dwelling Survey	
Ah	pendix E. Site Visits	E-1

Exe	ecutive Summary	ES-1
I.	Introduction Table I.1: Survey Pool & Completes Table I.2: Sample Distribution by Size Table I.3: Sample Distribution by City	I-4 I-5
Ш.	Program Development	
	Table II.1: Energy Rewards Program Products	
III.	Delivery through Cities Results	
IV.	Coupon Program Results	IV-1
	Table IV.1: Total Program Coupon Purchases	
	Table IV.2: Coupons Redeemed by Retailer	
	Figure IV.1: Participant Coupon Usage by Appliance	
	Table IV.3: Source of Program Information	
	Table IV.4: Reason Participant Utilized Coupon	IV-3
	Table IV.5: Participants' Satisfaction with Coupon Program	
	Components	
	Table IV.6: Importance of Coupon in Purchase Decision	IV-4
	Table IV.7: Retailers Rating of Program Impact on Sales	
	Practices	IV-6
	Table IV.8: Retailers' Rating of Usefulness of SBER Promotional Material	IV-7
	Table IV.9: Retailers' Rating of Time Needed to Administer	1 v - /
	SBER	IV-8
	Table IV.10: Retailer Rating of Promptness of Coupon Payment by SBER	
	Table IV.11: Non-Participating Retailer Rating of Impact of	1v-9
	Other Programs on Stocking and Sales of ENERGY STAR Products	IV-11
	Table IV.12: Net Gas and Electric Savings by Measure for	IV-11
	Coupon Redemption	IV-12
V.	MFD Program: Results	V-1
	Table V.1: Source(s) by Which MFD Customer Learned of	
	Program	V-1
	Figure V.1: Importance of Component in Decision to	
	Participate in MFD Program	V-2
	Table V.2: MFD Non-participants' Reason for Not	
	Participating	
	Table V.3: Problems Encountered During Installation	V-3

	Figure V.2: MFD Participants' Satisfaction with Program	
	Components	V-4
	Table V.4: Measures Considered Before Program	
	Table V.5: Recommendations for MFD Program	
	Improvement	V-5
	Table V.6: Distribution of Installed Measures in Site Visits	
	and Population	V-6
	Table V.7: Verification of Energy Savings by Measure – Site	
	Visits	V-7
	Table V.8: Verification of Demand Reduction by Measure –	
	Site Visits	V-7
	Table V.9: Total Program Energy Savings Adjusted by	11.0
	Verified Measure Energy Savings Realization Rate	V-8
	Table V.10: Total Program Demand Reduction Adjusted by	V O
	Verified Measure Demand Reduction Realization Rate	
VI.	Summary & Conclusions	VI-1
Арр	pendix A. Focus Group Discussion Guide	A-1
Арр	oendix B. Retailer Surveys	B-1
A		
Арр	pendix C. Resident Coupon Surveys	C-1
	pendix C. Resident Coupon Surveys pendix D. Multi-Family Dwelling Survey	
Арр	pendix D. Multi-Family Dwelling Survey	D-1
Арр		D-1 E-1

The South Bay Cities and Affiliates Energy Savings Program, *energyrewards*[™] (the Program), implemented by Rita Norton & Associates, Inc. (RNA), provides energy efficiency information and incentives to residential customers and property owners/managers in the South Bay Cities area of the Southern California Edison (SCE) and Southern California Gas (SCG) utility service territories. The Program integrates and leverages its outreach, marketing, and communications efforts with those of participating local governments. Additionally, the Program works with product retailers in cities to display energy efficiency materials.

The Program, funded through the California Public Utilities Commission, is comprised of an energy efficiency outreach and marketing effort, promoting the purchase of ENERGY STAR[®] products with two major financial incentives:

- Coupon program for residential customers (Coupon), including incentives for gas furnaces and water heaters, clothes washers, and dishwashers
- Lighting and HVAC retrofit component for Multi-Family Dwellings (MFD), which includes a variety of lighting and HVAC measures

This report presents the findings of Quantec's Evaluation, Measurement, and Verification (EM&V) analysis. The evaluation relies on Program data from late 2002 through December 31, 2003, and on data collected throughout 2003.

There are two main elements to this evaluation:

- 1. Assessment of the delivery of the Coupon component through local governments and retailers (limited process evaluation^{ES1})
- 2. Assessment of Program impacts for both Coupon and MFD (impact evaluation)

The Program used an innovative approach to encouraging energy efficient actions, drawing on marketing, education, and different types of incentives, delivered with strong assistance from local governments, and involving homeowners, tenants, multi-family owners/landlords, retailers, and contractors. The Coupon component was successfully implemented through a two-stage process, including a pilot to test and refine a point-of-purchase

^{ES1} The process evaluation, as approved by the CPUC, did not, primarily due to budget constraints, include in-depth interviews with all program actors, or evaluation activities, such as measuring customer response to bulbs, to commitment card, or home energy survey, for the CFL component.

redemption process, followed by implementation in all of the South Bay cities. The two-stage approach also characterized the outreach and marketing efforts, with RNA first gaining the commitment of the cities and then customizing outreach materials for their use. The group of cities the Program first brought together around energy efficiency continues to operate as a regional energy entity and the Program met a high percentage of its energy savings goals.

The specific results and conclusions drawn below focus on three key Program features: MFD component; Coupon component; and local government involvement.

MFD Program Results

Impact

The SBER Program reported 5,663,991 *gross* kWh and 4,531,193 *net* kWh savings. The program also reported a *gross* annual demand reduction of 1002 kW, with a *net* reduction of 802 kW. Applying our realization rate of 94% results in 5,331,556 *gross* kWh and 4,249,245 *net* kWh savings, and 940 *gross* realized kW and 752 *net* kW savings.

Process

The MFD component developed in several stages. The first stage involved requesting that cities conduct outreach with property owners. RNA's MFD contractor followed up with these contacts, offering a no-cost energy audit to owners and/or property managers. The MFD program experienced some initial difficulties, largely due to staff turnover with the implementation contractor and, as such, faced challenges in identifying and reaching the owners/managers in participating cities. This limited participation until late in the year. By year-end, however, 251 properties had participated, with the largest number of sites in Torrance and Hawthorne, followed by Redondo Beach, Inglewood, and Gardena.

Early implementation problems also arose with quality control of assessments and installations, but later Program participants expressed fewer concerns in these areas. The implementation contractor, responding to a few early problems, utilized the project completion report that included a brief assessment of the customer's satisfaction with the on-site work, allowing for improved monitoring of Program installations. Program staff indicated that customer reports on these assessments were generally positive. Nonparticipating owners expressed concern with the quality and cost of the lighting measures, believing the cost to be above the retail market rate.

Coupon Program Results

Verification of Savings

Of the 6,717 coupons distributed through the cities, toll-free program call-ins, and at point of purchase, 40% were redeemed for an eligible energy efficient product. Redemption for air conditioning units was the largest source of electric savings for both energy (52%) and demand (78%), while redemption for a clothes washer was the largest source of gas energy savings (56.5%). Our analysis simply consisted of tallying the coupons by measure type and multiplying these totals by the measure-specific deemed savings. Total net program savings were 57,907 therms, 12,777 kWh, and 4.79 kW.

Process

Most of those who redeemed coupons found them at the retailer and used them primarily to purchase dishwashers and clothes washers. Half of those surveyed reported that they were considering an energy-efficient product when shopping, but the coupon provided an added incentive to purchase the ENERGY STAR product. In general, participants expressed high levels of satisfaction with the ease of use of the coupon and the level of the incentive.

Retailers were also positive regarding the Coupon program, citing its ease of use, simple reimbursement process and, in some cases, a positive effect on their sales of ENERGY STAR products. The coupon was less effective in cities with lower-income populations, where fewer of the retailers stock energy-efficient models due to the inability of the customers to afford the products. Still, as reported in the Program's Quarterly Reports, almost forty percent of coupon participants were from zip codes defined as "hard-toreach."

The Program also revised the CFL component. While the original goal was to distribute 8,000 CFLs through the Coupon program, retailers did not feel it was cost-effective for them to engage in the redemption process for such low cost items. Subsequently, for most of the Program funds remaining for the CFLs, were expended on supporting the cities in giving away the bulbs to support education at special events and through city offices. Many residents did not want to provide their utility account number required on the program forms, limiting final distribution to 3,449 CFLs.

Regional Delivery through Local Cities

Delivery through the cities aligned with the South Bay Cities Council of Governments (SBCCOG) was very successful overall and the cities involved have continued to work together, acting as a regional energy entity for an SCE program funded by the California Pubic Utilities Commission (CPUC) for 2004-2005. The regional aspect was an important factor in several cities' decision to participate, and the SBCCOG staff person facilitating the process was viewed as very supportive. Several key issues emerged across and between cities.

As noted earlier, the cities were first approached to enlist their commitment to the project, followed by efforts to customize outreach materials for their use. Several City staff reported that the program materials, and communication mechanisms chosen, were not as effective as they could have been with their city's diverse populations (i.e., neither provided effective and in-language, inculture materials, nor utilized the most effective information channels). Program funding levels, however, did not allow for delivery in multiple languages or for community specific approaches. In wealthier cities with less diversity, the Program was not seen as particularly of interest to citizens, although residents did participate, to some extent, in the free CFL component.

A few of the cities with experience in energy education reported that they would also have preferred more involvement in the design of the Program. Enrollment of all of the cities, however, did not occur until after the pilot phase, when much of the Program design was complete. All expressed some concern that more was required from them than initially perceived. Finally, better communication between Program implementers and cities was desired, especially with the MFD program.

Program staff acknowledged that the Program was essentially a pilot, intended to provide the opportunity to develop and test this multi-faceted approach to energy education and behavior. Thus, there was learning and response to challenges throughout, some of which involved asking cities to take on a greater role in some Program aspects than initially envisioned.

Overall, the Coupon program and bulb distribution components were viewed positively by most of the cities' staff interviewed.

Conclusions & Recommendations

Several overall conclusions can be drawn from this evaluation, including:

- The Program successfully brought cities without previous experience of working together on energy matters to participate as a team one that remains active as a regional energy entity.
- Program staff effectively piloted and implemented a point-ofpurchase coupon component, by identifying and recruiting retailers and developing redemption, verification, processing, payment, and reporting systems.
- From original pilot to revisions during implementation, both Program staff and participating cities exhibited flexibility in

response to changing program requirements and to challenges faced during implementation.

- The gas side of the Coupon program was very successful, requiring shifting of funds from the electric to the gas side. Even with this shift, however, the therms savings portion of the overall Program is small.
- The Program involved a diverse set of delivery methods marketing and media campaigns, free CFLs and educational materials, incentive coupons toward ENERGY STAR products, distribution through city governments and local retailers, and outreach to multifamily building owners – to reach its goals. And using all methods, the Program realized 94% of projected energy saving goals.

While the Program saw many successes, some implementation issues were identified, with many reflective of the pilot and start-up aspects of the Program, as well as its unique nature. Program staff expected a significant amount of learning to occur given the Program's innovative design.

Issue: While the collaborative, regional approach was successful, the participating city representatives expressed some concern about the "one program fits all" design. The participating cities differ in the ethnic diversity of their populations; some city representatives felt that the Program materials and information dissemination approaches could have been more effective with these populations. Some cities, which had prior experience with energy education programs, felt that an earlier opportunity for them to provide input could have informed the design process.

• *Recommendation:* Work with local cities in determining dissemination approaches best suited to the information channels most used by their unique populations. This may involve developing materials in multiple languages, strengthening ties with community organizations with strong records of outreach to various groups, and exploring how citizens in individual cities most effectively access information.

Issue: City representatives expressed some concern with the extent of participation required by their cities and the fact that the expectations of them seemed to increase over the life of the Program. They remained flexible, however, and were generally supportive of the effort and positive regarding the support given them by the SBCCOG Program staff person. Some desire was also expressed for additional communication about Program progress and outcomes, especially in the MFD component.

• *Recommendation:* Clarity about the roles and expectations of community governments should be gained before implementation or, if significant learning and change is expected, communication should emphasize this aspect. To ensure their ongoing support for Programs

of this kind, periodic feedback should be given regarding how their cities are performing, how they compare to others in the region, and the results of outreach efforts they have undertaken or assisted by sharing information on their cities.

• **Recommendation:** Future efforts of this kind should consider allocating a greater portion of the budget directly to participating cities to support their efforts (e.g., reimburse data or information gathering, outreach, staff time).

Issue: Although Program goals were, in fact, reached late in the Program, the MFD data indicate that there was some concern with the cost of the measures, quality of installations and measures, and the level of communication with participating cities about the extent to which the owners in their cities participated. Some of these issues were more significant in the early stages of the Program, improving after the first round of site visits. Program staff reported high levels of satisfaction among participants by Program end.

• **Recommendation**: Program measure costs should be reviewed. Consistent monitoring of assessments and installations should be undertaken from initial implantation and maintained throughout the Program. Cities participating and providing support for a MFD initiative should be included in communication regarding the extent to which owners/managers in their cities are benefiting from the effort. This will ensure that support is available in these cities for future energy efficiency efforts.

Program Description

The South Bay Cities *energyrewards*[™] Program (Program), funded by California ratepayers under the auspices of the California Public Utilities Commission (CPUC), is comprised of an energy efficiency outreach and marketing effort¹ with two major financial incentives:

- Coupon program for residential customers (Coupon),² which provides incentives toward eligible ENERGY STAR[®]-rated products, including gas furnaces and water heaters, clothes washers, dishwashers, ceiling fans, and programmable thermostats
- Lighting retrofit for Multi-Family Dwellings (MFD),³ which includes a variety of lighting measures for common areas

The Program is offered to residents through participating cities including: Carson, El Segundo, Gardena, Hawthorne, Hermosa Beach, Inglewood, Lawndale, Lomita, Manhattan Beach, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance.

Participating retailers honor coupons at the point of purchase. These may include coupons that customers have obtained through a local city office or obtained at the retail store. Owners of multi-family dwelling units can obtain a facility lighting audit from the Program's subcontractor and, if eligible and choose to participate, can receive incentives toward energy-efficient lighting measures.

Quantec was engaged to provide Evaluation, Measurement and Verification (EM&V) analysis, as required by the CPUC. There are two main components to the evaluation reported here: assessment of Program delivery (process evaluation) and assessment of Program impacts (impact evaluation).

¹ The Program also included a CFL give away in which community residents received one bulb free of charge and, in return, were asked to sign a "commitment card" citing changes they would commit to make to reduce their energy use. An evaluation of this component was not requested in the EM&V Request for Proposal and thus not included in this effort.

² Tenants are also eligible to use the Coupon as long as they pay their own utility bill, have their own unique account, and reside within one of the 15 participating cities.

³ The MFD program serves only the common areas of buildings, those generally billed under small commercial utility accounts. It is promoted as a business opportunity to owners of the buildings. No work is done within units occupied by tenants.

Evaluation Goals

The evaluation goals are:

- Verification of the number of measures installed and calculation of estimates of energy savings
- Assessment of the success in implementing the Program as designed
- Assessment of participants' satisfaction and the degree to which the programs influenced their purchases of energy-efficient products

Data Collection

Multiple data-collection efforts were used to assess Program delivery and Impacts.

Document Review & Discussions with Program Staff

We reviewed many documents related to the Program, including filings with the CPUC (Program Implementation Plans including original concept plan, final approved program and two amendments), as well as materials developed for Program delivery. While we did not conduct formal interviews with all Program actors, we did have in-depth discussions with Program staff and subcontractors about various aspects of delivery and data tracking.

Focus Group

One focus group and follow-up telephone interviews were conducted with a sample of representatives of the participating South Bay cities. Quantec staff designed the focus group discussion guide, but was prohibited from attending the October 26 event due to closure of the airport resulting from fires. We worked with the South Bay Cities Council of Governments' (SBCCOG) Program staff to familiarize them with a list of general feedback questions. In our absence, the staff conducted an informal session with the focus group attendees and prepared summary notes. Quantec staff then completed eight follow-up telephone interviews with city representatives – some who had and some who had not attended the discussion event - using the original focus group discussion guide. See Appendix A for a copy of the Focus Group Discussion Guide and the Community Representative Discussion Guide used for telephone follow-up.

Surveys

Retailers. Quantec conducted telephone interviews with the primary contacts for eight of the nine participating retailers. The response to the participant survey effort was enhanced by the Program Manager providing the retailers with a letter from Quantec outlining the purpose of the survey, asking for their

written commitment to participate when called, and asking them for contact information on the best person to complete the survey. While the August holiday period and the busy schedule of retailers made reaching each a challenge, with multiple attempts we completed surveys with all but one contact.

We also conducted telephone surveys with a sample of ten non-participating retailers. The random sample was selected from a list of eligible retailers in zip codes 90277 and 90278. After deleting participants from this list, we telephoned a sample of the remaining 34 retailers – all stores not approached by Program staff to participate – to complete ten surveys. Given that the non-participating retailers had not formally received information about the Program, the brief survey focused on their current sales and promotion of ENERGY STAR products and their interest in a program like *energyrewards*TM. The sample of non-participants included small, local retailers and big-box companies, such as Home Depot and Lowe's. See Appendix B for copy of Retailer Surveys.

Residents. Telephone surveys were also completed with a sample of residents participating in the Coupon program. These participants were chosen randomly from the Program database. Quantec staff first reviewed customer households in the database and collapsed multiple-coupon households so that each household had an equal chance of being sampled. The list was then randomized and survey respondents drawn from this list. We completed 56 residential customer participant surveys.

To select non-participating customers – defined as those who ordered a coupon but did not redeem it – we again used the Program database, which included only 14 customers in this category. We made multiple attempts to achieve completes on all of the surveys, but two refused and eight could not be reached after four or more attempts, leaving four completed surveys.

The original evaluation goal was to complete 30 surveys with participating and 30 with non-participating Coupon customers. Given the small population of non-participants, as we defined them, we were not able to achieve the survey goal for this customer group. Instead, we continued to survey participants to complete the total of 60 resident surveys. See Appendix C for copy of Resident Coupon Surveys.

Owners/managers. Quantec conducted 30 telephone surveys with owners/managers of MFDs who participated in the Program. The sample of participants was drawn from the Program database and a stratified, random sample drawn based on number of measures and size of facilities (i.e., to include a representative sample of small, medium, and large projects).

To identify non-participants, the Program subcontractor provided the names of owners/managers whom they had contacted about the Program, but who chose

not to participate. From this sample of 27 non-participating owners/managers, and after multiple attempts to reach all, we completed 12 telephone surveys. See Appendix D for copy of MFD Surveys.

	Number in Pool	Number of Completes
Coupon		
Participants	2,648	56
Non-participants	14	4
MFD		
Participants	251*	30
Non-participants	27	12
Retailers		
Participants	10	9
Non-participants	34	10

Table I.1: Survey Pool & Completes

One hundred of these participants came into the program during the last months and thus were not in eligible sample at the time of our final set of surveys.

Analysis

Narrative data from the focus group and community representative interviews were analyzed to identify emergent themes and commonalities and differences among cities. The same type of analysis was conducted on open-ended survey items. Descriptive statistics were prepared for survey data.

Impact Evaluation (Verification of Savings)

The critical values for estimating program impacts on energy usage have already been stipulated in the Program Implementation Plans. As a result, the verification of savings was limited to:

- *Coupon component*: a review of the original assumptions and calculations and applying the ex-ante savings for each measure to those shown in the tracking database to verify Program savings
- *MFD component*: a review of the original assumptions and calculations and making adjustments to Program realization rates based on measure installations verified through the on-site visits

MFD Site Visits

The final MFD database tracking report identifies 251 multi-family properties representing 11,696 units. Quantec conducted site visits at 30 properties (12% of the population), representing 1,469 units (13% of total). A random sample

was chosen, then reviewed to ensure representativeness of the population by number of units per property and geographic location (city).

	Sample Properties %		Population		
			Properties	%	
0-49 units	21	70%	175	70%	
50-99 units	6	20%	50	20%	
100+ units	3	10%	26	10%	
Total	30	100%	251	100%	

Table I.2: Sample Distribution by Size

Table I.3:	Sample	Distribution	by City
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	Sample		Population	
	Properties	%	Properties	%
Carson	0	0%	6	2%
El Segundo	0	0%	3	1%
Gardena	4	13%	28	11%
Hawthorne	14	47%	60	24%
Hermosa Beach	0	0%	6	2%
Inglewood	3	10%	34	14%
Lawndale	0	0%	8	3%
Lomita	1	3%	9	4%
Manhattan Beach	0	0%	2	1%
Palos Verdes Estates	0	0%	1	0%
Rancho Palos Verdes	3	10%	10	4%
Redondo Beach	2	7%	33	13%
Torrance	3	10%	51	20%
Total	30 100% 251		100%	

Site Visit Protocol

Eleven sites were visited during a round of site visits conducted from July 7-11, 2003; additional site visits were conducted during a subsequent round from December 4-12, 2003.⁴ Before the site visits were conducted, Quantec called each contact in the sample. Typically, the contact listed in the database

⁴ The first round of site visits, fairly early in Program implementation, was conducted to obtain early information on the installation process and to get feedback from participants with recent experience with the Program. The second round drew on the larger number of participants who came in later in the year when the MFD component was more fully developed and more marketing efforts had brought in a wider range of participants.

was for someone in the property management office, and Quantec would be referred to the on-site building manager.

Before going out into the field, Quantec obtained a spreadsheet of information from the implementation contractor for each site. The spreadsheet reported critical information for the sites, including the project name and address, location of the retrofits (by fixture type), number of measures, the pre-retrofit fixture, the post-retrofit fixture, and projected energy and demand savings by measure. These spreadsheets were used during the on-site verification inspection to facilitate locating and counting the fixtures.

Most of the installed energy efficiency lighting measures were located in common areas, but some were within individual units. For those retrofit measures inside tenant units, the site inspectors used a sampling approach to verify installation. Frequently, however, site inspectors were able to verify the fixture type and quantity for each and every reported retrofit at the site. The inspections were thorough and detailed, and the wattage and type of each reachable fixture were verified. Any discrepancy from the site spreadsheet was noted, and the results of each site visit were entered into a separate spreadsheet at the end of each day.

Analysis

The analysis consisted of verifying the installation of the measures and making changes to database entries as appropriate. Based on computed savings for the visited sites, realization rates were estimated and results extrapolated to the population. To provide context for the evaluation findings, Quantec reviewed the Program materials, including original filings and quarterly reports, and held discussions with Program staff. The following summary of the Program's design and implementation presents the results of these efforts.

The Program is unique in that it brought together multiple components – some of which were new to area citizens – to achieve projected goals. Specifically, the Program:

- Created a team among multiple cities that had not previously worked together on energy efficiency issues
- Recruited retailers and developed systems for processing, redemption, verification, and payment of point-of-purchase coupons (versus more common rebate approaches)
- Included multiple targets residents, retailers, multi-family dwelling owners to involve a broad range of citizens, including the hard-to-reach

According to staff, the goals of the Program were to combine energy efficiency education with modest financial incentives and a community-based infrastructure for delivery of this and future energy efficiency programs. Increasing consumer awareness and supporting behavior change at the local level was central to the original Program conception. Program components, such as the marketing materials, coupon, and energy education, all supported these goals.

The Pilot

During the Program development stage, and prior to funding by the CPUC, RNA contacted the South Bay cities to solicit interest. The city of Redondo Beach responded. The Program was not selected for funding, however, until April of 2002, and in the months following the expectation of the final contract award, RNA continued to solicit interest from cities, finalized a scope of work to include a pilot phase prior to full implementation, and in September 2002 negotiated with the SBCCOG to act as the local government sponsor for the project. Thus, the Program transitioned from the City of Redondo Beach as a local organizer to the SBCCOG. An Energy Coordinator was contracted, the office opened, and the Program's 800 number, managed by the RNA's contractor, ASW, was activated. And, as a result of continued outreach to cities, a few others agreed to work on the program (and this list grew further with full implementation to include all SBCCOG cities). The cities' representatives formed an advisory committee that began meeting in November.

Coupon Component

Initially, the Program designers envisioned the coupon as the "pull" to encourage residents to replace appliances and, specifically, to purchase and install at least two energy efficient measures – ENERGY STAR[®] products. Thus, the original measures envisioned for the program included not only the dishwashers, clothes washers, gas water heaters, gas space furnaces, window air conditioning unites, programmable thermostats, ceiling fans, multi-family HVAC split-package units, lighting CFLs, and multi-family common area lighting, but also *refrigerators, gas/electric clothes dryers, television/VCRs, computers and PC monitors, and drinking water coolers*.

The italicized list above, however, was deleted from the Program, as required by the CPUC during the April to August 2002 contract negotiation phase, and the requirement of two measures revised to allow purchase of only one eligible product with each coupon. A given customer could use more than one coupon but only one per product (with the exception of ceiling fans, where up to three coupons could be used).

Staff noted that the intent of the Program design was to have a customer incentive – the coupon – that would be easy to use and occur at time of purchase. The system would be also designed to support retailers in promoting the Program while providing adequate oversight to ensure that only eligible residential users could redeem the coupons and the one-coupon per product requirement was honored. The coupons were to be available to single- and multi-family owners and landlords on a first come-first served basis. Customers could request a coupon by calling the Program toll-free number (redemption required within 60 days), and receive the coupon by mail. Coupons could be redeemed for ceiling fans, dishwashers, and clothes washers.

During the first two months of the pilot – October and November 2002– only 24 calls were received and 12 coupons mailed. Only seven of the coupons were redeemed. As a result of this low response, the Program was quickly revised. From Oct thru Dec 2002, the pilot retailer effort was conducted at Expo Home Design in Redondo Beach where the Program tested the "Retailer Participation Agreement," the "Retailer Training Material" and worked out the system for coupon pick up and financial reimbursement. These tested procedures were necessary for the recruitment of the ten stores who came on board by late February 2003. In January 2003 the Program launched the point-of-purchase coupons.

Through this pilot, Program staff identified and resolved challenges in redeeming the coupon at the cash register, processing of payments to retailers,

tested participation of consumers, and revised the Program as necessary. In the pilot phase, Program staff were also able to identify the best possible retail candidates for participation, eliminating some of the larger stores, such as Costco and Sam's, with centralized billing and operations systems and/or irregular stocking of ENERGY STAR products. Program staff recruited additional retailers through personal visits and incorporated lessons learned from the pilot as they prepared for full implementation early in 2003.

During the pilot, RNA also:

- Began development of the procedures for the MFD component
- Designed web-site and began development of marketing materials, including the Community Toolkit

Program Implementation

Full implementation of the Program began in February of 2003. The Program included the Coupon redemption component for appliances, other home products, including CFLs, the MFD component for common area lighting, as well as an education component. The original Program design included CFLs as part of the Coupon component, but retailers, due to the low margins on these products, would not offer coupons for them. As a result, the CFL component was revised to be a part of the Program's goal to demonstrate household education commitment to energy efficiency practices. Working agreements with the additional retailers finalized, point-of-purchase coupons redesigned, and on-site promotional materials developed. Coordination with ENERGY STAR[®] was ongoing. The advisory committee continued to provide input regarding implementation and discuss unique needs of local communities.

Coupon Component

In 2003, Program staff developed a training manual for retailers, trained sales staff at each store, identified processes for verification and authorization for redemption, and monthly picked up completed coupon records for retailer reimbursement. A final list of eligible products and incentives was also developed (see Table II.1).

	Description	Savings			
ENERGY STAR-Qualified Products					
Ceiling fans	\$20 off coupon	Electricity			
Clothes washers	\$75 off coupon	Natural Gas			
Dishwashers	\$50 off coupon	Natural Gas			
Programmable thermostats	\$20 off coupon	Electricity			
Single family space gas furnaces	\$100 off coupon	Natural Gas			
Window AC	\$50 off coupon	Electricity			
Other Energy-Efficient Products	Other Energy-Efficient Products				
Single family efficient gas water heater	\$50 off coupon	Natural Gas			
Window tinting	50 cents off per square foot	Electricity			

Table II.1: Energy Rewards Program Products

Coupons were sent/delivered to the subcontractor, ASW, responsible for remittance and data tracking. ASW designed a database to enter data from each coupon, identified by a unique tracking number.

After a marketing and media campaign was underway, by April of 2003, it was apparent that coupon redemption had focused heavily on gas saving products (primarily appliances), depleting this portion of the Program budget. The CPUC, at the request of Rita Norton & Associates (RNA), approved a new budget. This new budget allowed shifting of funds from the Window Tint Energy Efficiency Measure program to the Administration Labor budget on the electric side, and concurrently decreased the administrative budget on the gas side by the same amount, in order to increase the budget for the Gas Coupon Incentives program by \$60,000. This transfer, based on the recognition that the Gas Coupon Program was more cost-effective and successful with customers when compared to the Window Tint Program, allowed the coupon program to continue through June 2003, and limited gas coupon participants to SCE customers. The Window Tinting measure was also deleted from the Coupon program. With the exhaustion of all permitted funding for this activity, the coupon program was then terminated.

The original PIP included CFLs, with a goal of distributing 8,000 CFLs, with a unit cost of \$2.00 per CFL. The retailers, however, would not participate in the CFL component, finding the Program requirements to extensive for such low-cost items (compared to a major appliance, for example). In June of 2003, the CPUC approved reducing the goal to 4,000 units. Approval of this funding change required that SCE account numbers be obtained before issuing a CFL to the customer. Under this reduced budget with account numbers required, RNA moved the CFL distribution to support the education component. Most cities gave away the bulbs at special events or made them available to residents on request at city offices. A total of 3,449 CFLs were distributed through the program.

Multi-Family Component

Program staff reported that, in the original design, the MFD component was envisioned as an effort that would target energy savings based on generic measures. In the third quarter of 2002, however, the CPUC required that these measures be identified specifically, and thus the lighting retrofit measures (common area lighting only) and HVAC were included and goals assigned to each. Staff did note that, with the effort required to get the coupon and CFL portions of the Program in the field, and the response in the first half of 2003 to these components, the MFD did not receive as much attention early in the year and was slower to gain momentum. Budget changes later in the Program eliminated HVAC measures, leaving common area lighting only. And staffing changes at the subcontractor in mid-summer of 2003 also contributed to the MFD's slow start.

The subcontractor was responsible for recruitment, audits, and scheduling of installation of measures. Cities were asked to host an event, "Breakfast with the Mayor," for building owners/managers. If interested, an owner could request an on-site audit and, if eligible and interested in participating, would inform the subcontractor, who would arrange for installation and inspection. In 2003, the MFD manual was developed, and the process refined to include an inspection of a random sample of participating buildings.

There was a large increase in participation at the very end of the year, and the MFD component met projected energy savings goals. The subcontractor also addressed some of the early problems with audits and installations, and Program staff report that later participants gave generally positive assessments (as measured on a Program Completion Report in which customers were asked to rate satisfaction with the installation contractor and subcontractor's Program Coordinator).

Role of Cities: Summary

The cities involvement began with each municipality adopting a City Council Resolution supporting the Program, supporting the SBCCOG as the lead sponsor, and r acknowledging their commitment to use city resources to assist in outreach, marketing and education to their residents. In the first phase, Program staff met with each city and reviewed options for active support. The cities responded in various ways, with some providing linkages to the Program web pages, putting program inserts in newsletters or bills, holding marketing breakfasts, and outreach to community groups through special events. The cities were most involved with the Coupon component and the household educational component which evolved to include the CFLs. The Program provided the cities with templates for promoting the free CFLs – most had the bulbs available either at City Office counters and/or gave the

bulbs away at community events – as well as the coupon component. .⁵ They provided information on multi-family building owners and managers and hosted outreach events. By training city staff, and in some cases that of local community-based organizations, and encouraging promotion of the Program components through a range of community events, Program designers hoped to ensure that even the hard-to-reach customers would benefit.

The cities continue to work together, acting as a regional energy entity for a CPUC-funded, Southern California Edison (SCE) program in 2004-2005. While their role was expanded throughout the life of the Program, it was the initial support and leadership of local government – with the goal of engendering trust among constituents, as well as ongoing promotion of the Program – that was seen by the Program designers as essential to delivery and success.

⁵ The free CFL component was accompanied by asking recipients to complete a "commitment card" on which they identified how they would commit to saving energy at home. They were also given a home energy survey. Evaluation of this education, and behavioral support, component of the Program was not included in this EM&V effort.

The regional approach, developing a team of cities through which the program would be promoted and delivered, was central to the Program design. Thus, the EM&V effort included a specific effort to explore the experiences of these cities.

As previously described, in September, Quantec had developed a discussion guide and prepared to complete the focus group on October 27 with a sample of representatives from the participating South Bay cities. Quantec staff, however, was not able to attend the scheduled focus group due to airport closures caused by the California wildfires. Quantec staff, instead, worked with SBCCOG Program staff on some general questions about the Program they could use to conduct a more general feedback session with the focus group attendees. These staff prepared a brief report of their discussion.

Quantec staff subsequently conducted telephone interviews with eight city representatives, using the focus group script to guide the interview. This allowed for a more directed exploration of the cities' experiences in implementing the Program. In addition, Quantec staff conducted an in-depth interview with the Program Coordinator who worked for the South Bay Cities Council of Governments.

Summary of Key Results

Community Factors

The South Bay cities differ in size, population demographics, and experience with energy efficiency programs. They range from a small, all residential (no retail) community of 2,000, to a community of 15,000, of which only onequarter of the total square footage is residential, to an ethnically diverse, largely residential community of 150,000. Where the responsibility for the Program was placed in each city's organizational structure also varied. Key staff leading the Program included a mayor, engineers in Public Works and Planning, management analysts, administrative assistants, and an environmental services administrator.

About half of the city representatives we contacted reported that their local government had not participated in any energy conservation programs in the past. Three mentioned having taken steps to reduce energy in their own government buildings and in equipment operated by the city (e.g., street lights, traffic signals), and another mentioned having conducted a citizen education campaign on reducing energy usage during the energy crisis. Two community contacts had either received a grant to conduct energy efficiency projects or incentives from a utility to implement measures.

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Program Process

Perceived Benefits. We asked the community contacts what interested the city about participating in this Program and what benefits they saw for their community. Three of the contacts mentioned that it was probably because everyone else in the South Bay was doing it and they did not want to be left out (or be viewed as not-supportive). Other Program components that interested the cities included:

- Outside consultants would handle the marketing and then "just tell [the cities] what to do."
- Program carried on promoting energy conservation when many people thought the energy crisis was over. Thus, as city programs decreased, the Program allowed their efforts to continue a bit longer.
- Collaborative nature in all of South Bay was appealing and, for small cities, a regionally based program was seen as beneficial.
- City could benefit by being seen as a resource by its citizens, and residents would also benefit.
- Reduced cost as a result of discount citizens would receive when purchasing major items was attractive, as were the major energy savings possible in multi-family buildings. Increased citizen awareness of energy efficiency was also a perceived benefit.
- Retailer component was seen as helping with economic development, in addition to the benefit the Program would bring to residents.

Marketing and Outreach. Almost all of the community contacts expressed appreciation for the marketing materials provided by the Program. Five of the eight interview respondents said they had linked the *energyrewards*TM website to their local website. One respondent noted that there was a special *energyrewards*TM ad on the city web page and another said that the link was located on the city's energy conservation page. Several also reported that anytime information on SBER was included in a newsletter or other notices, the website was always included.

Seven of the cities we contacted had used their community newsletter or magazine to publicize the Program. One community also did another press release to local newspapers, and another said that sometimes, instead of an article or notice in their newsletter, their city would include a flyer about the Program.

Five of the cities also included the SBER in special events, such as a Hometown Fair, Earth Day, Annual Street Fair, Public Works Week (for community) and Health & Rideshare Fair (for city employees). One respondent said they had also conducted special outreach to three larger employers in their community. Several of the respondents reported that, in using the public events as a venue to promote the Program, giving away the bulbs was a very successful tool, but the commitment cards were not.

Additional marketing efforts included:

- Flyers handed out at City Hall, senior centers, and other public spaces
- Public service announcements developed by one city and made available to others
- Bulbs made available at public counters
- Program announced at Council Meetings
- Program notice included in water bill
- Breakfast meeting for MFD component
- Mailing to all multi-family building owners

While a few respondents said they did attend the "Train the Trainer" program – and one said they had a few people from their neighborhood associations attend as well – none knew if any of these associations or other community organizations really promoted the Program.

We asked the city contacts to what degree multiple City departments had been involved in the marketing and delivery of the Program. While half of those interviewed said none but their office had been involved, the other four reported utilizing many departments to get information out about the Program. Examples of these departments included:

- Program materials were at every public counter, including Community Development, Building and Safety, City Clerk's office, Parks & Recreation, and Library
- Program materials "where people pay their bills," including Finance (water bills) and Public Works
- Primarily the administrative staff at front counter handed out bulbs and coupons, but also made sure the Planning Department had information available when people came to get permits
- Flyers available in City Hall Rotunda, at volunteer desk, and other city hall locations

None of those interviewed could gauge the community response to the marketing materials, but only to the products themselves. The exception was that one community had received feedback from multi-family property owners after audits were completed on their sites. Some of these owners were skeptical of the legitimacy of the rebate or felt the measures were too expensive.

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Program Support. Almost all of those we interviewed felt that the SBCCOG staff person working on SBER was very helpful in making sure that the cities had materials and responding promptly to questions or needs.

"She would work with other consultants, then keep us up to date. If we had questions, she was very easy to get in touch with and a definite 'go-to' person. She would drop off any promotional materials, with very quick turnaround after we called. Sometimes, if we had a last minute event, she would come within the same day."

One respondent, however, had ongoing issues with the implementation staff person, noting that they primarily communicated by e-mail. This respondent said their community had difficulty getting coupons and, even though the SBER staff had been notified that the respondent was the person really running the program, they continued to send everything to the Assistant City Manager, which then sometimes took weeks to get to the right person.

Challenges in Program Delivery. Challenges faced by the cities as they implemented the Program ranged from having enough staff time to address Program needs to getting citizens to participate. Examples respondents gave of challenges during implementation include:

- Timing was an issue for one community. By the time notices to the community were sent out, the Program no longer had coupons available. This community requires three months lead time to get materials approved.
- Others in the city (e.g., council members) were not as supportive as expected.
- Getting residents to participate was challenging in a more affluent community, where lighting aesthetics are perhaps more important then energy efficiency, and cost is not a factor.
- Hard to promote MFD when most owners or management firms are not locally based.
- Communication seemed to break down with the MFD portion of the Program. Consultant staff turnover was a cause to some degree, but in general there was little communication with cities about MFD effort.
- Having sufficient staff, especially when the SBER team kept asking for more activity than originally presented, presented a challenge to several cities. Meeting with community groups was too time consuming, and did not happen in many of the cities. The CFL program, especially, takes time at the counter.
- Working out the relationships between the contractors/consultants and the COG was challenging, "identifying who was working for whom."

• There were many successive versions of the materials, and this was quite confusing. One respondent said it would have been much better to have all of the materials at the beginning; another said it would have been better if each had been marked as "most recent."

Lessons Learned & Ideas for the Future

We asked a series of questions designed to elicit respondents' views about lessons learned and suggestions for future programs and for cities' that might consider participating in a program like SBER. Some "lessons learned" included:

 Program cannot be a one-size-fits-all approach. In one affluent community, there was not much interest and a "free bulb" approach. In another, with a large population of nonnative English

"There is a huge loss of potential because of the lack of multilingual outreach. In some parts of our community, 75% of the population are Hispanic and they are not getting the bulbs or the message about the energy savings."

"People are very 'connected' here, so if you reach the key people, they then go back and share. You need to assess the communication channels in a given community and target efforts there. The essence of the program is good. But the communication needs to be tailored to the community needs.

speakers, the materials were not useful and the Program does not use the channels that reach these cities to get the message out (e.g., homeowners associations, churches, bus shelters/kiosk, etc.) Another has almost no multi-family units, but saw their city as a "good candidate" for the Coupon program.

• More needs to be done to reach property owners, perhaps through special events or outreach efforts.

There were other concerns about the Program. Several of those interviewed and one discussion group attendee expressed dissatisfaction that so much of the Program's budget went to

More of the Program monies should be helping cities implement, do the education, involve non-English speaking populations. They asked more of us than we were led to believe and nothing came back.

consultants/contractors and to the SBCCOG. One respondent felt that much more could be done if a greater portion of the funds went to the cities to reimburse them for commitment of staff and time.

• More follow-up with cities is needed. Two respondents reported having provided the SBER staff and/or consultants with lists – one of community based organizations, one of MFD units – and hearing nothing back about whether follow-up or action was taken based on this information.

Another city contact, however, reported that community residents really liked the Program and wanted to see it expanded through church groups and other community-based organizations. One respondent noted that the coupon also

seemed to be more a more successful approach than a rebate as it is easier for retailers and more attractive to customers.

"The coupon actually works, especially when you have distributors like Home Depot. It's easy for customers to get there and easy to use the coupons."

Other suggestions for the Program included:

- Hold a kickoff event to bring vitality to the Program
- Use direct mail with a cut-out coupon to residents and not require tracking information such as the account number for each coupon
- Just give away the bulbs if only trying to get people to try them; do not require account numbers and other commitments
- Target or tie MFD component to Community Development or Sustainable Development efforts in cities
- Include refrigerators in the eligible measures
- Design and provide more poster-sized marketing materials for use at events, in lobby of city hall
- Provide at least three months lead time for advertising
- Ask for more input from the cities who will be implementing the program. One respondent noted that their community had tried a similar "commitment card" process during the energy crisis and it did not work. This input could have helped the SBER planning.
- Design measurable targets and define for cities participating what is expected from each program component. One respondent noted, "We were never really clear about the goals of the Program."

Summary

Only one-half the participating cities had participated directly in energy saving programs before *energyrewards*TM. On learning about this opportunity, benefits perceived included the regional, collaborative approach, increased energy awareness as well as savings on measures for citizens, and benefits to the cities in being seen as resources for their citizens on energy efficiency matters. Some cities also believed that little effort would be required on their part, beyond distributing information prepared by Program consultants/contractors.

A variety of marketing efforts were used by the cities, including flyers in newsletters, posted information at City Hall, libraries, and other community buildings, special events where Program information was included or a key component. While most of the cities found the marketing materials prepared by Program staff to be useful, the multiple drafts of each were confusing to City staff.

Most of the city representatives felt that the Coupon program component was successful, but, in general, it seemed as if the overall Program was not well designed before implementation began. The MFD portion of the program, specifically, seemed to suffer from a change in staff and both the Coupon and MFD components seemed to demand more from the Cities than they originally anticipated. The lack of materials and information dissemination approaches more tailored to the diversity evident in the cities was also viewed as limiting effectiveness.

Coupon Overview

The program distributed 6,717 coupons. Of these, 40% were redeemed during six months of implementation. As shown in Table IV.1, most (94%) of the 2,670 coupons redeemed were used for the purchase of a dishwasher or clothes washer. More than 75% of redeemed coupons were used at Pacific Sales or Sears Torrance (see Table IV.2).

Energy Efficiency Measure	Frequency	Percent
AC Unit	31	1.2%
Ceiling Fan	12	0.4%
Clothes Washer	1,027	38.5%
DHW Heater	81	3.0%
Dishwasher	1,508	56.5%
Dryer	2	0.1%
Lighting - CFL	1	0.0%
Programmable Thermostat.	8	0.3%
Total	2,670	100%

Table IV.1: Total Program Coupon Purchases

Table IV.2: Coup	ons Redeemed	by	Retailer
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Retailer	Frequency	Percent
Pacific Sales	1,434	53.7%
Sears Torrance	703	26.3%
Liberty Appliance	149	5.6%
Home Depot Hawthorne	147	5.5%
Genuine Maytag	108	4.0%
Expo Design	76	2.8%
Sears Carson	18	0.7%
Townsend Appliances	14	0.5%
Home Depot Inglewood	11	0.4%
Spears Appliance	10	0.4%
Total	2,670	100%

Process Results

Resident Surveys

Quantec conducted 56 surveys with participating csutomer and only four with non-participating customers. The purchasing patterns of surveyed participants reflected those of total Program participants, with 55% using their coupons to purchase dishwashers, followed by clothes washers (43%). Fewer purchased domestic hot water heaters (see Figure IV.1).

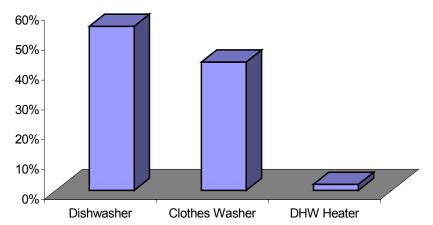


Figure IV.1: Participant Coupon Usage by Appliance

Data shown in Table IV.3 indicate that the majority of participants, 79%, said they learned of the Program through the retail salesperson; overall, 96% said they learned through some mechanism at the retailer (salesperson, display, or appliance sticker). Of the four non-participants surveyed, two learned through adds in the newspapers, one from a bill insert, and one from a flyer picked up at the local library.

Source	Participant		
Jource	Frequency	Percent	
Salesperson told me	44	79%	
Saw display/sign at the store	8	14%	
Saw sticker on the appliance	2	3%	
Ad in community newsletter	1	2%	
Ad in newspaper	1	2%	
Total	56	100%	

Reasons for Participation. While participants gave a variety of reasons for using the coupons (see Table IV.4), almost half said they would have purchased the appliance without the incentive but the coupon just "sweetened the deal." For almost one-third, the coupon made the purchase more affordable.

When asked what potential benefit they saw from the coupon, two of the nonparticipants surveyed mentioned that they were considering purchasing a fan and thought the coupon might help with the cost; one wanted to replace fans in a rental unit with efficient models, and one was hoping to take advantage of the Program to update household appliances. We then asked non-participants why they choose not to use the coupon: two reported that they decided not to purchase an appliance, one said that he tried to use it but the retailer did not know about the Program yet, and the remaining respondent failed to use the coupon before it expired.

Reason	Participant		
icason	Frequency	Percent	
Would have purchased anyway; this made it a better deal*	32	44%	
Made a more efficient model affordable	20	28%	
Coupon was easy and saved me money	18	25%	
Save on energy bills	2	3%	
Total	72**	100%	

Table IV.4: Reason Participant Utilized Coupon

Response was to open-ended question regarding reason for purchase. It was not given in response to a more common question specifically to measure freeridership, such as "would you have purchased the same level of efficiency in the absence of the coupon?" Thus, we cannot estimate freeridership from these responses.

** Multiple responses possible.

Coupon Use. The majority (93%) of respondents used the coupon to replace an existing appliance. We also asked the respondents if they used the new appliance differently than the one replaced. Nine said yes: four said they use the new appliance more frequently, and four saying they use it less frequently (e.g., new washer is larger allowing customer to do laundry less often). The remaining participant mentioned that the difference in design – old side-byside washer/dryer replaced by stackable front-loading units – accounted for change in how the appliance was used.

Satisfaction. Participants expressed high levels of satisfaction with all aspects of the Coupon program, including the retailer's delivery, ease of use, and the amount of the incentive (see Table IV.5). And, while almost two-thirds (63%) of participants said they had considered the purchase of an energy-efficient model of the product of interest before the Coupon program was in effect, 68% of participants said the coupon was "very important" or "somewhat important" in their ultimate purchase decision (see Table IV.6)

I	Very Satisfied		·]		Don't Know/ Don't Remember		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
Retailer's Explanation of Program	50	89%	2	4%	4	7%	56	100%
Ease of Coupon Use	48	86%	5	9%	3	5%	56	100%
Incentive Amount	50	90%	3	5%	3	5%	56	100%

Table IV.5: Participants' Satisfaction with Coupon Program Components

 Table IV.6: Importance of Coupon in Purchase Decision

 Participant

Rating	Participant		
	Frequency	Percent	
Very Important	14	25%	
Somewhat Important	24	43%	
Not very important	13	23%	
Not at all important	5	9%	
Total	56	100%	

When asked if they had made any other changes to household energy use since using the coupon, 15 (22%) of participants said "yes." The changes cited included having purchased other energy-efficient products (8) or generally reduced household energy consumption (6). When asked to rate the likelihood of purchasing energy-efficient products in the future, 87% percent of participants said it was "very likely," and the remaining 13% said they were "somewhat likely."

Thirteen participants provided additional comments about the Program. Of these, 4 (33%) were generally positive; 5 (42%) requested additional energy efficiency information on the products themselves; and 3 (25%) provided other types of comments. Examples of these comments included:

- "Although the coupon was not the reason we bought the appliance, it was still nice be rewarded for buying an energy-efficient product."
- "The incentive made the difference; it pulled me over."
- "Make the savings numbers more specific if possible; the yellow EnergyGuides are not very good."

Non-participants recommended extending the usage period for the coupon and ensuring that retailers are ready to go so coupon received could be used.

Retailer Surveys

The retailer experience of implementing the Coupon program also was a positive one, but a few concerns remained. The following is a summary of the interview findings and includes detailed responses from respondents regarding Program issues and concerns.

Reasons for Participation. All of the retailers reported that they felt enthusiastic when approached about participating in the Program, and only one retailer expressed concerns at all prior to participating. The lone retailer's anxiety centered on the timeliness of the coupon reimbursement process. The retailer noted having had difficulty in the past with being reimbursed quickly in similar programs and was hoping to avoid that experience with this program. This retailer said Program staff addressed the concerns and that any initial apprehension was unwarranted.

The most common reasons retailers gave for participating in the Program included:

- The Program's financial assistance greatly benefited the store's customers
- It served as a valuable marketing tool

One retailer stated that the Program's "third-party" position (i.e., that the program was run by a contractor associated with utility and not a manufacturer) was the primary reason his store participated.

Impact of Program Participation. The most common eligible appliance sold by participating retailers was the clothes washer, followed closely by dishwashers and distantly by ceiling fans, window air conditioning (AC) units, and programmable thermostats. *None of the retailers we spoke with reported carrying gas hot water heaters or furnaces*. To understand the true impact of the rebate program on store sales, we asked retailers a series of questions.

First, when asked how important they felt the incentive was in their customers' decision to purchase an ENERGY STAR[®] product, all the retailers responded either "very important" or "somewhat important" (7 and 2, respectively). Second, we asked the retailers to estimate the percentage of the participating customers that would have purchased the ENERGY STAR appliance in the absence of the Program (i.e., with no rebate). Responses ranged from 50% to 90%. The range was slightly narrower (60%-90%) for dishwashers than clothes washers, but as several retailers mentioned, this was probably a function of the fact that the price differential between ENERGY STAR and standard dishwashers is often significantly less than the same difference for clothes washers.

We also asked the retailers if the Program had an impact on their store's overall sales of each rebate eligible appliance during the Program. While many of the retailers were unable to estimate the impact, the four who could each said that their sales increased 10% for dishwashers and 5%-10% for clothes washers. When asked if the Program had contributed to increased sales of ENERGY STAR products since the promotion, one store noted a sustained increase in sales of 5% for both washers, while another noted a 3% sustained increase in sales of ceiling fans.

We asked the retailers additional questions related to the program's impact on sales practices. First, we asked if the Program had an effect on their knowledge of ENERGY STAR products and second, whether they had changed how often they promoted these products to customers. Their responses are summarized in Table IV.7. As shown, half of those responding said they had increased their knowledge somewhat and half promote ENERGY STAR products at least somewhat more often as a result of the Program.

Impact	Much more	Somewhat more	Only slightly more	No change	NR
Change in knowledge of ENERGY STAR products resulting from SBER	0	4	0	4	1
Change in promotion of ENERGY STAR products resulting from SBER	1	3	1	3	1

Table IV.7: Retailers Rating of Program Impact on Sales Practices

Promotional Materials. Retailers were also asked to rate the usefulness of various promotional materials provided by the Program. As evident in Table IV.8, the largest number of retailers rated the peel on/peel off stickers as "very useful." When asked why the felt this way, almost all retailers answered similarly: the stickers clearly identified the specific appliances and models that qualified for the Program rebate. Responding retailers added that clearly denoting which appliances were eligible not only made the retailer's job easier, but that customers tended to naturally gravitate toward the appliances with the Program sticker, intending to utilize the rebate to purchase a higher quality appliance.

Further, three retailers mentioned that their store conducted additional promotional activities to publicize the Program, ranging from putting up an

ENERGY STAR poster in the store and distributing literature, to promoting the Program on TV and in print. 6

Rating	Stand-Up Signs	Stickers	Brochure	
Very Useful	4	7	2	
Somewhat Useful	4	1	4	
Not very useful	0	0	1	
Don't know/ Did not use	1	1	2	
Most Useful	1	7		

Table IV.8: Retailers' Rating of Usefulness of SBER Promotional Material

Program Implementation. The retailers were also asked to rate the clarity of the information provided by Program staff, the amount of time required to administer the Program (primarily processing of coupons), and to compare the time and clarity of the Program to other similar efforts in which the retailers had participated. All but one of the retailers rated the information provided by Program staff as "very clear" or "somewhat clear." The one retailer who responded that the information was "not too clear" commented that there was not a well-established protocol for the Coupon reimbursement process and that his store's sales staff had been initially recording the rebates improperly. Although the store's billing staff identified the problem eventually, it was not before additional and unnecessary administrative burden had been generated.

Eight of the nine retailers had participated in similar programs. Those most commonly cited were offered by Southern California Edison, by the LA County Department of Water and Power, and by various manufacturers. Of the eight retailers surveyed, four rated the *energyrewards*TM information as either "much more clear" or "somewhat more clear" than previous programs in which they participated.

As shown in Table IV.9, the opinions of participating retailers differed about the time required to administer the Program. One respondent noted that regardless of the time it took to administer, it was worth it – "this is part of taking care of your customers."

⁶ Both respondents mentioning the use of TV and print ads to promote the program represented Sears stores.

	Time Need to Administer			
Rating	SBER	SBER Compared to Similar Programs		
Program Specific				
Not at all time consuming	2			
Not very time consuming	4			
Somewhat time consuming	2			
Very time consuming	1			
Comparison				
Much less time consuming		1		
Somewhat less time consuming		2		
About the same		2		
Somewhat more time consuming		3		
Not applicable		1		

Table IV.9: Retailers' Rating of Time Needed to Administer SBER

For those finding the Program somewhat more time consuming than others in which they had participated, the most common reasons included:

- Time required to call utility for customer account numbers
- The Program was a point-of-purchase rebate versus a mail-in, which required sales staff time

Regardless of their responses to these specific questions, most of the retailers commented that a direct comparison with other programs was difficult. These comments were often further followed with praise for the point-of-purchase rebate, with some respondents noting that it was much more effective at "making the sell" and therefore worth the extra time required to administer it.

We asked the retailers to estimate the percentage of coupons by type – pointof-purchase versus those brought to store by customers – that they processed during the Program. Only five of the retailers dealt with both types. Of the five who did, all felt that, from an administrative perspective, there was no difference in handling the two types of coupons.

Satisfaction. Retailers were also asked to rate the ease of submitting the coupons and all rated the process as "*very easy*." Several retailers noted their appreciation of the personal pickup of the coupons by Program staff, citing it as an opportunity to ask questions or clarify issues regarding the Program.

Retailers also rated the promptness of coupon payment. As shown in Table IV.10, half felt that the process was done in a "*very prompt*" manner, with one of these retailers noting that it was the "best program we have ever done." For the remaining four, who felt the process was less prompt, two noted that they had some coupons outstanding as far back as March, although

they had received some of the more recent payments. One described the process as "spotty." At least one person felt very strongly that, in spite of his continued efforts to work out the payment issues, his requests were "blown off."

Rating	Participating Retailers
Very prompt	4
Somewhat prompt	2
Not very prompt	2
Don't know/ don't remember	1

In rating the helpfulness of Program staff in resolving coupon issues, eight of the retailers rated them as "*very helpful*" or "*somewhat helpful*."

Overall Program View. Finally, participating retailers were asked if they had any recommendations for modifying or improving the Program. The following three recommendations were provided:

- Put the Program's entire coupon reimbursement process online so that retailers are able to check the status of their reimbursements
- Develop a clearer, more established protocol for the payment process
- Set up a direct phone line for accessing customer account numbers to speed up the rebate process for the retailers

Generally, the retailers embraced the Program – viewing it as both a valuable service they were able to provide for their customers and an effective method of generating sales – though a few retailers had concerns with the coupon reimbursement process.

Non-Participating Retailer Survey

To explore the stocking of ENERGY STAR products, Quantec first asked non-participants to estimate the percentage of their total sales of Programeligible products that were ENERGY STAR products. For dishwashers and clothes washers (the most common rebate eligible products stocked by the non-participating retailers), the responses ranged widely from 5% to 90%. There was no correlation between business type and the percentage of ENERGY STAR washers sold. Some local stores carried a high percentage of ENERGY STAR products, whereas some sold or stocked none. In each case, the retailers cited the financial status and desires of customers as the most important factor in its decision to carry (or not carry) a high percentage of ENERGY STAR-rated products. The large big-box retailers also tailored their stocking practices to their customer base. For example, one Home Depot reported that 90% of its sales for both dishwashers and clothes washers were ENERGY STAR, while another Home Depot reported approximately 30% for each. The latter cited low-income customers and cost minimizing contractors as the primary factors leading to the low ENERGY STAR sales. The range for other Programeligible products were as follows:

- Ceiling Fans: 20%-40% (two responses, one unsure)
- Window Air Conditioning Unit: 0%-60% (four responses, four unsure)
- Thermostat: 25%-40% (two responses, one unsure)

When asked to rate how often they promote ENERGY STAR products to their customers, seven of the retailers responded that they "*always*" or "*almost always*" promote these products and had used special promotions to do so. The most commonly cited promotions included placing ENERGY STAR materials, such as posters and/or literature around the store. For those not promoting ENERGY STAR products, two noted that they do not because their customers cannot afford them.

Several of these retailers mentioned that part of their sales practice is to push customers to "upgrade" to a more expensive model and in many cases, the more expensive model happens to be ENERGY STAR. Therefore, ENERGY STAR products were being promoted but not, perhaps, for energy efficiency reasons. In other cases, retailers actively promoted ENERGY STAR out of a desire for the customer to understand the value of energy efficiency. These retailers mentioned discussing life cycle and operating costs with customers to help them better understand the benefits of an ENERGY STAR-rated product.

Eight of the non-participating retailers surveyed reported that they have participated in rebate or other energy efficiency programs that supported ENERGY STAR products. The most commonly mentioned programs included efforts by Southern California Edison, Los Angeles County Department of Water and Power (an active rebate program), City of Santa Monica, and programs offered through manufacturers. As indicated in Table IV.11, five of the respondents said that their participation in these programs had influenced their stocking and sales practices "*a great deal*" or "*somewhat*."

Rating	Non-Participating Retailers		
A great deal	2		
Somewhat	3		
Not at all	3		
Not applicable	2		
Total	10		

 Table IV.11: Non-Participating Retailer Rating of Impact of Other

 Programs on Stocking and Sales of ENERGY STAR Products

Finally, we described the *energyrewards*TM Program and asked the retailers to rate their interest in participating if such a program were offered in the future. Seven of the retailers said that were "*very interested*" (6) or "*somewhat interested*" (1), while the remaining three said they would need more information. Overall, the retailers were very responsive to the idea of the Program and wished to be contacted in the future for possible participation.

Summary of Survey Results

While many of the recipients of coupons did not redeem them, those who did said they initially learned about the Program at the point of purchase, either from a salesperson or promotional material on site. More than half said they were considering an energy efficient product when shopping, usually to replace an existing appliance, but the coupon provided an extra incentive. Participants felt that the Program was easy to use, and the majority said that they planned to purchase energy-efficient products in the future.

While the sample sizes in this evaluation are small, the data from retailers indicate that those participating in the Program were quite satisfied and felt that, overall, it was easy to administer, provided a valuable service to their customers, and for some, increased their sales of ENERGY STAR products, both during and following the promotion. Retailers particularly appreciated the point-of-purchase rebate approach, as well as the responsiveness of Program staff to the coupon payment issues that arose.

For non-participating retailers, responses indicate that for some – those serving primarily low-income customers - even the coupon incentive is not sufficient for them to promote ENERGY STAR products. For the remainder, however, many already promote these products and expressed interest in a program like *energyrewards*TM that might further expand their sales of these products.

Involving the Hard-to-Reach

One of the goals of the Program was to make effort to serve hard-to-reach (HTR) customers. While Program funding did not allow for targeted outreach to unique zip codes defined as HTR by the participating utilities, 38%⁷ of coupon participants represented these HTR codes.

Verification of Savings

Quantec used the Program tracking database to determine how many coupons had been distributed and redeemed for each eligible measure. The per-unit savings as mandated in the Program Implementation Plan (PIP) were then used to calculate the gas and electric energy and demand savings by measure. A net-to-gross ratio of 0.80 was applied to both the gross gas and electric savings achieved by the Program to determine the net savings presented in Table IV.12.

Table IV.12: Net Gas and Electric Savings by Measure for Coupon	
Redemption	

	Gas Savings		Electric Savings			
Energy Efficiency Measure	Therms	Percent of Total	kWh	Percent of Total	kW	Percent of Total
Dishwasher	25,214	44%				
Clothes Washer	30,810	53%				
DHW Heater	1,883	3%				
AC Unit			6,696	52%	3.72	78%
Ceiling Fan			2,275	18%	1.04	22%
Prog. Tstat.			3,750	29%		0%
Dryer						
Lighting - CFL			55	0%	0.04	1%
Total	<i>57,907</i>	100%	12,777	100%	4.79	100%

⁷ Energy Rewards, 2nd, 3rd, & 4th Quarter 2003, Quarterly Reports. <u>http://www.energyrewards.org/reports.php</u>

Profile

A total of 251 projects were completed in the MFD Program. As shown in Table I.3 (page I-5), the cities of Torrance and Hawthorne had the greatest number of properties in the program, followed by Inglewood, Gardena, and Redondo Beach.

Process

Program Awareness & Decision to Participate

As shown in Table V.1, around one-fifth of MFD owners/managers learned about the Program through a flyer or local paper, and the same percentage of participants said they learned through an SBER seminar sponsored by their city. Non-participants were somewhat less sure about how they learned of the Program.

Source	Partic	ipants	Non-Participants		
Source	Frequency	Percent	Frequency	Percent	
Local paper/flyer	7	22%	2	17%	
City Hall Meeting	6	19%			
Word of Mouth	3	9%			
Local Government	3	9%			
Local Lighting Contractor	3	9%	1	8%	
Program Manager	2	6%			
SBER Energy Seminar	2	6%	2	17%	
Apartment Association Meeting	1	3%			
Building Owner	1	3%			
Phone call (unknown source)			1	8%	
Received program information in the mail			2	17%	
Not sure	4	13%	4	33%	
Total	32	100%	12	100%	

Table V.1: Source(s) by Which MFD Customer Learned of Program

Multiple Responses Provided

Figure V. 1 shows the importance ratings that MFD respondents gave when asked how important each was in their decision to participant. As shown, more than 80% of respondents said that each was very important in their decision. When asked which of these was most important in their decision, 30% said *"a combination,"* 30% said *"level of incentive,"* and 30% cited

"potential energy savings." The remainder mentioned the opportunity to upgrade lighting equipment, the payment structure, and the assessment.

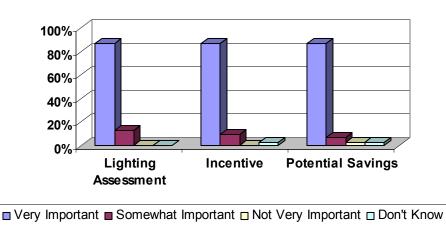


Figure V.1: Importance of Component in Decision to Participate in MFD Program

For non-participants, the most common benefit perceived when first learning about the Program was the opportunity save energy and lower energy costs (78%). Other potential benefits seen included aiding their maintenance process, lowering tenant costs, and the payment system offered by the Program.

Ten of the 12 non-participants we surveyed received an audit but subsequently chose not to participate in the Program. The reasons cited for non-participation were varied (as shown in Table V.2) and were split between those having to do with the building or business decision and those related to the Program structure.

At least four of the responses concerned the high price of the measures as offered in the Program. Examples included:

- "I thought that the prices charged by the sub-contractors were ridiculous. The same items could be bought at Home Depot for significantly less and installed at lower rates. The cost was not necessarily just the bulbs, but all of the other materials required as part of the Program."
- "I understood that the price of the bulb with the incentive was \$5 (down from a list price of \$9) and that's not any cheaper than I can get them myself at Home Depot without the benefit of the Program."

Two others noted that they had some early projects in the Program, but felt that the quality of the installations was declining, so for later projects decided not to participate.

Reason	Frequency	Percent
Incentives were not large enough	2	20%
Declining quality of work at other participating sites	1	10%
Did not want to outlay any cash for the project	1	10%
Energy savings were not enough to justify the investment	1	10%
Installed measures independently	1	10%
Owner would not authorize participation	1	10%
Prices charged by contractors were too high	1	10%
Timing was bad	1	10%
Already have efficient lighting	1	10%
Total	10	100%

Table V.2: MFD Non-participants' Reason for Not Participating

Satisfaction

We asked participants a series of questions about their experience with the Program, including whether any problems occurred and their satisfaction with aspects of Program delivery. Eight (22%) of participants said they encountered some problem during the lighting installation. Problems cited are shown in Table V.3, with incorrectly located installations or measure failures most often cited.

Table V.3: Problems Encountered During Installation

Problem	MFD Participants			
Гтобен	Frequency	Percent		
Inaccurate Installations (wrong locations)	3	38%		
Measure Failure	2	25%		
Disliked/Distrusted Contractors	1	13%		
Tardiness	1	13%		
Installation Process Took Too Long	1	13%		
Total	8	100%		

Even with a few problems reported, most participants reported fairly high levels of satisfaction with the Program components, with satisfaction highest for the auditor's performance, and somewhat less with the level of the incentive offered. (See Figure V.2).

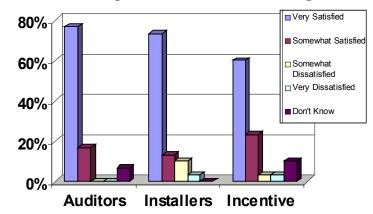


Figure V.2: MFD Participants' Satisfaction with Program Components

Program Influence on Installation

When asked if they had considered installing all or some of the measures before this Program was offered, six (20%) said the had considered installing "all" of the measures, and nine (30%) said they had considered "some." Measures considered prior to the Program are shown in Table V.4. Forty-three percent of participants who had considered some or all of the measures prior to the Program said they were "likely" or "somewhat likely" to have installed these measures within the next two years; 27% said it was "very unlikely" they would have installed the measures in this time frame.

Measures	MFD Participants			
wicasures	Frequency	Percent		
Common Areas	5	29%		
Garage	5 29			
General Lighting	2	12%		
Exterior	2	12%		
Entrance	1	6%		
Resident Bathrooms	1	6%		
Stairwells	1 6			
Total	17* 100%			

Table V.4: Measures Considered Before Program

Multiple Responses Provided

Six of the MFD participants reported having installed additional lighting measures, for which they did not receive an incentive, as a result of their Program participation. Of these, three had added additional lighting in individual units, two had installed additional lighting for safety purposes, and two had installed additional exterior lighting measures.

Program Improvement

In a final question for MFD participants, we asked how the Program might be improved, and for non-participants, what program changes might increase the likelihood of their participation. Summarized responses from both groups are shown in Table V.5.

Recommended Change	Participants	Non-Participants
More explanation of Program details	2	
Expand Program service area	2	1
Improve lighting (actual light output, more aesthetic options, better general quality)	3	
Lower prices of measures/materials/labor	1	3
More accurate assessments of savings	1	
Improve contractors (monitoring, hiring better quality)	2	1
Larger incentive		1
Eliminate upfront cash outlay		1
Total	11	7

Table V.5: Recommendations for MFD Program Improvement

Involving the Hard-to-Reach

As with the Coupon component, the Program goals included serving HTR customers in multi-family dwellings. While not specifically targeting MFD units in HTR zip codes, the Program was very successful in reaching these areas, with around 80% of participating MFD sites representing HTR zip codes.⁸

Impacts

Energy and Demand Savings Calculations

Most of the energy and demand impact components were stipulated in the Program Implementation Plan (PIP). Those components included wattage reduction and hours of use. This evaluation includes the verification of installation rates and associated savings, as well as an assessment of the corresponding realization rates and total Program-induced savings.

Methodology. The PIP was used to determine the demand reduction and annual energy savings per unit for each reported measure at the sampled sites. Quantec calculated the projected savings for each measure using the reported

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⁸ Ibid.

quantities and associated energy and demand values from the PIP. Likewise, the verified savings were calculated for each measure using the observed quantities and the associated energy and demand values from the PIP.⁹ For purposes of the savings calculations, any site that had a measure with more verified retrofits than projected was given a 100% realization rate for that measure. Quantec did not, however, explore the possible reasons for these additional savings and cannot assign it to Program spillover.¹⁰

Quantec calculated measure realization rates for both energy and demand. The realization rate for each measure was then applied to the projected Program savings to generate the actual Program-realized energy and demand savings. In addition, the Program mandated that a net-to-gross ratio (NTG) of 0.8 be applied to the calculated savings. Consequently, Quantec calculated both the gross and net Program-realized savings by measure.

Results. The SBER program had a total of 251 participants who had a variety of lighting measures installed. The list of those measures and the number of installations are provided in Table IV.6 below. The number of measures found in the sample of 30 sites is also provided. As may be seen in the table, the distribution of the measures in the sample is reasonably close to that of the overall population.

Measure	Sample Size (n=30)	Percent of Total	Population (n=251)	Percent of Total
Compact fluorescent lamps	2,250	66.3%	15,039	70.4%
4' T-12 fixtures replaced by 4' T-8 fixtures	701	20.7%	3,370	15.8%
8' T-12 fixtures replaced by 4' T-8 fixtures	260	7.7%	1,846	8.6%
LED Exit Signs	156	4.6%	646	3.0%
HPS or MH replacements	16	0.5%	293	1.4%
Other*	10	0.3%	162	0.8%
Total	3,393	100.0	21,356	100.0

Table V.6: Distribution of Installed Measures in Site Visits and Population

"Other" represents a very small portion of the total projected energy savings (less than ½ of 1%) in the Program. This measure includes: 2' T-8 lamps with ballast, 3' T-8 lamps with ballast, and 6' T-8 lamps with ballast.

For most of the measures at most of the sites, Quantec found a very high rate of consistency between reported installations (Program database) and those

⁹ The wattage for some of the installed CFLs differed from what was reported. In these cases, the savings were calculated by hand using the wattage of the baseline measure (from the associated measure code) and the wattage from the actual installed measure.

¹⁰ A list of these sites and measures can be found in Appendix E.

verified during site visits. Correspondingly, most of the measures at the visited sites realized a high percentage of their projected energy and demand savings.

During the first round of site visits, however, large discrepancies between reported and actual fixture installations were found at two sites. One of the sites, a senior residence home, was so highly disorganized that the inspector could not be absolutely certain as to whether the discrepancies were due to incorrect installations or to the disorganization. The inspector was also not able to look at the individual lighting in the rooms, and the building manager had to fax the lighting counts to Quantec after the inspection.

The other site was an apartment building that had had all but one of the walkway CFL bulbs stolen. In addition, there was considerable uncertainty as to which of the exterior security lights had been installed by the contractor and which by the building manager. For these reasons, these two sites were removed from the analysis.

The tables below show the energy and demand realization rates by measure for the remaining sites. Both the gross and net savings, as well as their corresponding realization rates, are shown for each measure.

Measure	Gross Savings (kWh)		Net Savings (kWh)		Realization
incusure	Reported	Verified	Reported	Verified	Rate
Compact fluorescent lamps	393,042	363,632	314,433	290,906	93%
4' T-12 fixtures replaced by 4' T-8 fixtures	103,844	101,988	83,075	81,590	98%
8' T-12 fixtures replaced by 4' T-8 fixtures	72,471	71,073	57,977	56,858	98%
LED Exit Signs	28,849	26,749	23,079	21,399	93%
HPS or MH replacements	6,526	6,526	5,221	5,221	100%
Other	985	985	788	788	100%
Total	605,716	570,953	484,573	456,762	9 4%

Table V.7: Verification of Energy Savings by Measure – Site Visits

 Table V.8: Verification of Demand Reduction by Measure – Site Visits

Measure	Gross Reduction (kWh)		Net Reduction (kWh)		Realization
incusure	Reported	Verified	Reported	Verified	Rate
Compact fluorescent lamps	69.4	64.2	55.6	51.4	93%
4' T-12 fixtures replaced by 4' T-8 fixtures	18.3	18.0	14.7	14.4	98%
8' T-12 fixtures replaced by 4' T-8 fixtures	12.8	12.6	10.2	10.0	98%
LED Exit Signs	5.1	4.7	4.1	3.8	93%
HPS or MH replacements	1.2	1.2	0.9	0.9	100%
Other	0.2	0.2	0.1	0.1	100%
Total	107.0	100.9	85.6	80.7	94%

Realization rates by measure type were used to extrapolate the results to the rest of the population.

For the CFLs, site visits revealed three key types of discrepancies: fewer fixtures found than recorded by the contractor; partial installation by the contractor with remaining CFLs provided "loose" to the participant; and removal of CFLs due to burn out, dissatisfaction, or theft. Since CFL conversions account for more than three-quarters (76%) of the reported Program energy and demand savings, they had a very large impact on the overall realization rate for all measures.

Tables V.9 and V.10 below provide the goals and the realized energy and demand savings for the SBER Program. The realized energy savings (4,249,245 kWh) for all measures was 94% of the reported net savings (4,531,193 kWh). Likewise, the realized demand reduction (752 kW) for all measures was 94% of the reported net demand reduction (802 kW).

Table V.9: Total Program Energy Savings Adjusted by Verified MeasureEnergy Savings Realization Rate

Measure	Gross Sav	ings (kWh)	Net Savings (kWh)	
	Reported	Realized	Reported	Realized
Compact fluorescent lamps	4,344,118	4,019,069	3,475,294	3,215,255
4' T-12 fixtures replaced by 4' T-8 fixtures	521,744	512,417	417,396	409,934
8' T-12 fixtures replaced by 4' T-8 fixtures	419,021	410,938	335,217	328,750
LED Exit Signs	137,051	127,076	109,641	101,660
HPS or MH replacements	218,771	218,771	175,017	175,017
Other*	23,285	23,285	18,628	18,628
Total	5,663,991	5,311,556	4,531,193	4,249,245

 Table V.10: Total Program Demand Reduction Adjusted by Verified

 Measure Demand Reduction Realization Rate

Measure	Gross Redu	iction (kWh)	Net Reduction (kWh)	
wicdSuit	Reported	Realized	Reported	Realized
Compact fluorescent lamps	768	710	614	568
4' T-12 fixtures replaced by 4' T-8 fixtures	92	91	74	72
8' T-12 fixtures replaced by 4' T-8 fixtures	74	73	59	58
LED Exit Signs	24	22	19	18
HPS or MH replacements	40	40	32	32
Other	4	4	3	3
Total	1,002	940	802	752

The South Bay cities participating in *energyrewards*[™] program perceived benefit from the regional, collaborative approach, as well as potential to increase energy awareness and provide cost savings for their citizens. Some of the city representatives, however, expressed concern that the expectation of level of effort on their part was not clearly represented and that the expectation increased over time. However, most made significant efforts, including using local media, flyers in community newsletters, City Council meetings, and special events to support the coupon program and CFL/commitment card components, and hosted seminars for MFD owners as well as providing information on this sector to the implementation contractor.

Most of the city representatives interviewed felt that the Coupon program component was successful but had concerns that it was not sufficiently conceptualized before implementation. This created confusion, for example, in marketing materials, reaching out to MFD sector, and, in some cases, delays in Program start that resulted in no bulbs being available after marketing effort had occurred. In addition, even though Program funding was not available to do so, some of the cities would have preferred that the Program materials and approaches had been better tailored to their unique community demographics and/or delivered through the information channels most effective in their community.

Of those residents using the coupon for purchase of an ENERGY STAR[®] appliance, most received the coupon at the time of purchase, learned about it from either a sales person or promotional material on site, and more than half said they were considering an energy-efficient product when they began shopping. Most felt the Program was easy to use and added an extra incentive for purchasing an energy-efficient model.

Retailers also found the Program easy to administer and especially appreciated the point-of-purchase materials. Several retailers reported that the Program allowed them to provide a valuable service to customers and that Program support made coupon reimbursement simple. Non-participating retailers, however, appeared to serve more low-income consumers, for whom the energy-efficient products, even with an incentive, are not affordable. Thus, they stock fewer of these products. Still, some expressed an interest in a program of this type.

The MFD component experienced difficulty early in implementation, with the departure of the implementation contractor's staff person who had initiated the effort. After a lag period following this departure, the Program began to move forward, but did not reach many of the eligible owners until the last months of the year. Most participants expressed satisfaction with the Program, including the assessment, the incentive, and the measures. City representatives,

however, felt that communication about this part of the Program was not effective. The results of their efforts to bring in participants were never reported to them and few knew to what extent their cities had benefited from the MFD program. Non-participants expressed concerns with the quality of the assessment, the contractors, and the cost of the measures.

Both programs achieved some success in serving HTR customers, with the majority of MFD sites located in designated HTR zip codes.

For the MFD component, the SBER Program reported 5,663,991 gross kWh and 4,531,193 *net* kWh savings. The program also reported a gross annual demand reduction of 1002 kW, with a *net* reduction of 802 kW. Applying our realization rate of 94% results in 5,331,556 gross kWh and 4,249,245 *net* kWh savings, and 940 gross realized kW and 752 *net* kW savings.

For the coupon component, total net program savings were 57,907 therms, 12,777 kWh, and 4.79 kW.

Several overall conclusions can be drawn from this evaluation of the *energyrewards*TM program, including:

- The Program was an innovative approach to encouraging energyefficient actions, drawing on marketing, education, and different types of incentives, delivered with strong assistance from local governments, and involving homeowners, tenants, multi-family owners/landlords, retailers, and contractors.
- The multi-stage process, including a pilot followed by full implementation, was successful, allowing Program staff to address many issues, particularly in the coupon redemption process, during implementation in all of the cities.
- The Program successfully brought cities without previous experience of working together on energy matters to participate as a team one that remains active as a regional energy entity.
- Program staff effectively piloted and implemented a point-ofpurchase coupon component by identifying and recruiting retailers and developing redemption, verification, processing, payment, and reporting systems.
- Piloted in 2002 with one retailer, the Program began full implementation in January 2003. From original design to revisions during implementation, both Program staff and participating cities exhibited flexibility in response to changing Program requirements and to challenges faced during implementation.
- The gas side of the Coupon program was very successful, requiring shifting of funds from the electric to the gas side. Even with this shift, however, the therms savings portion of the overall Program is small.

• The Program involved a diverse set of delivery methods – marketing and media campaigns, free CFLs and educational materials, incentive coupons toward ENERGY STAR products, distribution through city governments and local retailers, and outreach to multifamily building owners – to reach its goals. And using all methods, the Program realized 94% of projected energy saving goals.

While the Program saw many successes, some implementation issues were identified, with many reflective of the pilot and start-up aspects of the Program, as well as its unique nature. Program staff expected a significant amount of learning to occur given the Program's innovative design.

Issue: While the collaborative, regional approach was successful, the participating city representatives expressed some dissatisfaction with the "one-program fits all" design. The participating cities differ in the ethnic diversity of their populations. Some city representatives felt that the Program materials and information dissemination approaches were not as effective as they could have been with these populations. Others had some experience with energy education programs and felt that their input earlier could have informed the design process to a greater degree.

• **Recommendation:** Work with local cities in determining dissemination approaches best suited to the information channels most used by their unique populations. At a minimum, this may involve developing materials in multiple languages, strengthening ties with community organizations with strong records of outreach to various groups, and exploring how citizens in individual cities most effectively access information.

Issue: Some city representatives expressed dissatisfaction with the extent of participation required by their cities and the fact that the expectations of them seemed to increase over the life of the Program. They remained flexible, however, and were generally supportive of the effort and positive regarding the support given them by the SBCCOG Program staff person. Some concern was expressed about the lack of communication about Program progress and outcomes, especially in the MFD component. While this may be common in pilot programs, it still concerned city representatives.

- **Recommendation:** Clarity about the roles and expectations of community governments should be gained before implementation or, if significant learning and change is expected, communication should emphasize this aspect. To ensure their ongoing support for Programs of this kind, periodic feedback should be given regarding how their cities are performing, how they compare to others in the region, and the results of outreach efforts they have undertaken or assisted by sharing information on their cities.
- *Recommendation:* As the support and flexibility required from the cities did increase during program implementation, efforts of this

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kind should consider allocating a greater portion of the budget directly to participating cities to support their efforts (e.g., reimburse staff time, data or information gathering, outreach).

Issue: The MFD data indicate that, while reaching goals late in the Program, there was some concern with the cost of the measures (perceptions of higher than market cost), quality of installations and measures, and a lack of communication with participating cities about the extent to which the owners in their cities participated. Some of these issues were more significant in the early stages of the Program, improving following the first round of site visits. Program staff reported high levels of satisfaction among participants by Program end.

• **Recommendation**: Program measure costs should be reviewed. Consistent monitoring of assessments and installations should be undertaken from initial implantation and maintained throughout the Program. Cities participating and providing support for a MFD initiative should be included in communication regarding the extent to which owners/managers in their cities are benefiting from the effort. This will ensure that support is available in these cities for future energy efficiency efforts.

Appendix A. Focus Group Discussion Guide

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Focus Group Script South Bay Energy Rewards: Local Govt. Partners

I. Introduction (5 minutes)

Thank you all for coming to the group. My name is ______. I will be the facilitator for today's discussion. My job is to present the topics and help keep the discussion flowing, and to make sure we understand what you are telling us.

Have any of you participated in a focus group before?

Before we get started, I'd like to go over a few ground rules. (also, at this point, inform participants if there are "observers.")

- SBER will hold what goes on in this group in confidence. We are recording the session and will transcribe your comments, but what you say here will not be made public. Views expressed are reported in the aggregate.
- We are looking for your frank and open responses to what we present. We are just doing this research for SBER, so if you have strong feelings one way or another, please feel free to express them.
- Don't feel you have to talk just to me. We'd like this to be a group discussion, so feel free to share your views directly with each other, ask each other questions, and chime in if you have a comment.
- While we want everyone's active participation, we also need some order. Therefore, I need you to take turns and speak one at a time. I will try and make sure everyone gets a chance to talk, so I may call on people to make sure everyone is heard. In this way, we can keep track of what is being said.

II. Introductions (5-10 minutes)

Let's start by going around the table. I'd like everyone to tell us your name and in what way you have been involved with the SBER. [Can omit if participants already know one another.]

I'd like to begin by asking about your energy program experiences before SBER.

III. Past Experience

- 1. In what types of energy conservation programs have your or your local governments partners participated in the past?
- 2. What was your experience with these programs? Were they successful? If so, what made them so? If not, what factors were involved in their lack of success?
- 3. What first interested your city about the Energy Rewards program? What benefits were seen for your community? Who made the decision to participate?

III. Program Development & Implementation

- 1. What challenges were faced in developing the Program? What lessons were learned during the early days of the Program?
- 2. What was the role of the COG staff person in facilitating Program delivery? What changes in this role, if any, occurred over time?
- 3. What has been the community response to the marketing materials? How did the materials compare to others you have seen/used in energy programs?
- 4. To what extent did your communities use the trainer/educator provided by the Program for community special events? How satisfied were you with this support?

Next, let's discuss some of the ways in which the program was delivered.

- 5. First, tell me how you used the website option (probe: e.g., linking to your own community sites)
- 6. What about community events? What was done and how effective do you think these events were?

Can you talk about how you used the Community Outreach Toolkit?

- 7. Tell me about how you used newsletters. (Probe: SBCCOG and city-specific)
- 8. The program designers also envisioned that ultimately many City departments might get involved in marketing the Program. How did this work in practice?
- 9. Have I missed any of the ways your communities' promoted the program? If so, let's talk about these.
- 10. If you've received feedback from the community about the program, what have you heard?

IV. The Future

- 1. What lessons were learned during the development and delivery of the Program?
- 2. If another community were considering a program like this one, what would you tell them?
- 3. If you were to continue in program like this one or expanding it in your own communities, what would you suggest? (based on what you've learned)
- 4. Have we missed anything you'd like to say about the model of this program? (Let's talk about those.)

- Participating Retailer Surveys
- Non-Participating Retailer Surveys

•quantec

South Bay Energy Rewards Program Participating Retailer Survey

Into: My name is ______ from Quantec Consulting. I was calling in regard to your recent participation in the **South Bay** *energyrewards* program. You recently received our letter from the SBER program coordinator explaining your essential role in the evaluation process.

If no appt. or calling to set up appt: Is this a good time for us to talk? It will take about 10-15 minutes of your time.

If appt: Date _____ Time: _____

Interviewee Information:

Name:

Position:

Role in Program:	

First, I'd like to ask a few questions about when you first learned about the South Bay *energyrewards* Program.

1. What was your initial reaction when you heard about the Program?

- 2. Before you decided to sign up, did you have any concerns about participating in the Program?
 - a. Yes What were these?
 - b. No [*GO TO Q3*]

- 3. How were your concerns addressed?
- 4. What was the main reason you decided to participate in the Program? [Do not read list]
 - a. Letter from the Mayor
 - b. Good marketing tool
 - c. Benefits my customers
 - d. Easy to do it
 - e. Fits with our store's commitment to sell EE products
 - f. Other [Specify: _____
- 5. Which of the following products eligible for the Program are sold in your store?

a.	Dishwasher	Yes	No
b.	Clothes Washer	Yes	No
c.	SF Gas Water Heater	Yes	No
d.	SF Gas Furnace	Yes	No
e.	Ceiling Fan	Yes	No
f.	Window AC units	Yes	No
g.	Programmable Thermostat	Yes	No

6. How useful were the following materials to you in promoting *energyrewards* in your store? Would you say that the:

4a. Stand-up Signs with Plastic Holders were . . .

- a. Very useful
- b. Somewhat useful
- c. Not very useful
- d. Not at all useful
- e. Don't know/didn't use [Do not read]
- 4b. Peel on/peel off stickers for products
 - a. Very useful
 - b. Somewhat useful
 - c. Not very useful
 - d. Not at all useful
 - e. Don't know/didn't use [Do not read]

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- 4c. Program Brochure (tri-fold)
 - a. Very useful
 - b. Somewhat useful
 - c. Not very useful
 - d. Not at all useful
 - e. Don't' know/didn't use [Do not read]
- 7. Of these three types of point-of-purchase materials, which was **most** useful to you in promoting the Program?
 - a. Standup display
 - b. Product stickers
 - c. Brochure
- 8. How would you rate the information SBER representatives provided you about the Program?
 - a. Very clear
 - b. Somewhat clear
 - c. Not too clear
 - d. Not at all clear
 - e. Don't know/don't remember/NA [Do not read]
- 9. How would you rate the time required to administer the Program ?
 - a. Very time consuming
 - b. Somewhat time consuming
 - c. Not very time consuming
 - d. Not at all time consuming
 - e. Don't know/don't remember/NA [Do not read]
- 10. Prior to participating in the South Bay *energyrewards* Program, had your store participated in other energy efficiency Programs? [Probe if needed: sponsored by utility, other)

a. Yes. Please specify program name and type:

b. **No**. [GO TO Q13]

In comparison to your previous experience with energy efficiency programs . . .

- 11. How would you compare South Bay energyrewards Program in terms of clarity of program information provided to you?
 - a. Much more clear
 - b. Somewhat more clear
 - c. Somewhat less clear
 - d. Much less clear
 - e. Don't know/don't remember/ NA [Do not read]
- 12. How would you compare the South Bay energyrewards Program with respect to the time required to administer the program?
 - a. Much more time consuming
 - b. Somewhat more time consuming
 - c. Somewhat less time consuming
 - d. Much less time consuming
 - e. Don't know/don't remember/NA [Do not read]
- 13. Did your store hold special events or sales promotion activities to publicize the Program?
 - a. Yes
 - b. No [*GO TO Q14*]

13a. What type of activity(s)?

13b. In your opinion, what impact did the promotion have on the Program?

14. What percentage of customers at your location used POP coupons versus coupons they brought with them the store?

14a. POP Coupons: _____%

14b. Other Coupons: _____%

- 15. For all participants, how important do you think the incentive the coupon provided was in their decision to purchase an ENERGY STAR product?
 - a. Very important
 - b. Somewhat important
 - c. Not very important
 - d. Not at all important
 - e. Don't know/don't remember/NA
- 16. What is your perception of how many customers would have purchased the ENERGY STAR product in the absence of the coupon?
 - a. All would have purchased [Go to Q17]
 - b. Some would have purchased
 - c. A few would have purchased
 - d. None would have purchased [Go to Q17]
 - e. Don't know/don't remember/NA

16a. [*If b or c*] What percent would you estimate? _____%

[ASK Q. 17 – Q21 OF SALES STAFF and Bookkeeping/Accounting STAFF]

- 17. From an administrative perspective, was there a difference in handling the two types of coupons? (in-store vs. customer brought in)
 - a. Yes. Please explain:
 - b. No.

The SBER representative picked up your coupons each week and processed the payment. How would your rate the program process on the following:

- 18. Ease of submitting coupons
 - a. Very easy
 - b. Somewhat easy
 - c. Somewhat difficult
 - d. Very difficult
 - e. Don't know/don't remember/NA

- 19. Promptness of payment
 - a. Very prompt
 - b. Somewhat prompt
 - c. Not very prompt
 - d. Not at all prompt
 - e. Don't know/don't remember/NA
- 20. Problem solving on coupon issues
 - a. Very helpful
 - b. Somewhat helpful
 - c. Not very helpful
 - d. Not at all helpful
 - e. Don't know/don't remember/NA
- 21. What, if anything, would you change about the system for processing the coupons
 - a. Would change: _____
 - b. No changes
- 22. What impact do you think the Program had on participants' awareness of ENERGY STAR products and/or energy efficiency in general?
 - a. Substantial impact
 - b. Somewhat of an impact
 - c. Not much of an impact
 - d. No impact at all
 - e. Not applicable/ Don't know [Do not read]
- 23. From your perspective, how satisfied did participants appear to be with the South Bay energyrewards Program?
 - a. Very satisfied
 - b. Somewhat satisfied
 - c. Not very satisfied
 - d. Not at all satisfied
 - e. Not applicable/ Don't know [Do not read]

24. Did your participation in the Program have an effect on the percentage of ENERGY STAR Products sold **during the promotion**? (by products sold) - % above normal sales? **Since the promotion**?

	% Sales Increase during		% Increase Since
a.	Dishwasher	%	%
b.	Clothes washer	%	%
c.	SF Gas Water Heater	%	%
d.	SF Gas Furnace	%	%
e.	Ceiling Fan	%	%
f.	Window ac units	%	%
g.	Programmable Thermostat	%	%

- 25. As a result of participating in SBER, how would you rate your knowledge of ENERGY STAR Products? Would you say that you are:
 - a. Much more knowledgeable
 - b. Somewhat more knowledgeable
 - c. Not much more knowledgeable
 - d. No change in knowledge
 - e. Don't know/don't remember/NA
- 26. As a result of participating in SBER, do you promote ENERGY STAR Products to your customers:
 - a. Much more often
 - b. Somewhat more often
 - c. Only slightly more often
 - d. No change in how often I promote the products
 - e. Don't know/don't remember/NA

27. Have you changed any other sales practices with regard to ENERGY STAR Products as a result of your participation in the Program?

a. Yes What has changed:

b. No, nothing has changed

28. Do you have any further comments or suggestions on the South Bay energyrewards Program?

Thank and close.

South Bay Energy Rewards Program Non-Participating Retailer Survey

Into: My name is ______ from Quantec Consulting. I am calling as part of the **South Bay** *energyrewards* program, whereby customers receive coupons from local governments and at retail sites to redeem toward Energy Star products. We know that your store did not participate, but we would like to ask a few questions regarding your sales of Energy Star products.

If no appt. or calling to set up appt: Is this a good time for us to talk? It will take about 5-7 minutes of your time.

If appt: Date	Time:
Interviewee Information:	

Name:

Position:

1. Which of the following products are sold in your store? Of those sold, what percent would you estimate are Energy Star products?

	<u>Sold</u>		<u>% Energy Sta</u>
Dishwasher	Yes	No	
Clothes washer	Yes	No	
SF Gas heater	Yes	No	
SF Gas furnace	Yes	No	
Ceiling fan	Yes	No	
Window ac units	Yes	No	
Programmable thermostat	Yes	No	

- 2. Do you and/or your staff promote Energy Star products to your customers? Would you say:
 - a. Always
 - b. Almost always
 - c. Occasionally
 - d. Almost never
 - e. Never
 - f. Don't know (do not read)
 - 2a. If a, b or c: Have you ever had special promotions to encourage the purchase of Energy Star products?
 - a. Yes
 - b. No (GO to Q. 3.)
 - c. Don't know/don't remember (do not read) (GO to Q.3)

2aa. If yes: What were these promotions? What did you do? (probe: events, materials, in-store demonstrations, other)

- 2b. If e or f: Why do you seldom or never promote these products? (do not read; record all that apply)
 - a. Customers don't ask for the product
 - b. Customers don't want to pay the added cost
 - c. Other (specify:
- 3. Has your store participated in other energy efficiency Programs that supported Energy Star products? [Probe if needed: sponsored by utility, other)
 - a. Yes. Please specify program name and type:
 - b. No. (GO TO Q. 5)
- 4. To what extent did your participation influence your stocking and sales of Energy Star products?
 - a. A great deal
 - b. Somewhat
 - c. Not very much
 - d. Not at all
 - e. Don't know/don't remember (Do not read)

)

- 5. The South Bay Energy Rewards Program offered coupons to customers, through local government entities, which they could redeem toward discounts on eligible Energy Star products. Retailers also had point of purchase coupons, exhibited promotional material and assisted with the processing of the coupons for which they received an incentive. If such a program were expanded in the future, would your store be interested in participating?
 - a. Very interested
 - b. Somewhat interested
 - c. Only slightly interested
 - d. Not at all interested
 - e. Don't know/not sure/would need to know more
 - 5a. If c or d: why would you not be too interested?
- 6. What would make a program like this attractive to you?

Thank you for taking the time to talk with us.

Appendix C. Resident Coupon Surveys

- Participating Resident Coupon Surveys
- Non-Participating Resident Coupon Surveys

•quantec

South Bay Energy Rewards Program Participating Coupon Customer Survey

Intro: My name is _____ and I'm calling on behalf of _____ about a coupon you used this past year to purchase a new appliance/product. (INSERT NAME OF APPLIANCE FROM DATABASE) Are you the person who made this purchase and used the coupon?

[If no, ask to speak to the person who would know about the coupon and purchase. If not available ask for a good time to call back.]

If appt: Date_____Time: _____

[Once correct contact is made:]

We're talking with a few customers who used the coupon to get their views on the program. Do you have about five minutes to answer a few questions about using the coupon?

[If no, ask: Can we schedule a time when I might call you back?

If appt: Date:	Time:	
----------------	-------	--

1. First, could you verify that you purchased and installed: (if available from database; if not, need to ask which was purchased and installed – response categories for purchased; categories for installed)

		Purchased	Installed
a.	Dishwasher	~	~
b.	Clothes Washer	~	~
c.	SF Gas Water Heater	~	~
d.	SF Gas Furnace	~	~
e.	Ceiling Fan(s)	~ #	~
f.	Window AC units	~	~
g.	Programmable Thermostat	~	~

Program Awareness

- 2. How did you hear about the ENERGY REWARDS? (if needed: The coupon that would provide a discount to you on the purchase of an Energy Star appliance/product? (DO NOT READ; CHECK ALL THAT APPLY)
 - a. Ad in newspaper
 - b. Salesperson told me
 - c. Saw display/stand up sign at the store
 - d. Saw sticker on the appliance
 - e. Ad in community newsletter
 - f. Bill insert from city
 - g. Community event
 - h. A community based organization
 - d. Other (specify: ____
 - e. Not sure/don't remember
- 3. Why did you decide to utilize the coupon offered? (DO NOT READ; ENTER ALL THAT APPLY)
 - a. Made a more efficient model affordable
 - b. Would have purchased anyway; this made it a good deal
 - c. Coupon was easy and saved me money
 - d. Save money on energy bills
 - e. Save energy

Installation and Usage

[ASK 4, 4a, and 4b for each product purchased]

- 4. Did this product replace an existing appliance/product (s)?
 - a. Yes
 - b. No (GO TO Q.5)
 - 4.a. Do you us this appliance/product differently than the one it replaced?
 - a. Yes
 - b. No (GO TO Q.5)

4b. How is it used differently?

- 5. Overall, how satisfied were you with the retailer's explanation of the coupon program?
 - a. Very dissatisfied
 - b. Somewhat dissatisfied
 - c. Somewhat satisfied
 - d. Very satisfied
 - e. Don't know/don't remember

If a or b: Why were you dissatisfied?

- 6. How satisfied were you with the ease of using the coupon to receive a discount on your purchase?
 - a. Very dissatisfied
 - b. Somewhat dissatisfied
 - c. Somewhat satisfied
 - d. Very satisfied
 - e. Don't know/don't remember

If a or b: Why were your dissatisfied?

- 7. How satisfied were you with the amount of the incentive offered?
 - a. Very dissatisfied
 - b. Somewhat dissatisfied
 - c. Somewhat satisfied
 - d. Very satisfied
 - e. Don't know/don't remember

Impact of Coupon

- 8. Had you considered an energy efficient or Energy Star product before you made your purchase?
 - a. Yes
 - b. No
 - c. Don't know/don't remember (DO NOT READ)

- 9. How important would you say the incentive the coupon provided was in your decision to purchase an ENERGY STAR product? Would you say it was:
 - a. Very important
 - b. Somewhat important
 - c. Not very important
 - d. Not at all important
 - e. Don't know/don't remember
- 10. Since using the coupon for your purchase, have you made any other changes in how you use energy in your home?
 - a. Yes
 - b. No (GO TO Q. 11)
 - 10.a. What changes have you made?
- 11. In general, how likely are you, when purchasing similar appliances or products in the future, to buy an Energy Star product?

- a. Very unlikely (GO TO Q. 11b)
- b. Somewhat unlikely (GO TO Q. 11b)
- b. Somewhat likely
- c. Very likely
- d. Don't know/not sure (DO NOT READ)
- 11.b. Why is this not likely?
- 12. Do you have any suggestions for improvements that could be made to the coupon program?
- 13. Any other comments?

Thank you for sharing your thoughts about the coupon program. Your views will be very helpful as we plan programs for the future.

South Bay Energy Rewards Program Coupon Program: Nonparticipant Customer Survey

Intro: My name is _____ and I'm calling on behalf of _____ about a coupon you requested last year from _____. The coupon would have provided an incentive on your purchase of an energy efficient – ENERGY STAR- appliance/product. Are you the person who requested the coupon?

[Use date and calling SBER hotline to request as a probes if they don't remember]

[If no, ask to speak to the person who would know about the coupon. If not available ask for a good time to call back.]

If appt: Date Time:

[Once correct contact is made:]

We're following-up with a few customers who requested a coupon but did not redeem them. Do you have about five minutes to answer a few questions about the coupon?

[If no, ask: Can we schedule a time when I might call you back?

If appt: Date: ______Time: _____

Program Awareness

- 1. How did you hear about the coupon that would provide a discount to you on the purchase of an Energy Star appliance/product? [DO NOT READ; CHECK ALL THAT APPLY]
 - a. Ad in newspaper
 - b. Salesperson told me
 - c. Saw display/stand up sign at the store
 - d. Saw sticker on the appliance
 - e. Ad in community newsletter
 - f. Bill insert from city
 - g. Community event
 - h. A community based organization
 - d. Other (specify: _____
 - e. Not sure/don't remember

1.a. What did you think was the potential benefit of the coupon?

- 2. At the time you requested the coupon, what appliance/product were your considering purchasing? (CHECK ALL THAT APPLY)
 - a. Dishwasher
 - b. Clothes Washer
 - c. Gas Water Heater
 - d. SF Gas Furnace
 - e. Ceiling Fan
 - f. Window AC units
 - g. Programmable Thermostat
- 4. Have you purchased one of these products since you received the coupon?
 - a. Yes
 - b. No (GO TO Q. 7)
 - 4.a. Which appliance/product? (CHECK ALL THAT APPLY)
 - a. Dishwasher
 - b. Clothes Washer
 - c. SF Gas Water Heater
 - d. SF Gas Furnace
 - e. Ceiling Fan
 - f. Window AC units
 - g. Programmable Thermostat
 - 5.a. Was this/Were these product(s) an Energy Star Product?

- a. Yes
- b. No (GO TO Q.7)

^{6.} Did this product (s) replace an existing appliance/product? (ASK ALL OF SERIES IN Q.6 for each purchased)

- 6.a. Do you use this appliance/product differently than the one it replaced?
 - a. Yes
 - b. No (GO TO Q.7)
- 6b. How is it used differently?
- 7. Why did you choose **not** to use the coupon you received? (ask regardless of whether they since purchased or did not)
- 8. Overall, how satisfied were you with the length of time it took to receive the coupon after you requested it?
 - a. Very dissatisfied
 - b. Somewhat dissatisfied
 - c. Somewhat satisfied
 - d. Very satisfied
 - e. Don't know/don't remember

If a or b: Why were you dissatisfied?

- 9. In general, how likely are you, when purchasing similar appliance/products in the future, to buy an Energy Star product?
 - a. Very unlikely (GO TO Q. 9b)
 - b. Somewhat unlikely (GO TO Q. 9b)
 - b. Somewhat likely (GO TO Q.9c)
 - c. Very likely (GO TO Q.9c)
 - d. Don't know/not sure (DO NOT READ)

9b. If a. or b. Why are you unlikely to do so?

9c. If c. or d. Why are you likely to do so?

What does	Energy	Star mean	to you?

What do you see as the advantages of an Energy Star appliance/produ	What do you see as the advantages of an Energy Star appliance/produ		
Do you have any suggestions for how the coupon program might be improve	Do you have any suggestions for how the coupon program might be improve		What do you see as the advantages of an Energy Star appliance/produ
		Do γοι	have any suggestions for how the coupon program might be improve

Thank you for sharing your thoughts about the coupon program. Your views will be very helpful as we plan programs for the future.

Appendix D. Multi-Family Dwelling Survey

- Participating Multi-Family Dwelling Surveys
- Non-Participating Multi-Family Dwelling Surveys

quantec

South Bay Energy Rewards Program Participating MFD Customer Survey

Intro: My name is _____ and I'm calling on behalf of _____ about some funding for lighting measures that the South Bay Energy Rewards program provided for you to install in the common areas of your building(s).

Are you the person who worked with this project? (May need to probe: worked with Ed Berlen or someone else from Energy Innovations to assess your building and install lighting?)

[If no, ask to speak to the person who would know about the installations. If not available ask for a good time to call back.]

If appt: Date_____Time:_____

[Once correct contact is made:]

We're talking with a few customers who installed the lighting equipment to get their views on the program. Do you have about five minutes to answer a few questions?

Note: If they had a site visit early (see list), may note that our staff earlier visited their property to verify the lighting installations; now at year end, we like to follow-up with just a few questions. If they have not had a site visit, and this is done in person, delete intro.

[If no, ask: Can we schedule a time when I might call you back?

If appt: Date: _____ Time: ____

Program Awareness

- 1. How did you first hear about this program? (if needed: where you could have a building assessment and receive incentives to install more efficient lighting) (DO NOT READ; ENTER ALL THAT APPLY)
 - a. Building owner or manager association
 - b. Local lighting contractor
 - c. SBER Energy Seminar
 - d. Other (specify: _____
 - e. Not sure/don't remember (DO NOT READ)

Installation and Usage

- 2. Did you encounter any problems with the installation of this lighting equipment?
 - a. Yes
 - b. No (GO TO Q. 3)

2.a. What problems? How were these resolved?

- 3. Do you use any of the lighting equipment you installed differently than the equipment that was replaced? (e.g., have you changed the hours of operation for the lights you installed or made other changes)
 - a. Yes
 - b. No (GO TO Q.4)

3b. How is it (are they) used differently?

Satisfaction

- 4. Overall, how satisfied were you with the following:
 - 4a. With the auditor who did the assessment of your building(s)?
 - a. Very dissatisfied
 - b. Somewhat dissatisfied
 - c. Somewhat satisfied
 - d. Very satisfied
 - e. Don't know/don't remember (DO NOT READ)

If a or b: Why were you dissatisfied?

4.b. With the installers?

- a. Very dissatisfied
- b. Somewhat dissatisfied
- c. Somewhat satisfied
- d. Very satisfied
- e. Don't know/don't remember (DO NOT READ)

If a or b: Why were you dissatisfied?

- 4c. How satisfied were you with the amount of the incentive offered?
 - a. Not at all satisfied
 - b. Not very satisfied
 - c. Somewhat satisfied
 - d. Very satisfied
 - e. Don't know/don't remember

Impact of Assessment/Incentive

- 5. Had you considered installing some, all or none of this lighting equipment before the program?
 - a. Some
 - b. All (GO TO Q. 6)
 - c. None (GO TO Q.6)
 - d. Don't know/don't remember (DO NOT READ)

5.a. Which had you previously considered?

- 5b. For each listed in 5a: How likely is it that you would have installed these measures within the next two years?
 - a. Very unlikely
 - b. Somewhat unlikely
 - c. Somewhat likely
 - d. Very likely
 - e. Don't know/not sure (DO NOT READ)

I'd like to ask you to rate how important each of the following components of the program was to your decision to install the lighting equipment.

- 6a. First, how important was the free lighting assessment? Would you say it was:
 - a. Not at all important
 - b. Not very important
 - c. Somewhat important
 - d. Very important
 - e. Don't know (DO NOT READ)

- 6b. Next, how important was the incentive to your decision? Would you say it was:
 - a. Not at all important
 - b. Not very important
 - c. Somewhat important
 - d. Very important
 - e. Don't know (DO NOT READ)
- 6c. And, how important was the potential costs savings from reduced energy usage in your decision? Would you say it was:
 - a. Not at all important
 - b. Not very important
 - c. Somewhat important
 - d. Very important
 - e. Don't know (DO NOT READ)
- 6.d. Of the above, which aspect was most important in your decision?
 - a. Assessment
 - b. Level of incentive
 - c. Potential energy savings
 - d. None; it was the combination
 - e. Don't know/not sure (DO NOT READ)
- 7. Have you made any other non-lighting related changes in to save energy in your building(s) as a result of this program?
 - a. Yes
 - b. No (GO TO Q. 8)
 - c. Don't know/Not sure (DO NOT READ) (GO TO Q. 8)
 - d.

7a. What other changes have you made?

- 8. Did you install any additional lighting in this building or another building but did not receive an incentive as result of this program?
 - a. Yes
 - b. No (GO TO Q.9)
 - 8a. What was installed?

9. Do you have any suggestions for improvements that could be made to the South Bay Energy Rewards Multi-Family lighting program?

10. Any other comments?

Thank you for sharing your thoughts about the program. Your views will be very helpful as we plan programs for the future.

South Bay Energy Rewards Program Non-Participating MFD Customer Survey

Intro: My name is ______and I'm calling on behalf of ______ about a program called South Bay Energy Rewards, that provided building assessment and incentives to install energy efficient lighting in your building(s). Our records show that you received information about the program or an assessment but did not install the lighting equipment.

Are you the person who would know best about this decision? (May need to probe: may have had contact with someone from Energy Innovations to assess your building and arrange installation of lighting)

[If no, ask to speak to the person who would know about the decision not to install the lighting. If not available ask for a good time to call back.]

If appt: Date _____ Time: _____

[Once correct contact is made:]

We're talking with a few customers who know about the program but did not install the lighting equipment. Do you have about five minutes to answer a few questions?

[If no, ask: Can we schedule a time when I might call you back?]

If appt: Date: ______Time:

Program Awareness

- 1. How did you first hear about this program? (if needed: where you could have a building assessment and receive incentives to install more efficient lighting) [DO NOT READ; ENTER ALL THAT APPLY]
 - a. Building owner or manager association
 - b. Local lighting contractor
 - c. SBER Energy Seminar
 - d.
 - e.
 - d. Other (specify: _____)
 - e. Not sure/don't remember (DO NOT READ)

- 2. What aspects of the Program did you find potentially beneficial for your building(s)? (DO NOT READ; CHECK ALL THAT APPLY)
 - a. Save energy
 - b. Save money/lower energy costs
 - b. Improve lighting quality
 - c. Fewer increases in rents for residents
 - d.

e.

- 3. Our records show that the program provided an energy assessment/audit of your building to assess lighting improvement potential. Is this correct?
 - a. Yes
 - b. No (GO TO Q.5)
 - c. Don't know/don't remember (DO NOT READ) (GO TO Q5)

4. ASK ONLY IF HAD ASSESSMENT After you had the assessment, why did you decide not to install the equipment? (DO NOT READ; RECORD ALL THAT APPLY)

- a. Did not have funds to complete
- b. Incentive was not large enough
- c. Energy savings were not enough to justify investment
- d. We plan to install in future, still getting approval
- e.

GO TO Q.6

ASK ONLY OF THOSE THAT DID NOT HAVE AN ASSESSMENT

- 5. After learning about the program, why did you decide not to have the assessment and install the lighting equipment? (DO NOT READ)
 - a. Did not have funds to complete
 - b. Incentive was not large enough
 - c. Energy savings were not enough to justify investment
 - d. Have not had time to schedule
 - e. Had already replaced lighting
- 6. If a program like this one were offered to you again, what might be changed to increase the likelihood that you would participate?

7. What recommendations might you have for improving the program?

Thank you for taking the time to talk with us. Your views are very helpful as we consider future energy efficiency efforts.

Appendix E. Site Visits

Name/Address	Reported	Actual	Location	Database	Found
Unified Property Management 1 14012 Cordary Ave. Hawthorne	23 W CFL S/I	23 W CFL S/I	Front and Exterior	43	45
Gardena Retirement Center	13 W CFL S/I	13 W CFL S/I	Kitchen	6	7
14741 S. Vermont Ave. Gardena	13 W CFL S/I	20 W CFL	Dining Room	7	8
	13 W CFL S/I	20W CFL	Grand Parlor	6	8
	9 W CFL S/I	9 W CFL S/I	Hall - Downstairs	38	40
	13 W CFL S/I	13 W CFL S/I	Storage	1	4
Palo Verdas Villa 29661 S. Western Ave. Rancho Pales Verdes	26 W CFL S/I	26 W CFL S/I	Room Lamps	51	52
Chadron Apartments 13622 Chadron Ave Hawthorne	4' 2 lamp T8	4' 2 lamp T8	Exterior, Garage	49	51
	LED Exit	LED Exit	Exterior, Parking	1	3
Hampton Point Apartments 12830 Prarie Ave Hawthorne	4' 1 lamp T8	4' 1 lamp T8	Garage	14	17
	30w CFL Circline Fixt	30w CFL Circline Fixt	Int bath/BR/Liv	183	186

Table E.1: Site Visit Summary

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