

NYSERDA and National Awareness of ENERGY STAR® for 2014:

Analysis of Consortium for Energy Efficiency Household Survey Final Report

April 2015 Report Number 15-09

NYSERDA's Promise to New Yorkers:

NYSERDA provides resources, expertise, and objective information so New Yorkers can make confident, informed energy decisions.

Mission Statement:

Advance innovative energy solutions in ways that improve New York's economy and environment.

Vision Statement:

Serve as a catalyst – advancing energy innovation, technology, and investment; transforming New York's economy; and empowering people to choose clean and efficient energy as part of their everyday lives.

NYSERDA and National Awareness of ENERGY STAR® for 2014:

Analysis of Consortium for Energy Efficiency Household Survey

Final Report

Prepared for:

New York State Energy Research and Development Authority

Albany, NY

Jonathan Steiner Project Manager

Prepared by:

Research Into Action, Inc.

Portland, Oregon

Jane S. Peters Zac Hathaway Melanie Serrou Project Staff

Notice

This report was prepared by Research Into Action, Inc., in the course of performing work contracted for and sponsored by the New York State Energy Research and Development Authority (hereafter "NYSERDA"). The opinions expressed in this report do not necessarily reflect those of NYSERDA or the State of New York, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, NYSERDA, the State of New York, and the contractor make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. NYSERDA, the State of New York, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

NYSERDA makes every effort to provide accurate information about copyright owners and related matters in the reports we publish. Contractors are responsible for determining and satisfying copyright or other use restrictions regarding the content of reports that they write, in compliance with NYSERDA's policies and federal law. If you are the copyright owner and believe a NYSERDA report has not properly attributed your work to you or has used it without permission, please email print@nyserda.ny.gov

Abstract

This document reports the results of a comparative analysis of responses from residents in New York State versus national responses to the 13th National Household Survey of Consumer Awareness of ENERGY STAR® sponsored by the Consortium for Energy Efficiency (CEE). The 2014 NYSERDA oversample, including 303 respondents, provides the bases for the comparison to designated metropolitan areas (DMAs) in the national sample frame (including 1,430 respondents) and builds upon prior years' survey results collected every other year since 2001. Results focus on the extent to which consumers recognize the ENERGY STAR[®] label, understand its intended messages, and use (or are influenced by) the label in their energy-related purchase decisions. In general, label recognition - both nationally and in the NYSERDA area - is high, with shoppers in the NYSERDA area being more likely to either look or ask for ENERGY STAR-labeled products than shoppers nationally. In the 2014 version of the CEE Survey, the NYSERDA area refers to all of New York State. Additionally, the influence of the ENERGY STAR label increased among NYSERDA purchasers and continues to remain higher than purchasers nationally. Consistent with findings from previous years, almost all respondents who received rebates in 2014 said they would likely buy the same ENERGY STAR-labeled products without the rebate.

Keywords

ENERGY STAR, recognition, messaging, influence, purchasing decisions

Acknowledgements

The analysis team would like to thank the NYSERDA evaluation staff, Jonathon Steiner, for providing direction to the analysis team. The analysis team would also like to thank the CEE staff for providing valuable background information for their longitudinal household survey of consumer awareness of ENERGY STAR®. Additionally, the analysis team extend our thanks to staff at GfK Custom Research, LLC, the data collection firm, for providing information relevant to our analyses of the 2014 survey responses. Certain staff members at GfK, most notably Jeffery Banks and Courtney Buzzell, provided the analysis team with guidance and assistance in the application of appropriate weights.

Table of Contents

N	otice		ii
Α	bstrac	t	iii
K	eywor	ds	iii
Α	cknow	/ledgements	iv
L	ist of 1	Tables	vi
Ε	xecuti	ve Summary	1
1	Intr	oduction	1
2	Met	thodology	2
3	Res	sults and Discussion	4
	3.1	ENERGY STAR Label Recognition	4
	3.2	Product Associations	5
	3.3	Self-Reported Influence of the ENERGY STAR Label	7
	3.4	Rebate and Financial Influence	9
	3.5	Purchase of ENERGY STAR	. 10
	3.6	Recommendation of ENERGY STAR Products	. 12
	3.7	Information Sources Seen	. 12
	3.8	Perception Regarding ENERGY STAR Products	. 13
	3.9	Additional Questions for the NYSERDA Oversample	. 15

List of Tables

Table 2-1. Sample Size and Statistics for CEE National and NYSERDA Oversamples .	2
Table 3-1. ENERGY STAR Label Recognition	4
Table 3-2. Product Materials Where ENERGY STAR Seen	5
Table 3-3. Influence Over Decision	8
Table 3-4 . Percent of Shoppers Who Looked or Asked for ENERGY	
STAR-Labeled Products	9
Table 3-5. Influence of Rebates and Incentives	.10
Table 3-6. ENERGY STAR Label on Packaging or Instructions	10
Table 3-7. Likelihood of Recommending ENERGY STAR Products	12
Table 3-8. Seeing ENERGY STAR in Media and Other Locations	13
Table 3-9. Importance of Energy Efficiency in Appliance Selection for	
NYSERDA Oversample	.16

Executive Summary

In the fall of 2014, members of the Consortium for Energy Efficiency (CEE) sponsored the 13th National Household Survey of Consumer Awareness of ENERGY STAR[®]. Each year, the survey objectives have largely been the same: to collect national data on consumer recognition, understanding, and purchasing influence of the ENERGY STAR[®] label, as well as data on messaging and product purchases. The 2014 NYSERDA oversample, including 303 respondents, provides the basis for the comparison to designated metropolitan areas (DMAs) in the national sample frame (including 1,430 respondents) and builds upon prior years' survey results collected every other year since 2001. CEE members may choose to supplement the national sample by adding additional data points in order to assess label awareness in their local service territories. In 2014, CEE conducted additional surveys in the NYSERDA area.

This report discusses the results of the CEE 2014 ENERGY STAR Household Survey among respondents in the NYSERDA oversample, as compared to national respondents (excluding NYSERDA area respondents). This survey builds upon prior years' survey results and focuses on the extent to which consumers recognize the ENERGY STAR label, understand its intended messages, and use (or are influenced by) the label in their energy-related purchase decisions.

The following list is a summary of the key findings from this report:

- In 2014, unaided recognition of the ENERGY STAR label remained significantly higher in NYSERDA's area than nationally (79% and 75%, respectively). Aided recognition, both in the NYSERDA area and nationally, has increased since 2012 (88% and 83%), respectively compared to both at 82% in 2012).
- Most NYSERDA respondents (82%) reported the ENERGY STAR label "very much" or "somewhat" influenced their purchasing decisions. This number increased significantly from 65% in the 2012 survey and is significantly higher than the national respondents (71%).
- Overall, shoppers in the NYSERDA area are significantly more likely to either look or ask for certain ENERGY STAR-labeled products than shoppers nationally. Shoppers both nationally and in the NYSERDA area reported looking for ENERGY STARlabeled appliances (including washing machines, refrigerators, and dishwashers) more than any other product type.

- Similar to 2012, consumer awareness of the ENERGY STAR Most Efficient program remains low within both the NYSERDA area and nationally. Although, over half of respondents who were aware of ENERGY STAR Most Efficient either "somewhat" or "strongly" agreed that they would purchase a product with this designation. Increasing consumer awareness of ENERGY STAR Most Efficient should be a focus in order to maximize savings as the market share of ENERGY STAR products increases.
- Similar to 2012, the most common locations of ENERGY STAR labels cited by NYSERDA respondents were store displays, appliance or electrical equipment labels, and TV commercials.
- Energy efficiency of appliances decreased in importance to NYSERDA respondents making appliance purchases in 2014, compared to 2012. Two-thirds rated a high to very high level of importance to energy efficiency in appliance selection in 2014 compared to about three-quarters in both 2012 and 2010.

1 Introduction

In the fall of 2014, members of the CEE sponsored the 13th National Household Survey of Consumer Awareness of ENERGY STAR[®]. Since the survey began in 2001, the survey objectives have largely been the same: to collect national data on consumer recognition, understanding, and purchasing influence of the ENERGY STAR label, as well as data on messaging and product purchases. CEE members may choose to supplement the national sample in order to assess label awareness in their local service territories. In 2014, CEE conducted additional surveys in the NYSERDA area.

This report focuses on results from the NYSERDA area oversample as compared to the national sample. This report discusses the results of the CEE 2014 ENERGY STAR Household Survey, building on prior years' survey results and focusing on the extent to which consumers recognize the ENERGY STAR label, understand its intended messages, and use (or are influenced by) the label in their energy-related purchase decisions.

The remainder of this report summarizes the survey and analysis methodology; and provides key findings regarding ENERGY STAR label recognition, understanding, influence, and information sources.

2 Methodology

In recent years, CEE has conducted an annual survey of households across the nation. In 2001, 2004, 2006, 2008, 2010, 2012, and 2014 NYSERDA elected to fund an oversample within the System Benefits Charge service area. This decision provided an opportunity to collect time series data for the NYSERDA area and to draw comparisons to the national results.

Nationally, the 2001 survey was conducted both by mail and by WebTV, although, it was administered exclusively by mail in the NYSERDA area. From 2004 to 2014, the survey and all oversamples were administered exclusively by WebTV. The oversamples conducted in NYSERDA's service area in 2004, 2006, 2008, 2010, 2012, and 2014 included several questions in addition to those in the national surveys. Sample sizes for both the national surveys and the NYSERDA oversamples are presented in Table 2-1.

Table 2-1. Sample Size and Statistics for CEE National and NYSERDA Oversamples

	NYSERDA	National												
	20	14	20	12	20	10	20	08	20	06	20	04	20	01
Sample Size	303	1430	306	1005	300	1430	295	1866	334	2192	492	1249	646	1995
Precision at 95% C.L.	5.63%	2.59%	5.60%	3.10%	5.70%	2.60%	5.70%	2.30%	5.40%	2.10%	4.40%	2.80%	3.90%	2.20%

The remainder of this report summarizes findings of the 2014 CEE survey and the NYSERDA oversample. Throughout this discussion, national results exclude the NYSERDA oversample. Differences between NYSERDA 2014 and national 2014 results are described in the text, as are differences between NYSERDA year-to-year results and national year-to-year results.

CEE conducted this survey via an interactive Internet-based format with a random sample of households that are members of a WebTV panel designed to be representative of the U.S. population. Panel members are provided with an Internet-based appliance (WebTV) and respond to questionnaires administered to them via WebTV or the Internet. Where possible, comparisons between 2001, 2004, 2006, 2008, 2010, 2012, and 2014 national results rely on WebTV data to provide the most appropriate basis for comparison.

Unless otherwise stated, all NYSERDA and national (excluding NYSERDA) percentages are based on the weighted sample. The numbers of respondents (n's) for the tables are unweighted for all columns. Note that the national report excludes the NYSERDA over-sample.

In this report, the following terminology is used in comparing results across years or between the national and NYSERDA samples:

- The term "significant" implies statistical significance. In other words, differences between proportions that are described as "significant" are at least statistically different at the 10% level of significance. In some cases, the precision-values are given to provide the exact level of statistical significance.
- Unless stated otherwise, terms such as "smaller," "larger," "increase," or "decrease" refer to changes that are statistically significant at the 10% level or better.
- The term "similar" implies that there is no statistical difference between the results being compared at the 10% level of significance. In other words, the difference between the results is within the bounds that would be expected from chance variation in a random sample.

3 Results and Discussion

3.1 ENERGY STAR Label Recognition

In 2014, 79% of respondents within the NYSERDA area reported recognizing the ENERGY STAR label without being prompted by a description or visual image of the label, and 88% reported recognizing the ENERGY STAR label with prompting (i.e., after being shown a visual image of either a new or older ENERGY STAR label). Both of these percentages represent a significant increase from the 2012 findings (71% and 82%, respectively). Nationally, both unaided and aided recognition increased significantly from 2012 to 2014, with unaided recognition increasing from 65% to 75% and aided increasing from 82% to 83% in 2014, continuing the upward trend from 2001. Table 3-1 shows unaided and aided recognition results for each survey year.

Table 3-1. ENERGY STAR Label Recognition

Question: Prior to the survey, have you ever heard or seen the ENERGY STAR Label?

	NYSERDA	National												
	20	14	20	12	20	10	20	08	20	06	20	04	20	01
Recognizes ENERGY STAR														
LabelUnaided Recognition	79%*^	75% ^	71%*	65%	70% *	60%	76% *^	60% ^	64% *	51%	62% *	40%	NA	NA
Recognizes ENERGY STAR	_										_			
LabelAided Recognition	88% *^	83% ^	82%	82%	80% ^	76%	89% *^	74% ^	81% *^	67%	72% *^	60%	57%	40%

- * NYSERDA and National results for the same year are statistically different at the p<0.1 level
- ^ Results for this territory are statistically different from the same territory the previous survey year at the p<0.1 level.

Less than one-sixth of respondents from both the NYSERDA area and nationally (14% and 13%, respectively) had seen or heard of the ENERGY STAR Most Efficient program³, a similar proportion as in 2012. Among respondents who reported being aware of the ENERGY STAR Most Efficient program, less than one-third from both the NYSERDA area and nationally (28% and 26%, respectively) reported being aware that ENERGY STAR Most Efficient represented a subset of ENERGY STAR qualified products. Just over half of respondents from both the NYSERDA area and nationally (55% and 57%, respectively) either "somewhat" or "strongly" agreed that they would purchase a product due to its designation as ENERGY STAR Most Efficient.

The ENERGY STAR Most Efficient Program debuted in 2011, and is a label reserved for the top 5% of energy efficient products.

3.2 Product Associations

In the 2014 national survey, the products that respondents most associated with the ENERGY STAR label were refrigerators, washing machines, and dishwashers. These appliances have been most associated with the ENERGY STAR label since 2004. In the NYSERDA area, the appliances most associated with the ENERGY STAR label were refrigerators, washing machines, dishwashers, and room air conditioners. Respondents in the NYSERDA area were more likely to associate room air conditioners with the label (71% in the NYSERDA area versus 42% in the rest of the nation). These and additional comparisons can be seen in Table 3-2. The table was originally aggregated but has been disaggregated to show higher-level measure categories for ease of review.

Table 3-2. Product Materials Where ENERGY STAR Seen

Question: As you review the list, please select each of the products, product literature, or packaging on which you have seen the ENERGY STAR label.

Home Appliances

	2014 2012		20	2010		08	20	06	20	04	20	01		
	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National
Home appliances														
Refrigerator	87%	84%	86%	82%^	88%^	85%	78%	81%^	83%*	73%	80%*^	61%	70%	47%
Washing Machine	75%	75%^	77%*	72%^	77%^	77%	68%	72%^	66%^	63%	59%*^	49%	37%	34%
Dishwasher	73%^	73%^	58%*^	68%^	72%	74%	64%*	70%^	59%^	59%	52%^	50%	39%	33%
Room A/C	71%*	42%^	71%*	38%^	67%*	46%	72%*	44%^	69%^	41%	61%*^	35%	51%	26%
Microwave Oven	50%*	45%	49%	45%	51%^	45%	36%	38%^	44%*^	33%	33%*^	29%	22%	22%

- * NYSERDA and National results for the same year are statistically different at the p<0.1 level
- $^{\land}$ Results for this territory are statistically different from the same territory the previous survey year at the p<0.1 level.

VCRs, heating and cooling, home office equipment, home appliances/lighting, home electronics, and building materials were products tracked in previous survey years. Data for these products can be found in the 2010 and 2008 updates.

Home Electronics

	2014 2012		20	10	20	08	20	06	20	04	20	01		
	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National
Plug Loads														
Television	46%*^	52%^	40%*	47%^	39%	44%^	34%	32%^	33%*	29%	29%	28%	25%	22%
Computer or Monitor	34%	35%	37%	36%	31%^	36%	77%*	36%	29%*	37%	29%*^	42%	41%	47%
DVD product														
(including TV/DVD)	22%*^	17%	15%	18%	NA	NA								
Audio Product	12%	11%	13%	12%	14%	11%	15%*	9%	12%	10%	9%	10%	5%	10%
Copying Machine	10%*^	13%	17%	14%	15%	12%	14%	15%^	14%^	12%	9%*^	13%	14%	12%
Scanner	9%^	9%	14%*^	9%^	9%	7%	8%	10%	6%*	10%	6%*^	10%	10%	10%
All-in-one printer	18%^	19%	9%*	18%	NA	NA								
Computer Printer	15%^	18%	22%	19%^	15%^	14%	25%*	17%	10%*	14%	10%*^	15%	17%	14%
Fax Machine	7%^	9%	12%	10%^	11%	8%	8%	10%^	9%	9%	8%^	8%	12%	8%

- * NYSERDA and National results for the same year are statistically different at the p<0.1 level
- ^ Results for this territory are statistically different from the same territory the previous survey year at the p<0.1 level.

Lighting

	2014		2012		20	10	20	08	20	06	20	04	20	01
	NYSERDA	National												
Lighting														
CFL Bulb	26%*	32%^	21%*^	28%^	28%	32%	32%	31%^	22%^	22%	11%*^	18%	16%	15%
Skylight	7%*^	10%	12%*	9%^	12%	11%	12%	11%	12%^	11%	7%*^	5%	3%	6%
Lighting Fixture	18%	19%	18%^	21%	24%	21%	23%	23%^	16%^	17%	10%*^	14%	14%	13%

- * NYSERDA and National results for the same year are statistically different at the p<0.1 level
- ^ Results for this territory are statistically different from the same territory the previous survey year at the p<0.1 level.

Heating, Cooling and Insulation/Building Envelope

	20	14	2012		20	10	20	08	20	06	20	04	20	01
	NYSERDA	National												
Heating, Cooling, Insulation														
Door	22%	22%	25%^	25%	31%	27%	34%*	25%^	26%*^	19%	21%*^	14%	11%	11%
New Home	18%*	22%^	22%*	26%	21%	24%	22%	24%^	27%*	21%	25%*^	20%	10%	14%
Insulation	16%	19%^	18%*^	22%^	27%	25%	29%*	21%^	20%*^	17%	15%^	12%	9%	10%
Window	42%	40%^	43%	45%^	45%	50%	48%	47%^	37%	37%	35%^	31%	23%	26%
Heat Pump	14%	16%	13%	16%^	10%*	22%	11%*	20%^	9%*	16%	7%^	9%	2%	7%
Thermostat	12%*^	18%^	17%	14%^	14%	18%	20%	17%^	11%*	14%	9%*	14%	9%	6%
Gas water heater	49%*^	59%^	40%	43%	NA	NA								
Central A/C	43%	49%	44%*	49%	44%	49%	40%*	48%	41%	46%^	37%^	36%	29%	26%
Roofing Material	10%	9%	11%	10%^	12%	13%	17%*	10%	8%	9%	6%^	5%	3%	4%
Furnace or Boiler	35%*	31%	38%*	28%^	38%	33%	37%*^	32%^	28%	30%	28%^	24%	25%	13%
Dehumidifier	23%*^	16%^	18%*	13%	NA	NA								
None	1%*	3%^	1%^	0%^	4%	5%	NA	NA	8%	7%	6%	7%	NA	NA

- * NYSERDA and National results for the same year are statistically different at the p<0.1 level
- ^ Results for this territory are statistically different from the same territory the previous survey year at the p<0.1 level.

3.3 Self-Reported Influence of the ENERGY STAR Label

Nationally, 43% of the respondents who reported purchasing an ENERGY STAR-labeled product said they were "very much" influenced by the presence of the ENERGY STAR label; in NYSERDA's area, 48% gave the same response. Similar percentages of national (84%) and NYSERDA (85%) respondents reported they were influenced "very much, somewhat, or slightly influenced" by the ENERGY STAR label.⁵

For the NYSERDA oversample, the difference between the percentages of respondents who reported being influenced by the ENERGY STAR label in 2014 and those who reported being influenced in 2012 increased in all three affirmative response categories (two of which were significantly different). Conversely, for the national sample, the percentage of respondents who reported being influenced by the ENERGY STAR label in 2014 decreased slightly for two of the three affirmative response categories (none of which were significant decreases). Table 3-3a presents these results.

To be consistent with previous years, 2014 statistics were compiled using a weighted average to determine the relative importance of each category on the average. Responses of "don't know" were excluded from analysis.

Table 3-3. Influence Over Decision

Question: For any ENERGY STAR-labeled product(s) you purchased, how much did the presence or absence of the ENERGY STAR label influence your purchasing decision?

	201	14	2012		2	010	20	08	20	06	20	04	20	01
	NYSERDA	National												
Very Much	48%^	43%	40%^	45%^	63%	51%	47%	53%^	37%	33%	29%	26%	33%	27%
Very Much or Somewhat	82%*^	71%	65%	72%	77%	75%	69%*	76%^	72%*	63%	65%*	53%	67%	54%
Very Much, Somewhat, or Slightly	85%	84%	79%^	82%^	88%	86%	82%	85%^	88%*^	79%	80%*	73%	78%	72%
Not at all	15%	17%	20%^	17%^	12%	14%	17%	15%^	12%*^	21%	20%*	27%	22%	28%

- * NYSERDA and National results for the same year are statistically different at the p<0.1 level
- ^ Results for this territory are statistically different from the same territory the previous survey year at the p<0.1 level.

Respondents who reported shopping for appliances, room air conditioners, lighting products, or electronics products during the past 12 months were asked if they had either looked for or asked a salesperson about ENERGY STAR-labeled products. Among national and NYSERDA area shoppers, the most common ENERGY STAR-labeled products looked for or asked about were washing machines. Overall, NYSERDA area shoppers were more likely to report looking for or asking about ENERGY STAR labeled products than national respondents for every product type except DVD products. Table 3-4 presents these results.

Table 3-4. Percent of Shoppers Who Looked or Asked for ENERGY STAR-Labeled Products

	Looke Lab		Asked fo	r Label	Did Not or Asl Lab	k for
	NYSERDA	National	NYSERDA	National	NYSERDA	National
Dishwasher - NY (n=25);Nat (n=118)	60%	58%	30%	24%	40%	42%
Refrigerator - NY (n=36);Nat (n=193)	78%*	56%	53%*	20%	13%*	42%
Washing machine - NY (n=38);Nat (n=171)	80%*	59%	57%*	23%	14%*	41%
Room air conditioner - NY (n=44);Nat (n=91)	66%*	46%	39%*	18%	29%*	54%
Lighting fixture - NY (n=42);Nat (n=229)	44%	35%	20%*	10%	54%	64%
Light bulb - NY (n=131);Nat (n=727)	44%*	38%	13%*	9%	55%*	62%
Television - NY (n=50);Nat (n=279)	55%	48%	27%*	16%	43%	52%
DVD product - NY (n=26);Nat (n=145)	27%	32%	9%	14%	73%	68%
Audio product - NY (n=19);Nat (n=98)	37%*	15%	21%*	9%	63%*	84%

NYSERDA and National results for the same year are statistically different at the p<0.1 level

3.4 Rebate and Financial Influence

Among the 61 households in the 2014 national sample who purchased ENERGY STAR labeled products with rebates or reduced-rate financing, most (67%) would have been "very likely" to have purchased these products without the incentives; almost all (98%) would have been at least slightly likely to have made their purchases in the absence of incentives.

Table 3-5. Influence of Rebates and Incentives

Question: If rebates or reduced-rate financing had not been available, how likely is it that you would have purchased the ENERGY STAR-labeled product?

	2014 2012		20	2010		80	20	06	20	04	20	01		
	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National
Very Likely	44%*	67%^	27%*^	43%	68%	45%	47%*	73%^	26%*	59%	60%	52%	40%	34%
Very or Somewhat														
Likely	93%^	89%^	51%*^	74%	95%	76%	90%	76%^	67%*	85%	100%*	80%	80%	66%
Very, Somewhat, or		_		_										_
Slightly Likely	100%^	98%^	51%*^	89%^	100%	95%	99%	99%	96%	97%	100%	95%	92%	91%
Not at all likely	0%^	2%^	49%*^	11%^	0%	5%	1%*	15%^	4%	3%	0%	5%	8%	8%

^{*} NYSERDA and National results for the same year are statistically different at the p<0.1 level

3.5 Purchase of ENERGY STAR

Of nationwide households that purchased a product in the past 12 months, 75% purchased at least one ENERGY STAR labeled product. Additionally, Table 3-6 shows that 70% of the NYSERDA respondents recognized the label (both aided and unaided) and purchased at least one ENERGY STAR labeled product in the past 12 months. This recognition has decreased slightly since 2012 for NYSDERDA respondents (from 73% to 70% in 2014), though not significantly.

Table 3-6. ENERGY STAR Label on Packaging or Instructions

Question: For any of the products you purchased, did you see the ENERGY STAR label (on the product itself, on the packaging, or on the instructions)?

	20	14	201	2**	20	10	20	08	20	06	20	04
	NYSERDA National		NYSERDA	National								
	n=136	n=601	n=127	n=540	n=132	n=553	n=100	n=520	n = 126	n = 776	n = 165	n = 336
Yes	70%	75%	73%^	75%	82%	77%	74%	72%	77%	65%	58%	68%
No	30%	25%	27%	25%	18%	23%	26%	26%	23%	35%	42%	32%

^{*} NYSERDA and National results for the same year are statistically different at the p<0.1 level

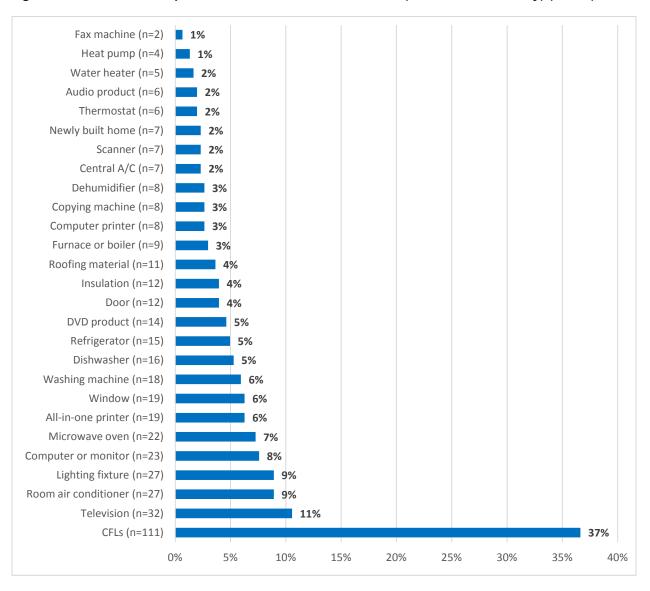
[^] Results for this territory are statistically different from the same territory the previous survey year at the p<0.1 level.

A Results for this territory are statistically different from the same territory the previous survey year at the p<0.1 level.

^{**} These values are somewhat lower than reported previously to reflect a reanalysis of 2012 data

For respondents in the NYSERDA area, follow-up questions were asked to better understand the market penetration of products purchased within the past year. Products purchased (either ENERGY STAR or non-ENERGY STAR) most by respondents in the past 12 months were CFLs (37%, up from 15% in 2012), televisions (11%, down from 21% in 2012), and room air conditioners (9%, down from 16% 2012) (Figure 3-1).

Figure 3-1. Percent of Respondents Who Purchased Products (2014 NYSERDA Only) (n=303)



3.6 Recommendation of ENERGY STAR Products

Respondents were asked to rate how likely they would be to recommend ENERGY STAR labeled products to a friend on a scale of 0 to 10, where "0" was extremely unlikely, and "10" was extremely likely. Approximately two-thirds of both NYSERDA area and national respondents reported they would be very likely (7 to 10) to recommend ENERGY STAR products to a friend (65% for both samples). Among NYSERDA area respondents, there was a slight decrease in the number of respondents who report being "extremely unlikely" to recommend ENERGY STAR products (decreasing from 4% in 2012 to 1% in 2014). For the first time since 2001, there was a slight decrease in the number of respondents to the national survey who reported they were at least somewhat likely (4 to 10) to recommend ENERGY STAR products to a friend (91%, down from 95% in 2012; Table 3-7). This slight decrease is similar to the 2010 report (92%) and suggests a possible leveling off of loyalty to ENERY STAR labeled products.

Table 3-7. Likelihood of Recommending ENERGY STAR Products

	2014		20	12	20	10	20	08	20	06	20	04	2001	
	NYSERDA	National												
	n=122	n=515	n=173	n=524	n=165	n=756	n = 106	n = 505	n = 88	n = 527	n = 94	n = 208	n=122	n=370
Very Likely (7-10)	65%	65%	67%^	68%^	72%^	67%^	58%	51%^	50%^	45%	40%	41%	47%	42%
Somewhat Likely (4-6)	25%	26%	23%	27%^	24%	25%^	35%	33%	28%	33%	37%^	32%	25%	29%
Slightly Likely (1-3)	9%	8%^	6%	4%^	4%	5%^	4%*	12%^	17%	19%	14%	19%	15%	16%
Extremely Unlikely (0)	1%^	2%^	4%	1%	1%	3%	3%	4%	5%	3%	10%	9%	13%	14%

- * NYSERDA and National results for the same year are statistically different at the p<0.1 level
- A Results for this territory are statistically different from the same territory the previous survey year at the p<0.1 level.

3.7 Information Sources Seen

National and NYSERDA respondents were asked where they recalled seeing or hearing about the ENERGY STAR label (Table 3-7). Most households in both response groups saw the label on appliances or electronic equipment (70% nationally; 78% for NYSERDA), as well as on displays in stores (45% nationally; and 44% for NYSERDA). TV commercials were the third most common place that the label was seen, with 36% of both the national and NYSERDA area respondents mentioning them.

The NYSERDA oversample showed several significant takeaways from the 2014 responses. There were three significant increases in terms of where respondents learned about ENERGY STAR. More respondents noted the labels on appliances or electronic equipment than in previous surveys

(78%, up from 68%). The Yellow Energy Guide label also saw an increase in the 2014 survey, 26%, up from 19%. Respondents mentioned contractors as their source of awareness for ENERGY STAR twice as much as in previous surveys (6%, up from 3%). Significant decreases from 2012 in the NYSERDA oversample included displays in stores (44%, down from 72%), newspaper or magazine advertisements (19%, down from 27%), TV commercials (36%, down from 43%). Additional decreasing trends in both the national and NYSERDA oversample are in Table 3-8.

Table 3-8. Seeing ENERGY STAR in Media and Other Locations

Question: Where did you hear or see something about ENERGY STAR? Please mark all that apply.

	2014		20	12	20	10	20	800	2006 2004		04	4 2001		
	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National	NYSERDA	National
	n=256	n=1130	n=241	n=743	n=234	n=1004	n=222	n=1075	n=232	n=1328	n=308	n=566	n=355	n=639
Labels on appliances or electronic equipment	78%*^	70%^	68%	64%^	68%	67%	66%	68%^	69%*	65%	65%	65%	61%	65%
Displays in stores	44%^	45%^	72%*^	55%^	65%	66%	63%^	65%^	55%	56%	57%*^	49%	41%	29%
TV commercial	36%^	36%	43%*^	37%^	58%	46%^	54%*^	38%^	42%*^	34%	52%*	29%	55%	36%
Utility mailing or bill inserts	26%^	24%	32%*	24%^	30%	27%	30%	29%^	26%^	26%	21%*^	25%	37%	23%
Yellow EnergyGuide label	26%*^	20%	19%^	19%^	25%	22%	20%	21%	24%	22%	21%	19%	18%	20%
Newspaper or magazine advertisement	19%^	18%	27%*^	20%^	35%	25%	29%*	22%	28%*	24%	26%*^	17%	35%	27%
Internet	18%	17%	14%	15%	17%	16%	15%^	17%^	11%	11%	8%*	11%	7%	9%
Salesperson	14%	14%^	13%^	11%^	18%	13%	13%	12%^	9%	8%	9%^	7%	6%	3%
Newspaper or magazine article	11%	9%^	11%^	12%	18%	13%	23%	15%	15%^	12%	11%*^	7%	14%	12%
Direct mail or circular advertisement	8%	9%^	9%^	12%	17%	12%	10%	11%	8%	10%	9%	7%	9%	7%
Radio commercial	7%*	5%	6%^	6%	12%	7%	15%*	8%^	13%*	6%	11%*	5%	12%	4%
Contractor	6%*^	4%	3%*	4%	4%	4%	9%*^	4%^	2%	2%	2%	2%	2%	1%
Homebuilder	5%*	8%	6%	7%	6%	7%	8%*^	6%^	5%	3%	6%*	3%	NA	NA
Friend, neighbor, relative, or co-worker	5%^	5%	10%*	5%	10%	6%	11%*^	5%	6%*	4%	6%*	3%	5%	4%
TV news feature story	4%	4%	4%^	5%^	9%	7%	6%	5%	5%	5%	5%^	3%	7%	3%
Billboard	2%*^	4%^	8%*	6%	9%	5%	11%*	5%	10%*	6%	8%*	2%	6%	3%
Realtor	2%*	4%	2%	4%^	3%	2%	4%	3%	2%	2%	3%*	1%	NA	NA
Lender	0%	0%	0%	1%^	1%	0%	1%	1%^	1%*^	0%	0%	0%	NA	NA
Other	3%	3%	2%^	2%	4%	2%	2%*	3%	3%	4%	2%*	6%	NA	NA
Don't know	2%*^	5%^	6%	7%^	6%	4%^	4%*^	7%^	8%*^	11%	3%*	10%	NA	NA

^{*} NYSERDA and National results for the same year are statistically different at the p<0.1 level

3.8 Perception Regarding ENERGY STAR Products

In 2014, as in 2012, respondents generally felt ENERGY STAR products are energy efficient and help to protect the environment. Compared to national respondents, NYSERDA area respondents were more likely to agree that they consider themselves loyal to ENERGY STAR-labeled products (26% for

[^] Results for this territory are statistically different from the same territory the previous survey year at the p<0.1 level.

NYSERDA; 22% nationally) and ENERGY STAR products are no different from other products (13% for NYSERDA; 10% nationally; Figure 3-2).

A minority of national and NYSERDA area respondents (12% each) agreed that buying ENERGY STAR products does not save money (up from 7% in the NYSERDA area in 2012), while 36% of both the national and NYSERDA area respondents believed ENERGY STAR products were of better value than products without the label (down from 41% and 43%, respectively in 2012). From 2012 to 2014, responses for half of the indices measuring perceptions of ENERGY STAR products changed significantly. Figure 3-2 provides notation on significant changes between 2014 and 2012 results as well as significant differences between NYSERDA and national respondents.

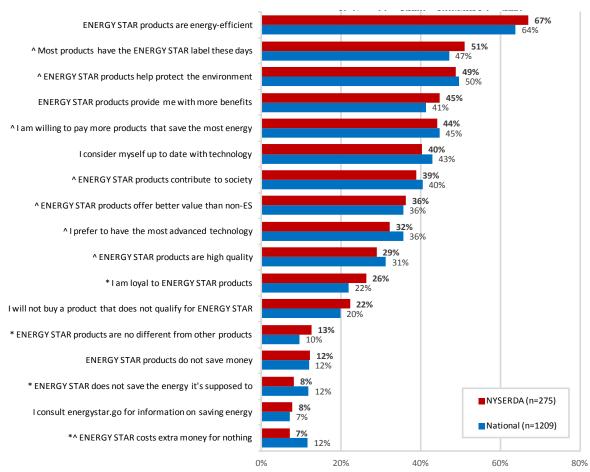


Figure 3-2. Percent of Respondents Who Agree with ENERGY STAR Issues

- * NYSERDA and national results for the same year are statistically different at the p<0.1 level.
- ^ Results for both territories are statistically different from the previous survey year at the p<0.1 level.

3.9 Additional Questions for the NYSERDA Oversample

Since 2004, a series of questions were asked only of the NYSERDA oversample. Results for these questions are summarized in this section. Note that findings may be inconclusive where sample sizes are small and differences in responses from previous years are not significant; these findings are only reported for potentially useful comparisons in the future.

- In 2014, nearly three-fourths (72%) of NYSERDA respondents who purchased ENERGY STAR in the past 12 months said they previously purchased a product with the ENERGY STAR label, an increase from 66% in 2012. This finding is consistent with the proportion of NYSERDA area respondents who reported purchasing an ENERGY STAR labeled product in 2012 (73%), 2010 (82%), and 2008 (74%).
- NYSERDA area respondents find ENERGY STAR promotional materials important in product selection; however, most say they would purchase the ENERGY STAR version of the product without any promotion. In 2014, five of the nine respondents who made recent purchases of ENERGY STAR labeled products placed a high level of importance on promotions they had seen or heard related to the ENERGY STAR program. When selecting specific products, on a 1-to-5 scale, with 5 as "very important," 56% gave promotions a 4 or a 5, the same proportion as in 2012. However, all nine respondents reported they would have purchased the ENERGY STAR version of the product if there had been no promotions.
 - Similarly, among the eight respondents who reported seeing in-store ENERGY STAR promotions, all but one placed a high level of importance on these promotions in the purchasing of ENERGY STAR-labeled products. However, when asked if they would have purchased an ENERGY STAR version without the retailer's energy-related promotion, five of eight reported they would have.
- Of households in the NYSERDA area, 66% reported energy efficiency being at least somewhat important (4 or 5 on a 5-point scale) in the selection of appliances, lighting, and other products for the home, compared to other criteria (such as price and features). This percentage decreased slightly from 73% reporting these results in 2012, but this is not considered a significant change. Results are shown in Table 3-9.
- Of households in the NYSERDA area, 55% said they gave energy efficiency more consideration in selecting appliances, lighting, and other home products than they did two years ago, up from 49% in 2012, but down from 72% in 2010 and 68% in 2008. This difference may suggest that the importance of energy efficiency is leveling out among consumers. This leveling is evident when looking at the percentage of respondents who gave energy efficiency the same consideration in previous years. Forty percent of remaining respondents said they gave energy efficiency the same consideration in selecting these products, as they did two years ago, down from 51% in 2012, up from 26% in 2010, and 32% in 2008.

Table 3-9. Importance of Energy Efficiency in Appliance Selection for NYSERDA Oversample

	2014 (n=94)	2012 (n=99)	2010 (n=108)	2008 (n=100)	2006 (n=84)	2004 (n=486)
5 (Very Important)	28%^	40%	32%	44%	43% ^	27%
4	38%	33%^	44%	38%	31%	37%
3	31%^	22%	20%	16%	21%	27%
2	2%^	0%^	3%	2%	4%	4%
1 (Not at all Important)	0%^	5%^	1%	0%	0%	3%
Refused	0%	0%	0%	0%	1%	2%
Total	100%	100%	100%	100%	100%	100%

[^] Results for this territory are statistically different from the same territory the previous survey year at the p<0.1 level.

- Of the 303 NYSERDA households, 5% reported seeing or hearing of the Lighting Facts label, unaided. When presented with the Lighting Facts label, an additional 37% of respondents recalled having seen the label before.
 - Of those respondents who purchased a CFL in the past 12 months, there was a significant increase in those who reported seeing the Lighting Facts label on the packaging (73% in 2014, up from 43% in 2012), of which 60% respondents reported using the label to help choose a bulb.
- Of households in the NYSERDA area, just over half (52%) reported having seen or heard the word "lumens" used in relation to lighting; an additional 15% did not know. This difference was not considered significant.
- The 2014 survey included three new questions for respondents in the NYSERDA area:
 - NYSERDA respondents were asked how many lumens a regular 60-watt incandescent bulb produces.
 Respondents provided responses ranging from zero to 8,200 lumens, with an average of 268 lumens and a median of 165 lumens. Less than 10% of respondents provided a response within 100 lumens of the correct response.⁶
 - NYSERDA area respondents were asked if they had purchased any ENERGY STAR Most Efficient equipment, of which more than one-third (38%) reported doing so during the past year.
 - NYSERDA area respondents were asked a question regarding associating the term "connected" in relation to ENERGY STAR products. Nearly all respondents in the NYSERDA area and nationally (96% and 97%, respectively) reported not hearing the term "connected" associated with ENERGY STAR products.⁷

16

A standard 60-watt incandescent bulb produces 800 lumens. Information available online at: http://lumennow.org/lumens-vs-watts/.

⁷ ENERGY STAR "connected" products are able to connect and be controlled through smart meters, home energy management systems (HEMs), and the Internet. Typically, ENERGY STAR connected products are refrigerators and freezers.

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York State since 1975.

To learn more about NYSERDA's programs and funding opportunities, visit nyserda.ny.gov or follow us on Twitter, Facebook, YouTube, or Instagram.

New York State Energy Research and Development Authority

17 Columbia Circle Albany, NY 12203-6399 **toll free:** 866-NYSERDA **local:** 518-862-1090 **fax:** 518-862-1091

info@nyserda.ny.gov nyserda.ny.gov



State of New York

Andrew M. Cuomo, Governor

New York State Energy Research and Development Authority

Richard L. Kauffman, Chair | John B. Rhodes, President and CEO

