



WE MAKE ENERGY WORK

2001 ENERGY STAR Household Survey

Miriam L. Goldberg, XENERGY Inc.
Tim Pettit, Cadmus Group

ACEEE Market Transformation Conference
March 25–26, 2002
Washington, DC



Survey Sponsorship

- Consortium for Energy Efficiency (CEE) and member sponsors
 - ❖ Survey design
 - ❖ Survey implementation
 - ❖ Sharing data to public
- EPA
 - ❖ CEE made data available to EPA for national analysis



Survey Goals

- National measure of ENERGY STAR recognition, understanding, and influence in households
- Compare
 - ❖ This year with last year
 - ❖ High versus low publicity areas
- Establish sound basis for ongoing tracking
 - ❖ Next round planned after awareness campaign
- Methodological issues
 - ❖ Mail survey versus Web TV
 - ❖ Nonresponse



Who's Covered?

- National survey
 - ❖ All U.S. households in large designated market areas (DMAs), ~70% of U.S. households
- Utility-sponsored samples
 - ❖ New York (mail)
 - ❖ New Hampshire (mail)
 - ❖ S. California (Web TV)



Survey Methods

- Mail survey: 1,997 completes
 - ❖ Stratified by DMA
 - ❖ Allocated proportional to # households
- Web TV: 1,936 completes
 - ❖ Stratified by publicity level
 - ❖ ~1/3 in each publicity level



Survey Questions

- Open-ended — what does E* label suggest?
- Seen the label before?
 - ❖ In what medium?
 - ❖ On what products?
- What products purchased in last 12 months?
 - ❖ Which ones had E* label?
 - Did E* label influence purchase?
 - Did you get a rebate / financing help?
 - How much did that affect E* purchase?



Survey Questions (cont)

■ Info sources likely to use

- ❖ Heating and cooling
- ❖ Appliances / lights / electronics

■ Demographics

- ❖ # PCs, **average daily hours**
- ❖ # people
- ❖ Age
- ❖ Sex
- ❖ **Energy bill payment**
- ❖ Dwelling type
- ❖ **# bedrooms**
- ❖ Own / rent
- ❖ Income level
- ❖ **Others**



Steps Taken to Improve Response Since Previous Survey

■ Survey Design

- ❖ Layout
- ❖ Condensed open-ends at beginning

■ Mail Survey

- ❖ Cover letter
- ❖ Additional mail follow-up
- ❖ Follow-up phone survey with subsample
- ❖ Corrected for bad addresses in response rate

■ Web TV



Response Rates

	Previous Mail Only 2000	Current Mail Only 2001	Current Web TV 2001
Sendout/Requested	34,250	8,000	2,395
Completed	3,496	1,997	1,936
Ineligible		453	
Return Rate	10.2%	25.0%	80.8%
Recruitment Rate			56.0%
Response Rate		26.5%	45.3%



Preliminary Results



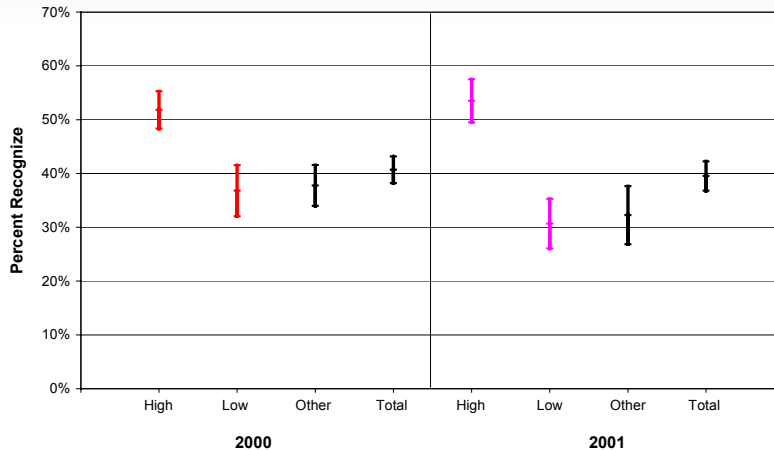
Recognition of the Label (Base = All Respondents)

	Previous Mail Only 2000	Current Mail Only 2001	Current Web TV 2001
Estimates			
% Recognize Unaided			25%
% Recognize Aided	41%	40%	39%
Standard Errors			
% Recognize Unaided			1.1%
% Recognize Aided	1.5%	1.7%	1.3%



Recognition by Publicity Level

Percent Recognize (Aided)
with 90 Percent Confidence Interval
Mail Surveys 2000 and 2001 by Publicity Level



Does Respondent Understand E*?

- High: mentioned one or more of
 - ❖ Savings (operating)
 - ❖ Environmental benefit
 - ❖ Energy efficiency
 - ❖ Product standard
- General: mentioned one or more of
 - ❖ Energy
 - ❖ Energy guide
 - ❖ Environment
 - ❖ Specific products
 - ❖ Quality
 - ❖ Saving \$ on purchase (rebate)
 - ❖ Government backing
 - ❖ NOT specifically efficiency, savings, benefit, standards



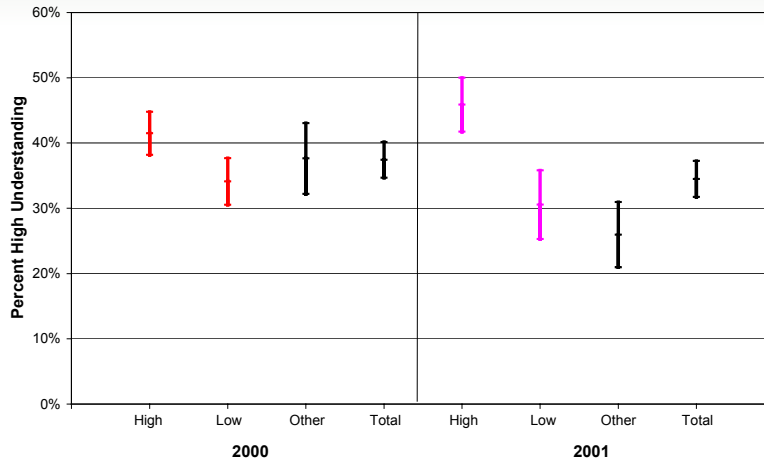
Understanding General or Better (Base = All Respondents)

	Previous Mail Only 2000	Current Mail Only 2001	Current Web TV 2001
% High + General Understanding	57%	54%	56%
Standard Error	2.0%	1.8%	1.3%



High Understanding by Publicity Level

Percent High Understanding
with 90 Percent Confidence Interval
Mail Survey 2000 and 2001 by Publicity Level



Purchase Influenced by E* Label (Base = E* Purchasers)

	2000 Response	2001 Response	Previous Mail Only 2000	Current Mail Only 2001	Current Web TV 2001
Estimates	Yes	Very much, somewhat, or slightly	50%	72%	64%
		Very much or somewhat		54%	50%
		Very much		27%	25%
Standard Errors	Yes	Very much, somewhat, or slightly	5.1%	3.2%	3.4%
		Very much or somewhat		3.4%	3.6%
		Very much		3.3%	3.3%

E* Penetration

(Base = Purchasers Recognizing E*)

	Previous Mail Only 2000	Current Mail Only 2001	Current Web TV 2001
% Bought ENERGY STAR	74%	82%	67%
Standard Error	3.7%	3.1%	2.7%



Would Recommend E* to a Friend

(Base = E* Purchasers)

	2001 Response	Previous Mail Only 2000	Current Mail Only 2001	Current Web TV 2001
Estimates	Very, somewhat, or slightly likely		86%	84%
	Very or somewhat likely		71%	66%
	Very likely		42%	34%
Standard Errors	Very, somewhat, or slightly likely		3.1%	2.8%
	Very or somewhat likely		3.5%	3.7%
	Very likely		3.9%	3.7%



Conclusions

- Confirmation of 2000 Survey Findings
 - ❖ Substantial fractions recognize and understand the label
 - ❖ Partner publicity efforts improve recognition and understanding
 - ❖ Label influences purchases



Further Analysis

- Nonresponse follow-up survey
- More detailed comparisons
 - ❖ Between years
 - ❖ Between modes
- Methodological recommendations



Next Steps

- EPA analysis report ~June
- CEE paper at ACEEE summer study
~August
- Ongoing campaign survey ~September

