

CONSUMERS' ATTITUDES TOWARD ENERGY EFFICIENT APPLIANCES IN THE LOS ANGELES AREA

Study 3503

*Conducted for
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STUDY I: A look at the impact of the Energy Star[®] retailer program pilot. Pre-initiative perceptions based on intercept interviews with consumers and sales representatives

STUDY II: Focus Groups with consumers who had purchased refrigerators within the last twelve months and received a rebate.

STUDY III: Sales staff approach toward selling energy efficient appliances. Interviews conducted with sales representatives and department managers in the appliance departments of Circuit City stores.

December 1997

SCE Major Appliance Labeling “Retail Initiative” Pilot Program

I. Program Description

The “ENERGY STAR” program was a joint partnership with the U.S. Dept. of Energy and the U.S. Environmental Protection Agency (DOE/EPA). The program, which commenced as a pilot in 1996, provided target levels for “high efficiency” appliance classifications and rated the efficiency of refrigerators, dishwashers, and room air conditioners. Program collateral materials included a program training guide for the retail dealer’s sales people, static-cling (ENERGY STAR) labels for qualifying appliances, and point-of-purchase banners, posters, product “tents,” and customer brochures for each type of appliance in the program. The pilot program involved 30 Circuit City retailers in SCE’s service area.

The DOE/EPA program was designed to help create a recognizable brand that customers would associate with energy efficiency. Program timing coincided with the Federal Trade Commission’s (FTC) plan to upgrade of the time honored “Energy Guide” appliance label in 1997/98. The program was also expected lead to a collaboration between the Federal National Mortgage Association (FNMA) and participating retail dealers for a consumer financing component.

Under Edison’s initiative, typical participation agreements covered retail dealer issues such as qualifying appliance stocking and inventory, sales staff compensation, education and training, point-of-purchase displays, advertising, promotion, and consumer finance options. Edison for its part agreed to match a portion of the participating retailer’s investment for the activities on an agreed-performance basis.

This “retail initiative” was designed as a pilot program, testing the feasibility of running such a program in Edison’s service territory. Even though the program was underway before the end of 1996, we decided that *some* of the market effects of such an intervention might be measured.

II. Market Barriers Addressed

Examination of the Retail Initiative program characteristics allowed us to surmise which particular market barriers (from the Eto-Prahl-Schlegel paradigm) the program was implicitly addressing. Within general categories, the following specific barriers were hypothesized.

- A. *Information or Search Cost.* 1.) Customers are typically unaware of the existence of high efficiency appliances as an option to standard efficiency units; 2.) customers cannot easily identify high efficiency appliances in advertisements or on the dealer’s showroom floor.

- B. *Performance Uncertainties.* 1.) The customers perceive no relationship between price and performance; e.g., a customer says: “There’s not much difference in performance, but there’s a big difference in price.” 2.) It is not uncommon for appliance salespeople to misinform customers; e.g., “Today, all the dishwashers and refrigerators are energy efficient. Look for yourself... they all have the yellow ‘Energy Guide’ label.”
- C. *Asymmetric Information and Opportunism.* Customers may question the veracity of the appliance sales person, suspecting that the desire for greater sales commissions will lead the sales person to sell a more expensive and feature-rich appliance than the customer feels is required. This market barrier is related to the “Information or search costs” barrier above, i.e., the seller ultimately has more information than the buyer about high efficiency appliances and their benefits. The information mismatch can lead to distrust by buyers who may be helpless to assess claims for or against the high efficiency product feature.
- D. *Product Unavailability.* Retail dealers might not stock the models their customers want to buy. Low-volume or low-market-share models have a higher cost to the retailer. Higher costs can lead to lower gross margin due to cost of money factors (i.e. higher wholesale acquisition cost), and can lead to higher inventory and flooring (wholesale financing) costs due to a slower turnover rates.

III. Evaluation Research

In cooperation with the DOE and its research contractor, Edison undertook the following research activities for the program pilot. Edison regarded this research as qualitative in nature, the results of which will be used to assist in evaluating the success of the pilot and to provide guidance for program design.

Three reports, representing three different qualitative research efforts, are provided:

Customer intercept interviews were conducted with 147 shoppers. The principal objectives were to assess:

- consumer knowledge, awareness and understanding of energy efficiency ratings,
- relative importance of energy efficiency in appliance purchase decisions,
- attitudes toward energy efficient products,
- assess the influence of and preference for various sources of product information available to consumers (e.g. consumer reports, sales reps, DOE/EPA, utility).

Interviews were also conducted with 23 sales representatives who worked in the appliance departments.

Two **customer focus groups** were conducted with refrigerator purchasers to obtain additional qualitative insight into consumer purchasing practices, the effects of program-related energy efficiency information, and information on how to enhance the communication effectiveness of Energy Star appliance labels and related energy efficiency information.

Sales staff interviews will provide information on consumers' response to the retail initiative, adequacy of sales associate training program, and to obtain feedback on which program elements work/don't work from a front line perspective.

A fourth study component, **appliance sales movement analysis**, was originally planned and could have provided evidence of any change in sales volume for program appliances. However, the data proved to be either nonexistent and/or proprietary – inaccessible, in any case.

IV. Evaluation Research Originally Considered But Not Conducted

In the event that Edison continued the Energy Star Program in 1997, the following proposed research was also to be considered: a Manufacturers Survey; On-site Inspections; a Retailers Survey; and a General Consumer Market Research Survey. However, since the program was not continued beyond the pilot stage, these were not conducted.

V. Market Effects

The market effects we anticipated, and which formed the basis for developing testable research hypotheses about program impact, are presented by market participant in the following:

Manufacturers

1. Advertising expenditures for high efficiency appliances will increase.
2. A higher proportion of production capacity will be devoted to high efficiency appliances.
3. The number of different efficiency appliance product configurations will increase.
4. High efficiency appliance product prices will decrease.
5. R&D expenditures for high efficiency appliances will increase.

Retailers

1. Retail store chain advertising of CFLs will increase.
2. Total retail floor space and for high efficiency appliances will increase.
3. Retail sales personnel product knowledge for high efficiency appliances will increase.
4. Attitudes of sales associates toward high efficiency appliances will become more favorable.
5. The frequency of promotional programs (discounts and sales) will increase.

6. The use of point of purchase display advertising will increase.
7. The amount of technical and product comparison information available at retail stores will increase.

Consumers

1. Knowledge about the energy savings benefits of high-efficiency appliances will become more accurate.
2. Attitudes toward high efficiency appliances will become more favorable.
3. Intent to purchase high efficiency appliances will increase.
4. The saturation/market share of residential high efficiency appliances will increase.

VI. Summary of Findings

The research suggests that:

- A. Consumers in the market for major appliances generally do not regard energy efficiency as a product feature. Brand, size and low purchase price appear to be more salient considerations.
- B. Both consumers and retailers are generally reluctant to differentiate between standard and high efficiency appliances.
- C. Although consumers have a basic understanding of energy efficiency, they often fail to make the all-important link with associated benefits (i.e., pay back). Moreover, brand, size and low purchase price appear to be more salient considerations.
- D. Energy Guide/Star labels have moderate information value, but the impact can be enhanced considerably by well-informed sales personnel.
- E. Placement of program collateral/ pop materials may not be reliable.

VII. Recommendations

- A. Rewrite/improve program training material.
 1. Implement a sales training program that will grant a certificate of completion only upon demonstrated proficiency with program material.
 2. Produce a training video to supplement the formal training program and mitigate the problem of employee turn over.
- B. Employ “mystery shopper” technique to assess impact of sales training program.
- C. Monitor placement of in-store point-of-purchase material for compliance.

**CONSUMERS' ATTITUDES TOWARD
ENERGY EFFICIENT APPLIANCES**

A LOOK AT THE IMPACT
OF THE
ENERGY STAR RETAILER PROGRAM PILOT
IN THE LOS ANGELES AREA

Pre-Initiative Perceptions
*Based On Intercept Interviews
With Consumers And Sales Representatives
Conducted During December, 1996*

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Program Pilot**

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- A: Comparison of DOE and SCE Study
- B: The Intercept Survey Questions
- C: The Sales Representative Survey Questions

EXECUTIVE SUMMARY

Background & Objectives

At the beginning of the implementation of the Energy Star® Retailer Program, consumers' attitudes about energy efficiency were profiled. The principle objectives were to assess consumer knowledge, awareness and understanding of energy efficiency ratings, the relative importance of energy efficiency in appliance purchasing decisions, attitudes toward energy efficient products, and preference for various sources of product information.

This study was designed to collect quantitative data from a “convenience” sample of shoppers in appliance departments. It was modeled on a recently completed study conducted for the US Department of Energy (DOE) with consumers in Milwaukee, San Francisco, Tampa, and Washington, DC. Comparisons with the recently completed DOE study are presented in Appendix A.

The research design of the DOE study relied on two previous qualitative studies. Dated February, 1996, the *U.S. Department of Energy Efficiency and Renewable Energy's Energy Savers Retailer Initiative Test Phase Program Report* was based on intercept interviews conducted in the Washington, DC area. *A Qualitative Examination of Energy Savings, A report to Oak Ridge National Laboratory, February, 1995* was based on focus groups conducted in Baltimore, MD and Portland, OR.

The Sample

Intercept interviews were held in the appliance departments of Circuit City stores in the Los Angeles area during December of 1996. The resultant sample consisted of 147 consumers. Supplementing this sample, 23 sales representatives, who worked in the appliance departments where the interviews were conducted, were interviewed.

The Findings

More consumers were in the market for a refrigerator than for any other single appliance. Almost half wanted to replace old appliances that were either not working or had major problems. Almost 30 percent were buying an appliance they did not already have. Only 12 percent were buying a new appliance because they wanted new features or were remodeling. On the average, shoppers intended to purchase their new appliance in about a month.

Disposal of Old Appliances

New appliances in a household did not necessarily mean that the old ones were out of commission; to the contrary, about a quarter of the consumers purchasing appliances were planning to keep the old one in service by using it in another part of the house, giving it away, or selling it. Replaced appliances averaged 13.6 years old.

Who Makes the Decision

Although most respondents lived in households of two or more people; 56 percent of them made the appliance buying decision by themselves. Thirty-two percent made the decision jointly with their spouses.

Important Attributes

Respondents proclaimed brand as the most important factor in their appliance purchasing decisions. Other frequently mentioned factors were capacity/size, low purchase price, low operating cost, quality, and reliability. Of the total respondents, a little less than one-third of the sample included electricity consumption on their list of important factors.

Role and Meaning of Energy Efficiency

The first time that “energy efficiency” was mentioned by the interviewer, almost 54 percent of the respondents stated they planned to buy an energy efficient appliance.

It was important to determine if our sample understood the meaning of energy efficiency. When asked, respondents associated energy efficiency with electricity consumption, low operating costs, and environmental friendliness. The ratings gleaned from associating a variety of terms indicate interviewees also knew that there is a societal value placed on energy efficiency.

Energy Star® Logo and *EnergyGuide* Label

Asked if they had seen the Energy Star® logo before, 42 percent of participants registered awareness of it. A few more, 68 percent, had seen the *EnergyGuide* label and knew what information was on it. Although almost two-thirds claimed the label was considered in their purchasing decision, it was considered only moderately to somewhat useful.

Preferred Way of Stating Energy Efficiency

When presented with choices of ways in which they would like to see energy efficiency information stated, respondents chose “Dollars Saved,” closely followed by “Dollars of Operating Costs.” Respondents showed a slight preference for having energy efficiency information presented in terms of a yearly time period.

Value of Energy Efficiency

Would customers pay more for an energy efficient appliance or one that has a rebate associated with it? While responses were highly variable, the average additional price a consumer would pay was \$120 for an \$800 refrigerator that would save \$50 a year in utility bills. If a \$50 rebate were offered, then the average additional amount that consumers would pay was \$135.

The Research Process

Over two-thirds of respondents had gathered information prior to shopping for an appliance. More women than men conducted research before they went to showrooms. This is the only time in this study that a demographic factor associated with a response was revealed. Personal contacts and the showroom were considered more helpful than other sources of consumer advice. *Consumer Reports* was considered the most reliable information source. Information from utility companies was listed next followed by the *EnergyGuide* label.

Conclusions

Gender is associated with attitudes toward energy efficiency.

Statistical analysis indicated the one significant demographic factor that seems associated with people's attitudes towards energy efficient appliances was gender when it came to doing research prior to visiting showrooms. Age, occupation, income, educational level, and race most often did not yield statistically significant differences.

The first time interviewees were asked if they were seeking energy efficient appliances, slightly more than half said they were. While this was somewhat consistent with interviewees listing operating costs as the fourth most important factor in their purchasing decisions, the stronger positive response given when directly asked could have been because interviewees perceived it was the socially responsible answer, or because they needed a gentle reminder to give some thought to something (energy efficiency) that they were not consciously considering at the time.

The experience in the showroom is, along with personal contacts, the preferred source of consumer advice. This points to the value of interaction with the sales representatives and viewing the point-of-purchase materials coupled with the actual array of appliances. By further educating the sales representatives to feature energy efficiency in their presentations, consumers could be influenced to purchase more energy efficient appliances. Likewise, awareness of energy efficiency could be increased through upping the impact of the point-of-purchase materials.

In summary, this study shows that consumers have a basic understanding of what energy efficiency means and have some concern about energy efficiency. Even though consumers registered a significant recognition of the Energy Star® graphic and understanding of its meaning, this did not carry over into their purchase decision. At the time when this study was done, purchase price and several other attributes carried more weight than energy efficiency in appliance buying decisions. Education of the consumer could impact consumers' attitudes, and subsequently their buying behavior, towards energy efficient appliances.

SURVEY METHODOLOGY

INTERCEPT INTERVIEWS

This study was designed to provide a base-line assessment of the impact of the Energy Star® Retailer Program. The first step was to assess consumers' attitudes toward purchasing energy efficient appliances prior to the introduction of the Energy Star® Logo.

Intercept interviews were conducted during December, 1996 in ten Los Angeles area Circuit Cities. These stores were selected by headquarters personnel of both Circuit City and Montgomery Ward because it was thought they had strong appliance sales volumes and customer traffic. Each appliance department hosting the intercept interviews had models on the floor that represented a broad range of energy efficient refrigerators produced by all the major manufacturers.

Trained market research personnel conducted the intercept interviews. Based on the total traffic in each store, the average response rate was 32.5 percent yielding a total of 147 participants. Each interview lasted approximately 12 minutes. The sessions were held on weekday evenings.

The number of interviews conducted in each location was affected by the traffic in the appliance departments of the store and the willingness of the customers to be interviewed. In many cases participants did not wish to answer all of the questions that were posed.

Administering the survey designed for this study (see Appendix A), interviewers posed each question and wrote down the responses. When interviewees were asked to prioritize several variables, large cards with the questions printed on them were shown to study participants. When comments on the *EnergyGuide* label or the Energy Star® logo were solicited, respondents were shown the item in question.

Table 1:

**Tally Of Intercept Interviews And Total Traffic
Per Test Location**

	INTERCEPT INTERVIEW	TOTAL TRAFFIC	PERCENT INTERVIEW	TOTAL SESSION	INTERVIEWS PER SESSN	AVER TRFFC PER SESSN
CITY OF INDUSTRY	28	72	38.9%	5	5.6	14.4
HOLLYWOOD	7	14	50.0%	2	3.5	7.0
LAGUNA HILLS	14	82	17.1%	6	2.3	13.7
LONG BEACH	0	15	0.0%	4	0.0	0.0
NORTHRIDGE	11	50	22.0%	5	2.2	10.0
PASADENA	35	49	71.4%	5	7.0	9.8
POMONA	11	78	14.1%	5	2.2	15.6
SANTA BARBARA	13	40	32.5%	3	4.3	13.3
WEST COVINA	21	32	65.6%	6	3.5	5.3
WOODLAND HILLS	7	20	35.0%	5	1.4	4.0
GRAND TOTAL	147	452	32.5%	46	3.2	9.8

The first mention of “energy efficiency” per se was made one-third of the way into the questionnaire, after interviewees had had the opportunity to prioritize a wide range of factors that they would consider in making their appliance purchasing decision. These factors included aspects of energy efficiency such as operating costs, electricity consumption, and environmental friendliness.

While the questionnaire was designed to capture quantitative data, several open-ended questions were included to record insights to perceptions and attitudes. Some of these comments are included in the body of this report, affording a more in-depth look at interviewee responses.

Most questions asked respondents to rank factors in their order of importance or to assign a rating on a one-to-five scale. When ranking was requested, “one” was assigned to the item of highest importance, “two” to the next most important, and so on. Whenever ratings were to be assigned, interviewees were shown a scale relevant to the question that defined the meaning of each number. In all cases “one” was the lowest rating and “five” the highest.

ANALYSIS OF DATA

A Caveat

The respondents were basically “a convenience sample” of customers visiting the appliance departments of Circuit City stores in the Los Angeles area who were willing to talk to the interviewer. As such, the findings must be considered as potentially biased due to the sampling techniques.

Confidence Levels

In most aspects of the analysis we are 95 percent confident that percentages describing the consumer sample describe the larger population of appliance purchasers within an accuracy of plus or minus eight percent.

INTERVIEWS WITH SALES REPRESENTATIVES

In addition to the intercept interviews, sales representatives were interviewed when they were not busy with customers. The questionnaires administered to them were designed to assess their opinions about consumers attitudes toward energy efficient appliances.

Sales reps said:

When comments by sales personnel are relevant to the elements of the sales sample, their comments are framed in boxes such as this. These same comments also appear sequentially in the section devoted exclusively to the sales representative sample.

A total of 23 sales representatives participated in the study. This sample size precludes correlating their responses with consumers' attitudes in each city. However, the survey of sales representatives does add another dimension to the study as a whole.

THE FINDINGS

DEMOGRAPHICS OF THE CONSUMER SAMPLE

Men made up the majority of the sample, comprising 61.2 percent of the consumers who completed intercept interviews. Overall, almost 80 percent of the respondents were in the 18-49 age range and about two-thirds were married. Almost three fifths of the interviewees were Caucasian with significant representations of African Americans, Asians and Hispanics.

Table 2:

Interviewee Demographics: Gender, Age, Marital Status, Race

	TOTAL	PERCENT
<u>GENDER:</u>		
MALE	85	61.2%
FEMALE	54	38.8%
SUM	139	100.0%
<u>AGE:</u>		
18-34	53	39.8%
35-49	52	39.1%
50-64	21	15.8%
65+	7	5.3%
SUM	133	100.0%
<u>MARITAL STATUS:</u>		
SINGLE	57	46.3%
MARRIED	66	53.7%
SUM	123	100.0%
<u>RACE:</u>		
CAUCASIAN	72	58.5%
ASIAN	14	11.4%
AFRICAN AMER.	12	9.8%
HISPANIC	20	16.3%
OTHER	5	4.1%
SUM	123	100.0%

Forty-two percent of the sample held a college (or advanced) degree and 56 percent were employed in white collar occupations. Household incomes ranged widely, with 12.9 percent of the sample claiming earning over \$75,000 annually. Fifty-nine percent of the entire sample owned their own homes.

Table 3:
Intercept Interviewee Demographics
Education, Occupation, Political Affiliation,
Income, & Housing

<u>EDUCATION:</u>	COUNT	PERCENT
ELEMENTARY	0	0.0%
HIGH SCHOOL	29	23.8%
SOME COLLEGE	40	32.8%
COLLEGE DEGREE	33	27.0%
ADVANCED DEGREE	18	14.8%
OTHER	2	1.6%
SUM	122	100.0%

<u>OCCUPATION:</u>	COUNT	PERCENT
STUDENT	8	6.5%
WHITE COLLAR	56	45.2%
BLUE COLLAR	45	36.3%
HOUSE SPOUSE	2	1.6%
RETIRED	7	5.6%
OTHER	6	4.8%
SUM	124	100.0%

<u>HOUSEHOLD INCOME:</u>	COUNT	PERCENT
\$5 - \$14	8	6.9%
\$15 - \$24.9	16	13.8%
\$25 - \$34.9	16	13.8%
\$35 - \$44.9	24	20.7%
\$45 - \$54.9	14	12.1%
\$55 - \$64.9	19	16.4%
\$65 - \$74.9	19	16.4%
>\$75	15	12.9%
SUM	116	100.0%

<u>HOUSING:</u>	COUNT	PERCENT
RENT	50	41.0%
OWN	72	59.0%
SUM	122	100.0%

APPLIANCES SOUGHT BY CONSUMERS

More consumers were looking for a refrigerator than any other single appliance. On average, almost half of the people intercepted were shopping for a refrigerator.

Table 4:
Large Appliances Sought By Consumers

<u>WHICH APPLIANCE?</u>	COUNT	PERCENT
REFRIGERATOR	46	46.0%
CLOTHES WASHER	28	28.0%
DISHWASHER	14	14.0%
STOVE	12	12.0%
AIR CONDITIONER	0	0.0%
TOTAL COUNT	*100	100.0%

*When the consumer was seeking more than one appliance, each item was considered in this tally.

WHY CONSUMERS WERE SHOPPING

- Fifty percent of the sample owned old appliances that they wanted to replace. Break-down of the old appliance was the impetus for shopping 37 percent of the time. Thirteen percent of the sample reported that impending demise was the motivating force for shopping for a new appliance.
- Forty percent of the sample were buying an appliance they did not already have. Twenty-one percent did not own the desired appliance at present and 8 percent were moving.
- Sixteen percent were replacing functional appliances. This consumer group is made up of four percent who wanted new features and seven percent who were remodeling.

Table 5:

Reasons For Purchasing New Appliances

	#	%
BREAK-DOWN	50	36.8%
TIME TO REPLACE	18	13.2%
	68	50.0%
DIDN'T HAVE ONE	29	21.3%
MOVING IN	11	8.1%
	40	29.4%
OTHER	24	17.6%
	6	4.4%
DESIRE NEW FEATURES	10	7.4%
REMODELING	16	11.8%
TOTAL COUNT	136	100.0%

Sales reps said:

Sales representatives were asked to rate the frequency of customers' reasons for shopping for a new appliance. They were instructed to assign to each possible cause a "1" (very rarely), "2" (occasionally), "3" (half the time), "4" (frequently), and "5" (most of the time). When asked to rank the reasons customers purchase appliances "break-down" was the most frequently mentioned reason for refrigerators and dishwashers with "didn't have one" listed as the most frequent factor for buying an air conditioner. The desire for new features was on the bottom of the list for all three appliances.

HOW SOON WOULD PURCHASE BE MADE

On average, shoppers wanted to purchase their new appliance in about one month. However, great variability (as indicated by the high standard deviation) was recorded in these responses ranging from "immediately" to the distant future.

Table 6:

Average Months Until Purchase Is Expected To Be Made

	OVERALL
AVERAGE MONTHS	1.0

DISPOSING OF OLD APPLIANCE

Although many respondents were not aware of the service, appliance vendors often remove old appliances when delivering the new ones. Therefore the 32 percent of the sample who said they would dispose of the old appliances through store pick-up might be understated.

However, about a quarter of the consumers purchasing a new appliance were planning to keep the old appliance in service: 9.1 percent were to be given to a friend or relative, 5.1 percent would continue to be used in another part of the house, and 12.1 percent planned to sell their old appliances.

Table 7:

Plans for Disposing of Old Appliances

	#	%
STORE PICK-UP	32	32.3%
OTHER	15	15.2%
*SELL	12	12.1%
PICK-UP BY CHARITY	10	10.1%
PICK-UP BY TRASH COLLECTOR	9	9.1%
*GIVE TO FRIEND	9	9.1%
TAKE TO DUMP	7	7.1%
*USE IN HOUSE	5	5.1%
TOTAL COUNT	99	100.0%
*RECIRCULATE	26	26.3%

Sales reps said:

Consumers ask about disposing of old appliances very frequently. The average response was a 4.0 rating on the 1-5 scale of “very rarely” to “most of the time.” When disposing of refrigerators or dishwashers, store pick-up is requested frequently.

AGE OF OLD APPLIANCE BEING REPLACED

The average age of appliances which customers reported plans to replace was 13.6 years. (This is based on information supplied by 60 of the respondents. As indicated in Table 5, 50 percent of the sample was replacing an appliance that was no longer functional.)

Table 8:

Mean Age Of Old Appliance Being Replaced By Type of Appliance

	COUNT	MEAN
REFRIGERATOR	35	13.9
DISHWASHER	7	8.4
AIR CONDITIONER	0	
STOVE	7	17.6
CLOTHES WASHER	11	13.5
TOTAL	60	13.6

Sales reps said:

The average age of the appliance being replaced was 9.4 years, with refrigerators having the greatest average longevity (11.7 years), followed by room air conditioners lasting 6.3 years, and dishwashers lasting 9.0 years.

WHO DECIDES

Most often, 5 percent of the time, the individual shopper was planning to make the decision alone. This is true even though 87.2 percent of the sample reported living in households of two or more people. When the decision is made jointly, spouses are the most frequently involved.

Table 9:

The Decision Making Process

	#	%
<u>BY MYSELF</u>	80	55.9%
<u>JOINTLY</u>		
WITH SPOUSE	45	31.5%
WITH SIG OTHER	8	5.6%
WITH PARENT	5	3.5%
WITH CHILD	0	0.0%
WITH HOUSE-MATE	3	2.1%
WITH OTHER	2	1.4%
TOTAL	143	100.0%

Sales reps said:

About half of the time the decision is made by the individual shopper. When there is a co-decision maker, that person is most often the shopper's spouse.

WHAT MATTERS MOST WHEN BUYING AN APPLIANCE

Respondents were shown a list of factors that could possibly influence their decision to purchase a new refrigerator. They were asked to choose the six most important factors and to prioritize them. The results are presented in terms of those factors most frequently mentioned in the “top six”.

Table 10:

Factors Influencing Purchase of an Appliance

	COUNT	<u>PERCENTAGE of RESPONDENTS LISTING IN TOP SIX FACTORS</u>
BRAND	90	61.2%
CAPACITY/SIZE	77	52.4%
LOW PURCHASE PRICE	76	51.7%
LOW OPERATING COST	62	42.2%
QUALITY	62	42.2%
RELIABILITY	58	39.5%
LIFE SPAN	54	36.7%
ELECTRICITY CONSUMPTION	46	31.3%
WARRANTY PERIOD	46	31.3%
COLOR	41	27.9%
CONVENIENCE FEATURES	39	26.5%
IMMEDIATE DELIVERY	26	17.7%
PHYSICAL SIZE	26	17.7%
EASE OF OPERATION	24	16.3%
FINANCING AVAILABLE	21	14.3%
STYLE	21	14.3%
REBATE OFFERED	17	11.6%
EASE OF INSTALLATION	16	10.9%
ENVIRONMENTALLY FRIENDLY	15	10.2%
INSTALLATION AVAILABILITY	10	6.8%

No statistically significant association emerged between the importance of purchasing factors and any of the following: age, gender, education, income, occupation, or race. As a result, none of these demographics could be associated with consumers’ statements of what influenced their selection of appliances.

The most frequently named factor that influenced respondents' decisions was brand mentioned by 61.2 % of the sample. This was followed by 52.4 percent listing capacity/size (a non-negotiable issue for most purchasers). Low purchase price was listed by 51.7 percent, low operating cost by 42.2 percent, quality by 42.2 percent, and reliability by 39.5 percent.

Of the total respondents, a little less than one-third included electricity consumption (31.3 percent) on their list of important factors. Environmental friendliness was mentioned by only 10.2 percent.

Sales reps said:

Brand was the highest priority for consumers, followed by low purchase price, capacity/size, convenience features, immediate delivery, and quality. One-third considered electricity consumption to be one of the top six priorities for consumers, and only 17 percent named operating costs as a major factor in purchasing decisions. The sales representatives' response was congruent in many respects with the responses of the larger sample, with a coefficient of correlation of .77.

PREDISPOSITION TOWARD ENERGY EFFICIENT APPLIANCES

When asked if they were specifically seeking an energy efficient appliance, 53.6 percent of the respondents claimed they were, 18.8 percent stated they were not, and the 27.7 percent remaining claimed they were not sure.

This question represented the first time that "energy efficiency" was mentioned by the interviewer. It is possible that "energy efficiency" received a positive response either because interviewees perceived it was

the socially responsible answer or because they needed a gentle reminder that “energy efficiency” was a factor that should be considered.

The size of the “not sure” category could mean that education of consumers would make a significant difference.

Table 11:

**Response To Query About
Whether Seeking
An Energy Efficient Appliance**

	#	%
TYPE OF APPLIANCE		
ENERGY EFFICIENT	60	53.6%
STANDARD	21	18.8%
NOT SURE	31	27.7%
TOTAL COUNT	112	100.0%

Sales reps said:

Energy efficiency is moderately important to consumers. On average, sales representatives assigned a 3.3 to the question “How important a factor is energy efficiency in customers’ appliance buying decisions?” (Based on one-to-five scale: one was “not important” and five was “very important.”)

Reflecting this moderate degree of importance, sales representatives stated that they mention energy efficiency often in their sales presentations. They assigned an average rating of 3.9 to the question, “How often do you mention operating costs or energy efficiency in your sales pitch?” (Based on a one-to-five scale: one was “rarely” and five was “very frequently.”)

The effectiveness of energy efficiency as a selling point was considered to be moderate. Sales representatives assigned an average rating of 3.7 to the question, “How effective is energy efficiency as a selling point?” (Based on a one-to-five scale: one was “not effective” and five was “very effective”.)

All of this is consistent with the sales representatives’ reporting that customers ask about energy efficiency about half of the time. Sales representatives assigned an average of 2.8 to the question “Do consumers ask about energy efficiency?” (Based on a one-to-five scale: one was “very rarely” and five was “most of the time”.)

AWARENESS OF ENERGY STAR® LOGO

When participants were asked if they had seen the Energy Star® logo before, 42 percent registered an awareness of it. No demographic

variables were found to be associated with this awareness.

When shown the Energy Star® logo and asked what it meant to them, interviewees frequently mentioned that it meant the appliance it was posted on would save energy.

Table 12:

**Awareness of
Energy Star® Logo**

	COUNT	PERCENT
Yes	58	42.0%
No	80	58.0%
TOTAL COUNT	138	100.0%

Sales reps said:

Almost all of the sales representatives (95 percent) had seen the Energy Star® logo previously. Their responses upon seeing it replicated the typical consumer interviewee who indicated that the appliance it was mounted on would save energy.

THE EnergyGuide LABEL

Slightly more than half of respondents (52 percent) had seen the EnergyGuide Label. Only one-third of the interviewees responded with a “yes” when asked if they knew what was on it. Thirty-five percent

claimed the label figured in their purchasing decision. Respondents found the label to be moderately to somewhat useful, giving it an average of 3.28 rating on a one-to-five scale (where one was “not useful” and five “very useful.”)

No statistically significant relationships were found between awareness of the *EnergyGuide* label and race, occupation, gender, age, income, or education.

Table 13:

**Awareness of
EnergyGuide Label**

	COUNT	PERCENT
Yes	68	51.9%
No	63	48.1%
TOTAL COUNT	131	100.0%

Sales reps said:

Customers notice the *EnergyGuide* label somewhat more than half of the time. The sales representatives refer to the *EnergyGuide* label more than half the time. The average rating assigned to these questions was 3.6 and 3.7 respectively, based on a one-to-five scale where one was “very rarely” and five was “most of the time”.

ASSOCIATION OF PURCHASING FACTORS WITH ENERGY EFFICIENCY

Interviewees were asked to rate the degree of association of each purchasing factor with energy efficiency. For each factor, respondents were asked to use a one-to-five scale by assigning a number expressing this association: one was “no association,” two was “weak association,” three was “moderate association,” four was “strong association,” and five was “very strong association.”

Table 14:

Association Of Purchasing Factors With Energy Efficiency: Average Responses

FACTORS INFLUENCING BUYING DECISION	AVERAGE RATINGS ASSIGNED: 1-5 SCALE	
	CONSUMER SAMPLE	SALES REP SAMPLE
ELECTRICITY CONSUMPTION	4.10	4.62
LOW OPERATING COST	4.05	4.25
ENVIRONMENTALLY FRIENDLY	3.89	3.21
QUALITY	3.66	
LIFE SPAN	3.66	2.79
RELIABILITY	3.50	2.88
CAPACITY/SIZE	3.32	3.45
LOW PURCHASE PRICE	3.25	2.50
PHYSICAL SIZE	3.01	3.70
BRAND	2.95	2.86
WARRANTY PERIOD	2.82	2.42
CONVENIENCE FEATURES	2.57	2.20
REBATE OFFERED	2.55	2.32
EASE OF OPERATION	2.55	2.16
EASE OF INSTALLATION	2.45	1.79
STYLE	2.26	2.21
INSTALLATION AVAILABILITY	2.13	2.16
FINANCING AVAILABLE	2.06	2.16
IMMEDIATE DELIVERY	2.02	2.11
COLOR	1.89	1.42

The top three factors associated with energy efficiency were electricity consumption, low operating costs, and environmental friendliness. This indicates that while respondents did understand what energy efficiency means, one component (low operating costs) came in fourth (as voiced by 42%) as was one of the most influential factors when deciding which appliance to purchase. Conversely, as reported earlier, when asked directly, more than half of the participants responded that energy efficiency was an important concern.

PREFERRED WAYS TO PRESENT ENERGY EFFICIENT INFORMATION

Interviewees were presented with several different ways of presenting energy consumption and asked to rank their preferences. A ranking of “one” was to be assigned to the most desirable form of presentation, sequentially followed by less desirable forms. (This differs from ratings where respondents were asked to assign numbers from one-to-five where five was the highest score.)

Table 15:
Useful Ways Of Presenting Energy Efficient Information

PRESENTATION FORMS	MEAN RANKINGS	
	Consumer Sample	Sales Rep Sample
DOLLARS SAVED	1.92	3.06
DOLLARS OPER. COSTS	1.99	2.25
KW/HRS SAVED	2.66	5.15
KW/HRS CONSUMED	2.95	5.42
OFFICIAL EE LABEL	2.98	3.25
PERCENT HIGHER EFFICIENCY	3.12	4.23
NATURAL RESRCS CONSERVD	3.56	6.38
POLLUTANT REDUCTION	4.05	7.00

When presented with these choices of how they would like to see energy efficient information stated, respondents chose “Dollars Saved” closely followed by “Dollars of Operating Costs.”

Respondents showed a slight preference for seeing energy efficient information presented in terms of a yearly time period. However, it was also desirable to have energy savings presented in terms of both the lifetime of an appliance as well as on a monthly basis.

Table 16:
**Preferred Time Periods For Presenting
Energy Efficient Information**

PRESENTATION FORMS	MEAN RANKINGS	
	Consumer Sample	Sales Rep Sample
YEAR	1.7	1.3
LIFETIME OF APPLIANCE	1.8	1.8
MONTH	2.0	1.6
WEEK	3.3	3.4

Sales reps said:

Sales representatives agreed with consumers that the most preferable way of presenting energy savings was in terms of a year and the least preferable was in savings per week. The coefficient of correlation between the mean rankings of both groups was .99.

THE VALUE OF ENERGY EFFICIENT APPLIANCES

Respondents were willing to pay an average of \$120 more for an \$800 energy efficient refrigerator that would save \$50 per year over its fifteen year lifetime. Alternatively, if the utility company provided a \$50 rebate, then the consumers interviewed said they would pay an average of \$135 more.

Table 17:
**Consumers' Willingness To Pay More:
For Energy Efficient Appliances
Or With Rebate**

ADDITIONAL AMOUNTS	MEAN RANKINGS Average
FOR ENERGY EFFICIENT APPLIANCE	\$120
WITH REBATE	\$135

When interviewees were asked how much extra money they would be willing to pay, their responses varied from nothing to over one thousand dollars.

Sales reps said:

Customers would be willing to pay an average additional amount of \$236 for an energy efficient appliance compared with a standard one. If a rebate were given customers would pay an average additional payment of \$224. However, responses to both these cases were very variable with markedly different opinions expressed by the sales representatives in our sample. The extra average amount that sales representatives thought customers would be willing to pay is *nearly double* what the customer respondents said.

RESEARCHING THE MARKETPLACE

A little more than two-thirds (68.6 percent) of respondents had gathered information prior to shopping for an appliance.

Table 18:

Response To Query About Conducting Research Prior to Shopping

	FEMALE	MALE	TOTAL
YES	(79.2%) 42	(61.9%) 52	(68.6%) 94
NO	(20.8%) 11	(38.1%) 32	(31.4%) 43
TOTAL	(100.0%) 53	(100.0%) 84	(100.0%) 137

More women than men conducted research before they went to the showrooms. This proves interesting because it is the only demographic that could be found to influence a response. We had analyzed several questions in terms of demographic factors such as gender, age, income, race, educational level, and occupation. Concern for energy efficiency, awareness of the Energy Star® Logo, and awareness of the EnergyGuide Label were not associated on a statistically significant level with any of these demographics. However, when we looked at whether or not people gathered information prior to shopping, women significantly outnumbered men when it came to finding out what was in the marketplace.

Asked to rate useful sources of consumer advice on a one-to-five scale, with a rating of five being “most helpful” and one “least helpful,” respondents depended most personal contacts as a source of information, rating it an average 3.76. In other words, word-of-mouth is an important influence in appliance buying decisions as reported by this study’s sample.

The showroom was virtually tied with an average rating of 3.72. Respondents found it helpful to talk with salespeople, read the point-of-purchase materials, and see the appliances “in the flesh.”

Third and fourth most influential were newspapers and magazines, rated an average of 3.45 and 2.97 respectively. In most cases, “magazines” refer to *Consumer Reports*.

Table 19:
Interviewees Preferred Sources of Consumer Advice
Ratings Assigned on One-to-Five Scale

SOURCE OF ADVICE	CONSUMER SALES REPS	
	Average	Average
PERSONAL CONTACTS	3.76	3.62
SHOW ROOM	3.72	3.84
NEWSPAPERS	3.45	3.38
MAGAZINES	2.97	3.81
TV	2.04	3.53
INTERNET	1.81	2.50
RADIO	1.68	3.11

In many ways these research components work together. Interviewees referred first looking at newspaper ads to get a general idea of the price range, desired features and brands.

Table 20:
Consumers' Ratings Of The Reliability Of Consulted Information Sources
Ratings Assigned on One-to-Five Scale

INFORMATION SOURCE	CONSUMER SAMPLE	SALES REP SAMPLE
	Average	Average
CONSUMER REPORTS	3.95	4.82
UTILITY COMPANY	3.91	3.58
ENERGY GUIDE LABEL	3.49	4.11
SALES PERSON	3.42	3.75
MANUFACTURER	3.30	3.27
EPA	3.21	3.43
DOE	3.13	3.75
PRODUCT ADVERTISEMENTS	2.80	2.95
ARTICLES/STORIES IN MEDIA	2.77	3.56
GOVERNMENT	2.34	2.67
FTC	2.02	2.50

The same one-to-five rating scale where one was “not reliable” and five was “extremely reliable” was used by respondents to assess the reliability of the information sources that they consulted. *Consumer Reports* was rated the highest with an average of 3.95.

The utility company was rated almost as high a reliable source with an average rating of 3.91. The *EnergyGuide* label was listed next with an average rating of 3.49, followed by sales reps, rated at an average of 3.42. As a perceived source of information about energy efficiency, the government received and the FTC the lowest rating. Note this suggests a discrepancy with the relatively high regard shown for the *EnergyGuide* label.

Sales reps said:

The responses of sales representatives were closely correlated with those of consumers. For “Preferred Sources of Consumer Advice” the coefficient of correlation is .69 and for “Reliability of Consulted Information Sources” the coefficient of correlation is .84. While slight variations did exist, the most notable (and expected) was the emphasis that the sales rep sample gave to the influence of the sales person as well as the showroom.

WHAT IS ENERGY EFFICIENCY ALL ABOUT?

Respondents were asked to use a one-to-five scale to rate the degree of association between energy efficiency and a specific phrase (see Table 21) where one was “no association” and five was “complete association.” They rated operating costs highest, followed by environmental issues. The next highest rating words were “smart,” “rewarding,” and “90’s term.”

This again indicates that respondents understood the meaning of energy efficiency. In addition, it speaks to the high societal value placed on energy efficiency.

Table 21:

**Association Of Terms With
Energy Efficiency
Average Ratings of Degree of Association
Assigned by Consumer Sample**

	Average
SAVING MONEY	4.04
LOWERING UTILITY BILLS	3.93
CONSRVNG NATURL RESOURCES	3.65
ENVIRONMENTALLY SAFE	3.57
EXPENSIVE	2.89
REWARDING	2.58
90'S TERM	2.51
MORE FEATURES	2.46
MORE CONVENIENT	2.33
SMART	2.30
HIGHER UTILITY COSTS	2.15
POLITICALLY CORRECT	2.10
SQUANDERING NATURAL RESRCS	2.10
WASTING MONEY	2.10
CHEAP	2.07
INTERESTING	1.99
FEWER FEATURES	1.93
LESS CONVENIENT	1.85
UPSCALE	1.80
BORING	1.65
DUMB	1.59
HEROIC	1.51

THE SALES REPRESENTATIVE SAMPLE

OVERVIEW

Sales representatives were interviewed when they were not busy with customers. The questionnaires administered to them were designed to assess their opinions about consumer attitudes toward energy efficient appliances.

Table: 22
**Interviews With Sales Representatives
By Site**

CITY	SALES INTERVIEWS	% OF TOTAL
HOLLYWOOD	2	8.7%
LAGUNA HILLS	6	26.1%
NORTHRIDGE	2	8.7%
PASADENA	2	8.7%
POMONA	4	17.4%
SANTA BARBARA	4	17.4%
WOODLAND HILLS	3	13.0%
TOTAL	23	100.0%

A total of 23 sales representatives participated in the study. This small sample size, when distributed by location, precludes correlating their responses with consumers' attitudes in each city. However, the surveying of sales representatives does add another dimension to the study as a whole and, as such, is reported in each section.

Table: 23

**Sales Representatives:
Number of Years Doing Their Job**

	AVERAGE	RANGE
TIME IN STORE IN POSITION	5.0	1 month - 30 years
HOW LONG SELLING	12.6	6 months - 30 years
YEARS SELLING APPLIANCES	4.7	1 month - 30 years

While many of the sales representatives comprising the sample were seasoned professionals, there was great variability in the length of time they had been in their positions. Some sales representatives had been working in stores just a few weeks, while others had been selling for thirty years.

THE FINDINGS

Sales representatives were asked to rate the frequency of customers' reasons for shopping for a new appliance. They were instructed to assign to each possible cause a "1" (very rarely), "2" (occasionally), "3" (half the time), "4" (frequently), and "5" (most of the time). When asked to rank the reasons customers purchase appliances, "break-down" was the most frequently mentioned reason for refrigerators and dishwashers with "didn't have one" listed as the most frequent factor for buying an air conditioner. The desire for new features was on the bottom of the list for all three appliances.

Consumers ask about disposing of old appliances very frequently. The average response was a 4.0 rating on the 1-5 scale of "very rarely" to "most of the time." When disposing of refrigerators or dishwashers, store pick-up is requested frequently.

The average age of the appliance being replaced was 9.4 years, with refrigerators having the greatest average longevity (11.7 years), followed by room air conditioners lasting 6.3 years, and dishwashers lasting 9.0 years.

About half of the time the individual shopper makes the purchasing decision by himself/ herself. Most of the time the co-decision maker is the shopper's spouse.

Brand was the highest priority for consumers, followed by low purchase price, capacity/size, convenience features, immediate delivery, and quality. One-third considered electricity consumption to be one of the top six priorities for consumers, and only 17 percent named operating costs as a major factor in purchasing decisions. The sales representatives' response was congruent in many respects with the responses of the larger sample, with a coefficient of correlation of .77.

Energy efficiency is moderately important to consumers. On average, sales representatives assigned a 3.3 to the question "How important a factor is energy efficiency in customers' appliance buying decisions?" (Based on one-to-five scale: one was "not important" and five was "very important.")

Reflecting this moderate degree of importance, sales representatives stated that they mention energy efficiency often in their sales presentations.

They assigned an average rating of 3.9 to the question, “How often do you mention operating costs or energy efficiency in your sales pitch?” (Based on a one-to-five scale: one was “rarely” and five was “very frequently.”)

The effectiveness of energy efficiency as a selling point was considered to be moderate. Sales representatives assigned an average rating of 3.7 to the question, “How effective is energy efficiency as a selling point?” (Based on a one-to-five scale: one was “not effective” and five was “very effective”.)

All of this is consistent with the sales representatives’ reporting that customers ask about energy efficiency about half of the time. Sales representatives assigned an average of 2.8 to the question “Do consumers ask about energy efficiency?” (Based on a one-to-five scale: one was “very rarely” and five was “most of the time”.)

Almost all of the sales representatives (95 percent) had seen the Energy Star[®] logo previously. Their responses upon seeing it replicated the typical consumer interviewee who indicated that the appliance it was mounted on would save energy.

Customers notice the *EnergyGuide* label somewhat more than half of the time. The sales representatives refer to the *EnergyGuide* label more than half the time. The average rating assigned to these questions was 3.6 and 3.7 respectively, based on a one-to-five scale where one was “very rarely” and five was “most of the time”.

Sales reps agreed with the associations of purchasing factors and energy efficiency that were stated by the consumer sample. The coefficient of correlation was .73.

Sales representatives had a slightly different perception of how consumers would like to see energy efficient information presented. However, agreement was high as indicated with the coefficient of correlation between the mean rankings of both groups being .86.

Sales representatives agreed with consumers that the most preferable way of presenting energy savings was in terms of a year and the least preferable was in savings per week. The coefficient of correlation between the mean rankings of both groups was .99.

Customers would be willing to pay an average additional amount of \$236 for an energy efficient appliance compared with a standard one. If a rebate were given customers would pay an average additional payment of \$224. However, responses to both these cases were very variable with markedly different opinions expressed by the sales representatives in our sample. The extra average amount that sales representatives thought customers would be willing to pay is *nearly double* what the customer respondents said.

The responses of sales representatives were closely correlated with those of consumers. For “Preferred Sources of Consumer Advice” the coefficient of correlation is .69 and for “Reliability of Consulted Information Sources” the coefficient of correlation is .84. While slight variations did exist, the most notable (and expected) was the emphasis that the sales rep sample gave to the influence of the sales person as well as the showroom.

APPENDIX A: Comparison of DOE and SCE Study

More can be learned about the attitudes of the Los Angeles population through comparing the findings of this study with those of a parallel project done months earlier in four cities (Milwaukee, San Francisco, Tampa, and Washington, DC).

SUMMARY

Analysis yielded great similarity between both samples with the following exceptions:

- The DOE sample was slightly more than twice as large as the SCE sample.
- Demographics significantly differed in terms of gender, age distribution, and home ownership. More women than men participated in the DOE study, the opposite was true for SCE. In addition, more respondents were younger (between 18 and 34), single, and rented in the SCE sample.
- The SCE study indicated that many more respondents were making the appliance-buying decision by themselves. Consequently, the proportion making the decision with their spouses was lower.
- For SCE respondents, brand was the most important factor influencing purchase of an appliance as compared to low purchase price for interviewees participating in the DOE study. In addition, convenience features were not as important for the SCE group.
- Many more participants in the DOE study were aware of the EnergyGuide Label than were those in the SCE study.
- SCE participants were willing to pay more for energy efficient appliances. If a rebate were included, they volunteered to pay even more. In both cases, the amounts they were willing to pay exceeded those in the DOE sample.
- More women than men did prior research in the SCE sample than in the DOE group.
- Sales representatives in the SCE sample had sold appliances for two-thirds as long as those in the DOE sample.

METHODOLOGY

The discrepancies that exist between the findings from the larger DOE four-city study and this SCE study are presented in bold face in the tables comparing responses in terms of percentages.

Findings were reported in both studies, with a 95 percent confidence level that they would describe the larger population of appliance purchasers. The range of sampling error in the DOE and SCE studies was respectively plus or minus four and eight percent. Because of sampling error, if the differences between these studies were within 12 percent of each other, they are not considered to indicate differences in the larger populations.

When responses were in the form of ratings or rankings, coefficients of correlation were calculated between the DOE and SCE data. As reported, these indicate a high degree of similarity between the two samples.

THE FINDINGS

The DOE sample was slightly more than twice as large as the SCE sample. The fact that traffic per session was higher for the DOE study may be attributed to timing: the DOE study was largely done during weekends in mid-fall whereas the SCE interviews were held during weekday evening hours in December. On the other hand, there is no significant difference between the percent of traffic that participated in each study.

Table 1:

Tally Of Intercept Interviews And Total Traffic

	INTERCEPT INTERVIEW	TOTAL TRAFFIC	PERCENT INTERVIEW	TOTAL SESSION	INTERVIEWS PER SESSN	AVER TRFFC PER SESSN
DOE	323	1112	29.0%	74	4.4	15.0
SCE	<u>147</u>	<u>452</u>	<u>32.5%</u>	<u>46</u>	<u>3.2</u>	<u>9.8</u>
Difference	176	660	2.5%	28	1.2	5.2

Demographics significantly differed in terms of gender, age distribution, and home ownership. More women than men participated in the DOE study, the opposite was true for SCE. In addition, more respondents were younger (between 18 and 34), single, and rented in the SCE sample.

Table 2:

**Interviewee Demographics:
Gender, Age, Marital Status, Race**

	DOE	SCE	Difference
<u>GENDER:</u>			

MALE	41.3%	61.2%	19.9%
FEMALE	58.7%	38.8%	19.9%
<i>SUM</i>	100.0%	100.0%	
<u>AGE:</u>			
18-34	25.4%	39.8%	14.4%
35-49	40.5%	39.1%	1.4%
50-64	24.8%	15.8%	9.0%
65+	9.3%	5.3%	4.0%
<i>SUM</i>	100.0%	100.0%	
<u>MARITAL STATUS:</u>			
SINGLE	32.0%	46.3%	14.3%
MARRIED	68.0%	53.7%	14.3%
<i>SUM</i>	100.0%	100.0%	
<u>RACE:</u>			
CAUCASIAN	75.5%	58.5%	17.0%
ASIAN	5.4%	11.4%	6.0%
AFRICAN AMER.	11.8%	9.8%	2.0%
HISPANIC	4.5%	16.3%	11.8%
OTHER	2.9%	4.1%	1.2%
<i>SUM</i>		100.0%	

Table 3:

Demographics: Education, Occupation, Political Affiliation, Income, & Housing

	DOE	SCE	Difference
<u>EDUCATION:</u>			
ELEMENTARY	2.6%	0.0%	2.6%
HIGH SCHOOL	26.6%	23.8%	2.8%
SOME COLLEGE	23.7%	32.8%	9.1%
COLLEGE DEGREE	38.1%	27.0%	11.1%
ADVANCED DEGREE	7.7%	14.8%	7.1%
OTHER	1.3%	1.6%	.3%
<i>SUM</i>	100.0%	100.0%	
<u>OCCUPATION:</u>			
STUDENT	3.0%	6.5%	3.5%
WHITE COLLAR	55.3%	45.2%	10.1%
BLUE COLLAR	12.6%	36.3%	23.7%
HOUSE SPOUSE	5.3%	1.6%	3.7%
RETIRED	9.3%	5.6%	3.7%
OTHER	14.6%	4.8%	10.2%
<i>SUM</i>	100.0%	100.0%	
<u>HOUSEHOLD INCOME:</u>			
\$5 - \$14	8.0%	6.9%	1.1%
\$15 - \$24.9	9.5%	13.8%	4.3%
\$25 - \$34.9	12.4%	13.8%	1.4%
\$35 - \$44.9	17.2%	20.7%	3.5%
\$45 - \$54.9	12.8%	12.1%	.7%
\$55 - \$64.9	12.0%	16.4%	4.4%
\$65 - \$74.9	9.9%	16.4%	6.5%
>\$75	18.2%	12.9%	5.3%
<i>SUM</i>	100.0%	100.0%	
<u>HOUSING:</u>			
RENT	20.4%	41.0%	20.6%
OWN	79.6%	59.0%	20.6%

In general, respondents from both groups were shopping for the same appliances.
 However, more of the SCE sample was looking for appliances not listed in the choices supplied to them.

Table 4:

Appliances Sought By Consumers

<u>WHICH APPLIANCE?</u>	DOE	SCE	Difference
REFRIGERATOR	32.2%	31.9%	.3%
CLOTHES WASHER	25.6%	19.4%	6.2%
OTHER	18.1%	30.6%	12.5%
STOVE	15.1%	8.3%	6.8%
DISHWASHER	7.5%	9.7%	2.2%
AIR CONDITIONER	1.5%	0.0%	1.5%
TOTAL	100.0%	100.0%	

Reasons for purchasing new appliances were similar in both samples.

Table 5:

Reasons For Purchasing New Appliances

	DOE	SCE	Difference
BREAK-DOWN	28.7%	36.8%	8.1%
TIME TO REPLACE	18.9%	13.2%	5.7%
<i>REPLACE OLD</i>	47.6%	50.0%	2.4%
DIDN'T HAVE ONE	12.3%	21.3%	9.0%
MOVING IN	12.0%	8.1%	3.9%
<i>NEW</i>	24.3%	29.4%	5.1%
OTHER	11.5%	17.6%	6.1%
DESIRE NEW FEATURES	10.6%	4.4%	6.2%
REMODELING	6.0%	7.4%	1.4%
REPLACE WORKING	16.6%	11.8%	4.8%
TOTAL COUNT	100.0%	100.0%	

The respondents in the SCE sample planned to make their purchase a couple of weeks sooner than those in the DOE sample.

Table 6:

Average Months Until Purchase Is Expected To Be Made

	DOE	SCE	Difference
AVERAGE MONTHS	1.6	1.0	.6
STANDARD DEVIATION	3.1	3.7	.6

In general, plans for disposing of old appliances did not significantly differ between both samples. The exception was the “other” category specified by many more respondents in the SCE study.

Table 7:
Plans for Disposing of Old Appliances

	DOE	SCE	Difference
STORE PICK-UP	38.0%	32.3%	5.7%
OTHER	1.8%	15.2%	13.4%
*SELL	7.7%	12.1%	4.4%
PICK-UP BY CHARITY	13.1%	10.1%	3.0%
PICK-UP BY TRASH COLLECTOR	5.9%	9.1%	3.2%
*GIVE TO FRIEND	12.2%	9.1%	3.1%
TAKE TO DUMP	9.5%	7.1%	2.4%
*USE IN HOUSE	11.8%	5.1%	6.7%
TOTAL COUNT	100.0%	100.0%	
*RECIRCULATE	31.7%	26.3%	5.4%

A high correlation exists between the age of old appliances that are being replaced in both studies.

Table 8:
Mean Age Of Old Appliance Being Replaced By Type of Appliance

	DOE	SCE	Difference
REFRIGERATOR	12.9	13.9	1.0
DISHWASHER	11.1	8.4	2.7
AIR CONDITIONER	12.8	—	—
STOVE	18.4	17.6	.8
CLOTHES WASHER	15.8	13.5	2.3
GRAND MEAN	13.4	13.6	.2

Coefficient of Correlation = .9

The SCE study indicated that many more respondents were making the appliance-buying decision by themselves. Consequently, the proportion making the decision with their spouses was lower.

Table 9:
The Decision Making Process

	DOE MEAN	SCE MEAN	Difference
<u>BY MYSELF</u>	31.7%	55.9%	24.2%
<u>JOINTLY</u>			
With Spouse	81.3%	31.5%	49.8%
With Sig Other	6.7%	5.6%	1.1%
With Parent	3.4%	3.5%	.1%
With Child	3.8%	0.0%	3.8%
With House-Mate	2.4%	2.1%	.3%
With Other	2.4%	1.4%	1.0%
TOTAL	100.0%	100.0%	

For SCE respondents, brand was the most important factor influencing purchase of an appliance as compared to low purchase price for interviewees participating in the DOE study. In addition, convenience features were not as important for the SCE group.

Table 10:

Factors Influencing Purchase of an Appliance				
<u>PERCENTAGE of RESPONDENTS</u>				
<u>LISTING IN TOP SIX FACTORS</u>				
	DOE	SCE	Difference	
BRAND	47.7%	61.2%	13.5%	
CAPACITY/SIZE	52.0%	52.4%	.4%	
LOW PURCHASE PRICE	71.8%	51.7%	20.1%	
LOW OPERATING COST	31.9%	42.2%	10.3%	
QUALITY	45.5%	42.2%	3.3%	
RELIABILITY	44.6%	39.5%	5.1%	
LIFE SPAN	28.8%	36.7%	7.9%	
ELECTRICITY CONSUMPTION	28.8%	31.3%	2.5%	
WARRANTY PERIOD	28.5%	31.3%	2.8%	
COLOR	29.7%	27.9%	1.8%	
CONVENIENCE FEATURES	42.4%	26.5%	15.9%	
IMMEDIATE DELIVERY	17.0%	17.7%	.7%	
PHYSICAL SIZE	25.4%	17.7%	7.7%	
EASE OF OPERATION	22.0%	16.3%	5.7%	
FINANCING AVAILABLE	8.7%	14.3%	5.6%	
STYLE	13.3%	14.3%	1.0%	
REBATE OFFERED	11.8%	11.6%	.2%	
EASE OF INSTALLATION	14.2%	10.9%	3.3%	
ENVIRONMENTALLY FRIENDLY	11.1%	10.2%	.9%	
INSTALLATION AVAILABILITY	9.9%	6.8%	3.1%	

Similar proportions of each sample were seeking an energy efficient appliance.

Table 11:

**Response To Query About
Whether Seeking
An Energy Efficient Appliance**

	DOE	SCE	Difference
TYPE OF APPLIANCE			
ENERGY EFFICIENT	63.5%	53.6%	9.9%
STANDARD	15.1%	18.8%	3.7%
NOT SURE	21.4%	27.7%	6.3%
TOTAL		100.0%	

Similar proportions in each study were aware of the Energy Star[®] Logo.

Table 12:

Awareness of Energy Star Logo[®]

	DOE	SCE	Difference
Yes	40.0%	42.0%	2.0%
No	60.0%	58.0%	2.0%
TOTAL	100.0%	100.0%	

Many more participants in the DOE study were aware of the EnergyGuide Label than were those in the SCE study.

Table 13:

Awareness of EnergyGuide Label

	DOE	SCE	Difference
Yes	77.9%	51.9%	26.0%
No	22.1%	48.1%	26.0%
TOTAL	100.0%	100.0%	

Both samples agreed on which purchasing factors were associated with energy efficiency as indicated by the high coefficient of correlation between sets of responses.

Table 14:

Association Of Purchasing Factors With Energy Efficiency: Average Responses

	AVERAGE RATINGS ASSIGNED: 1-5 SCALE	
	DOE	SCE
ELECTRICITY CONSUMPTION	4.5	4.1
LOW OPERATING COST	4.4	4.1
ENVIRONMENTALLY FRIENDLY	3.9	3.9
QUALITY	3.4	3.7
LIFE SPAN	3.2	3.7
RELIABILITY	3.2	3.5
CAPACITY/SIZE	3.2	3.3
LOW PURCHASE PRICE	2.7	3.3
PHYSICAL SIZE	2.5	3.0
BRAND	2.4	3.0
WARRANTY PERIOD	2.6	2.8
CONVENIENCE FEATURES	2.6	2.6
REBATE OFFERED	2.1	2.6
EASE OF OPERATION	2.3	2.6
EASE OF INSTALLATION	2.0	2.5
STYLE	2.0	2.3
INSTALLATION AVAILABILITY	1.8	2.1
FINANCING AVAILABLE	1.8	2.1
IMMEDIATE DELIVERY	1.6	2.0
COLOR	1.5	1.9

Coefficient of Correlation = .96

The samples essentially agreed as to useful ways of presenting energy efficient information.

Table 15:

**Useful Ways Of Presenting
Energy Efficient Information**

PRESENTATION FORMS	MEAN RANKINGS	
	DOE	SCE
DOLLARS SAVED	2.4	1.9
DOLLARS OPER. COSTS	2.0	2.0
KW/HRS SAVED	3.3	2.7
KW/HRS CONSUMED	3.0	3.0
OFFICIAL EE LABEL	3.4	3.0
PERCENT HIGHER EFFICIENCY	3.7	3.1
NATURAL RESRCES CONSERVD	4.1	3.6
POLLUTANT REDUCTION	4.3	4.1

Coefficient of Correlation = .94

Consistency was recorded between groups for the time periods in which they would like to see energy efficient information presented.

Table 16:

**Preferred Time Periods For Presenting
Energy Efficient Information**

PRESENTATION FORMS	MEAN RANKINGS	
	DOE	SCE

FORMS			
YEAR		1.5	1.7
MONTH		1.6	2.0
LIFETIME OF APPLIANCE		1.8	1.8
WEEK		2.9	3.3

Coefficient of Correlation = .98

SCE participants were willing to pay more for energy efficient appliances. If a rebate were included, they volunteered to pay even more. In both cases, the amounts they were willing to pay exceeded those in the DOE sample.

Table 17:

**Consumers' Willingness To Pay More:
For Energy Efficient Appliances Or With Rebate**

ADDITIONAL AMOUNTS	MEAN RANKINGS	
	DOE	SCE
FOR ENERGY EFFICIENT APPLIANCE	\$89	\$120
WITH REBATE	\$92	\$135

More women than men do prior research in the SCE sample than in the DOE group.

Table 18:

**Response To Query About
Conducting Research
Prior to Shopping
(Percent that said they do prior research)**

	DOE	SCE	DIFFERENCE
FEMALE	60.3%	79.2%	18.9%
MALE	69.8%	61.9%	7.9%

Members of both groups agreed as to which sources provided reliable information.

Table 19:

**Interviewees Preferred Sources
of Consumer Advice
Ratings Assigned on One-to-Five Scale**

SOURCE OF ADVICE	DOE	SCE
-----------------------------	------------	------------

	Average	Average
PERSONAL CONTACTS	3.3	3.8
SHOW ROOM	3.7	3.7
NEWSPAPERS	2.5	3.5
MAGAZINES	2.8	3.0
TV	2.1	2.0
INTERNET	1.4	1.8
RADIO	1.5	1.7

Coefficient of Correlation = .92

Both samples agreed as to the reliability of consulted information sources.

Table 20:

**Consumers' Ratings Of The Reliability Of
Consulted Information Sources
Ratings Assigned on One-to-Five Scale**

INFORMATION SOURCE	DOE Average	SCE Average
CONSUMER REPORTS	4.4	4.0
UTILITY COMPANY	3.6	3.9
ENERGY GUIDE LABEL	3.8	3.5
SALES PERSON	2.9	3.4
MANUFACTURER	3.2	3.3
EPA	2.9	3.2
DOE	2.8	3.1
PRODUCT ADVERTISEMENTS	2.6	2.8
ARTICLES/STORIES IN MEDIA	2.9	2.8
GOVERNMENT	2.4	2.3
FTC	2.4	2.0

Coefficient of Correlation = .86

Member of both groups made highly similar associations with terms associated with energy efficiency.

Table 21:

**Association Of Terms With
Energy Efficiency
Average Ratings of Degree of Association
Assigned by Consumer Sample**

	DOE	SCE
--	------------	------------

SAVING MONEY	4.0	4.0
LOWERING UTILITY BILLS	4.2	3.9
CONSRVNG NATURL RESOURCES	3.9	3.7
ENVIRONMENTALLY SAFE	3.8	3.6
EXPENSIVE	2.2	2.9
REWARDING	2.7	2.6
90'S TERM	2.3	2.5
MORE FEATURES	2.2	2.5
MORE CONVENIENT	2.2	2.3
SMART	3.1	2.3
HIGHER UTILITY COSTS	1.9	2.2
POLITICALLY CORRECT	2.1	2.1
SQUANDERING NATURAL RESRCS	2.1	2.1
WASTING MONEY	2.0	2.1
CHEAP	2.1	2.1
INTERESTING	2.1	2.0
FEWER FEATURES	1.6	1.9
LESS CONVENIENT	1.7	1.9
UPSCALE	1.9	1.8
BORING	1.4	1.7
DUMB	1.3	1.6
HEROIC	1.5	1.5

Coefficient of Correlation = .95

When looking at longevity of sales representatives, the only notable difference was in how long they had been selling appliances. Those in the SCE sample had sold appliances for two-thirds as long.

Table: 23

**Sales Representatives:
Number of Years Doing Their Job**

	DOE	SCE
TIME IN STORE IN POSITION	5.2	5.0
HOW LONG SELLING	13.8	12.6
YEARS SELLING APPLIANCES	7.1	4.7

INTERCEPT QUESTIONNAIRE

INTERVIEWER'S NAME _____ DATE _____
STORE NAME _____ STORE # _____ TIME _____
INTERVIEW # _____

Good morning (afternoon - evening).

1A. Are you shopping today for an appliance? (PROBE & CHECK APPROPRIATE RESPONSE)

_____ Just purchased _____ Browsing (maybe)
_____ Looking to buy _____ Not interested -----> TERMINATE

B. Which one? _____

I would like to spend a few minutes and ask you a few questions about your approach to buying appliance.

I am part of a research group looking at how consumers make purchasing decisions about buying appliances. We are conducting this survey for statistical purposes only. We will not ask your name: all information will be kept confidential. We welcome whatever responses you offer. There are no right or wrong answers or, in some cases, you simply may not have a response. Our objective is simply to find out about people's attitudes towards purchasing appliances. If any question is not clear, please ask for an explanation.

2. What prompted your decision to shop for a _____ (See 1B) _____ ?(CHECK APPROPRIATE RESPONSE)

Didn't have one _____ Break-down _____ Time to replace _____
Remodeling _____ Moving-in _____
Desire for new features? _____ Which ones _____
Other? _____

3. How soon do you plan to make a purchase? _____

4A. If replacing an old appliance, how old is this appliance? _____ years.

B. What are your plans for getting rid of this appliance? (CHECK RESPONSE, PROBE IF NECESSARY)

_____ Pick-up by store _____ Pick-up by charity _____ Pick-up by trash collector
_____ Take to dump _____ Use in another part of house _____ Give to friend or relative
_____ Sell _____ Other _____

5. In your household, will you make the appliance buying decision by yourself or with someone else?

(CHECK RESPONSE, PROBE IF NECESSARY)

_____ I make the final _____ The decision is made Who has the final say?
decision by myself. jointly with: _____ you
_____ spouse _____ significant other _____ the other person
_____ parent _____ child _____ both together
_____ house-mate _____ other

6. From this list, please select at least one and up to six important factors you have in mind today as you shop. Please rank the six you choose in the order of importance - with one being your greatest concern and six the least. (GIVE RESPONDENT THE PINK FORM TO LOOK AT)

_____ Brand _____ Ease of Installation _____ Electricity consumption
_____ Capacity / size _____ Ease of Operation _____ Environmentally
_____ Color _____ friendly
_____ Convenience features _____ Financing available

- | | |
|--|---|
| <input type="checkbox"/> Immediate delivery | <input type="checkbox"/> Low purchase price |
| <input type="checkbox"/> Installation availability | <input type="checkbox"/> Physical size (external) |
| <input type="checkbox"/> Life span | <input type="checkbox"/> Quality |
| <input type="checkbox"/> Low operating costs | <input type="checkbox"/> Rebate offered |
| | <input type="checkbox"/> Reliability |
| | <input type="checkbox"/> Style |
| | <input type="checkbox"/> Warranty period |

7. Open ended questions -

Now that we've gone through some survey questions, I would like to give you the opportunity to respond in your own words. (INTERVIEWER - PLEASE USE BACK OF PAGE IF YOU NEED MORE SPACE TO RECORD RESPONSES. BE SURE TO LABEL THE QUESTION NUMBER CORRECTLY.)

A. Please tell me how you go about deciding which specific model you would like to purchase. (PROBE)

B. Are you planning (did you plan) to buy an appliance that is _____ standard or _____ energy efficient? (_____ not sure, _____ don't care)? (MARK APPROPRIATE BLANK)

C. Have you seen this (Show Energy Star Logo) before? _____ yes _____ no
What does it say to you?

D. We will be looking at the Energy Guide Label in a moment. Before I show it to you, please tell me if you have noticed it while appliance shopping? _____ yes (GO TO D1a) _____ no (GO TO D2)

D1a. Do you remember what is on it?

D1b. Do you refer to this label as part of your purchasing decision? _____ yes _____ no

NOW LET'S LOOK AT THE ENERGY GUIDE LABEL (INTERVIEWER: INDICATE ENERGY GUIDE LABEL THAT IS POSTED ON A NEARBY APPLIANCE.)

D2a. Looking at it, please tell me how useful it is in your purchasing decision? **(SHOW WHITE SHEET LISTING RATING SCALES AND CIRCLE RESPONSE)**

1	2	3	4	5
Not useful	A little useful	Modertely useful	Somewhat useful	Very useful

D2b. Why did you assign the rating you did?

D2c. How could the label be improved to be helpful?

E. When you hear the term "energy efficiency", what comes to your mind?

F. Tell me what energy efficiency means when you think of

- Refrigerators
- Room air conditioners
- Dishwashers

G. To you, what are the advantages of buying and/or owning an energy efficient appliance?

H. What are the disadvantages of buying and/or owning an energy efficient appliance?

I. Are there any other environmental concerns that you consider when buying an appliance?

Now that we've had a chance to hear your thoughts, I would like to ask you a few more short answer questions.

8. How much do you think each of the following has to do with energy efficient appliances? SHOW WHITE RATING SHEET, EXPOSING QUESTION #8. READ EACH ITEM AND WAIT FOR RESPONSE.

Please rate on a 1 to 5 scale where 1 is no association and 5 a strong association.

1	2	3	4	5
No association	weak	moderate	strong	Very strong association
___ Brand		___ Electricity consumption		___ Low purchase price
___ Capacity / size		___ Environmentally friendly		___ Physical size (external)
___ Color		___ Financing available		___ Quality
___ Convenience features		___ Immediate delivery		___ Rebate offered
___ Ease of Installation		___ Installation availability		___ Reliability
___ Ease of Operation		___ Life span		___ Style
		___ Low operating costs		___ Warranty period

9. What information about energy efficiency would be helpful to know when making your purchase?

(GIVE RESPONDENT THE BLUE FORM TO LOOK AT)

If you do have an opinion, please rank in order of importance - one is most helpful.

___ Official Energy Efficient Label	___ Kilowatt/hours consumed	___ Natural resources conserved
___ Dollars of operating costs	___ Kilowatt/hours saved	___ Pollutant reduction
___ Dollars saved	___ Percent higher efficiency	___ Other _____
___ None	___ Don't know	

10. For what time period would you like to see this information stated? Please rank, 1 is the highest, 4 the lowest: ___ Week ___ Month ___ Year ___ Lifetime of appliance ___ Don't know.

(GIVE RESPONDENT THE ORANGE FORM TO LOOK AT)

11. Let's say an energy efficient appliance such as a refrigerator would save you \$50 a year in utility bills. This appliance lasts an average of 15 years. This means it saves you \$4.17 a month, or \$750 over the 15 year lifetime of the appliance. If the standard model costs \$800, how much more, if any, would you be willing to pay for this energy efficient appliance? Remember the only difference between it and the standard one is that it lowers your utility bills because it uses less energy. \$ _____

12. Let's look at the same standard model refrigerator costing \$800. This time the utility company offers you a \$50 rebate when you purchase an energy efficient model. How much more, if any, would you be willing to pay for it? \$ _____

13. Have you tried to gather any information about the appliances you are interested in prior to shopping? ___ Yes ___ No

14. If so, where did you find helpful consumer advice? Please rate on a one to five scale where one is not helpful and five is extremely helpful. Be specific when you can. (SHOW WHITE RATING SHEET,

EXPOSING QUESTION #14. READ EACH ITEM AND WAIT FOR RESPONSE).

1 2 3 4 5
 Not helpful A little helpful Moderately helpful Somewhat helpful Extremely helpful

_____ Personal contacts _____ Show room _____
 _____ Internet _____ Radio _____
 _____ Magazines _____ TV _____
 _____ Newspaper _____ Other _____

15. Which sources of information about energy efficiency have you found to be the most reliable? Rate only those that you have used. Use a one to five scale where one is not reliable and five is extremely reliable. (SHOW WHITE RATING SHEET, EXPOSING QUESTION #15. READ EACH ITEM AND WAIT FOR RESPONSE.)

1 2 3 4 5
 Not reliable Barely reliable Moderately reliable Somewhat reliable Extremely reliable

_____ Product advertisements _____ The government _____ Consumer Reports
 _____ Articles & stories in the media _____ Department of Energy _____ Utility company
 _____ Energy Guide Label _____ Environmental Protection Agency _____ (Electric or gas company)
 _____ Manufacturer _____ Other
 _____ Sales person _____ Federal Trade Commission

16. When you think of "Energy Efficiency", to what extent does each of these words or phrases come to mind? Please use a one to five scale where one is no association and five is complete association. (SHOW WHITE RATING SHEET, EXPOSING QUESTION #16. READ EACH ITEM AND WAIT FOR RESPONSE.)

1 2 3 4 5
 No association Weak association Moderate association Strong association Complete association

_____ Rewarding _____ Wasting money _____ '90's term
 _____ Cheap _____ Dumb _____ Boring
 _____ Conserving natural resources _____ Lowering utility costs _____ Saving money
 _____ Less convenient _____ More features _____ Squandering natural resources
 _____ Interesting _____ Higher utility costs _____ Upscale
 _____ Expensive _____ Politically correct _____ Fewer features
 _____ Environmentally safe _____ Heroic _____ More convenient
 _____ Smart

To complete this questionnaire, I would like to ask you a few questions about yourself. All information will be entirely anonymous and absolutely confidential.

17. Please tell me about yourself. (SHOW GREY SHEET, AND ASK FOR APPROPRIATE RESPONSE.)

Gender _____ male _____ female **Age** _____ 18-34 _____ 35-49 _____ 50-64 _____ 65+
Marital status _____ single _____ married
Race _____ Caucasian _____ Asian _____ African American _____ Hispanic _____ other
Highest education level _____ **Occupation** _____ **Political affiliation** _____
Political orientation (please choose one):
 ___ Very Conservative ___ Somewhat Conservative ___ Middle-of -the-Road ___ Somewhat Liberal ___ Very Liberal
Do you belong to any environmental organizations? _____. Which ones _____
Household income _____ \$5,000 - \$14,999, _____ \$15,000 - \$24,999, _____ \$25,000 - \$34,999, _____ \$35,000-
 \$44,999, _____ \$45,000 - \$54,999, _____ \$55,000 - \$64,999, _____ \$65,000 - \$74,999, _____ \$75,000 and above.
Housing _____ rent _____ own _____ apartment _____ town house _____ detached/stand alone
Number of people in household _____

18. If buying an appliance is not your decision alone, please provide information about the other person

Gender male female **Age** 18-34 35-49 50-64 65+
Marital status single married
Race Caucasian Asian African American Hispanic other
Highest education level _____ **Occupation** _____ **Political affiliation** _____

Thank you for participating in this study.

SALES ASSOCIATE QUESTIONNAIRE

INTERVIEWER'S NAME _____ DATE _____
 STORE NAME _____ STORE # _____ TIME _____
 INTERVIEW # _____

In questionnaires such as this there are no right or wrong answers. Our objectives are to find out your perceptions about customer's attitudes towards purchasing appliances.

1. In your opinion, what prompts consumers' decisions to shop for appliances? Please rate the frequency of each cause.

1 2 3 4 5
 Very rarely Occasionally Half of the time Frequently Most of the time

A. REFRIGERATOR

Didn't have one _____
 Remodeling _____
 Break-down _____
 Moving in _____
 Desire for new features _____
 Which ones _____

 Other? _____

B. ROOM AIR CONDITIONER

Didn't have one _____
 Remodeling _____
 Break-down _____
 Moving in _____
 Desire for new features _____
 Which ones _____

 Other? _____

C. DISHWASHER

Didn't have one _____
 Remodeling _____
 Break-down _____
 Moving in _____
 Desire for new features _____
 Which ones _____

 Other? _____

If replacing, average age of old appliance _____

If replacing, average age of old appliance _____

If replacing, average age of old appliance _____

2. How often do consumers ask about disposing old appliances?

1 2 3 4 5
 Very rarely Occasionally Half of the time Frequently Most of the time

3. What plans do consumers have for disposing old appliances? Please rate the frequency of each plan.

1 2 3 4 5
 Very rarely Occasionally Half of the time Frequently Most of the time

A. REFRIGERATOR

Pick-up by store _____
 Pick-up by charity _____
 Pick-up by municipal trash collection _____
 Take to dump _____
 Use in another part of house _____
 Give to friend or relative _____
 Sell _____
 Other _____

B. ROOM AIR CONDITIONER

Pick-up by store _____
 Pick-up by charity _____
 Pick-up by municipal trash collection _____
 Take to dump _____
 Use in another part of house _____
 Give to friend or relative _____
 Sell _____
 Other _____

C. DISHWASHER

Pick-up by store _____
 Pick-up by charity _____
 Pick-up by municipal trash collection _____
 Take to dump _____
 Use in another part of house _____
 Give to friend or relative _____
 Sell _____
 Other _____

4. How are appliance buying decisions made? Please rate each according to this scale:

1 2 3 4 5
 Very rarely Occasionally Half of the time Frequently Most of the time

A. _____ Individual shopper makes the final decision by him/herself.

B. ___ The decision is made jointly with:
_____ spouse _____ parent _____ child
significant other _____ house-mate _____ other

5. From this list, please select up to six important factors customers have in mind when shopping for appliances. Please rank them in the order of importance - one is the greatest concern.

_____ Brand _____ Electricity consumption _____ Low purchase price
_____ Capacity / size _____ Environmentally friendly _____ Physical size (external)
_____ Color _____ Financing available _____ Quality
_____ Convenience features _____ Immediate delivery _____ Rebate offered
_____ Ease of Installation _____ Installation availability _____ Reliability
_____ Ease of Operation _____ Life span _____ Style
_____ Low operating costs _____ Warranty period

6. How much do your customers think the following are associated with energy efficient appliances?

1 2 3 4 5
No association weak moderate strong Very strong association

_____ Brand _____ Electricity consumption _____ Physical size (external)
_____ Capacity / size _____ Environmentally friendly _____ Purchase price
_____ Color _____ Financing available _____ Rebate offered
_____ Convenience features _____ Immediate delivery _____ Reliability
_____ Ease of Installation _____ Installation availability _____ Style
_____ Ease of Operation _____ Life span _____ Warranty period
_____ Operating costs

7. When customers are deciding which appliance to buy, how important a factor is energy efficiency in that decision? (Please circle the most appropriate number.)

1 2 3 4 5
Not important Slightly Moderately Important Very important
Important Important

8. How often do you mention operating costs or energy efficiency in your sales pitch? (Please circle the most appropriate number.)

1 2 3 4 5
Rarely Occasionally Sometimes Often Very frequently

9. On the average, how often do your customers seek information about energy efficiency? Please assign the most appropriate rating:

1 2 3 4 5
Rarely Occasionally Sometimes Often Very frequently

10. What information, if any, do your customers want to know about energy efficiency?

_____ None _____ Don't know

If you do have an opinion, please rank in order of importance - one is most helpful, nine the least.

_____ Official Energy Efficient _____ Kilowatt/hours consumed _____ Natural resources conserved
Label _____ Kilowatt/hours saved _____ Pollutants controlled
_____ Dollars of operating costs _____ Percent higher efficiency _____ Other _____
_____ Dollars saved

11. For what time period do you think your customers want to see this information stated? Please

rank, 1 is the highest:

____ Week ____ Month ____ Year ____ Lifetime of appliance

12. Think about your average customer. Suppose you presented an energy efficient appliance such as a refrigerator that would save \$50 a year in utility bills and lasts on the average 15 years. This means it saves \$4.17 a month, or \$750 over the 15 year lifetime of the appliance. If the standard model costs \$800, how much more, if any, do you think this customer would be willing to pay for this energy efficient appliance? Remember the only difference between it and the standard one was that it lowered utility bills because it used less energy? \$ _____ In terms of all customers, what would be the lowest and highest extra amounts they would be willing to pay? _____ MIN _____ MAX

13. Let's look at the same standard refrigerator costing \$800. For the energy efficient model, the utility company offers a \$50 rebate when purchased. How much more, if any, do you think a customer would be willing to pay for it? _____ In terms of all customers, what would be the lowest and highest additional amounts they would be willing to pay? _____ MIN _____ MAX

14. Do your customers try to gather any information about the appliances they are interested in prior to shopping? _____

1 2 3 4 5
Very rarely Occasionally Half of the time Frequently Most of the time

15. If so, as far as you know where do they find helpful consumer advice? How often do your customers use each of the following sources?

1 2 3 4 5
Never Seldom Sometimes Often Frequently

_____ Personal contacts	_____ Newspaper	_____ TV
_____ Internet	_____ Show room	_____ Other _____
_____ Magazines	_____ Radio	

16. Which sources of consumer advice are most helpful to your customers? Please rank in order of importance, with one being most important.

_____ Personal contacts	_____ Magazines	_____ Show room	_____ TV
_____ Internet	_____ Newspaper	_____ Radio	_____ Other _____

17. Which sources of information about energy efficiency have your customers found to be the most reliable?

Rate only those that your customers have used and mentioned to you.

1 2 3 4 5
Not reliable Barely reliable Moderately reliable Somewhat reliable Extremely reliable

_____ Product advertisements	_____ The government	_____ Consumer Reports
_____ Articles & stories in the media	_____ Department of Energy	_____ Utility company
_____ Energy Guide Label	_____ Environmental Protection Agency	_____ (Electric or gas company)
_____ Manufacturer	_____ Federal Trade Commission	_____ Other _____
_____ Sales person		

18. Now that we've gone through some survey questions, I would like to give you the opportunity to tell me in your own words your thoughts about customers' attitudes toward energy efficient appliances. May I have your permission to record your responses in order to save some time.

A. How you think customers decide the specific model they would like to purchase?

B. Do consumers ask you about energy efficiency? Please circle the frequency of occurrence:

1	2	3	4	5
Very rarely	Occasionally	Half of the time	Frequently	Most of the time

C. What do they want to know?

D. Please indicate the level of training you received re: selling energy efficient appliances? Please circle:

1	2	3	4	5
Poor training	A little training	Some training	Good training	Excellent training

E. Do you mention energy efficiency in sales pitches? Please circle the frequency:

1	2	3	4	5
Very rarely	Occasionally	Half of the time	Frequently	Most of the time

F. Why or why not?

G. If you do talk about energy efficiency in your sales pitches, what do you say in terms of

G1 Refrigerators

G2 Room air conditioners

G3 Dishwashers

H. Have you seen this (Show Energy Star Logo) before? ____ Yes ____ No

I. What is the message that it conveys to your customers?

J. Show Energy Guide Label.

J1. Do customers notice it when appliance shopping? Please circle the frequency of occurrence:

1	2	3	4	5
Very rarely	Occasionally	Half of the time	Frequently	Most of the time

J2. What questions have they asked about it? _____

Is this label useful in customers' purchasing decisions?

If yes, please state how.

J3. Do you refer to this label as part of your selling process? Please circle the frequency of occurrence:

1	2	3	4	5
Very rarely	Occasionally	Half of the time	Frequently	Most of the time

J4. In your opinion, should the label be changed in any way to make it more effective?

K. What do you think comes to mind for your customers when they hear the words “energy efficiency?”

L. Do your customers talk about any energy efficient appliances they own? Please circle the frequency:

1 2 3 4 5
Very rarely Occasionally Half of the time Frequently Most of the time

Which ones are most common? _____

How long have they owned them? _____

How do they know they are energy efficient? _____

M. What do you think affects customers’ decisions about purchasing energy efficient appliances compared with ones that are LESS energy efficient?

N. How effective is energy efficiency as a selling point? Please circle the effectiveness:

1 2 3 4 5
Not effective Weak Moderate Strong Very effective

O. Why did you choose this degree of effectiveness?

P. Please add any additional comments about customers’ awareness of energy efficient appliances.

19. Please tell me about yourself:

Gender: _____ male _____ female

Age _____ 18-34 _____ 35-49 _____ 50-64 _____ 65+

Marital status _____ single _____ married

Race _____ Caucasian _____ Asian _____ African American
 _____ Hispanic _____ other

Highest education level _____

How long have you been working in this position as a sales associate at this store? _____

Please tell about the other jobs you have held in the last two years. _____

How long have you been selling? _____

How long have you been selling appliances? _____

CONSUMERS' ATTITUDES TOWARD ENERGY EFFICIENT APPLIANCES

Focus Groups Conducted in the Los Angeles, CA

*with consumers who had purchased refrigerators
within the last twelve months and received a rebate*

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I. INTRODUCTION

Background

As part of the Energy Star® Retailer Initiative, focus groups were conducted to explore consumer attitudes toward energy-efficient appliances. These in-depth conversations with people who have purchased energy-efficient refrigerators within the last year were intended to help guide the positioning of energy-efficient appliances in the broader marketplace.

This qualitative research supplements the quantitative research consisting of intercept interviews conducted at the inception of the Energy Star® Program in the appliance departments of Circuit City stores in ten Los Angeles locations.

Two previously conducted qualitative studies were invaluable to the development of the *Screener* and the *Moderator's Guide* . The *U.S. Department of Energy Efficiency and Renewable Energy's Energy Savers Retailer Initiative Test Phase Program Report* , dated February, 1996, was based on intercept interviews conducted in the Washington, DC area. *A Qualitative Examination of Energy Savings, A report to Oak Ridge National Laboratory, February, 1995* was based on focus groups conducted in Baltimore, MD and Portland, OR.

Study Purpose

The study was conducted to:

- Obtain insight into consumer purchasing factors.
- Explore the effects of program-related energy efficient information.
- Look at how to enhance the communication effectiveness of Energy Star® appliance labels and related energy efficiency information.

Methodology

Two focus groups were conducted in the Los Angeles area. Participants were recruited by the Discovery Research Group in Irvine, California from a list of consumers who had purchased an energy-efficient refrigerator within the last twelve months. Recruiters were instructed to form groups with an even distribution of gender and ages.

Group I consisted of ten people, five women and five men. Six had household incomes above \$50,000. Group II, conducted at 8:00 p.m. was comprised of eight people, four women and four men. Six had household incomes above \$50,000.

PROFILE OF EACH FOCUS GROUP												
Group	Size of Household					Home Ownership		Household Income		Gender		Total
	1	2	3	4	5& up	YES	NO	Below \$50 K	Above \$50K	Male	Female	
I. 6:00	1	5	2	0	2	6	4	4	6	5	5	8
II. 8:00	2	0	1	3	2	8	0	2	6	4	4	8

The groups were held on the evening of March 11, 1997 at 6:00 and 8:00 p.m. Both sessions took place at a mirrored focus group facility at the Discovery Research Center in Irvine, California. Observers from the facility and the Southern California Edison Company were present.

Issues Covered

- Baseline information
- Description of refrigerator that was purchased
- Motivation for purchasing a new refrigerator

- Product attributes that are important and brand awareness
 - Prior to their purchase
 - After purchase
 - Brand names
- Awareness of energy efficiency
 - EnergyGuide label
 - Changes in usage behavior
- Importance of rebate
- Researching the purchase
- Experience in the showroom
 - Importance of visiting appliance showrooms
 - The Energy Star[®] logo
 - Improving the showroom experience
- Importance of sales price and operating costs
- Perception of SCE and value of electricity
- The next appliance to be purchased

Moderator

Karen A. Cantor, MBA, Research Director for Brown & Whiting
Marketing & Public Relations

Statement of Limitations

In qualitative market research, the focus group approach seeks to develop insight and direction rather than quantitatively-precise or absolute measures. Because of the limited number of respondents and the restrictions of recruiting, this research must be considered as no more than elucidating perceptions and attitudes.

The findings, while providing valuable insights as to how people think about energy efficiency, do not necessarily describe the larger population. The recruiting of participants cannot be exactly replicated, identical questions cannot be asked in each group, nor can the results of one group be compared precisely with other groups: they can only be added to the body of knowledge on this topic.

II. EXECUTIVE SUMMARY

- When consumers are exposed to issues of energy-efficiency, their awareness is raised as are their stated intentions of altering their purchasing behavior.
- *Consumer Reports* is generally considered to be a respected resource, serving as a counselor and advisor.
- Visits to the showroom are a critical component in researching the final purchase. This highlights the importance of the sales representative's expertise and the point-of-purchase materials.
- In some cases the sales representative emphasized energy efficiency and convinced the buyer that saving on operating costs added to the value of their purchase.
- The EnergyGuide label is somewhat important in purchase decisions.
- The Energy Star[®] Logo is considered easier to use than the EnergyGuide label and a valuable guide.
- Energy-efficiency is associated with either high quality or curtailed life expectancy and more frequent repairs.
- Paybacks are, for some, a new way of thinking about concepts of energy efficiency.
- While the savings generated by operating one efficient appliance may not seem like much, the savings resulting from several appliances together may seem significant.
- Reducing monthly utility bills is the main reason for interest in energy efficiency.
- Rebates are valued, although their dollar amount does not seem to be a convincing sales factor.
- Interacting with Southern California Edison can be beneficial or

frustrating.

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THE FINDINGS

Each of the participants in both focus groups had purchased a refrigerator within the last 12 months. Most had purchased a refrigerator some time earlier; four were buying one for the first time

Describing their refrigerators, respondents listed either features or benefits before naming brand. Of the 20 respondents, half owned Whirlpools, five had Kitchen-Aides, two had GE Hot Points, and one had an Amana. Twelve had purchased side-by-side refrigerators and six had freezer-on-top models.

Reasons for Purchase

Several different reasons accounted for the purchase of a new refrigerator. Some participants bought new refrigerators because they either did not have one, or the old one no longer worked or seemed it was going to seriously malfunction soon. Some decided that repair of the current model was too expensive or that the current model no longer met their needs. Others were remodeling.

Important Attributes

Respondents were asked about what attributes were important to them prior to their purchase. They talked about space constraints, ice maker with external dispenser, internal capacity and model configuration, and cleanability. In both groups, respondents' first mention of energy efficiency came up when talking about important attributes. Dealing with Southern California Edison also was mentioned in this context.

When talking about what they liked about their new refrigerators after installation, energy efficiency was considered as one of the most important features of respondents' new refrigerators. Participants also were enjoying many of the features that increased storage, made it easier to view the contents, and contributed to the longevity of the stored foods. Ease of cleaning and convenience features were also important. Color was also listed.

When asked how their list of desired features have changed since the last time they purchased a refrigerator, not one respondent mentioned energy. Rather, they focused on cleanability and convenience features that were

not available the last time they shopped. Respondents also mentioned capacity needs that had grown along with their family size.

Savings

In addition to the savings were generated from energy efficiency, other features that saved money were listed. These included see-through bins which made it easier to see fruits and vegetables so they were not overlooked. Humidity control promoted produce longevity. The freezers' pull-out shelves and bottom tray were cited in terms of both convenience and fostering awareness of the contents. Added storage meant fewer trips to the grocery store.

Research

Although researching purchases ranged from none to conducting in-depth searches, most people did some homework before they made a purchase.

Brand names were referred to as a way of knowing which refrigerators would be a quality product backed with a proven track record of longevity. *Consumer Reports* was thought of primarily as an advisor and counselor, as opposed to marching orders for purchasing a specific model. Word-of-mouth, was depended upon by many participants who had benefitted from talking with friends and relatives about their refrigerators. Frequently, group members had bought the brands with which their families were most familiar and comfortable.

While just a few had consulted The Internet, their experiences suggest that in the future The Internet will be used more and more as a source of manufacturers' data and consumer information.

Newspapers were a respected resource that featured what was available and price points. Others looked at newspapers after the sale to check to make sure they had gotten the best deal.

Respondents reported different experiences upon calling SCE. Some received detailed information about energy efficient refrigerators including being encouraged to buy a new one to save on energy. Others told about having SCE conduct energy inventories of their home. Still others recounted not being able to get in touch with Edison because they were left on hold and/or did not have messages returned.

Showroom Experience

Many participants relied on their visits to the showroom to find the best model for their needs and pocketbook. Once there, they consulted with sales representatives, compared models on the floor, and looked at the point-of-purchase materials. Many first learned about rebates offered by the retailer in the showroom. Also, it was there that they experienced a heightening of their awareness of energy efficient refrigerators.

The sales representatives were mentioned frequently as strongly influential in the buying decision. In some cases, they made the sale. Other times, they endorsed specific brands. In some cases, sales representatives drew attention to varying energy consumption of different models. Sales representatives were considered to have a pivotal role in explaining how savings generated from energy savings could payback the initial cost of the refrigerator.

Point-of-Purchase signs made a positive difference for several participants, making it easy to compare model information. The EnergyGuide label was cited as influencing decisions. However, concern was registered as to the label's descriptive accuracy in regard to product category and whether the right label was placed on the appropriate refrigerator.

Recommendations for improving the EnergyGuide label included larger type, more explicit graphic display of efficiency, and actual savings that would be experienced in specific locales. Respondents liked the Energy Star® Logo because, appearing in three different versions, it was easy to use without in-depth analysis.

Some participants first learned about rebates offered by Circuit City from the signs posted on the showroom refrigerators.

The group reported mostly good experiences in the showroom. Suggestions for improving communications about energy efficiency focused on a large posted chart that would present the EnergyGuide information in a comparative form.

Cost, Payment Plans, and Paybacks

While some respondents reported that cost was not the determining factor, others claimed that price is the ultimate decision-maker. The actuality, it

seems, is that for many, the dollar can prove a powerful influence. Payment plans with zero-percent interest were also significant incentives.

Although many thought that paybacks accrued from saving money on monthly utility bills would take too long, others thought that energy efficient models would have a full complement of features making them worthwhile expenditures.

Circuit City

In addition to zero-percent payment plans, Circuit City was the retail outlet of choice because participants knew they could expect to make their purchase at the lowest market price, even if the posted prices were higher than competitors'. The sales staff at Circuit City was often mentioned as being professional and easy to deal with.

Cost of Electricity

Controlling electric utility bills at home was primarily a matter of turning lights off and being aware of the high costs of air conditioning. Both groups presented an attitude of being concerned about their utility bills coupled with a feeling of resignation that, in spite of budgetary constraints, there was little they could do.

Indeed, the opinion was voiced that in terms of energy consumption, with new refrigerators there is not much difference model to model. However, members of both groups were aware that the differences are significant between older models and brand new ones.

Energy Efficiency

When asked about what was important prior to shopping for a refrigerator, only one respondent from each group mentioned energy efficiency. Once refrigerators were purchased and installed, energy efficiency became one of the top attributes mentioned by well over half of the respondents.

One possible explanation for this change is the experience in the showroom. Many group members experienced an increased awareness of energy efficiency imparted by both the sales representatives and the point-of-purchase materials. Another, is that awareness was raised during the course of the focus group, resulting in participants speaking more and more about energy efficiency.

Some respondents reported significant savings on their monthly electric bills since their new refrigerators had been installed. Others had not looked for any differences on their bills. There were those attendees who registered little regard for what they deemed were small differences in operating costs.

Some believed that it was the user, and not the particular model, that determined energy consumption. Others were aware that some of the features on the refrigerator impacted how they used it. These included door dispensers for ice and water and having enough door storage to house milk, orange juice, and soda.

Another concern about dramatically high energy efficiency was breakdown resulting from the possibility that the manufacturer was giving something up to decrease energy consumption. Several respondents claimed that the new refrigerators just don't seem to last as long. Which is why, one participant said, she bought the extended warranty. Some respondents claimed that a difference of brands could be more critical to making a decision than comparative energy savings.

When asked to list and then rank the appliances that used the most energy in their homes, air conditioners were considered to use the most energy, with dryers and refrigerators appearing in either the second or third spot. Lists included computers, hair dryers, microwaves, lights, pool pumps, space heaters, power tools, TV's and VCR's.

When asked about the next appliance they would buy and the importance of energy efficiency in that decision, respondents talked about a wide array of appliances, noting in some cases they were propelled by the need to be more energy efficient.

Features vs. Energy Efficiency

Even though energy consumption was important, features were often cited as the critical deciding factors. If all things were equal (including availability), then several respondents said they would choose an energy efficient model. Paybacks were considered slow as well as needing to be explained in terms of operating costs and how lower monthly bills could add up over a period of time to equal the initial outlay.

Rebate

Some respondents learned about a rebate offered by Circuit City when they were shopping. There was some confusion as to the source of the energy rebate as to whether it was Edison or Circuit City. Both groups were uncertain about the source, types, and expected dates of payment. Participants agreed that the rebate was nice to have, but it did not force their decision.

Value of Electricity

When queried as to whether they thought they were getting reasonable value for the electricity they were using, the responses were mixed. Some respondents thought there was no way of knowing. Others felt it was a non-issue, because they had no choice. A few mentioned that rates vary by locations with a concomitant variance in service.

No respondents had any knowledge that utility rates were going down. Concern was also expressed that if rates went down, service would diminish as well.

CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

As both sessions progressed, members of both groups expressed concern about energy efficiency as reflected by their monthly utility bills. The very fact that consciousness was being raised during the course of the focus groups suggests that when consumers are exposed to the issues, they are more likely to be receptive to altering their purchasing behavior.

Visits to the showroom were claimed to be a critical part of the decision-making process, no matter how much research had been done previously. Respondents liked seeing and touching a wide array of actual appliances along with receiving the help offered by the sales representatives. Awareness of the EnergyGuide labels was high, but confusion was expressed about what they were supposed to be communicating. Some consulted them to determine relative energy efficiency, others found them too confusing to deal with, and a few

thought that there mere presence meant the unit they were placed on was energy-efficient. The Energy Star® logos were considered simpler to deal with and a valued guide.

The rating of an appliance as “energy-efficient” communicates other messages as well. It can convey that the appliance is built well, a high quality item that will last a long time. Conversely, it can also be associated with curtailed longevity and the possibility of more break-downs. Other than a specific mention of SERP refrigerators as being very expensive, “energy efficiency” did not elicit associations with high cost.

Interest in energy efficiency is driven by an interest in saving money on monthly utility bills. Awareness was registered of the difference in energy consumption between old models and new refrigerators.

The concept of paybacks in terms of saving on operating costs was greeted with interest, with respondents asserting they had not given much thought to operating costs in terms of paybacks. However, paybacks were downplayed because it would take too long for savings to equal the initial expenditure. Savings in operating costs generated by a refrigerator were considered negligible by most. On the other hand, the issue was raised of adding together the savings realized by several appliances functioning all at the same time.

Features were the consummate selling points. The consumers in these focus groups were drawn to certain features such as external ice and water dispensers as well as better organized internal storage. This suggests that even though these features were energy conserving, their selling points were the convenience benefits that the consumer enjoyed. Rebates were not considered to be a very significant incentive for a specific purchase decision.

Dealing with Southern California Edison . The cost of electricity is considered as a “given”. Some respondents knew about the home energy assessment offered by the utility and felt that the analysis was valuable. On the other hand, some participants reported difficulty in getting an Edison representative on the phone. No one was aware of future rate decreases.

III. FINDINGS

Baseline Information

The session began with respondents telling the group the last time they purchased a refrigerator as well as recalling the time before that. All participants had purchased a refrigerator within the last 12 months.

Members of the groups who had previously bought a refrigerator had made their purchase anywhere from two years to 25 years ago.

Group I had one person who was a first-time new refrigerator purchaser. Previously she had lived in other states where apartments came equipped with a refrigerator. Four respondents in Group II had never before purchased a refrigerator. One had just established a household and three had replaced used models they had been given or bought. Each of these three offered unsolicited explanations, such as:

“In our five years of marriage we have used my wife’s old, 1970’s model Montgomery Ward Refrigerator. Now it is literally falling to pieces. We finally go some bills paid off, had the money available, and went out and bought a refrigerator.”

Description Of Refrigerator That Was Purchased

When asked what they had purchased, both groups initial responses were descriptive. Group II laughed when a woman said,

“A box that keeps things cold.”

The next response answered the question, and introduced the pattern of mentioning brand:

“Side-by-side with ice maker and dispenser on the door. Trying to think of the name of it. Yes, a Kitchen-Aide”.

Likewise in Group I, the first two responses were anecdotal. Both comments referred to needing more refrigerator capacity as well as introducing such topics as disposal of old models and the attraction of having certain features.

“In my lifetime I’ve bought about 15 refrigerators. Two are

in my shop, two at home. I bought one for my daughter and her husband this year. The one I bought for myself is in the garage because we needed more freezer space.”

“The first refrigerator we bought was too small. We wanted to replace the 18 cubic foot model with 25 cubic feet. Plus, my wife wanted water and ice dispensers.”

Polling each group yielded information as to specific purchases, as reported in this table.

TYPES OF REFRIGERATORS PURCHASED		
	GROUP I (TOTAL = 10)	GROUP II (TOTAL = 8)
BRAND		
AMANA	1	
GE HOTPOINT	1	1
KITCHEN-AIDE	3	2
WHIRLPOOL	5	5
STYLE		
SIDE-BY-SIDE	5	7
FREEZER ON TOP	5	1

Motivation For Purchasing A New Refrigerator

Some participants bought new refrigerators because they either did not have one, or the old one no longer worked or seemed it was going to seriously malfunction soon. Some decided that repair of the current model was too expensive or that the current model no longer met their needs. Others were remodeling.

Half of Group I referred to signs of aging as did three respondents in Group II The first mention of energy efficiency was made in this context as was a reference to dealing with Southern California Edison. Both

topics will be explored later in this report.

Respondents frequently learned that their refrigerators were dying by the noises they made:

“The sound was like a buzz. It would pop and crackle a few times. Plus it was a matter of energy efficiency. Twenty years ago energy efficiency was not a matter of consideration for manufacturers and now it is.”

“Our refrigerator gave up the ghost - big time. The only advance notice was more noise. And then, one day, the milk was sour. Like overnight. So, I had to replaced it.”

The cost of repair motivated one participant to purchase a new refrigerator:

“One of the reasons that we didn’t repair it was because it was 19 years old. A service call costs \$50, then it would be parts. It would be just too much to put into an old refrigerator.”

A desire for increased capacity impelled at least four group members to replace their old models.

In many cases, a combination of factors added up to the decision to buy a new refrigerator. In addition to remodeling the kitchen, this list included the refrigerator not being as cold as expected, making more noise, having limited capacity, and being an unappealing color.

“The avocado green paint was peeling off. I told my husband that as hard as I have been working on the house, this ugly contraption was just not going to do.”

Important Product Attributes

Respondents were asked about what attributes were important to them prior to their purchase. Their comments at this point in the discussion could be categorized in one of the following ways: space constraints, energy efficiency, ice maker with external dispenser, internal capacity and model configuration, and cleanability. Issues of usability surfaced later in the session when participants were asked to discuss what they liked about their new refrigerators.

Space Constraints.

Space constraints were listed by a few people.

“I wanted the biggest refrigerator I could get that would fit into the spot. I wanted a 27 cubic foot. I was pushing my luck with a 25 cubic foot model.”

One man was remodeling and was able to open up a space behind his new refrigerator so it would not abut into the kitchen. Another woman settled for her refrigerator protruding because she surmised she had no choice.

Two men talked about installing a refrigerator into a tight space. One did it without mishap by using a plastic sheet as lubricant, the other scratched his unit's side wall so voiding his warranty (as group members informed him).

Energy Efficiency.

One person in each group mentioned energy efficiency. A member of Group I thought that top-and-bottom units were more efficient than side-by-sides.

“If you look at the calculations from Edison, they (top-and-bottom models) are more energy efficient (then side-by-sides). And that was important to me. I bought the most energy efficient model I could get, the Super Star[®], or whatever they call it these days.”

A Group II participant listed energy efficiency along with price as the two most important features he was seeking. No other comments about operating costs or energy efficiency were mentioned at this point on the discussion.

Ice Makers With External Dispensers.

Frequently mentioned features were ice makers with external dispensers. In Group II four participants choose side-by-side models so that they could have these features.

“I have three kids and an ice maker is my big thing. My husband just won't do it (fill ice trays) and I was always the one making ice cubes. I wanted the ice dispenser on the outside and it is so nice. I just love it. It does all the work for

me.”

Not everyone was enamored with external dispensing systems.

“They are nice to have, but the ice makers and water dispensers are very prone to break.”

One respondent in this group did not want an external ice dispenser because, invariably, ice would end up on her new wood floors leaving puddles in their wake. In addition, she did not want a water dispenser because she prefers not to drink tap water. Her husband did not think that a filter would make the water potable enough. She ended up buying a side-by-side model with external dispensers because the size of the doors on a top-and-bottom model would have been too big for the available space.

Capacity and Model Configuration

Respondents had different views about the internal capacity of side-by-side models vs. that of the side-by-side models.

“The more I saw side-by-sides, the more I decided that I did not want one. . . . as I looked I thought they felt cramped and changed my mind right on the sales floor.”

“I thought I wanted a side-by-side - they look really nice. But then I thought of my sister’s side-by-side and remembered that it was always packed. You could never find anything you were looking for. Always just digging through it.”

“My neighbors who have side-by-sides are always coming in and asking me to put big stuff in my refrigerator.”

Others raved about their side-by-side models.

“I like it because it has different shelves I can organize and order is important to me.”

“We had a side-by-side with water and cubes in the door for 19 years and loved it, so replaced it with another one. I wanted pull-out bins that you could see through and pull-out shelves and also spill-proof shelves. Also, I have a tall husband. (With a side-by-side) he doesn’t have to get down on his knees to reach things.)

Some respondents talked about capacity without mentioning their model type when asked about what features they liked best:

“The ability to hold gallon milk containers on the door - cause I have kids - and adjustable shelves in the freezer.”

“It is a good feature to have adjustable shelves in the freezer. It means things can be found and food doesn't get wasted.”

“Some shelves are staggered. You can have a half a shelf one way and the other half the other way. Means storage of large and small items do not waste space.”

Cleanability and Visibility.

Both pebble finish and spill-proof shelves were mentioned as attractive features. Respondents also mentioned see-through bins.

Respondents were queried as to what they liked about their new refrigerator after it was installed.

Respondents were asked to list the features they liked best about their new refrigerators and then to specify, from that list, the most important attributes. Group I named their top three, and Group II, because they wanted to include model configuration (seven had selected side-by-sides) named four.

Energy Efficiency and Cost Issues.

In this context, energy efficiency was deemed important in both groups where more than half considered it as one of the most important features of their new refrigerators. (See table listing respondents' favorite features.) Upon tallying the responses with the emphasis on energy efficiency, the two immediate responses are telling:

“Energy efficiency means saving money every month on the electric bill.”

Group II's participants spoke about the relationship of initial costs to operating costs. Upon hearing a group member say that energy efficiency

was a big thing for him, a respondent replied,

“(Energy efficiency) is an operating cost, not a capital one. In terms of money outlay, we are talking about money spent now and money spent then.”

A female participant then posed the question about whether the greater concern was monthly bills or the actual cost of the refrigerator:

“(Does energy efficiency appear on your list) . . . to save money, or are you just an energy conscious person?”

In terms of paybacks, the first respondent said,

“If you are saving money at \$10 a month over your old refrigerator, it will take you a long time to make up the difference between a premium refrigerator and the \$795 special.”

The retort was that the difference between the standard model and the premium, energy efficient one (costing almost twice as much) was that the latter would also include many extra features. Taking a slightly different, but supporting view was another male respondent who advocated the energy efficient route:

“I looked at the difference in price between a standard model and one that is energy efficient. It is only two or three hundred dollars. You are only talking about the thickness of walls and maybe a few different parts on the bottom of the refrigerator. My thinking is that those extras will be made up in a few years - maybe five. Beyond that, the savings are gravy.”

Once cost was listed, it was discussed in several frameworks. When the woman, who was a very thorough researcher, listed four features without including cost, another female participant said she was surprised that best price was not mentioned. The consummate researcher said,

“Cost wasn’t that important to me. With all my research I can say that there are more important things than cost. . . . That was not the reason I went to so many stores. The reason is to hear everything twice, so I can be sure of the information that I have been given. Cost becomes an issue at the end when you have decided what you want. Then, rounds can be made one more time to get the best price. . . . You can always get something for the price you are willing to pay. First you

have to decide what you want. Then, see who is willing to sell it to you so it is fair to everyone involved.”

Another respondent simply stated that,

“Price is the ultimate decision-maker.”

Additional Economies.

Energy efficiency was not the only way that new refrigerators were saving money. The see-through bins added value because,

“I always used to forget the stuff that was in the bins until it was too late. Now I can see what I have and waste a lot less.

Humidity control was deemed important also.

“Humidity control is nice as well. Now my vegetables last for weeks whereas before they would quickly become mush.”

The usability of the freezer was cited in terms of both convenience and savings:

“The tray on the bottom of the freezer pulls out, so everything can be seen. I now know the food is there, so I use it rather than forgetting about it and having to dump it.”

Other Features.

Cleanability, convenience and added storage were frequently cited. The color came up as well. A member of Group I eloquently articulated all the benefits when she said,

“It is my son who does the shopping and every week I used to have to rearrange all his fruits and vegetables just to be able to find things. But now with the new one it is so much easier to organize. I had that old almond color and it was old and ugly and showed dirt - the gaskets were atrocious. It was time. Just a matter of our breaking down and going out and doing it. Constantly we are saying how great the new refrigerator is. We had a huge party Saturday night and we talked about how we couldn't have had the party without the new refrigerator. We are really enjoying it.”

Now and Then

When asked how their list of desired features have changed since the last time they purchased a refrigerator, not one respondent mentioned energy. Rather, they focused on cleanability and convenience features that were not available the last time they shopped. The excitement of having a new refrigerator was also voiced.

FAVORITE FEATURES of NEW REFRIGERATORS
Based on Respondents' Lists
(Excluding External Size)

	Percent on Top 3 List	GROUP 1	Percent on Top 4 List	GROUP 11
Energy Efficiency	80%	Energy Efficiency	62.5%	Energy Efficiency
Ice Maker / External Dispenser			62.5%	Ice Dispenser Ice Maker
Capacity / Usability / Convenience	20%	Adjustable Shelves	37.5%	Adjustable Shelves In Door
	70%	Adjustable, Wide Door Shelves	12.5%	Can Holder Door Shelf Divider
		Freezer Pull-Out Tray	62.5%	Door Storage Capacity
		Meat Locker		Egg Holder
	30%	Pull-Out Shelves	12.5%	Freezer Basket
	60%	See-Through Bins		Interior Carousel
		Spill-Proof Shelves	12.5%	Slide-Out Shelves
			12.5%	Two Liter Bottle Hook Spill-Proof Shelves
Additional Convenience Features	10%	Controls In The Front Humidity Control		
		Light In Freezer		
	10%	New Gaskets		
		Two Thermostats		
Cleanability	20%	Pebble Finish Rollers For Movement		
Model Configuration			62.5%	Side-By-Side
Other			25%	Color
			50%	Cost

In summary, both groups were concerned with energy efficiency. Participants also were enjoying many of the features that increased storage, made it easier to view the contents, and contributed to the longevity of the stored foods. For Group I, ease of cleaning and convenience features were on top of their lists.

Researching The Purchase

When asked how they obtained information about the refrigerator they purchased prior to purchase, responses ranged from buying on impulse to conducting in-depth searches. Most people conducted a multi-pronged approach. One woman spoke of the importance of doing a thorough research job:

“To me, buying a refrigerator is a lot of money to lay down. So you at least have to know that you did the best that you could if it turns out that you are not happy with it.”

Brand Names

The value of a name brand came up when participants were asked about their research approach. A Group II member stated,

“I keep track of brands - seeing quality in general. I do that by watching business sections, I look at who builds what. My information comes from various sources (magazines, TV) as well as showrooms. For instance I know that Kitchen-Aide puts out a high quality appliance. Brand was very important.”

Other participants echoed the importance of manufacturer viability.

“You are trying to find some sort of track record about the company you are buying the product from.”

“You are not going to buy a brand you never heard of unless they are giving it to you.”

Group I focused on specific brand names. Participants mentioned Whirlpool, Amana, GE, Kenmore, and Kitchen-Aide. The genesis of brand loyalty was recounted by two participants.

“I have had a KitchenAide mixer - one of those big, heavy duty ones - and I liked it. Also, my Mom has had a Kitchen-Aide dishwasher and she had liked it a lot. So I knew that Kitchen-Aide was a good brand.”

“My family ad always used GE or Whirlpool. So I wanted one of those two brands.”

A few respondents spoke of manufacturers producing refrigerators sold

under different names. Two respondents mentioned that Whirlpool made Sears' Kenmores. Another claimed that Kitchen-Aide and Whirlpool were made by the same manufacturer. He also asserted that brand was very important to him.

Consumer Publications

One respondent had consulted *Consumer's Digest* and many had looked at *Consumer Reports*. Some bought the suggested models and others simply did not trust the consumer magazines.

"I've seen so many discrepancies that I believe so much is the writer's opinion."

Even if the publication were considered the gospel, one man noted,

"Finding specific models that are on the showroom floor in Consumer Reports just doesn't happen."

For the most part, *Consumer Reports* served an advisory function, whether it was purchased or consulted in the library, but it was not the last word.

"I look at Consumer Reports, not for precise models because that is next to impossible, but what I will do is to read the article and see what they are talking about - what they have found on different models. That just opens my mind up to what is out there and what I should be looking for. So it might not be concrete information - but it gets my mind alerted to what I should be checking for."

Word-of-Mouth

Talking with friends and relatives about their refrigerators proved fruitful for several participants. One woman consulted her married daughters and discussed the pros and cons of each of their refrigerators. Another turned to her father. In several cases, participants bought the brands with which their families were most familiar and comfortable.

The specifics of word-of-mouth researching were articulated by one respondent who said,

"When I talk to friends and neighbors I ask 'What kind of refrigerator do you have? How long have you had it? What

kind of trouble have you had with it? Why did you buy it?' They always offer the information as to how much they like it. But what I have found is that most people bought, say the GE Profile, because it was flush with their countertops. They are not the kind of researchers that I am. So we had different reasons for our purchases."

The Internet and Contacting the Manufacturer

Each of the three participants who consulted the Internet used it differently, suggesting that in the future the Internet will become an important source of information for appliance shoppers.

One woman checked what *Consumers Reports* had to say after she had made her purchase to confirm that she had bought a quality model.

To find out specifications, one male respondent looked at all the models on the Internet.

"I even registered on-line, but I didn't learn anything. I went to the home-page of each manufacturer and printed out their spec sheets. It gave all the features. For instance we compared - feature by feature - Whirlpool with GE Profile. We kept a hard copy of the models we liked."

Another claimed that the Internet is replacing brochures.

"I think that the Internet is now replacing the pamphlets that used to be in the store. Now when you ask for specific information in the form of pamphlets, young sales reps think you have lost your mind because the pamphlets are a thing of the past. In order to get solid information you either call the manufacturer or go on the Internet."

As for calling the manufacturer, one participant recalled phoning Kitchen-Aide requesting information and then never got any.

Newspapers

Respondents consulted newspapers to find out what was available and price points. Newspapers were how one participant found out about the no-interest loans Circuit City was offering. Another was impressed by

Best Buy's advertising and went there only to be disappointed.

Others looked at newspapers after the sale to check to make sure they had gotten the best deal.

"I used the newspaper after the purchase to see if I could get money back (from Circuit City)."

Consulting Government Sources and Utility Companies

When respondents were asked if they had consulted any government agencies, a comment from Group II induced laughter:

"If there were some government agency that gave an endorsement, I would probably stay far away."

Group I responded to this query by talking about the rebates offered by Edison. (See section on rebates.)

The Utility Company

Several people mentioned calling Edison. One asked for calculations on energy efficiency of varying models of refrigerators. Another spoke of calling Edison to find out why her electric bill was so high. The response sparked her to go out and purchase a new refrigerator!

"I had called Edison because our utility bill was so phenomenal. The woman who I talked to asked me what kind of refrigerator we had and how old it was. She explained that the cost per day with a refrigerator like that was about \$1 per day - whereas the cost per year is now \$59 - \$69. So that was a big factor in making the decision to replace it."

Respondents also reported that Edison would conduct an in-depth energy survey of their homes. Group I detailed the process:

"Edison, the water, and the gas company will do these evaluations. At end, Edison gave me a list of what my bills had been for the last year. Then they went through and looked at all the appliances and the energy they consumed. Then they looked at all the doors and windows and checked how well sealed they were. They suggested updating the heating and air conditioning systems. They also told me about an Edison showroom that displays different types of appliances."

“They will also tell you about peak times - when to avoid using energy and the best time to schedule using appliances.”

“They will also sign you up for a special rebate program if you will agree to use appliances on non-peak times.”

“They give you corrections first - like weather stripping. Then they customize recommendations to your lifestyle.”

Not everyone spoke favorably of dealing with Edison. Members of Group II spoke of how frustrating it was to try to contact the utility company.

“What would have been helpful for me would have been if you could call the electric company and said, “I am buying a refrigerator. Do you know what the top energy efficient model would be? (I didn’t call) because every time you call they put you on hold for 20 minutes. They make it inconvenient to contact them.”

Another spoke of calling “Edison” to find out about getting his old refrigerator hauled away and getting his free cooler. After being on hold for twenty minutes and then leaving a message, his call was never returned.

Experience In The Showroom

Many participants relied on their visits to the showroom to find the best model for their needs and pocketbook. Once there, they consulted with sales representatives, compared models on the floor, and looked at the point-of-purchase materials. Many first learned about rebates in the showroom. Also, it was there that they experienced a heightening of their awareness of energy efficient refrigerators.

The Sales Representatives

The sales representatives were mentioned frequently as strongly influential in the buying decision.

In some cases, they made the sale:

“If the salesman hadn’t been there, I would not have walked out with a refrigerator.”

Other times, they endorsed specific brands:

“The sales rep said that Kitchen-Aide was much better. We wanted something that was going to last if we were going to spend that much money.”

An attendee suggested that emphasis on a particular brand could be because the sales representative might be enjoying some spiffing.

“It is just like all of the sales reps are real helpful, but they are probably getting spiffed. Now, they might be pushing GE Profiles, two months from now it might be something else. But they are getting spiffed. Every time they sell the product that they are getting spiffs for, they make a certain amount of dollars. Lots of times manufacturers spiff - just so they can move their product. They have excess inventory, so they promise to kick-back to salesman some money.”

In some cases, sales representatives drew attention to varying energy consumption of different models:

“The EnergyGuide changed my mind at the prompting of the sales rep. He pointed out the difference in savings and I decided to go with the energy efficient model.”

Sales representatives were considered to have a pivotal role. When talking about paybacks, a respondent claimed,

(The salesman) would have to point out the payback. It would have to be sold to you. The ordinary person would not extrapolate those things.

Point-of-Purchase

Participants spoke appreciatively of the signs on the showroom refrigerators. They expressed that it made it easy to compare models from an informational standpoint.

“The labels on the refrigerator are so basic - you can stand and look at two refrigerators and see a comparison. They tell you the savings, energy factor, etc. You feel as though you are looking at Consumers Reports because you are getting that kind of information.”

The EnergyGuide Label

Many respondents reported having seen the EnergyGuide Label saying it influenced their decision.

“The EnergyGuide line showed this model way over to the left. It wasn’t the principle reason for my choice, but it was good to see that I was buying the most efficient model that I could get in the size range.”

Two issues about the label’s descriptive accuracy surfaced. The first had to do with how refrigerator categories are determined:

“If the appliance manufacturer is clever, he will get his appliance into the category that looks good. There are probably ways to do that.”

The second issue was whether the appropriate label had been placed on the appliance:

“I found different labels on the same refrigerators in different stores. . . . Some refrigerators had none of these labels. In other cases, it looked like the labels had been peeled off something else before being placed where I saw them.”

When asked about suggestions for improvement, recommendations were for larger type, more explicit graphic display of efficiency, and actual savings that would be experienced in their locales. Comments from Group I express these concerns:

“Why don’t they tell you how much it is going to cost?”

“In this area, there are several rates.”

“When Edison comes, they give you a little chart to calculate your rates - it really changes from locale to locale.”

“There is some good technical information here. It would be good to see kilowatt per hour information on a graph to make it more explicit. A graphic symbol would be much better.”

“It is too crowded. Everything is too small. Lots of shoppers would need to put on their glasses.”

“Savings is based on 8.25, which doesn’t say what that would mean for me.”

The Energy Star® Logo

When shown the Energy Star® Logo, several respondents stated that their refrigerators had come with it. Once the sales representative explained the meaning of the Energy Star®, it made a difference to a few group members.

“The model I bought came with it. There was a Super Star and a Star Plus. The sales rep explained what each one meant. He told me which ones were more energy efficient. There were a couple that had very similar features and close in price. So the Energy Star swayed me - I was teetering between two models and it helped me make my decision.”

One woman reported that

“The Energy Star® was easy to use, because I could compare the three different levels. It drew my attention, whereas I don’t remember the EnergyGuide label at all.”

While looking at the Energy Star® Logo, a respondent noted that he had seen a different label that said SERP.

Some participants first learned about the rebates from the signs posted on the showroom refrigerators.

Improving the Showroom Experience

The group reported mostly good experiences in the showroom. When asked how communications about energy efficiency might have been improved while shopping a suggestion was made for a large posted chart that would present the EnergyGuide information in a comparative form.

“A major chart that gave you an idea of the different options. And even on that major chart if they showed different types of refrigerators. The manufacturers would not want to do that so it would have to come out of Circuit City.”

“It would be harder to spiff if that happened.”

“The electric company might do that. It would be done for the consumer.”

Role of Price

While some respondents reported that cost was not the determining influence (see section on “Energy Efficiency and Cost Issues” in “Product Attributes That are Important”), others claimed that price is the ultimate decision-maker. The actuality, it seems, is that for many, the dollar can prove a powerful influence. A few respondents told about purchasing a floor model that had a reduced price (usually because it had been returned by a customer.)

“(The salesman) guided me to something that was energy efficient. Then he showed me one that had been returned and was a couple of hundred dollars less.”

Payment plans were significant incentives:

“The zero-percent interest was a big influence. When I told my husband that we could pay with \$200 a month and no interest, that sold him.”

“That is why we bought at Circuit City. I specifically waited until they advertised (zero-percent interest). The day we saw it, I was down there.”

Another reason respondents chose to shop in Circuit City was that they knew they could expect to make their purchase at the lowest market price, even if the posted prices were higher than competitors’.

“It seems that Circuit City does so much research on their own, and they keep prices down, plus they guarantee their prices.”

“Circuit City was much higher than the prices I had found for the same model. But they sold it to me for the price I showed them another place was charging.”

One respondent suggested that Circuit City’s policy of matching lowest price was a gamble for the retailer:

“Circuit City works on the assumption that everyone is lazy and they are not going to look around once they have made their purchase. It is a calculated risk on their part.”

Significance of Energy Efficiency

Controlling electric utility bills at home was primarily a matter of turning lights off and being aware of the high costs of air conditioning. Both groups presented an attitude of being concerned about their utility bills coupled with a feeling of resignation that, in spite of budgetary constraints, there was little they could do.

“Utility costs, unless you are independently wealthy and cannot figure out what to do with your money, are important. Certainly, most of us live on some type of budget. Utility costs in general matter, and with three young kids, bills in general matter. Some things can be cut and others it is a lot more difficult - like refrigerators.”

Indeed, the opinion was voiced that in terms of energy consumption, with new refrigerators there is not much difference model to model. However, members of both groups were aware that the differences are significant between older models and brand new ones.

As reported above, when asked about what was important prior to shopping for a refrigerator, only one respondent from each group mentioned energy efficiency. Once refrigerators were purchased and installed, energy efficiency became one of the top attributes mentioned by well over half of the respondents.

Why the change? One possible explanation is the experience in the showroom. Many group members experienced an increased awareness of energy efficiency imparted by both the sales representatives and the point-of-purchase materials. Another, is that awareness was raised during the course of the focus group, resulting in participants speaking more and more about energy efficiency.

How important are energy efficiency concerns in terms of refrigerators?

“It is important because every month when that electric bill comes in, it is significant. For that one month when we could see the difference, accounting for the different number of days in the month, etc., it was a \$20 difference. Granted, that is not as much as if we had several refrigerators going at once, it still matters. Our house is 40 plus years old. We have been in the process over the last few years of making it

more efficient. So a few bucks here and from there start making a real difference.”

Awareness of Effect of Energy Efficient Refrigerators on Monthly Bills

Others claimed to having selected their energy efficient model because it would save them money, yet they have not as yet checked to see if their utility bills have gone down.

“I haven’t checked my bills yet. But I assume that there will be a difference, because that is why I bought the model I did. . . . But then it surprises me. If I made a last minute decision to buy the model I chose because it would cut down on my utility bills, then why haven’t I checked to see that they really are less than they were? I really did trust the label.”

A few people knew how much their monthly electric bills had dropped since they purchased their new refrigerators. In addition to the respondent who was saving twenty dollars a month, participants noted monthly savings ranging from a few dollars to 25 dollars.

Contrary to any concern for energy efficiency are those who registered little regard for what they deemed were small differences in operating costs.

“As long as (the refrigerator) works and keep things cold. Even if I am losing five to ten dollars a month on efficiency, I don’t know and I don’t see it.”

Individual Usage and Its Effect on Energy Consumption

Some believed that it was the user, and not the particular model, that determined energy consumption.

“. . . all the refrigerators are much the same. It is like gas mileage on a car. It is all your driving habits.”

Others were aware that some of the features on the refrigerator impacted how they used it. For instance:

“With the ice maker we do not open the freezer as much.”

“By having the milk, orange juice, and soda on the door energy is saved. Now, I just open the door and grab it out.”

When this stuff was inside the refrigerator, the door was open for a lot longer. Everything had to be moved around.”

With a smile, a woman reported,

“My own energy is changed because with a bigger refrigerator, I don’t have to go to the store as often.”

Extended Warranties: Refrigerator Quality and Energy Usage - a Trade-Off?

Another concern about dramatically high energy efficiency was break-down; whether or not the manufacturer was giving something up to decrease energy consumption.

“I am surprised about how long and often my new refrigerator’s compressor goes on. I suspect that one of the ways it is more efficient is because it has a smaller compressor that has to run more often to do the job. They said not to put any food in it for 24 hours after it first started up. The older boxes would have cooled off much quicker.”

Several respondents claimed that the new refrigerators just don’t seem to last as long. Which is why, one participant said, she bought the extended warranty. Several agreed with a respondent who said,

“There was a lot of pressure to buy the extended warranty when I made my purchase. And everything I read tells me that that’s where they make their profits.”

Brand and Energy Efficiency

However, a difference of brands could be more critical to making a decision than comparative energy savings. A respondent was asked if the only differences between two refrigerators were energy efficiency and brand (cost and features were the same), would he purchase the more energy efficient model?

“Not necessarily. It depends on brand. If it said Kenmore, which is made by GE and Kitchen-Aide which is made by Whirlpool, I would choose the latter.”

All Things Being Equal

On the other hand, if all things were equal, then several respondents said they would choose an energy efficient model.

“When you are choosing two refrigerators that are essentially the same, a difference in energy efficiency would then affect my final decision.”

“All things being equal” refers not only to features but also to availability. Two respondents said they would have been willing to pay more for a refrigerator that was significantly more efficient, but the model they wanted could not be delivered the next day. One woman opted not to buy what was probably a SERP model:

“There was another Kitchen-Aide that was more energy efficient. A similar model that was only available in California and other certain places. Having to do with whatever electric company you are with. I would have done that. It was \$150 more. (Not counting rebates.) But it was not immediately available, and I wanted it delivered the next day. Something on it was different that really would have saved a lot of energy.”

Features vs. Energy Savings

Even though energy consumption was important, features were often the critical deciding factor:

“(Energy consumption) was one of the deciding factors - but not the most important one. I would say that the features in general were the deciding factors.”

Paybacks and Savings

When Group II was asked if they would pay more for a refrigerator that would exceed federal energy consumption guidelines, the immediate consensus was some, but not a lot more. Enthusiasm was lukewarm as expressed by

“Even saving \$20 a year would take too long to pay back.”

One problem is that the consumer does not actually see the difference that

energy efficiency produces unless they look for it. (Note that several in the group had not checked to see if their utility bills had gone down since their new refrigerators were installed.)

“You really don’t see the savings. It is not like someone actually hands you \$20. You may be saving money - but it doesn’t accumulate in your bank account. It just goes somewhere else. You are just not aware of the actual savings.”

One of the functions of the sales representative that respondents cited was to explain how paybacks worked. That comment was based on the belief that shoppers do not usually think in terms of operating costs and how lower monthly bills could add up over a period of time to equal the initial outlay.

Knowledge About Rebate

Some respondents learned about the rebate when they were shopping. There was some confusion as to the source of the energy rebate, with members of Group II suggesting that it was Edison. One respondent had noted that her documents said Edison. Another noted that she believed it was Edison.

“That’s why it is taking so blasted long to get it. With them working with Circuit City - it will take awhile. I still haven’t received it, and I’ve had my refrigerator for over two months.”

Group I talked about two types of Edison rebates. Those issued for trading in old refrigerators and the program offering different amount on different models. Both groups expressed some confusion about the source, types, and expected dates of payment.

“The rebate was not explained. It was not really comfortable. It said to mail in as soon as possible for a grocery rebate. I think the other one was an energy rebate. A few weeks later my son said that we hadn’t gotten the rebate yet. When he called, they said that it wouldn’t be mailed until after the third or fourth month. That was the only thing about the whole situation that I really was uncomfortable with.”

Participants agreed that the rebate was nice to have, but it did not force

their decision.

“It swayed me, but was not the reason I decided upon the model I bought.”

“It’s not like we bought this one because it was the only one that had a rebate.”

General Awareness of Energy Costs

Household Appliances Using the Most Energy

Both groups were asked to list and then rank the appliances that used the most energy in their homes. Air conditioners were considered to use the most energy, with dryers and refrigerators appearing in either the second or third spot. Lists included computers, hair dryers, microwaves, lights, pool pumps, space heaters, power tools, TV’s, and VCR’s.

The Value of Electricity

When queried as to whether they thought they were getting reasonable value for the electricity they were using, the responses were mixed. Some respondents thought there was no way of knowing.

“I am not dissatisfied. However, I don’t know if the service I am getting is good compared to others. There are always hidden costs.”

Others felt it was a non-issue, because they had no choice.

“The reality is that we use what we need, and we don’t think of value. You take it for granted.”

A few mentioned that rates vary by location:

It varies a lot by location. I try my darndest and I can’t get my bills as low as some of my friends.

“I live in Orange and my business is in Anaheim. The business is 16,000 square feet with two air conditioners going. My house costs more than that and it is 2400 square feet. I don’t think we get our money’s worth from Edison.”

While Anaheim was acknowledged to have cheaper rates, a respondent talked about the lower reliability of power there.

“ If you want low bills, you have to be in Anaheim. However, it is not as reliable with power surges or being without power.”

Other localities with substandard service were also mentioned:

“I ran a computer in Costa Mesa. With power surges and failures it got to the point that we saved all the time. So I don't think it was just in Anaheim where there were problems.”

This was countered with a justification for higher rates:

When there is a power outage, than you pay almost anything to get the power on again.

One Anaheim service that was not disputed was the company's customer relations practices:

In Anaheim, they do a lot of PR. For instance, you could go to the power company and get estimates of, say, what Christmas light would cost. Do (Or hair dryer, curling irons.) They do a lot of public relations. They do things to help new companies coming in. They really help you control costs. So value has to do with support and customer relations.

Prognosis for Lowering of Utility Rates

When asked if anyone had any knowledge of utility rates going down in the future, no one had. One man said that deregulation could have an effect:

“I know that deregulation will encourage competition that will drive prices down.”

Other comments included:

“We heard it the other way, that it is going up.”

“All we hear about are hearings. I don't live expecting prices to go down.”

Concern was also expressed that if rates went down, service would diminish as well:

“You will also see more brown-outs and black-outs.”

The Next Appliance to be Purchased

When asked about the next appliance and the importance of energy efficiency in the decision, two said that the low energy efficiency of their old appliances was motivating them to go out and buy a replacement for old air conditioners and freezers.

Other new appliances that participants wanted to buy included computer, dishwasher, dryer, microwave, mixer, range, stove, vacuum, and VCR.

Awareness that the more an appliance is used, the more energy is consumed was voiced. Respondents in Group I noted that although toasters, ranges, and dryers place a high draw on the system, they are not used steadily.

SALES STAFF APPROACH TOWARD SELLING ENERGY EFFICIENT APPLIANCES

Interviews Conducted in the Los Angeles, CA Area

*with sales representatives and department managers
in the appliance departments of Circuit City Stores*

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I. INTRODUCTION

Background

As an extension of the research activities conducted in conjunction with the Department of Energy's Energy Star[®] Retailer Program Pilot, this qualitative study interviewed sales staff in seven different Circuit City stores located in the Los Angeles area.

This research supplements two earlier reports: (1) focus groups conducted in mid-March, 1997 with recent purchasers of energy efficient refrigerators to explore consumer attitudes toward energy efficient appliances and (2) quantitative research drawn from intercept interviews conducted in December, 1996 at the inception of the Energy Star[®] Program in the appliance departments of Circuit City stores in ten Los Angeles locations.

Study Purpose

The study was conducted to:

- Research sales staff opinions about customer reaction to the Energy Star[®] retail marketing efforts.
- Reveal information about customer satisfaction with energy efficient products.
- Elucidate the adequacy of the sales associate training program in energy efficiency.
- Obtain feedback on the efficacy of the Energy Star[®] program elements from a front line perspective.

Methodology

The researcher interviewed sales representatives and department managers in the appliance departments of seven Circuit City stores in the Los Angeles area on March 10, 11, and 12, 1997. A total of 13 sales representatives and four department managers were interviewed.

The structured questions asked the interviewees about their perceptions of the importance of energy efficiency to the consumer, how much research a consumer does prior to shopping, why consumers purchase a new refrigerator, the effectiveness of point-of-purchase materials, their training

for selling energy efficient appliances, and their role in the buying process. Responses to these questions were recorded and later transcribed.

II. EXECUTIVE SUMMARY

- **The degree of importance ascribed to energy efficiency as a selling point varies among sales representatives and their managers.** Some mention it all the time, others only when it seems to be a customer concern.
- **For the sales staff to be able to talk convincingly about energy efficiency, they must have received training.**
- **Training of sales representatives is far from uniform or effective.**
- **Rebates are valued as a sales tool.** Sales representatives like the rebate program and are convinced that it helps them move product. Because rebates are associated with energy efficient models, respondents brought up energy efficiency to their customers when queried about rebate notices on certain refrigerators. Customers did not always know about rebates prior to shopping. During the course of conducting interviews for this study, sales associates referred to rebates in many contexts including trading in old appliances. Utility companies were mentioned frequently as being associated with the rebate program.
- **A common perception exists that all newly-made refrigerators are energy efficient.** Sales representatives often do not differentiate between the energy consumption of different refrigerators on the showroom floor because they believe that compared to the difference between an old and a new refrigerator, the differences among new ones are insignificant.
- **Energy efficiency is seen as less important to consumers than features or price.** Respondents repeatedly stated that consumers are generally more concerned with the initial outlay than with ongoing operating costs. They also noted that consumers' reluctance to spend more for energy-efficient refrigerators reflects that energy efficiency is not a concept that sells refrigerators at this point in time.

- **Sales representatives believe that discussing energy consumption is useful for both bonding with shoppers and for closing sales.** The more a sales representative can explain in layman's terms about refrigerators, the greater the chance of establishing a relationship so necessary for a sale. Talking about energy efficiency provides this opportunity. Closing a sale is easier when customers can see why it is advantageous to buy a certain model. Very often that means pointing out that a more expensive model will not only have desirable features, but also generate monthly savings.
- **Attitudes toward the Energy Star[®] logo vary.** Some interviewees noted that about half of their customers ask about it, while others think that it does not mean much, because shoppers only bring it up occasionally. A few claimed that the logo is superfluous because it does not communicate substantive information. Many respondents closely associated the Energy Star[®] with the rebate program.
- **The EnergyGuide logo is deemed significantly more useful a sales tool than the Energy Star[®].** Referred to by most of the respondents, the EnergyGuide is considered an important sales tool because it shows customers how they can save money. The EnergyGuide frequently stimulates questions about energy consumption.
- **Respondents were divided as to which version of the EnergyGuide they prefer.** Some find the newer version of the EnergyGuide confusing because the smaller numbers, based on only one rate, do not impart enough information for some interviewees. On the other hand, some said that not listing varying rates could be effective because the high rate in the SCE region is potentially a negative influence on the sales process. A preferred feature of some labels is the ranking scales that could be used to easily compare models. In addition, some of the sales representatives stated that many shoppers were not comfortable converting kilowatt hours to dollars spent on energy consumption.
- **The concept of paybacks must be explained by sales associates to consumers.** Sales staff believe that until shoppers are guided through how their monthly bills will reflect less consumption of electricity, they do not think much about the benefits of energy-efficient refrigerators.
- **Sales associates observe that relatively small differences in monthly utility bills are usually not a reason for most**

consumers to pay more for energy-efficient appliances that cost more than standard models.

- **Some sales associates sell extended warranties through claiming that new refrigerators will not last as long.** In these cases consumers are told that energy efficient refrigerators tend to need repair more often because of smaller compressors that run for longer time periods.
- **According to the respondents, energy efficiency can be associated with either higher or lower quality in the mind of the consumer.** Sales representatives stated that attitudes toward quality depend on whether the consumer is convinced that better materials, workmanship, and engineering have produced the energy efficient model or whether energy efficiency results from continually pushing the refrigerator's mechanism to the limit.
- **Sales associates stated that consumers research by consulting *Consumers Reports*, talking to other people, looking in newspapers and visiting other showrooms.** Additional comments about consumers included: occasionally shoppers have done research on the Internet; they tend to believe what the utility company has told them; and consumers' comments on the questions remaining in their research process often afford the sales representative an opportunity to add more information and clinch the sale.
- **For some of the sales associates, discussion about energy efficiency when selling dishwashers or room air conditioners occurs only when the customer brings it up.** Conversely, other sales representatives claimed they mention energy efficiency in every sales pitch for every appliance. Others talk about energy efficiency when they sell air conditioners, yet rarely when selling dishwashers.
- **Several sales representatives expressed the thought that consumer awareness could raise demand for energy efficient appliances.** Suggestions are that consumer demand could come about from a concerted public relations campaign. One approach would be for a particular retailer to sponsor a company. For instance, the suggestion was made that the EnergyGuides should be featured in ads and flyers saying "Energy-Efficient Appliances that save you money are available at Circuit City."

THE FINDINGS

The job of a sales representative is to sell appliances. In addition to being aggressive in approach, what does it take to get the job done? Many respondents spoke of listening to the customer and gearing the sales presentation to individual needs.

“We have to qualify. The first question is if they are replacing an old model.”

“The process is really a qualification by the salesperson. The customer might have a general idea, but they usually don’t know what brand they want - or anything of this nature.”

It is up to the sales representative to find out why customers are shopping and what is important to them. Most shoppers are in the market for a new refrigerator because their old one is no longer functional or because they are moving.

In some cases shoppers come in with size specifications and a general idea of what they need. In others, consumers know specifically what brand and style they are looking for.

Whatever the motivation, sales representatives claimed that features and price were the determining factors:

“People buy a refrigerator usually because they like the other features on the refrigerator - not because it is energy efficient.”

“(Customers) look at features that are available. They always want the best price.”

Sales representatives depend upon building rapport and trust in order to make the sale.

“I like to be compared with others and have customers choose to do business with me because they are more comfortable with me.”

The more a sales representative can explain about refrigerators in layman’s terms, the more he can bond with his customer. One manager and several

sales representatives reported that talking about energy efficiency facilitates this process.

“(Customers) want to know what (energy efficiency) means for them. It is a great opportunity for the salesman to be able to establish a rapport with the customer by explaining it.”

In order to make a sale to consumers who are not interested in energy efficiency, some sales representatives stated that they do not talk about operating costs to those shoppers.

“When I qualify I ask about family size, why they are buying a new one, the features they are looking for and so on, energy efficiency might not be all that relevant (so I do not mention it).”

The Role of Energy Efficiency in The Sales Process

Sales representatives have varying notions of how important energy efficiency was to consumers. A few said that, while it is not top on the list of desired attributes, it is a great way to close a sale:

“I don’t know of any consumers who buy a new appliance simply based on energy efficiency. Always it is a second thought. Comes after certain features such as cleanability or storage capacity. I always use energy efficiency as a way to close the sale. It is a good sales closer. I don’t think it is a selling point. I can’t think of one customer in the three years I have been here who has bought one appliance based on the fact that it is energy efficient. If they like it, they will buy it.”

“I mention (energy efficiency) almost all the time. When people are about to spend a lot of money, it helps to mention energy efficiency to them. It really makes them feel better about what they are about to dive into - a \$500 dollar to \$2000 refrigerator. Comparing new to old, say if the old one is 20 years old, I tell them that the new one will be 50 to 75 percent more energy efficient. I then tell them that a refrigerator uses about 20 percent of the electricity in your home, so any savings will be significant.”

As in the case of the above quote, many respondents made the point that all new refrigerators are energy efficient compared to models that are ten to fifteen years old.

“When customers ask if a particular refridge is efficient, I always tell them yes. Because in today’s marketplace, all refrigerators are more efficient than they were ten or twelve years ago.”

“Shoppers know that older refrigerators consume a lot more energy than newer models. When they ask about energy efficient they want to know how much it will cost to run. Also, how the refrigerator is made so that it is energy efficient. For instance, are the walls thicker? Is the insulation different?”

“The smart shopper - the one who reads Consumer Reports, will always look for (energy efficiency). I tell them if they have an older model - say ten or 15 years old - that buying a new one will save them money because the motor and compressor are smaller. It runs a little harder, repair bills might be more. But it is more efficient. Motors have gone from a half horsepower down to a quarter. Costs will vary from location to location.”

Respondents were markedly inconsistent in their reporting of how often shoppers ask about energy efficiency.

“They want to know which models are most efficient once they narrow down their options to two or three choices.”

“(Consumers ask about energy efficiency) frequently. They want to know which appliances use the least energy. It is a strong influence in their purchase decision.”

In many cases, the EnergyGuide label posted on each refrigerator triggers a query about energy efficiency.

“They see the EnergyGuide and ask about it. They want to know how a particular model will do.”

“When they do (ask about energy efficiency), they want to know what the EnergyGuide label is all about. Many of those who ask seem to know that older refrigerators are not as efficient as newer ones. When they ask, they want to know how much it costs to run per year. Sometimes they ask about the Whirlpool SERP models.”

Questions about energy efficiency posed by customers have to do most often with how much money they will be saving. Occasionally shoppers ask about the construction of the new model refrigerators and their impact on the environment.

“About half of the customers want to know the energy costs - how much it costs to run. We encourage them to ask those questions. What they want to know is operating costs.”

“They want to know about the new compressor and other different innovations. Customers want to know how much money they will be saving compared to the old models that they already own.”

“About 5 percent of people are concerned about the environment and they ask about the old versus new refrigerants. They are concerned about CFC’s and freon.”

“We’ve had some Green Peace people who have come in here and asked about the most energy efficient product. They also want to know what do these refrigerators do to the environment.”

Interviewees stated that shoppers often do not know about their refrigerator’s energy consumption. When it is pointed out to them, consumers are often surprised and interested in a new-found ability to curtail some household expenses.

“Most customers are not aware of energy savings. When you tell them about it, they are very interested. Especially when they learn you can save 50 percent over the cost of their older refrigerators. They say, ‘golly you’re right’.”

Inducing Customers to Buy A More Energy Efficient Refrigerator

Several interviewees announced that savings on monthly bills could induce shoppers to choose energy saving models.

“There are a lot of people who care about what they spend per year on energy. I have occasionally seen people opt to give up some features in order to get an energy efficient model. The energy efficiency is a feature in itself, and it is very important.”

One manager was convinced that once customers understand the paybacks generated by an energy efficient refrigerator, their interest in purchasing such a model is heightened.

“Most people are trying to save money. They don’t realize what the operating costs are. When you plug in a refrigerator for 24 hours a day, it costs money to run. Who wouldn’t want to go from 75 dollars a day to 25 dollars a day. Add that up over 12 months and that is 600 dollars. Those are the kinds of things you have to use to sell. I might be high on this. But you have to break it down and show people, explaining that it is money they will never actually see - but they will have it.”

Another respondent stated that customers will pay only a small additional amount in order to reap modest savings throughout the life of their refrigerator. He gave an example of how much a consumer would be willing to pay initially in order to save money later on.

“We have a Whirlpool model that sells for \$1399. Then we have one that is the same, but more energy efficient and we sell it for 100 dollars more. The difference in energy consumption will save them about ten dollars per year which comes to about \$100 in ten years. That is not a big enough energy savings to make the extra amount spent now worthwhile. They would rather save one hundred dollars now, and not get ten dollars a year for ten years. If there were a 50 dollar difference, they would probably go for that - 100 dollars with this return is just too much for the consumer to spend.”

Whatever the paybacks, other factors can influence the buying decision:

“Often the energy efficiency is not as important as the style or as the features that are available. If the difference in energy efficiency are not all that much, they will go with the higher rated model.”

Talking About Energy Efficiency When The Customer Hasn't Brought It Up

The sales representatives that were interviewed had varying approaches to raising issues of energy efficiency. Some initiate discussion of operating costs only when their customers are interested; others raise it every time.

Some respondents reported that discussing energy efficiency is a powerfully persuasive tool:

“Energy efficiency is important as a sales point. Because energy savings means money savings. When time someone buys a refrigerator that costs more money to run it is because they are brand driven, want a particular style, or have a very limited space. Other than that, they will buy the model that is more energy efficient. Energy savings are very important. They will save money and get a rebate. From the consumer standpoint I would like the same attention.”

“I mention it partly because it is a good selling tool. When they compare brands, I can show them the advantage over the lifetime of the appliance of the one I want to sell them. That can be a really big help, especially when they are comparing store to store.”

Another approach sales representatives take is to always raise the energy-efficiency issue by referring to the EnergyGuide label, and then seeing how the consumer responds. If the consumer is interested, then a dialogue is begun about energy efficiency. If not, then the topic is dropped.

“We always point at the energy costs, the EnergyGuide label on the refrigerators makes it easy to do that. I do, because it might be something they are concerned about. If not, you find it out real quick and move on to what they want to know.”

“(I bring it up all of the time) because I think that people should be aware of how much energy appliances use. When I bring it up, if people are not interested, than I drop the energy efficient issues. Most people think about right now, and not long term.”

Other sales associated proceed with great caution, not wanting to jeopardize a sale by talking about energy efficiency when the customer is not receptive.

“(I bring up energy efficiency) if I feel it is within the customer’s concerns. But this happens rarely. Because if I bring up energy efficiency too early in the sales process before I know the customer, I could talk myself out of the sale.”

An attitude that reinforced sales associates’ avoidance of bringing up energy efficiency is based on the belief that because every new model will generate savings, the differences from model to model are inconsequential.

“(Energy savings) is not the customer’s main interest. Their concern is the costs of operating an old versus new model - not the difference from model to model.”

In some cases, energy efficiency is raised only in the context of a warranty.

“The only time I do (mention energy efficiency is when I am selling the warranty. I tell them that operating costs will go down because the compressors have changed and are smaller now. The refrigerator will not last as long. Therefore, a longer warranty is prudent.”

Because rebates are associated with energy-efficient models, respondents would bring up energy efficiency when queried about eligible models.

“There are certain brands for which I very much stress energy efficiency. I explain why these particular models are different than

the others and that because they are so energy efficient, California Edison is giving a rebate on them. Energy efficiency only comes up with the rebate program.”

Energy savings is often introduced as a way of closing a sale.

“We bring it up when we are comparing different models. When we are selling higher price models it of course comes up. . . . Energy efficiency is important to bring up when one refrigerator costs more than another. Say for a hundred dollar difference between models, it is the savings in monthly utility bills that will more than justify the difference in costs.”

The Meaning of Energy Efficiency for Customers

Repeatedly, respondents stated that customers understand that energy efficiency means saving money because an appliance will cost less to operate.

“When customers think about energy efficiency they think about their wallets.”

For some customers, energy efficiency implies higher quality. For others, it specifically refers to the functioning of the motor and the compressor.

Energy efficiency was also associated with the amount of noise made by a refrigerator:

“Another major concern is the noise that a refrigerator makes. Customers think that the more noise a refrigerator makes, the more power that it consumes.”

The Effectiveness Of Energy Efficiency As A Selling Point

Sales representatives and their managers ascribed varying degrees of importance to energy efficiency. Some found it so effective that they use it all the time, trying to convince their customers that it will save money in the long run.

Others reported that a significant percentage of customers can be influenced to spend more money to purchase an energy efficient model.

“Energy efficiency is a very effective selling tool. We have some side-by-sides that are not very energy efficient. Then we have others that run 1200 dollars to 1400 dollars - and some even higher. A half to a third of customers can be swayed away from the thousand dollar model to the more energy efficient ones that are more expensive. In the side-by-side, GE’s are not the most efficient. But they are in the freezer-on-top models. They are rated at \$45 a year and 21 cubic foot Whirlpool is \$46 a year. We sell a lot of those, plus the consumer also gets a rebate.”

The issue of initial outlay versus reaping benefits in the future mitigates, for some, the effectiveness of energy efficiency as a sales tool.

“People buy an energy efficient sales tool to save money. However, if they have to pay more in the beginning it is not very effective. Most people would rather pay less now and more in the future.”

An important caveat was the perceived need of sales associates to explain to customers how paybacks would be generated. One manager referred to the role of the EnergyGuide in supporting this process:

“Energy efficiency is effective, but it depends on the person. If you just tell someone that a particular model will save them money, they will not understand it unless someone explains it to them. It takes explanation. It has to be put into layman’s terms. It should be simplified - and the EnergyGuide does that.”

“Great to be able to explain how much money the customer can save. For instance with SERP models. I show them how much they can save because the motor is more efficient.”

In a particularly wealthy area, a sales representative reported that energy efficiency has absolutely no value to her customers.

“I don’t think that customers care. Even if they see it, they don’t ask about it. At this store, people don’t care. I don’t think the

EnergyGuide matters here. To the customer, energy efficiency means nothing. I have to tell them. But here, they have a lot of money and they don't care. People here are not very knowledgeable. They don't read a lot. A lot of older men come in with young women in their 30's. And then, there are older ladies who come in by themselves. They are concerned with features - such as how noisy it is."

The Role Of Energy Efficiency In Selling Dishwashers Or Room Air Conditioners

For some respondents, discussion about energy efficiency occurs only when the customer brings it up. On the other hand, other sales representatives claimed they mention energy efficiency in every sales pitch for every appliance.

"Most people are really concerned about how much appliances will cost to run. People have been asking about energy costs more and more, especially over the last six months."

Others talked about energy efficiency when they sell air conditioners, yet rarely when selling dishwashers.

"It comes up all the time for air conditioners. The refrigerator runs all the time, and the customer knows that. They also know that the air conditioner costs a lot of money to run. On the other hand the dishwasher is not on a lot."

"When I sell dishwashers energy efficiency is not important. They only consume about 35 dollars of electricity a year. So a more efficient model would save 3 - 4 dollars per year. That is not a lot of money. Whereas a refrigerator consumes easily 15 dollars a month of electricity."

"Air conditioners are a high energy usage product. In fact, more people are concerned about the amount of energy consumed by an air conditioner than for any other product. They are looking for an air conditioner, but they don't want it to cost an arm and a leg."

One respondent did note that whereas energy consumption is the big issue for refrigerators, water usage is the major concern for dishwashers and washing machines.

"In refrigerators energy efficiency is a big deal because it is talked about on the Internet and in other publications. In other products, it is not quite such an issue. For instance in products that use water such as dishwashers or washers, water usage is the concern."

Comments About Consumer Willingness to Spend More for Energy Efficiency

When queried as to how much extra money consumers would be willing to pay for an \$800 standard refrigerator that would save them \$50 a year, responses varied greatly.

Considered highly influential, rebates were cited frequently as important to making the sale.

“Depends upon the features. And it depends on the customer. Whether they want to save the money or now or later. If there is just a \$50 difference, many customers can be convinced to go with the more energy efficient model because it is more politically correct. When there is a rebate, customers are more likely to spend the extra money, because they will get the money. When the double rebates are out there, it is a good selling point. Every time people are going to get something back, they are happy.”

A customer concern is what the manufacturer might have traded off for increased energy efficiency.

“. . . when refrigerators are too energy efficient, customers get suspicious. They want to know how the manufacturer achieved that degree of efficiency. What did they have to give up?”

When asked how much extra consumers would pay for a refrigerator that would save \$50 per year, a respondent offered an actual example concluding that a differential of \$350 is too large for half of the shoppers unless a rebate is offered as well.

“We do have two models that have (an operating cost difference of \$50 per year.) A GE is \$89 per year and the Whirlpool is \$53 per year. If you multiply both by 50%, then the difference in consumption is \$135 for the GE and \$76 for the Whirlpool. The GE costs \$1039 and \$1399 for the Whirlpool SERP. With this difference of \$350, it is difficult to get people to buy the SERP model - it happens maybe half the time. The rebate helps. It would have to be a bigger rebate to make it happen more often.”

Putting it very simply, a respondent noted that energy efficiency is not a concept that sells refrigerators at this point in time.

“Like cars, mileage per gallon is often not why someone decides on a particular model. People would spend maybe \$75 dollars more for a refrigerator that would save them \$50 a year.”

Energy Efficiency And Other Appliances

Only a few interviewees responded when asked about customers mentioning dryers and air conditioners in terms of energy efficiency.

“My customers will talk about dryers when they think about energy efficiency. They want to know why they don’t have EnergyGuide labels. However, this is a gas market, and they know that dryers cost \$50 a year to operate on gas and \$125 on electricity. I rarely hear questions in terms of other appliances.”

“(Customers) might say they have an energy efficient appliance at home, and would like to buy another. The big thing they talk about is air conditioners.”

Interviewees stated that customers who have learned to appreciate energy efficient appliances are reminiscent of the proverbial reformed smoker.

“When replacing older appliances - say 10 to 15 years old, (their comments can be very negative). I have a customer that was very suspicious their refrigerator was using an awful lot of energy. So they turned everything - and I mean everything - off in their house and went outside and looked at the meter running.”

In terms of awareness, one manager cited that consumers have more knowledge about larger appliances’ energy consumption than smaller ones.

“They really don’t have much understanding about how much energy small appliances use. They seem to know a little bit more about the larger appliances.”

Rebates

While customers do not always know about rebates prior to shopping, the sales representatives find that rebates are very effective sales tools. Rebates were mentioned in many contexts throughout the interviews. Respondents, claiming that rebates are very important for customers, were clear about their fondness for rebates:

“If a rebate is thrown in, (customers) will spend the extra (for energy efficiency) a lot easier. I love it when they have the rebates. It generates a lot more sales for us.”

“We really like the rebate program from Edison. We wish it could be extended through the summer. It has really helped us sell a lot of refrigerators. When people are going to save another \$80 or \$90, that is a strong selling point. When people can afford to buy an energy efficient refrigerator they will do it - rebate or not.”

Rebates also came up in the context of disposing of old appliances.

“Sometimes (customers) will use an old appliance in another part of the house. Most of the time they want us to get rid of it for them because they know that costs money. Once in awhile they ask if we give them any money for it. When I say no, they can choose to hold it and have Edison dispose of it. I believe Edison gives bonds or cash rebates for old refrigerators.”

Role of Point-of-Purchase: Energy Star[®]

Attitudes toward the Energy Star[®] logo ranged from thinking of it as a useful tool to its being superfluous. Some respondents noted that about half of the customers ask about it, while others thought that it did not mean much to shoppers.

Two managers explained why the Energy Star[®] logo was a successful sales tool:

“Right away they (customers) are thinking about whether it will be saving them money. Money is a very big object. It is attractive and has helped with presentations. It helps the salespeople use energy efficiency as a sales tool. A lot of sales that were marginal have been saved by introducing the concepts of energy efficiency.”

“It is good to have - a good program. It shows that companies like Circuit City care about energy efficiency. More important, it is

beneficial for the customer because it saves money. It is hard for a lot of people to grasp that someone is giving them something as opposed to taking something. People ask about it.”

In two of the stores, the sales managers thought that the Energy Star[®] logo was associated with the rebate program and removed all the logos when the rebate program was terminated. A respondent from one of those stores noted that when the Energy Star[®] logos were displayed on the refrigerators, people asked about the rebates - not about the Energy Star[®]. In another store where the logos stayed on display, a sales representative said,

“Most of the Energy Stars[®] were linked with the rebate program. So we would talk about both at once. Our advertising had shown the Energy Star[®]. Actually, hardly any one has asked about the Energy Star[®].”

A few respondents were negative about the Energy Star[®] because they felt it does not communicate substantive information. This lack of specific data is particularly glaring in this age of consumer information.

“I don’t think that customers pay a lot of attention to the Energy Star[®] logo. But they do pay attention to the EnergyGuide. I am not sure what the logo does. No one has ever told me about it. I have never seen a customer look at it. To me, it is like more junk on the front of the unit. The customer then has to pick and choose what is important to look at, and what is just redundant stuff. The Energy Star[®] is cartoonish. It is not substantive, communicating hard information. It really doesn’t say much of anything. Shoppers today are very knowledgeable. For instance, with cars, customers know a great deal. They no longer want the sizzle. They are sophisticated and want the hard facts.”

Role of Point-of-Purchase: EnergyGuide

Compared to the Energy Star[®], respondents were much more enthusiastic about the EnergyGuides. Some respondents refer to it almost all the time in the sales process, although others point it out rarely.

Those who use the EnergyGuide consider it to be an important sales tool because it shows customers how they can save money. Although customers do not always ask about it, one interviewee reported that when he sees people talking about it with each other, it gives him a chance to start talking

about energy efficiency. As mentioned earlier, the EnergyGuide frequently provides an opportunity for the sales representative to talk with customers extensively, forming the foundation for the relationship building vital to making a sale.

Respondents were divided as to which version of the EnergyGuide they preferred. The newer version of the EnergyGuide is a source of confusion for some respondents.

“Some customers think the energy efficiency has to do with the compressor, others with the number of light bulbs in the refrigerator. It would be better if the dollar amount had to do with what it costs to operate in this area. I would like to more easily compare one to the other.”

The smaller numbers based on only one rate did not impart enough information for some interviewees.

“The big problem with the EnergyGuide is that the new numbers are so small, they are difficult to read. Plus, the rate is based on a little more than eight cents per kilowatt hour. The rates here are over 12 cents, so they are one and a half times as high as the EnergyGuide says. The old version had varying rates, so it was easy to see what operating costs would be. It is important, because when the amounts that can be saved is multiplied out over ten can result in saving two or three hundred dollars. That amount should really be on the price tags.”

One respondent liked the fact that varying rates are not listed because the high rate in the SCE region could be a negative influence on the sales process:

“Actually, I frequently refer to the EnergyGuide in sales pitches. I like the new label better because it doesn’t list varying utility rates. Sometimes when people see how high the rates are here, it becomes a negative and casts a pall over the sales process. It is better the way it is now. Customers don’t ask what it means in this specific area.”

A preferred feature of some labels is the ranking scale that could be used to easily compare models:

“The other ones are valuable because they have a scale, showing exactly where the product is in its category. I like the scale and the yearly cost as it varies per region.”

Citing another area of confusion, an interviewee noted that many shoppers are not comfortable converting kilowatt hours to dollars spent on energy consumption:

“It is somewhat confusing because it gives information in kilowatt hours and most people don’t know how to convert that to dollars. What they do look at is the large number in the middle that refers to annual cost. That is very useful.”

While many of the respondents think the EnergyGuide is important to the sales process, not all agreed.

“In this area, operating costs are not a big deal. I am not going to steer a customer away from a GE Profile that is rated at \$79 per year to a Whirlpool that is \$53 . If the customer likes the features of the GE, I am not going to push him the Whirlpool. After all, that is only \$26. In ten years that is \$260 and that is just not a big deal. I don’t think the customers care about the energy consumption as much as they care about the features of the refrigerator. If I know they are interested in energy, then I will emphasize it. If not, I don’t make a big deal about it. My interest is in selling refrigerators, not paying attention to the EnergyGuide.”

One interviewee addressed the issue of customers not caring about energy efficiency in his statement that consumer awareness should be raised by a concerted public relations campaign.

“Changing the label will not make a difference. People have to be more aware. They have to realize that it is important. They just don’t hear it enough. Edison should emphasize it more. They should be bombarded with information. Then, when that happens, people just know. You don’t know how that happened, but you end up a lot more aware.”

Managers articulated that the EnergyGuide is an extremely useful sales tool.

“These are great. Because they give a lot of information about comparative costs. It is important to explain that it is an approximation - costs will vary from home to home. People get to see a graphic of what they will spend per year. In the past they never knew. I point it out most of the time. It is a great selling point.”

“It is bright and stands out. I think it should be featured in ads and flyers. They should say “Energy Efficient appliances that save you money are available at Circuit City.” The program is working now, but it could be even better if that was part of it.”

“They notice it most of the time. They ask what is this energy thing? Will I save money on my electric bill?”

“Customers look at it. They are looking for a unit which will have lower monthly operating costs. They ask about what it means. When they find out, they will buy the more efficient ones.”

The Customer Mindset

According to respondents, when customers shop for a new refrigerator, they often have some concept of what they are looking for. Respondents claimed that in addition to size and price constraints, shoppers often have a specific style (side-by-side or freezer-on-top) and brand in mind.

“(Shoppers are guided by) past experience, advertising. Most customers have a general idea of what they want. When they come in here, they get more specific information about what is available. That’s where we come into play - we tell them about the features and disadvantages of different models. Most people have already had an appliance.”

One manager cited the importance of brand as well as the EnergyGuide label.

“Brand preference (is critical for customers). Operating costs are important. Longevity is critical. If they have had Whirlpool for 40 years, that’s what they want. The next question has to do with the yellow tag on the refrigerator.”

The Customer Research Process Prior to Shopping

According to the interviewees, shoppers often have consulted *Consumers Reports*, talked to other people, and visited other showrooms. Occasionally they have looked on the Internet. Whatever the approach, the research process often affords the sales representative an opportunity to add more information and clinch the sale.

“Some of them will read Consumers Reports and they will buy the recommended model. Then they might ask which is the better one. We’ll show them the EnergyGuide and try to sell the better one because it costs more. Three out of ten go by Consumers Reports. Four out of ten will get the same brand that they had before. The rest is up to the salesman. It is important to explain to the customer the features and benefits.”

“Often they have read Consumers Reports or Consumers Digest. Sometimes they have been to another store like Montgomery Ward and then they have a lot of questions about what they have seen. Usually the research consists of a combination of approaches - some even look on the Internet. But most of the time it is Consumers Reports.”

In some cases repairmen have suggested to consumers that it is time to buy a new refrigerator, stating that a purchase is timely not only because the old one will cost too much to fix, but also because energy consumption will be markedly reduced.

“Customers do tell me that they have been told, say by a service person, that new appliances will use a lot less energy. That happens quite often - say 50 percent of the time. That motivates buying a new one, especially when an appliance is on its last legs.”

Shoppers also asked other consumers, consulted newspapers, and visited other showrooms. In addition, they attach great importance to what the utility company says.

“People often ask others about their opinions of what to buy. Customers constantly look in newspapers to find current prices. They go to other showrooms at least half the time. Frequently they look at TV ads, less often the radio. They do believe what the utility company tells them.”

“It is very important to a lot of customers that it has the utility company endorsement. They are reading the information that is out there.”

Interviewees stated that customers also mention the utility company in connection with rebates. For instance, a sales representative quoted one spouse saying to the other,

“You know something, honey, I think we could get a \$50 bond back from Edison if we bought this refrigerator.”

Respondents stated that today’s consumer is smarter, having become more sophisticated over the last few years.

“(Customers) are more aware now. They are more concerned about the costs of running an appliance. The major changes in concerns have been in the last five years.”

Many shoppers had not done much research. This could be because the purchase of a refrigerator is frequently an emergency situation.

“Most people go shopping when they are in need. Say the refrigerator has gone kaput. So they just don’t have time to shop.”

Brand is extremely important.

“They base their decision on the brand and style they have owned in the past. For first-time issues, they look for the brand and style that their parents owned.”

Salesman Training For Selling Energy Efficient Appliances

Sales representatives reported varying degrees of training ranging from poor to excellent. Here’s what they had to say, beginning with those comments that were most favorable.

“We get training from the manufacturers and from Edison. For instance GE has detailed their models to us. Although a lot of their research has gone into developing features, they also produce some energy-efficient models. The training has been terrific - say very good to excellent.”

“I have received excellent training. We had a two-week course on products in the classroom. During that time we touched base a little bit on energy.”

“Quite a bit. It was good. When you first get hired at Circuit City they send you for training. Not only for book work and videotapes but they send you to school for a week. They put you up in a hotel and spend about \$6000 on each sales person to help train you in selling appliances. Part of that training has to do with energy efficiency.”

“A few months back we had a session conducted by someone from Washington. We have had good training.”

“We had one session with people from Washington.”

“We have seen the video and other materials that we were sent. We were not trained as a group.”

“A little. We have heard about energy-efficient appliances when people come in and talk to us. Also, when we go to our meetings,

models such as the SERPs might be mentioned. Other than just what we've read, not much."

"One session. Pretty much they explained about saving money in the long run on utility bills and things like that. That happened about two month ago. Issues of energy rarely come up when meeting with the manager."

"A little training. We received a booklet telling us about the energy savings targeted to help sell certain products."

"It's been two years since we had any training on energy efficient refrigerators. When the SERP models came out, we were trained on those. But that was it."

"Poor training, I would say. Almost nothing, the emphasis is not on energy consumption."

"I have received no formal training about selling energy efficient appliances. The training I have received is really common sense. If a customer asks about energy efficiency, then I focus on telling them about how the refrigerators they are looking at are energy efficient."

Managers echoed this report of differing degrees of training.

"I've learned myself. You have to be willing to read and to learn. That's what it takes to be a good salesperson. You have to be willing to learn. When you can explain things well to people, they will buy."

"We've not received training on energy efficient products per se. For instance manufacturers come in, like Whirlpool, and they will do their product training. But I've never been to training conducted by Southern California Edison."

"Because I am new, I don't know if any training has been done regarding energy efficiency in the store."

"We have ongoing training and meet once a week. Issues of energy efficiency come up when the manufacturer comes in to tell us about specific products. Energy efficient issues sometimes are part of that. A few months ago we had training on the Energy Star® program. But we have none left up anymore, we are getting replacements."

One manager's approach to training seems particularly effective. It could serve as a prototype for all stores:

“When I bring out the rebates and the signs, I go through the training book. We do demonstration/training during the morning. Three days a week we have a major mention of energy efficiency. We go through the details of the energy rebates so the sales reps are very familiar with the program. They also have good margin on a lot of the rebated items - so it is interesting to everybody. We teach the sales people that reducing monthly operating costs puts money in the pocket of the consumer - and it also helps the ecology.”

Because the training that sales representatives receive translates into policy-in-action, a program that effectively educates staff is vital. A sales manager expressed how important it is to train the sales staff so they have the sales tool of communicating how saving energy means saving dollars on monthly utility bills.

“(Consumers) are buying energy efficient models no matter what. All the models on the floor are energy efficient. Even if they don't want to buy it, they are buying it. (i.e. even when not specifically seeking energy efficiency, they are getting more efficient refrigerators.) Ninety-nine percent of what is out there is energy efficient. It takes the sales people to explain it. And they have to be properly trained. How can someone who has received no training teach someone else what it is all about? It comes down to good sales work and good follow-up. This is a tool that can help people sell. Energy efficiency put in terms of savings helps people sell. Money is money.”

“When I first started out the gross margin was about 25%. Now, you are lucky to get 14 or 15 percent. That is a big drop. If you can substantiate the cost of why something is more money, you can get (consumers) to spend the additional amount. You have to be there and be able to explain. But it is important to train people.”

SALES ASSOCIATE QUESTIONNAIRE

INTERVIEWER'S NAME _____ DATE _____
STORE NAME _____ STORE # _____ TIME _____

In questionnaires such as this there are no right or wrong answers. Our objectives are to find out your perceptions about customer's attitudes towards purchasing appliances.

1. How you think customers decide the specific model they would like to purchase?
2. Do often do consumers ask you about energy efficiency?
3. What do they want to know?
4. Let's talk about the kind of training you received re: selling energy efficient appliances?
5. How often do you mention energy efficiency in sales pitches?
6. Why or why not?
7. If you do talk about energy efficiency in your sales pitches, what do you say in terms of refrigerators , room air conditioners, and dishwashers?
8. Let's look at the Energy Star® Logo

What does it say to the consumer?

Is it useful for the consumer?
9. Let's talk about the EnergyGuide Label:

How often do customers notice it when appliance shopping?

What questions have they asked about it?

How is this the EnergyGuide useful in customers' purchasing decisions?
10. How often do you refer to the EnergyGuide label as part of your selling process?
11. In your opinion, should the label be changed in any way to make it more effective?

12. What do you think comes to mind for your customers when they hear the words “energy efficiency?”
13. How often do your customers talk about any energy efficient appliances they own?
14. What do you think affects customers’ decisions about purchasing energy efficient appliances compared with ones that are LESS energy efficient?
15. How effective is energy efficiency as a selling point?
16. Think about your average customer. Suppose you presented an energy efficient appliance such as a refrigerator that would save \$50 a year in utility bills and lasts on the average 15 years. This means it saves \$4.17 a month, or \$750 over the 15 year lifetime of the appliance. **If the standard model costs \$800, how much more, if any, do you think this customer would be willing to pay for this energy efficient appliance?**
17. Let’s look at the same standard refrigerator costing \$800. For the energy efficient model, the utility company offers a \$50 rebate when purchased. How much more, if any, do you think a customer would be willing to pay for it?
18. How frequently do your customers try to gather any information about the appliances they are interested in prior to shopping?
19. If so, as far as you know where do they find helpful consumer and how helpful is it?
20. Please tell me about yourself:
- Gender: _____ male _____ female
- Age _____ 18-34 _____ 35-49 _____ 50-64 _____ 65+
- Marital status _____ single _____ married
- Race _____ Caucasian _____ Asian _____ African American
 _____ Hispanic _____ other
- Highest education level _____
- How long have you been working in this position as a sales associate at this store? _____
- Please tell about the other jobs you have held in the last two years. _____
- How long have you been selling? _____
- How long have you been selling appliances? _____

SALES STAFF' VERBATIM COMMENTS

Major Themes

APPENDIX B

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What helps make the sale?

(STORE E-2) - To be good at sales, must be very aggressive. In the store, appliances is the best department. Kids aren't there just trying things out. People are here because they really need an appliance. You don't have them coming in on a whim and returning it on Monday morning when they realize it is just too expensive. A very few people will return it just because they didn't want it.

Listening to the customer and gearing sales presentation to individual needs

(STORE A-2) - We have to qualify. The first question is if they are replacing an old model.

Role of rebates in the sales process

(STORE C-1) We really like the rebate program from Edison. We wish it could be extended through the summer. It has really helped us sell a lot of refrigerators. When people are going to save another \$80 or \$90, that is a strong selling point. When people can afford to buy an energy efficient refrigerator they will do it - rebate or not.

Energy efficiency can seal the deal

(STORE B-2) - I don't know of any consumers who buy a new appliance simply based on energy efficiency. Always it is a second thought. Comes after certain features such as cleanability or storage capacity. I always use energy efficiency as a way to close the sale. It is a good sales closer. I don't think it is a selling point. I can't think of one customer in the three years I have been here who has bought one appliance based on the fact that it is energy efficient. If they like it, they will buy it.

Role of the sales rep

(STORE F-2) - The process is really a qualification by the salesperson. The customer might have a general idea, but they usually don't know what brand they want - or anything of this nature.

(STORE B-1) - The sales person is very important. With a lot of rapport and customer trust, I don't think they do all that much showroom hopping. Usually, they think they should go to at least one other store. I like to be compared with others and have customers choose to do business with me because they are more comfortable with me.

(STORE A-1) - Generally speaking, people don't ask about energy efficiency. That is why we are here.

(STORE G - MNGR) - They are buying energy efficient models no matter what. All the models on the floor are energy efficient. Even if they don't want to buy it, they are buying it. 99 percent of what is out there is energy efficient. It takes the sales people to explain it. And they have to be properly trained. How can someone who has received no training teach someone else what it is all about? It comes down to good sales work and good follow-up. This is a tool that can help people sell. Energy efficiency put in terms of savings helps people sell. Money is money.

When I first started out the gross margin was about 25%. Now, you are lucky to get 14 or 15 percent. That is a big drop. If you can substantiate the cost of why something is more money, you can get them to spend the additional amount. You have to be there and be able to explain. But it is important to train people.

(STORE F - MNGR) - The sales person qualifies them.

What customers really want

(STORE C-2) - I mention it almost all the time. When people are about to spend a lot of money, it helps to mention energy efficiency to them. It really makes them feel better about what they are about to dive into - a 500 dollar to 2000 refrigerator. Comparing new to old, say if the old one is 20 years old, I tell them that the new one will be 50 to 75 percent more energy efficient. I then tell them that a refrigerator uses about 20 percent of the electricity in your home, so any savings will be significant.

(STORE C-2) - People don't care what is inside anymore because the insides are so similar. Rather, they buy for the price tag, energy efficiency, or the looks. A lot of customers ask about energy efficiency. They also ask about rebates. They are very important for the customer.

(STORE D-1) - For refrigerators, the first question is size, then price.

(STORE B-1) - Customers will buy a higher efficient refrigerator to save money. When they don't it is because they are brand loyal or really are drawn to a certain style. Of course, space constrictions can affect their choice.

(STORE E-2) - Brand preference and features.

(STORE E-2) - People buy a refrigerator usually because they like the other features on the refrigerator - not because it is energy efficient.

(STORE A - MNGR) - Look at features that are available. They always want the best price.

Why people buy a new refrigerator

(STORE C-1) - About twenty percent of the time people buy a new refrigerator because they see that the old one costs too much to run. They also come in because the old one has broken down or because they are moving.

Importance of energy efficiency in sales process

Do customers ask you about energy efficiency?

(STORE C-1) About half of them do. When they do, they want to know what the EnergyGuide label is all about. Many of those who ask seem to know that older refrigerators are not as efficient as newer ones. When they ask, they want to know how much it costs to run per year. Sometimes they ask about the Whirlpool SERP models.

(STORE C-2) - Customers ask about energy efficiency more than 50 percent of the time - probably about two thirds of them ask. They want to know which models are most efficient once they narrow down their options to two or three choices.

(STORE G-1) - Occasionally, a few people ask. They want to know about the new compressor and other different innovations. Customers want to know how much money they will be saving compared to the old models that they already own. Energy efficiency is not the main thing that people ask for. They want to know if it will fit and particular model. Their interest is in features.

(STORE D-1) - About half of the customers want to know the energy costs - how much it costs to run. We encourage them to ask those questions. What they want to know is operating costs. About 5 percent of people are concerned about the environment and they ask about the old versus new refrigerants. They are concerned about CFC's and freon.

(STORE D-2) - Some do and some don't - 50/50. They want to know what it will cost to operate on a yearly and monthly basis. Some of the refrigerators show it. Most customers are not aware of energy savings. When you tell them about it, they are very interested. Especially when they learn you can save 50 percent over the cost of their older refrigerators. They say, "golly you're right."

(STORE F-1) - Rarely. Those who ask refer to the EnergyGuide. And that has only happened a couple of times. They will ask about the rebate occasionally.

(STORE F-2) - Very rarely. When they do, they ask if the particular refridge is efficient. I always tell them yes. Because in today's marketplace, all refrigerators are more efficient than they were ten or twelve years ago.

(STORE B-1) - They do if they have heard about them or ask questions about the EnergyGuide. But that is rare. But we go out of our way to inform them, especially in rebate season. What they want to know is the comparison between models.

(STORE B-2) - Occasionally, 20% of the time they ask about energy efficiency. They want to know how the efficiency compares with other brands. Questions have to do with operating costs.

(STORE A-2) - Most of the time. They see the EnergyGuide and ask about it. They want to know how a particular model will do. Another major concern is the noise that a refrigerator makes. Customers think that the more noise a refrigerator makes, the more power that it consumes.

(STORE E-1) - Rarely. Maybe 5 percent of the customers. Is this model better than the others in terms of operating costs?

(STORE E-2) - Mostly they don't - very rarely. When they do, they ask if the new one will cost them more than the 20 year old one that they are replacing.

(STORE E-2) - Mostly they don't - very rarely. When they do, they ask if the new one will cost them more than the 20 year old one that they are replacing.

(STORE G - MNGR) - About three quarters of the time. The smart shopper - the one who reads *Consumer Reports*, will always look for that. I tell them if they have an older model - say ten or 15 years old - that buying a new one will save them money because the motor and compressor are smaller. It runs a little harder, repair bills might be more. But it is more efficient. Motors have gone from a half horsepower down to a quarter. Costs will vary from location to location.

(STORE D - MNGR) - We've had some Green Peace people who have come in here and asked about the most energy efficient product. They also want to know what do these refrigerators do to the environment.

(STORE F - MNGR) - Yes, frequently. They want to know which appliances use the least energy. It is a strong influence in their purchase decision.

(STORE A - MNGR) - A little less than half the time they do because they understand that some models use more energy and it will cost more in the long run. They know that older refrigerators consume a lot more energy than newer models. When they ask about energy efficient they want to know how much it will cost to run. Also, how the refrigerator is made so that it is energy efficient. For instance, are the walls thicker? Is the insulation different?

When will customers buy a more energy efficient refrigerator?

(STORE C-1) - The main thing is to save monthly bills. Environmental issues rarely come up.

(STORE C-2) - It depends upon the price point. For instance, we have a Whirlpool model that sells for \$1399. Then we have one that is the same, but more energy efficient and we sell it for 100 dollars more. The difference in energy consumption will sell them about ten dollars per year which comes to about \$100 in ten years. That is not a big enough energy savings to make the extra amount spent now worthwhile. They would rather save one hundred dollars now, and not get ten dollars a year for ten years. If there were a 50 dollar difference, they would probably go for that - 100 dollars with this return is just too much for the consumer to spend.

(STORE D-1) - Features

(STORE D-2) - There are a lot of people who care about what they spend per year on energy. I have occasionally seen people opt to give up some features in order to get an energy efficient model. The energy efficiency is a feature in itself, and it is very important.

(STORE D-2) - Often the energy efficiency is not as important as the style or as the features that are available. The difference in energy efficiency are not all that much, so they will go with the higher rated model.

Do you talk about energy efficiency in your sales pitches when the customer hasn't brought it up?

(STORE G-1) - Occasionally, not very often. It is not the customers main interest. Their concern is the costs of operating an old versus new model - not the difference from model to model.

(STORE D-1) - We always point at the energy costs, the EnergyGuide label on the refrigerators makes it easy to do that. I do, because it might be something they are concerned about. If not, you find it out real quick and move on to what they want to know.

(STORE D-2) - Most of the time. Especially with refrigerators because they use the most energy..

(STORE F-1) - The only time I do is when I am selling the warranty. I tell them that operating costs will go down because the compressors have changed and are smaller now. The refrigerator will not last as long. Therefore, a longer warranty is prudent.

(STORE F-2) - There are certain brands for which I very much stress energy efficiency. I explain why these particular models are different than the others and that because they are so energy efficient, California Edison is giving a rebate on them. Energy efficiency only comes up with the rebate program.

(STORE B-1) - Yes, in terms of the rebate program. When people are replacing an older refrigerator, then it is important to show the comparison between the older model and the newer one in terms of what their monthly utility bills will be. Whatever they buy now will save them money.

(STORE B-1) - It depends on the customer. When I qualify I ask about family size, why they are buying a new one, the features they are looking for and so on. Energy efficiency might not be all that relevant.

(STORE B-1) - Energy efficiency is important as a sales point. Because energy savings means money savings. When someone buys a refrigerator that costs more money to run it is because they are brand driven, want a particular style, or have a very limited space. Other than that, they will buy the model that is more energy efficient. Energy savings are very important. They will save money and get a rebate. From the consumer standpoint I would like the same attention.

(STORE B-2) - I mention it partly because it is a good selling tool. When they compare brands, I can show them the advantage over the lifetime of the appliance of the one I want to sell them. That can be a really big help, especially when they are comparing store to store.

(STORE A-1) - We bring it up when we are comparing different models. When we are selling higher price models it of course comes up. Sometimes it comes up and some times it doesn't. Energy efficiency is important to bring up when one refrigerator costs more than another. Say for a hundred dollar difference between models, it is the savings in monthly utility bills that will more than justify the difference in costs.

(STORE A - 2) - Most of the time. It is important because it will save the customer money.

(STORE E-1) - Yes, if I feel it is within the customer's concerns. But this happens rarely. Because if I bring up energy efficiency too early in the sales process before I know the customer, I could talk myself out of the sale.

(STORE E-2) - All of the time. Because I think that people should be aware of how much energy appliances use. When I bring it up, if people are not interested, than I drop the energy efficient issues. Most people think about right now, and not long term.

(STORE G - MNGR) - I would talk about it most of the time. Most people are trying to save money. They don't realize what the operating costs are. When you plug in a refrigerator for 24 hours a day, it costs money to run. Who wouldn't want to go from 75 dollars a day to 25 dollars a day. Add that up over 12 months and that is 600 dollars. Those are the kinds of things you have to use to sell. I might be high on this. But you have to break it down and show people, explaining that it is money they will never actually see - but they will have it.

(STORE F - MNGR) - Don't know if the sales people bring up energy.

(STORE A - MNGR) - When customers are looking at 2 different models, then energy efficiency is important to differentiate one model from another. It is a way for customers to save money in the long run.

When customers hear energy efficiency, what comes to mind for them?

(STORE C-2) - When customers think about energy efficiency they think about their wallets.

(STORE G-1) - Saving money.

(STORE D-1) - That the appliance will cost less money to operate.

(STORE D-2) - Less cost to them. Maybe higher quality. If you have a product that is going to save you more money, the likelihood is that it will save you more money.

(STORE B-1) - Money saving. Energy efficiency comes up rarely in conversations about other appliances - mainly in appliances.

(STORE A-1) - It is rare that people come because they want to replace an old refrigerator to get better energy efficiency. Most often they come because of break-down. They will buy an energy efficient model because it will save them money over the years.

(STORE A-2) - They think it has to do with the motor, the compressor.

(STORE E-1) - Money.

(STORE E-2) - I would imagine that they think about what it will cost them to run - but not in terms of what they will save.

(STORE G - MNGR) - Saving money. It is a bottom line issue - the money in your wallet.

(STORE A - MNGR) - They want to know what it means for them. It is a great opportunity for the salesman to be able to establish a rapport with the customer by explaining it.

How effective is energy efficiency as a selling point?

(STORE C-1) - I use it all the time, because it will save money in the long run.

(STORE C-2) - Energy efficiency is a very effective selling tool. We have some side-by-sides that are not very energy efficient. Then we have others that run 1200 dollars to 1400 dollars - and some even higher. A half to a third of customers can be swayed away from the thousand dollar model to the more energy efficient ones that are more expensive. In the side-by-side, GE's are not the most efficient. But they are in the freezer-on-top models. They are rated at \$45 a year and 21 cubic foot Whirlpool is \$46 a year. We sell a lot of those, plus the consumer also gets a rebate.

(STORE D-1) - Moderate - some times other things are more important. Sometimes it is the main decision-making factor - probably about 10 percent of the time.

(STORE F-1) - I don't think that customers care. Even if they see it, they don't ask about it. At this store, people don't care. I don't think the EnergyGuide matters here. To the customer, energy efficiency means nothing. I have to tell them. But here, they have a lot of money and they don't care. People here are not very knowledgeable. They don't read a lot. A lot of older men come in with young women in their 30's. And then, there are older ladies who come in by themselves. They are concerned with features - such as how noisy it is.

(STORE B-1) - It is very effective. The environmental concerns come up most when people ask about CFC's, etc. Maybe one percent of people are very conscious about energy consumption. For them, it comes up a lot when they come in here.

(STORE A-2) - Basically a few think energy efficiency is important, but certainly not all customers. Three out of five customers had no awareness of how much energy a refrigerator uses before they came in here.

(STORE A-2) - Operating costs are important. But the major selling point is to compare older models - more than five years old - with newer refrigerators in terms of the energy that is used to run them.

(STORE E-1) - People buy an energy efficient sales tool to save money. However, if they have to pay more in the beginning it is not very effective. Most people would rather pay less now and more in the future.

(STORE E-2) - I don't think it is that effective for most people. It is hard to judge because there is such a wide variety. Maybe 15 to 20 percent of people care. Even when they do, they might not talk about it.

(STORE G - MNGR) - Actually moderately. It is effective, but it depends on the person. If you just tell someone that a particular model will save them money, they will not understand it unless someone explains it to them. It takes explanation. It has to be put into layman's terms. It should be simplified - and the EnergyGuide does that.

(STORE G - MNGR) - Great to be able to explain how much money the customer can save. For instance with SERP models. I show them how much they can save because the motor is more efficient.

(STORE D - MNGR) - Fifty percent of the sale is energy efficiency. Very few people don't care about how much their electric bill is going to be.

(STORE A - MNGR) - It can be very effective. Especially for closing sales. Depends upon the situation. More than 50 percent of the time people are more concerned about the initial outlay than about operating costs. Their concern is what they are shelling out now.

(STORE A - MNGR) - A lot of the energy efficient models are esthetically pleasing. They look good and have full features. People who are educated about it and understand the benefits make it an easier sale.

Do you talk about energy efficiency when you are selling dishwashers or room air conditioners?

(STORE C-1) - Yes, on everything. Most people are really concerned about how much appliances will cost to run. People have been asking about energy costs more and more, especially over the last six months.

(STORE G-1) - I haven't sold them yet.

(STORE D-1) - Yes - it comes up all the time for air conditioners. The refrigerator runs all the time, and the customer knows that. They also know that the air conditioner costs a lot of money to run. On the other hand the dishwasher is not on a lot.

(STORE C-2) - When I sell dishwashers energy efficiency is not important. They only consume about 35 dollars of electricity a year. So a more efficient model would save 3 - 4 dollars per year. That is not a lot of money. Whereas a refrig consumes easily 15 dollars a month of electricity.

(STORE D-2) - Air conditioners are a high energy usage product. In fact, more people are concerned about the amount of energy consumed by an air conditioner than for any other product. They are looking for an air conditioner, but they don't want it to cost an arm and a leg.

(STORE F-1) - The only time I talk about energy efficiency is when the customer brings it up.

(STORE F-2) - We don't sell room air conditioners here, so it is not an issue. But, based on my experience with other retail establishments, it does come up when people buy room air conditioners. Hardly ever does the consumer ask about the energy efficiency of dishwashers.

(STORE B-1) - Energy efficiency never comes up with dishwashers. And our training about energy efficiency was only for refrigerators.

(STORE B-2) - In refrigerators energy efficiency is a big deal because it is talked about on the Internet and in other publications. In other products, it is not quite such an issue. For instance in products that use water such as dishwashers or washers, water usage is the concern.

(STORE A-1) - Energy efficiency is much more pronounced with refrigerators than with other appliances.

(STORE A-2) - Yes, because it means savings for the customer.

(STORE E-1) - With dishwashers, no one cares. Air conditioner and refrigerators, people care.

(STORE E-2) - I haven't had much experience with air conditioners. It is hard to talk about energy issues for dishwashers or clothes washers. But with refrigerators it is different. They are constantly running. It is easier to show. It runs all the time. I tell customers that saving energy means saving money for them.

(STORE G - MNGR) - We're just putting the air conditioners out. So it is important in terms of the amount of BTU's that are used. And especially for air conditioners - they are a luxury, not a necessity. An air conditioner is like a computer, not like a refrigerator. And, you don't need it all year long. However, when people use it, they wonder why their utility bills go up so much.

(STORE A - MNGR) - Not there. Rather when comparing gas / electric dryers and ranges.

How much more would people spend on \$800 standard model compared with an energy efficient one?

(STORE C-1) - - Maybe \$300. If they got a rebate, then maybe they would spend a little more.

(STORE C-2) - If they saved 50 a year, then they would spend two or three hundred dollars extra - because they could be easily shown that after five or six years the savings would amount to that. On the other hand, when refrigerators are too energy efficient, customers get suspicious. They want to know how the manufacturer achieved that degree of efficiency. What did they have to give up?

We do have two models that have that kind of difference. A GE is 89 dollars per year and the Whirlpool is 53 dollars per year. If you multiply both by 50%, then the difference in consumption is \$135 for the GE and \$76 for the Whirlpool. The GE costs \$1039 and \$1399 for the Whirlpool SERP. With this difference of \$350, it is difficult to get people to buy the SERP model - it happens maybe half the time. The rebate helps. It would have to be a bigger rebate to make it happen more often.

(STORE D-1) - They would pay more, but how much I don't know. If they also got a \$50 rebate, they would pay \$100 more.

(STORE D-2) - Maybe one hundred to three hundred more. Some will do their homework - others won't. The initial outlay of the money is of concern to some, not to others. I think people will more easily spend up to 200 more if it can be justified. Above 300 dollars, there has to be a lot of other justification. If a rebate is thrown in, they will spend the extra a lot easier. I love it when they have the rebates. It generates a lot more sales for us.

(STORE B-1) - Probably \$200 more. Even with a rebate.

(STORE A-1) - Energy efficiency is not a concept that sells refrigerators at this point in time. Like cars, mileage per gallon is often not why someone decides on a particular model. People would spend maybe \$75 dollars more for a refrigerator that would save them \$50 a year. The rebate was a significant factor in people's decision to buy a particular refrigerator.

(STORE E-1) - Simply not true, I can't answer. With the rebate, the price came down to match the non-energy efficient. We're only talking about 5 to 10 dollars a year.

(STORE E-2) - Depends upon the features. And it depends on the customer. Whether they want to save the money or now or later. If there is just a 50 dollar difference, many customers can be convinced to go with the more energy efficient model because it is more politically correct. When there is a rebate, customers are more likely to spend the extra money, because they will get the money. When the double rebates are out there, it is a good selling point. Every time people are going to get something back, they are happy.

(STORE D - MNGR) - When you point out the savings, they are willing to spend a little more up front to save a lot more in the long run. You need to be able to show them the savings they will have over the life of the appliance. They will pay \$50 - \$100 more if, on an \$800 dollar appliance, they can save \$50 a year. If they were to get a \$50 rebate too, then they would probably go up a couple of hundred dollars.

Energy efficiency and other appliances

(STORE C-2) - My customers will talk about dryers when they think about energy efficiency. They want to know why they don't have EnergyGuide labels. However, this is a gas market, and they know that dryers cost \$50 a year to operate on gas and \$125 on electricity. I rarely hear questions in terms of other appliances.

(STORE D-1) - No, it simply doesn't come up. Certainly it is not something I am probing for.

(STORE D - MNGR) - A few. They might say they have an energy efficient appliance at home, and would like to buy another. The big thing they talk about is air conditioners.

Role of Point-of-Purchase

Energy Star

(STORE C-2) - Some know about it from buying computer equipment because it comes up on their screens. Only a small number of people ask about it - maybe 20 percent. We bring it up by showing which models are energy efficient, and which ones are particularly so because they have been marked with the super star. Convenience and efficiency are the two biggest things for consumers.

(STORE G-1) - No. I do point it out when they are interested in a refrigerator that has it on it.

(STORE D-1) - Signing has been up for a few weeks. Customers notice them, and it says that it costs less money to operate. About half the people seem to be real interested.

(STORE D-2) - Most of the Energy Stars® were linked with the rebate program. So we would talk about both at once. Our advertising had shown the Energy Stars®. Actually, hardly any one has asked about the Energy Stars®.

(STORE F-2) - Not specifically. When I am showing products, I will mention that the energy efficiency on one is higher than another. However, I always sell to customer interest - as I've determined through qualifying them as to the features that they want which is not necessarily about energy efficiency.

(STORE B-1) - Not much. But they did ask about SERP when the POP started appearing. Energy Star® doesn't seem to mean much to consumers.

(STORE B-2) - I don't think that customers pay a lot of attention to the Energy Star® logo. But they do pay attention to the EnergyGuide. I am not sure what the logo does. No one has ever told me about it. I have never seen a customer look at it. To me, it is like more junk on the front of the unit. The customer then has to pick and choose what is important to look at, and what is just redundant stuff. The Energy Star® is cartoonish. It is not substantive, communicating hard information. It really doesn't say much of anything. Shoppers today are very knowledgeable. For instance, with cars, customers know a great deal. They no longer want the sizzle. They are sophisticated and want the hard facts.

(STORE B-2) - Today, people are more educated. They come in with their guard up and armed with more information. Think about credit card debt. People pay a lot of attention to interest. It is just another point about how much people know. Today, people come in here asking questions that are really knowledge based. Such as "does it have a rotary compressor?" They want to know how these things work. The more questions that people ask, the more that I learn. I tell them when they have taught me something. Customers seem quite pleased when I do that. It really helps build rapport.

(STORE A-1) - They were up for awhile, but now they are no longer around. It was associated with the rebate.

(STORE A-2) - It is not up any more. But it did not come up very much.

(STORE E-1) - We took the stickers and rebates down when the rebate program ended. We didn't have instructions to leave them up. When they were up, people didn't ask about the Energy Stars®. They did ask about the rebates and why they were on those particular refrigerators. We told them why - that these refrigerators were more energy efficiency.

(STORE E-1) - We have two SERPS - Whirlpool. No one comes in asking for SERP.

(STORE E-2) - The Energy Stars® were coupled with the rebate signs. That was a mistake. We are waiting for the new ones to come. I don't think customers noticed them. A very few saw them and asked. There are always a few.

(STORE G - MNGR) - It is good to have - a good program. It shows that companies like Circuit City care about energy efficiency. More important, it is beneficial for the customer because it saves money. It is hard for a lot of people to grasp that someone is giving them something as opposed to taking something. People ask about it.

(STORE D - MNGR) - Right a way they are thinking about whether it will be saving them money. Money is a very big object. It is attractive and has helped with presentations. It helps the salespeople use energy efficiency as a sales tool. A lot of sales that were marginal have been saved by introducing the concepts of energy efficiency.

(STORE A - MNGR) - They will ask what it is and what it means. They came down by mistake when the rebates were over.

(STORE G - MNGR) - It is good to have - a good program. It shows that companies like Circuit City care about energy efficiency. More important, it is beneficial for the customer because it saves money. It is hard for a lot of people to grasp that someone is giving them something as opposed to taking something. People ask about it.

EnergyGuide - its function and reactions to the two versions

(STORE C-1) - Customers look at the EnergyGuide to compare differences between models. Sometimes I point it out, and sometimes they ask me about it. Probably seven out of ten ask me about it. They try to figure out how much a year it will cost to operate that model. Sometimes they look at the number and they think it is too much. So you have to explain what it is all about. I refer to this label almost all the time when I am selling.

(STORE C-2) - The big problem with the EnergyGuide is that the new numbers are so small, they are difficult to read. Plus, the rate is based on a little more than eight cents per kilowatt hour. The rates here are over 12 cents, so they are one and a half times as high as the EnergyGuide says. The old version had varying rates, so it was easy to see what operating costs would be. It is important, because when the amounts that can be saved is multiplied out over ten can result in saving two or three hundred dollars. That amount should really be on the price tags.

(STORE G-1) - I point it out rarely. Occasionally, customers ask about it. When I do, the customer looks at it in terms of comparison. They seem to understand it. Maybe a third, if that many, cares about it. I don't think it should be changed in any way. Because everyone understands it.

(STORE D-1) - Customers do notice it on refrigerator and on air conditioners. If replacing a refrigerator, the new one costs a lot less to operate than the old model. More than half of the customers want to talk about it. It is somewhat confusing because it gives information in kilowatt hours and most people don't know how to convert that to dollars. What they do look at is the large number in the middle that refers to annual cost. That is very useful.

Once I bring it up, only about half are interested. If they are replacing a refrigerator that costs a lot of money to run, or maybe they had a serviceman out there or someone from Edison who told them it was costing lots to run - then, they are real interested in the efficiency.

People don't understand kilowatt hours. The only concern is the cost to run it.

(STORE D-2) - The old ones broke down annual dollars by different ratings in different locations. But the new EnergyGuide labels don't have that - so it is a little more difficult. So you have to calculate it for this area.

Some customers do and some customers don't. Occasionally they will ask. They want to know what it is about. We explain that some are more efficient than others. Of course the SERPS are the highest rated. Then, we tell them about the Super Energy Refrigerator Program. Maybe one out of 100 come in knowing about the SERP models.

I wonder how useful it is, because they rarely ask about it. However, it does show costs plus capacity. But I don't think that customers read. They would rather be told.

Frequently we do refer to it.

(STORE F-2) - Absolutely, I use it quite a bit. I show them what it costs to operate explain what it costs to run their old one and what it will be for a new one. If there is only a ten dollar difference annually between the cost of operation between two models, then I will not stress one over the other on the basis of energy efficiency. The EnergyGuide labels says what it needs to. It works as a selling point and does not need to be changed.

In this area, operating costs are not a big deal. I am not going to steer a customer away from a GE Profile that is rated at \$79 per year to a Whirlpool that is \$53 . If the customer likes the features of the GE, I am not going to push him the Whirlpool. After all, that is only \$26. In ten years that is \$260 and that is just not a big deal. I don't think the customers care about the energy consumption as much as they care about the features of the refrigerator. If I know they are interested in energy, then I will emphasize it. If not, I don't make a big deal about it. My interest is in selling refrigerators, not paying attention to the EnergyGuide.

Maybe three percent max of the people who come in here are interested in energy consumption.

(STORE B-1) - When people look at it they really don't understand what it is all about. They think the big number is a monthly charge or somehow related to the cost of the unit. They don't read it in detail until we bring it up - unless they have recently (over the past 5 - 10 years) purchased a refrigerator. When they do look, they then start comparing costs. That was easier to do with the older labels. The new ones don't have that, so I think we will be getting less questions than we were getting before. It is very useful, it is a way to show them how to save money. It helps them decide which refrigerator to buy. In other words, once they know what the EnergyGuide is, then it becomes helpful.

Actually, I frequently refer to the EnergyGuide in sales pitches. I like the new label better because it doesn't list varying utility rates. Sometimes when people see how high the rates are here, it becomes a negative and casts a pall over the sales process. It is better the way it is now. Customers don't ask what it means in this specific area.

(STORE B-2) - Customers notice it all the time when they are shopping. There are two different types of EnergyGuides. Some have a number and then they give you a yearly cost break-down, depending what it will cost in your area. The other ones are also valuable because they have a scale, showing exactly where the product is in its category. I like the scale and the yearly cost as it varies per region.

(STORE B-2) - They might not ask me, but I see them talking about it with each other. It gives me a chance to start talking about energy efficiency.

(STORE A-1) - Half of them don't know what they are looking at. We have to explain them. We tell them that they are calculated on an average rate. I bring it up about 75 percent of the time. The older ones were better because they gave varying amounts depending upon specific utility rates. The newer ones don't give relevant information.

(STORE A-2) - People ask about it about a third of the time. Some customers don't mind a high rating at all. Some customers think the energy efficiency has to do with the compressor, others with the number of light bulbs in the refrigerator. It would be better if the dollar amount had to do with what it costs to operate in this area. I would like to more easily compare one to the other.

(STORE E-1) - Maybe half of the time people ask about them. Sometimes they use them in their purchasing decisions. Most people are replacing an old refrigerator that is ten to fifteen to twenty years old. Now, they are looking at refrigerators that range that goes between 60 to 75 dollars a year to run. It doesn't really matter because it will be two to three times as efficient to run as the old model. The difference between 60 and 75 is just not that much of a big deal.

I use it less than half the time. The label would be better if it had a chart showing how much money they would save comparing an old one with a new one. But they are saving with any new model that they are buying

(STORE E-2) - Frequently customers ask about it. All they ever ask is the actual cost to run the refrigerator. People who look at it already know how it works - so they don't have as many questions. People who don't look at the EnergyGuide or give it just a glance don't understand it. People who are aware of energy consumption know how to read the EnergyGuide. For some people it doesn't make a difference - it doesn't matter. If it will cost 40 or 140 dollars a year to run, they don't care - because that is the refrigerator that they want.

(STORE E-2) - A lot of people buying their first refrigerator are swayed by looks. People replacing old refrigerators are more aware of energy consumption. There are always a few people who know the relationship between certain features and energy efficiency. But not everybody. There are so many different people that buy different things for different reasons. About $\frac{3}{4}$ are replacing and $\frac{1}{4}$ buying refrigerators for the first time.

(STORE E-2) - I use it a little less than half the time.

(STORE E-2) - Changing the label will not make a difference. People have to be more aware. They have to realize that it is important. They just don't hear it enough. Edison should emphasize it more. They should be bombarded with information. Then, when that happens, people just know. You don't know how that happened, but you end up a lot more aware.

(STORE G - MNGR) - These are great. Because they give a lot of information about comparative costs. It is important to explain that it is an approximation - costs will vary from home to home. People get to see a graphic of what they will spend per year. In the past they never knew. I point it out most of the time. It is a great selling point.

(STORE G - MNGR) - It is bright and stands out. I think it should be featured in ads and flyers. They should say "Energy Efficient appliances that save you money are available at Circuit City." The program is working now, but it could be even better if that was part of it.

(STORE D - MNGR) - They notice it most of the time. They ask what is this energy thing? Will I save money on my electric bill?

(STORE F - MNGR) - Customers look at it. They are looking for a unit which will have lower monthly operating costs. They ask about what it means. When they find out, they will buy the more efficient ones.

(STORE A - MNGR) - People sometimes notice it. Probably less than half the time. They usually don't know what it is, or want to use it to compare 2 different appliances. Have to find those customers who are concerned with how much they are paying for energy and those who just don't care. Important for the salespeople to differentiate. Frequently people are concerned, not all the time. Talking about the EnergyGuide, the graphic scale is important.

Perceptions

Comparing old and new appliances in terms of energy efficiency

(STORE G-1) - No. Well, only in terms of older appliances costing a lot. When they buy a new one they don't care much about comparing one to the other. The major concern is that it costs much less to operate than the older ones.

Relationship of energy efficiency rating and quality of the refrigerator

(STORE G - MNGR) - More and more the new appliances are energy efficient. Sometimes I get an older couple. I tell them that I have a refrigerator that is more efficient, but it will not have as strong a motor or compressor as the old one. That is news to them.

Customer research

Customers' decision-making process - knowledge upon shopping

(STORE C-2) - They pretty much know if they want side-by-side or freezer on the top. A lot of customers have a color preference. Some times they ask about energy efficiency.

(STORE G-1) - Mostly from past experience. What they have had before and what their parents owned.

(STORE D-2) - Past experience, advertising. Most customers have a general idea of what they want. When they come in here, they get more specific information about what is available. That's where we come into play - we tell them about the features and disadvantages of different models. Most people have already had an appliance.

(STORE F-1) - Usually they have looked at *Consumers Reports* or they just ask for the top of the line.

(STORE B-1) - They have a general idea, but they don't make a decision until they see the different features that are available.

(STORE A-1) - The main thing is model and available space. Then they look at what they can find.

(STORE E-1) - Price and size. Then features such as sliding shelves, see-through crispers, etc.

(STORE G - MNGR) - Brand preference. Operating costs are important. Longevity is critical. If they have had Whirlpool for 40 years, that's what they want. The next question has to do with the yellow tag on the refrigerator.

(STORE D - MNGR) - They go by brand and price.

The source of knowledge prior to shopping: *Consumers Reports*, talking to other people, and going to other showrooms

(STORE C-1) - Some of them will read *Consumers Reports* and they will buy the recommended model. Then they might ask which is the better one. We'll show them the EnergyGuide and try to sell the better one because it costs more. Three out of ten go by *Consumers Reports*. Four out of ten will get the same brand that they had before. The rest is up to the salesman. Important to explain to the customer the features and benefits.

(STORE C-2) - Often they have read *Consumers Reports* or *Consumers Digest*. Sometimes they have been to another store like Montgomery Wards and then they have a lot of questions about what they have seen. Usually the research consists of a combination of approaches - some even look on the Internet. But most of the time it is *Consumers Reports*.

(STORE C-2) - Consumer Reports. Rarely the Internet. Sometimes they tell me that repair people have advised them. Never have they mentioned the utility company. Ten percent of the customers know about the rebates.

(STORE G-1) - They have looked at *Consumers Reports* and word-of-mouth. Rarely they have contacted the manufacturer.

(STORE D-1) - Maybe about 20 percent would have done some research, looked at *Consumers Reports*, and have an idea of what brand they want. Some people use it as a bible, others as a guide. It does make sense to do some research. People often ask others about their opinions of what to buy. Customers constantly look in newspapers to

find current prices. They go to other showrooms at least half the time. Frequently they look at TV ads, less often the radio. They do believe what the utility company tells them.

(STORE D-2) - Half the time they might try to gather information from other sources prior to shopping. Often customers think that *Consumer Reports* is the gospel. Most people go shopping when they are in need. Say the refrigerator has gone kaput. So they just don't have time to shop. When they do, like when remodeling, then they spend more time shopping.

(STORE F-2) - Today's consumer is smarter. Talking to other people is like a referral, so it is very important. A lot of people put a lot of credence in *Consumers Reports*. As for going to other showrooms, my belief is that they get the best knowledge base by going to Circuit City. I think the caliber of sales people here is a lot better than other places that I have seen. People here are better trained and more committed to satisfying the customer.

(STORE B-1) - Occasionally - 20%. They look in *Consumers Reports* and go by their personal experience. When people come in looking for a particular brand, such as Kenmore, we ask some questions. We tell them that we don't have that brand, but we have refrigerators produced by the maker of that brand. I then ask them what they like about that brand. And then, I ask qualifying questions about what they like about that brand.

(STORE A-1) - Generally speaking they have not done much research. It is looked at as an essential commodity. They come in when the other has konked out. They need something immediately because they are concerned about their food being ruined. Two percent have done research.

(STORE A-1) - Maybe 2 percent have consulted *Consumer Reports*. One customer over the past year has looked on the Internet. Most of the research is done on the showroom floor.

(STORE A-2) - Only about 5 percent have looked in *Consumers Reports*. A few have talked to other people.

(STORE E-1) - Half the time. Literature, word-of-mouth, past experience. More and more people are looking at the Internet. In those cases, they have more information than I do. *Consumer Reports* is the most consulted source. They weigh it pretty heavily. In my opinion it weighs pretty heavily too. They also go to other stores.

(STORE E-2) - Some read *Consumer Reports*. But with *Consumer Reports* they are talking about what is old already. So you have to talk them into a newer appliance.

(STORE E-2) - A lot of people do gather information prior to coming in. Frequently they depend on word-of-mouth, people are beginning to show interest in the Internet. Also often people look in *Consumer Reports* and in newspapers. It seems that almost all the time they have been to other showrooms. Often they see something on TV. Never have I heard of someone calling the utility company. I don't think people read the inserts in the bill.

(STORE G - MNGR) - *Consumers Reports*, word-of-mouth, EnergyGuide labels. Not a lot of people use the Internet - but that would be great. I would do it by putting information in the bills saying if you have an old refrigerator save money by buying a new one.

(STORE D - MNGR) - Ten percent of customers use *Consumers Reports*. Very few comment on utility company. Most people who come in have gotten information on TV or magazines - the ads in both. Very few get information before they come in.

(STORE F - MNGR) - They use *Consumers Reports*, they ask us what we know, and they talk to their friends and relatives. Really what influences them is brand loyalty, *Consumers Reports*, and our recommendations.

(STORE A - MNGR) - A lot of people look in *Consumers Reports* - but not as many people who used to. Three years ago I think that people consulted it a lot more. Lots of times they get information from friends. Go to other showrooms and talk to competitors. Some look on The Internet. Lots of people know about rebates - they look for it in the summer time. They may not know why some products have rebates and others don't.

The power of a brand name

(STORE B-2) - They base their decision on the brand and style they have owned in the past. For first time issues, they look for the brand and style that their parents owned.

Have people consulted the utility company?

(STORE G-1) - No

(STORE F-2) - The only time Southern California Edison is mentioned is when it comes to getting a rebate. "You know something, honey, I think we could get a 50 dollar bond back from Edison if we bought this refrigerator."

(STORE B-1) - It is very important to a lot of customers that it has the utility company endorsement. They are reading the information that is out there. Reference to government endorsements does not even come up.

(STORE B-2) - Sometimes they will use an old appliance in another part of the house. Most of the time they want us to get rid of it for them because they know that costs money. Once in awhile they ask if we give them any money for it. When I say no, then they can choose to hold it or have Edison dispose of it. I believe Edison gives bonds or cash rebates for old refrigerators.

(STORE A-1) - The only time is to find out about the rebate.

(STORE A - MNGR) - Some have. People really like the rebate program. People get information from many sources. Radio, magazines, etc.

About the customer

Why do people buy new refrigerators?

(STORE F-1) - Usually because of break-down. They want something that is reliable. They often ask for the top of the line, such as GE Profile.

(STORE B-2) - Customers do tell me that they have been told, say by a service person, that new appliances will use a lot less energy. That happens quite often - say 50 percent of the time. That motivates buying a new one, especially when an appliance is on its last legs. When people go appliance shopping, they are generally ready to buy - even if the appliance might have lasted a few more years.

Do customers mention other energy efficient appliances?

(STORE D-2) - Detrimentally - when replacing older appliances - say 10 to 15 years old. I have a customer that was very suspicious their refrigerator was using an awful lot of energy. So they turned everything - and I mean everything - off in their house and went outside and looked at the meter running.

(STORE A - MNGR) - Not really. They really don't have much understanding about how much energy small appliances use. They seem to know a little bit more about the larger appliances.

How have customers changed in the last ten to fifteen years?

(STORE D - 1) - They are more aware now. They are more concerned about the costs of running an appliance. The major changes in concerns have been in the last five years.

Salesman training - re: selling energy efficient appliances

Per sales rep

(STORE C-1) - One session. Pretty much they explained about saving money in the long run on utility bills and things like that. That happened about two month ago. Issues of energy rarely come up when meeting with the manager.

(STORE C-2) - We get training from the manufacturers and from Edison. For instance GE has detailed their models to us. Although a lot of their research has gone into developing features, they also produce some energy efficient models. The training has been terrific - say very good to excellent.

(STORE G-1) - I have received excellent training. We had a two week course on products in the classroom. During that time we touched base a little bit on energy.

(STORE D-1) - Poor training, I would say. Almost nothing, the emphasis is not on energy consumption.

(STORE D-2) - A little training. We received a booklet telling us about the energy savings targeted to help sell certain products.

(STORE F-1) - Some.

(STORE F-2) - I have received no formal training about selling energy efficient appliances. The training I have received is really common sense. If a customer asks about energy efficiency, then I focus on telling them about how the refrigerators they are looking at are energy efficient.

(STORE B-1) - Its been two years since we had any training on energy efficient refrigerators. When the SERP models came out, we were trained on those. But that was it. "Some" training.

(STORE B-2) - Quite a bit. It was good. When you first get hired at Circuit City they send you for training. Not only for book work and videotapes but they send you to school for a week. They put you up in a hotel and spend about \$6000 on each sales person to help train you in selling appliances. Part of that training has to do with energy efficiency.

(STORE B-2) - Quite a bit. It was good. When you first get hired at Circuit City they send you for training. Not only for book work and videotapes but they send you to school for a week. They put you up in a hotel and spend about \$6000 on each sales person to help train you in selling appliances. Part of that training has to do with energy efficiency.

(STORE A-1) - A few months back we had a session conducted by someone from Washington. We have had good training.

(STORE A-2) - We had one session with people from Washington.

(STORE E-1) - Some. We have seen the video and other materials that we were sent. We were not trained as a group.

(STORE E-2) - A little. We have heard about energy efficient appliances when people come in and talk to us. Also, when we go to our meetings, models such as the SERPS might be mentioned. Other than just what we've read, not much.

(STORE G - MNGR) - I've learned myself. You have to be willing to read and to learn. That's what it takes to be a good salesperson. You have to be willing to learn. When you can explain things well to people, they will buy.

(STORE G - MNGR) - We've not received training on energy efficient products per se. For instance manufacturers come in like Whirlpool and they will do their product training. But I've never been to training conducted by Southern California Edison.

(STORE F - MNGR) - Because I am new, I don't know if any training has been done re: energy efficiency in the store.

(STORE A - MNGR) - We have ongoing training and meet once a week. Issues of energy efficiency come up when the manufacturer comes in to tell us about specific products. Energy efficient issues sometimes are part of that. A few months ago we had training on the Energy Star® program. But we have none left up anymore, we are getting replacements.

Teaching salesmen

(STORE G - MNGR) - My function as a manager is to train people and be sure that merchandise is properly displayed. I also control the electronics department. It is important to teach sales people to build rapport. If you can't do that, you can't sell. Very important to back up with knowledge.

(STORE D - MNGR) - When I bring out the rebates and the signs, I go through the training book. We do demonstration / training during the morning. Three days a week we have a major mention of energy efficiency. We go through the details of the energy rebates so the sales reps are very familiar with the program. They also have good margin on a lot of the rebated items - so it is interesting to everybody. We teach the sales people that reducing monthly operating costs puts money in the pocket of the consumer - and it also helps the ecology.

Thoughts about the future

(STORE D - MNGR) - We have had a few who come in and talk about a commercial they saw on TV which focuses on energy efficiency. So, I guess they have learned something about energy efficiency.

(STORE D - MNGR) - At my home, we used to discourage the kids from opening the refrigerator unnecessarily by taking a photo of the contents every time I went shopping or did some major cooking. When you have three kids, the refrigerator can be open a half hour at a time.

(STORE F - MNGR) - With deregulation, the consumer will benefit. Rates will go down. The utilities have been monopolies for many years. Sooner or later there will be competition in the field.