

NIMR

Nexus Market Research, Inc.

Report on the Web TV Survey for the New Hampshire ENERGY STAR® Appliances Program

Final Report
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1. Introduction

This document is a summary of a tracking survey conducted on behalf of the New Hampshire investor-owned electric utilities. This survey was first conducted in the fall of 2001 as a New Hampshire oversample of a mail survey simultaneously conducted on the national level on behalf of the Consortium for Energy Efficiency (CEE). In 2002, the survey was changed to a WebTV survey, and fielded by Knowledge Networks, Inc. among a pre-recruited panel of households in the U.S. as a whole (that is, without a New Hampshire oversample). With minor modifications, the WebTV survey was conducted again in the fall of 2003 and 2004; the 2004 survey included a New Hampshire oversample.

This document compares these annual results, and also compares New Hampshire results with national results, with grouped results from areas of the country having high promotional efforts for ENERGY STAR[®]-labeled products, and with current results from eight states (Massachusetts, New York, New Jersey, Pennsylvania, Ohio, Florida, Texas, and California) that had large enough samples to examine separately in 2004, either because they were oversampled or because they are large states with large samples.

Knowledge Networks has a pre-recruited panel of consumers who have agreed to complete occasional surveys in exchange for free Web TV in their homes. Because of an extensive recruiting effort, the panel includes a high percentage of those initially targeted, and recruiting quotas have resulted in a panel composition that is demographically similar to that of the U.S. High cooperation rates, coupled with high rates of recruitment, result in reasonable response rates (effectively 24% for the current survey). Also—unlike telephone surveys—the Web TV format allows respondents to see images (such as the ENERGY STAR logo in the current survey), and—unlike mail surveys—allows complex skip patterns.

Knowledge Networks provided the raw data from this survey to Nexus Market Research (NMR), which conducted the analysis presented here. The EPA has commissioned a separate analysis of the national data in order to track consumer recognition, understanding, and purchasing influence of the ENERGY STAR label, as well as data on messaging, product purchases, and information sources used by consumers in their purchasing decisions. This report is expected to be available in March 2005.

The objectives of this survey are to assess:

- Unaided recognition: whether people remember seeing or hearing of the ENERGY STAR label without a visual representation; this number should be comparable to findings from a telephone survey.
- Aided recognition: whether people remember seeing a visual representation of the ENERGY STAR label—either the original version or the version updated in 2003; this number should be comparable to findings from a mail survey, and is not possible to measure with a telephone survey.
- Awareness and understanding of what the label means.

- Whether respondents have been shopping for key appliances (as well as whether they have bought any), allowing us to correlate awareness with shopping and purchases.
- Source of awareness.

The sample for New Hampshire consists of 100 households selected randomly from all households that had been pre-recruited to Knowledge Networks' New Hampshire Web TV sample. The national sample includes the New Hampshire sample, plus another 1,641 households (1,741 total). The non-New Hampshire national sample was divided into three strata based on the largest Nielsen Designated Market Areas (DMAs) that account for approximately 70% of all U.S. households. These three strata are:

- **High-publicity areas.** Areas in which there has been at least two recent years of sustained ENERGY STAR promotions and publicity from non-federal activities. These areas include DMAs in states with a high degree of utility activity: California, Connecticut, Massachusetts, New Jersey (most of the state), New York, Oregon, Pennsylvania (very small part of the state), Rhode Island, Washington, Wisconsin, and Vermont. These areas account for 949 of the total 1,741 households surveyed in 2004. DMAs in New Hampshire, of course, are also high publicity areas, but they were treated as a separate stratum for purposes of this survey.
- **Low-publicity areas.** Areas in which there have been federal campaign activities only and no significant regional program-sponsored activities.
- **Other.** All other DMAs.

In addition, the over-samples from New York and New Hampshire were categorized into two strata each. In this report, all the strata are weighted proportionally when data for the U.S. as a whole are presented.

In addition to the high publicity areas discussed above, we also compare findings for New Hampshire with those of some individual states: Massachusetts, New York, New Jersey, Pennsylvania, Ohio, Florida, Texas, and California. While most of these states have at least some regions with concentrated ENERGY STAR activity, the level and length of activity differ among them. In this report, Massachusetts, New York, and California are considered "active" ENERGY STAR states while New Jersey, Pennsylvania, Ohio, Florida, Texas are considered "less active" states. This part of the analysis will help illuminate where New Hampshire stands in comparison to other areas. We present these comparisons in separate "b" or "c" tables (e.g. Table 1b).

It should be noted that, at 100 households, the sample size in New Hampshire is smaller than in 2001, when 278 households in the state were sampled. The change in sample size reflects the shift from a mail survey to a WebTV survey as well as the decision to conduct a survey among Knowledge Network's potential sample every three years instead of every year, when Knowledge Network rotates its participants. In order to avoid surveying the same individuals every year, the sample size had to be reduced. While necessary, the change to a smaller sample size has some important implications. First, seemingly large percentage differences between New Hampshire and the nation, other high publicity areas, or individual states sometimes fail to prove statistically significant (see Table 5d below for a good example). Second, although we

highlight some of the differences below, comparisons with the previous results must be made with caution because at least some of the findings could be artifacts of the change in survey methodology and not necessarily a change in ENERGY STAR recognition, purchasing behavior, or loyalty.

The questionnaire used for this survey appears as an appendix to this report. In addition, below are examples of the ENERGY STAR and Energy Guide labels; note that the ENERGY STAR label can appear in several different formats.



Based on standard U.S. Government tests

ENERGYGUIDE

Refrigerator-Freezer
With Automatic Defrost
With Side-Mounted Freezer
Without Through-the-Door-Ice Service

XYZ Corporation
Model ABC-W
Capacity: 23 Cubic Feet

Compare the Energy Use of this Refrigerator with Others before You Buy.

This Model Uses 776 kWh/year		
Energy Use (kWh/year) range of all similar models		
Uses Least Energy 742		Uses Most Energy 836

kWh/year (kilowatt-hours per year) is a measure of energy (electricity) use. Your utility company uses it to compute your bill. Only models with 22.5 to 24.4 cubic feet and the above features are used in this scale.

Refrigerators using more energy cost more to operate. This model's estimated yearly operating cost is:

\$68

Based on a 1992 U.S. Government national average cost of 8.24¢ per kWh for electricity. Your actual operating cost will vary depending on your local utility rates and your use of the product.

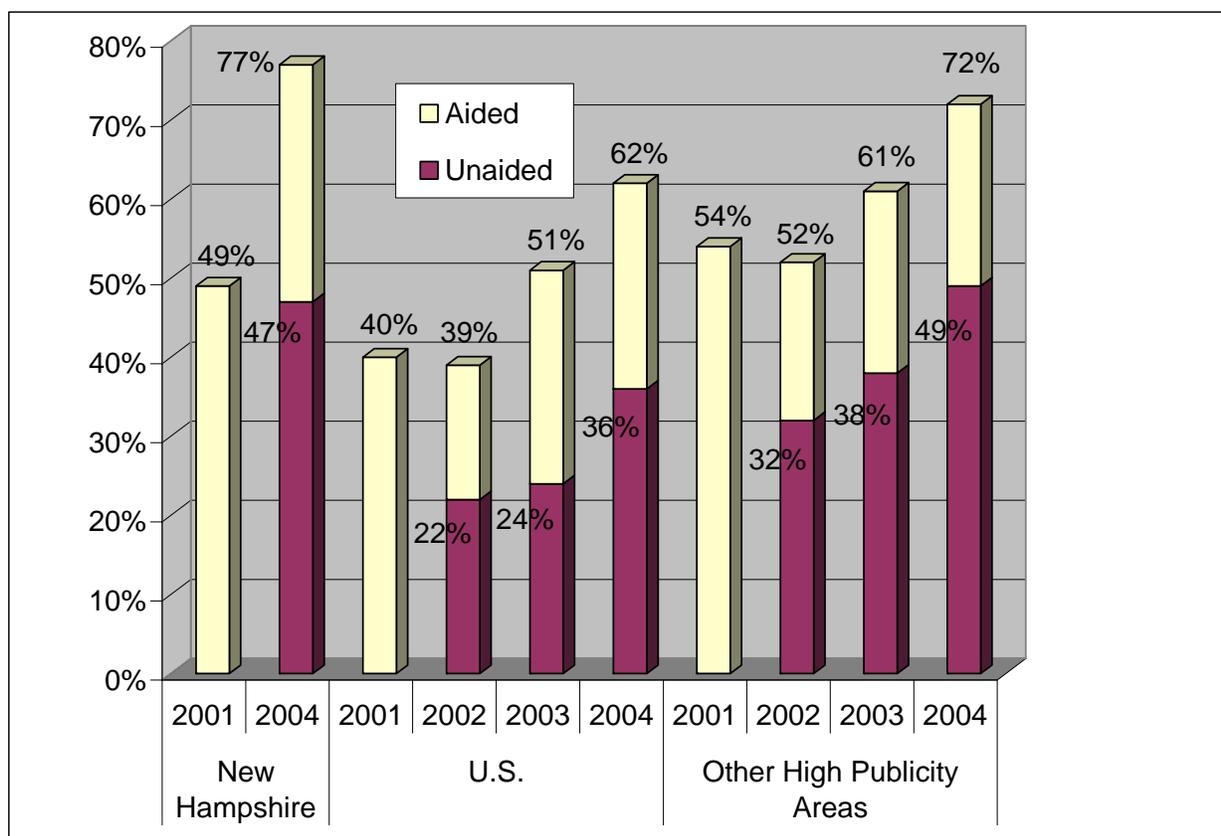
Important: Removal of this label before consumer purchase is a violation of Federal law (42 U.S.C. 6300).

2. Summary

The primary findings of this survey are as follows:

- Recognition.** Aided recognition in New Hampshire in 2004 is 77% - significantly higher than the 49% in 2001 and higher than both the U.S. and other high publicity states (Figure 1). Unaided recognition in New Hampshire is 47%, higher than the 36% for the nation as a whole and about equal to other high publicity areas (49%). Unaided recognition in New Hampshire is only eclipsed by Massachusetts, New York, and California, while aided recognition in New Hampshire is only equaled by California.

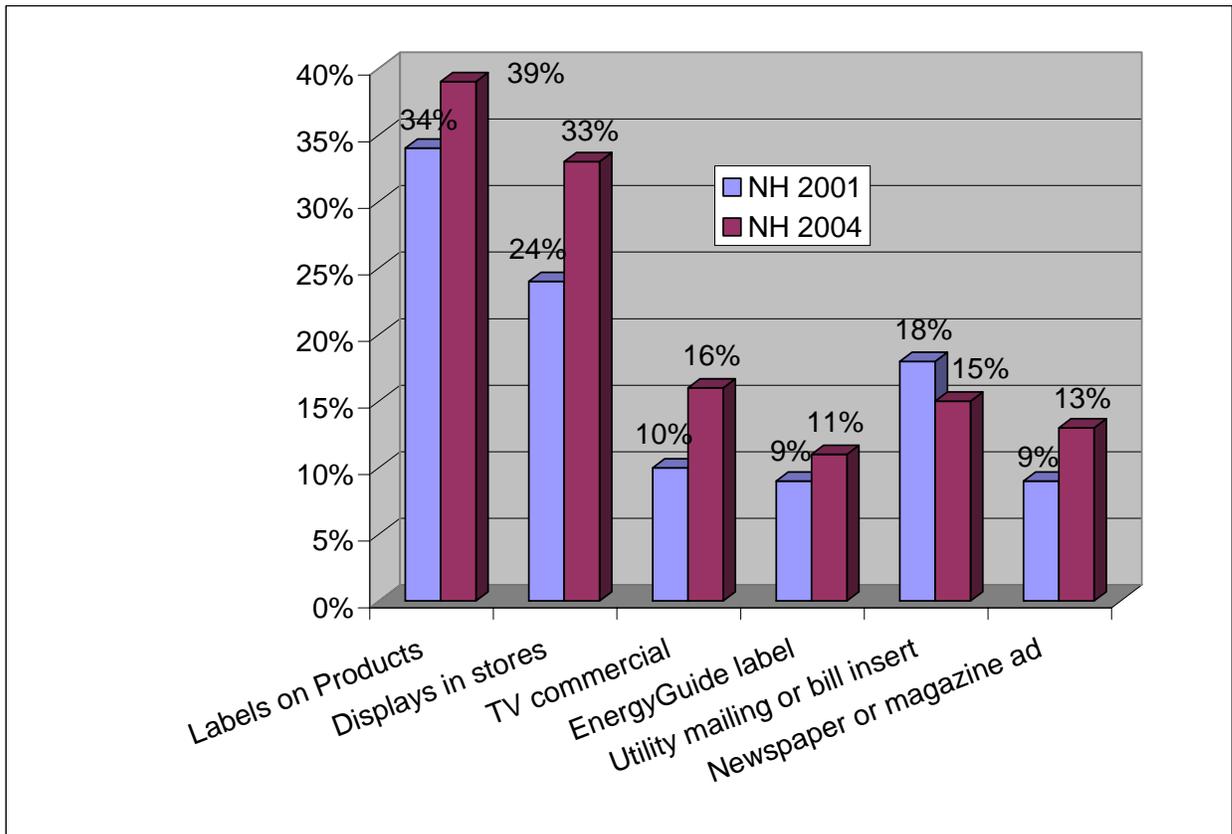
Figure 1: Aided and Unaided Awareness of the ENERGY STAR label



- Source of Recognition.** Asked where they have seen the ENERGY STAR label, New Hampshire respondents most often say on appliances or electronic equipment (39%). This is slightly higher than in 2001 (Figure 2) and the U.S. as a whole, but similar to other high publicity areas and several active states, including Massachusetts, New York, and California. New Hampshire respondents also often say they have seen the label on displays in stores (33%), TV commercials (16%), utility mailings or bill inserts (15%), or newspaper/magazine ads (13%). New Hampshire respondents are significantly likelier than those in the U.S. as a whole and other high publicity regions to have learned of the

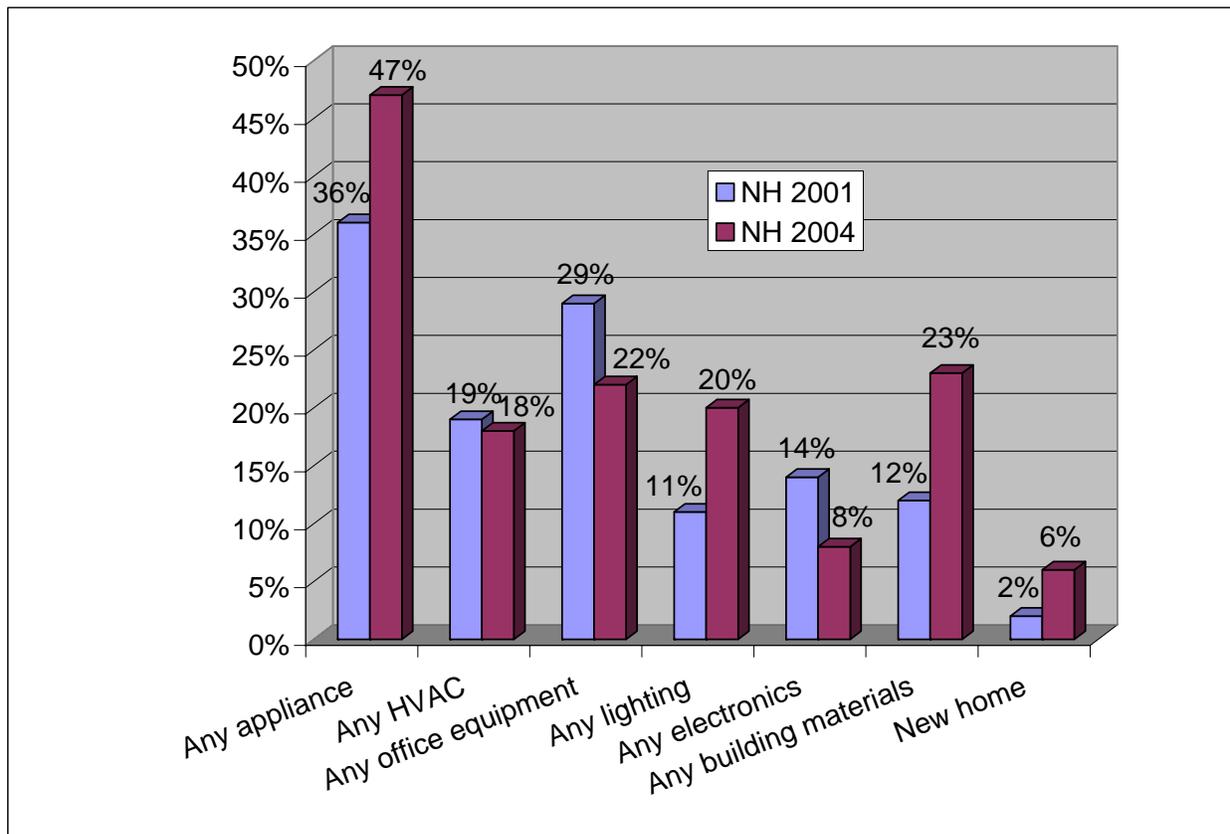
label from appliances or electronic equipment, store displays, and word of mouth. Also note that significantly more NH respondents cited store displays in 2004 than in 2001. These findings regarding appliances/equipment and store displays may reflect the effect of programs in New Hampshire, which utilize both avenues to promote ENERGY STAR products.

Figure 2: Primary Sources of Recognition of the ENERGY STAR label, New Hampshire



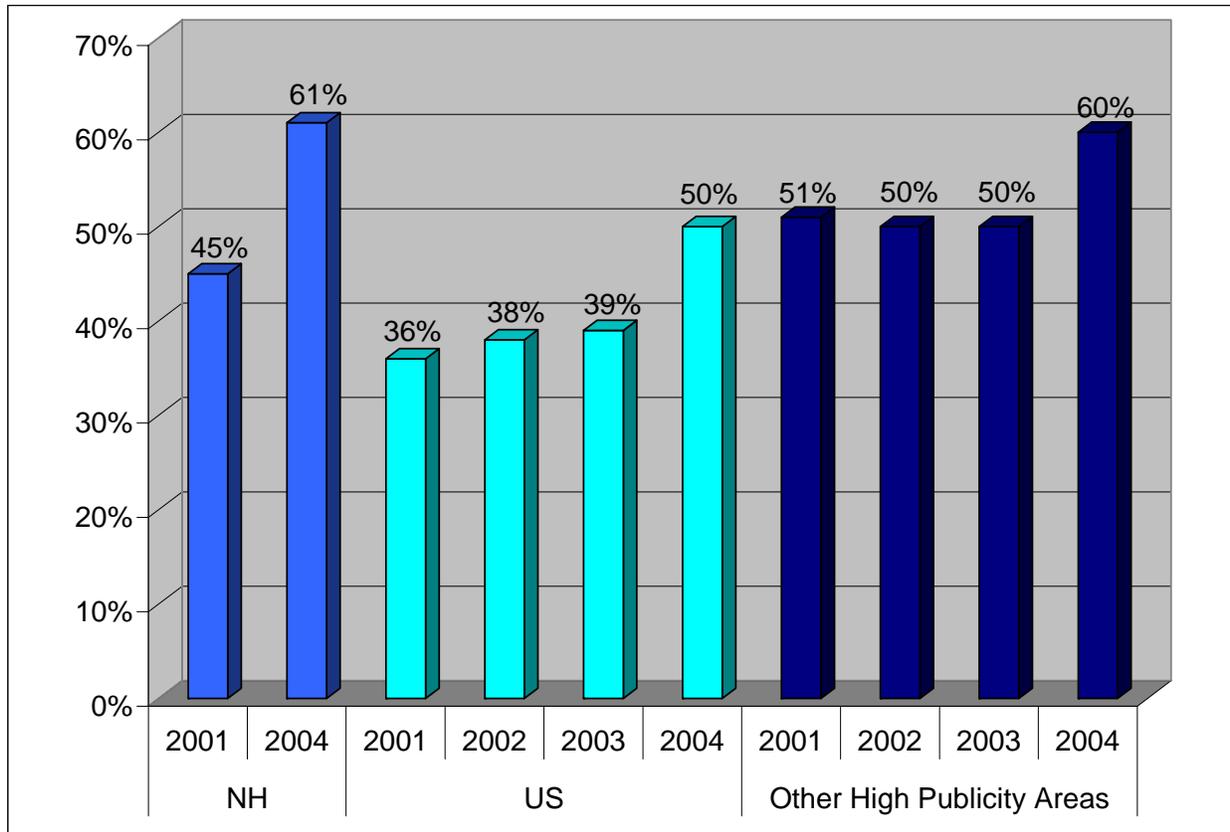
- Associations by Product Type.** New Hampshire residents are by far most likely to recall seeing the label on home appliances (47%) compared to other product types (Figure 3). Compared to 2001, a significantly greater number of New Hampshire residents have seen the label on home appliances, lighting products, and building materials. In terms of specific products, significantly more NH respondents saw the label on: dishwashers, refrigerators, washing machines, microwave ovens, windows, and doors.

Figure 3: Percent of New Hampshire Respondents who have seen the ENERGY STAR label by Product Type



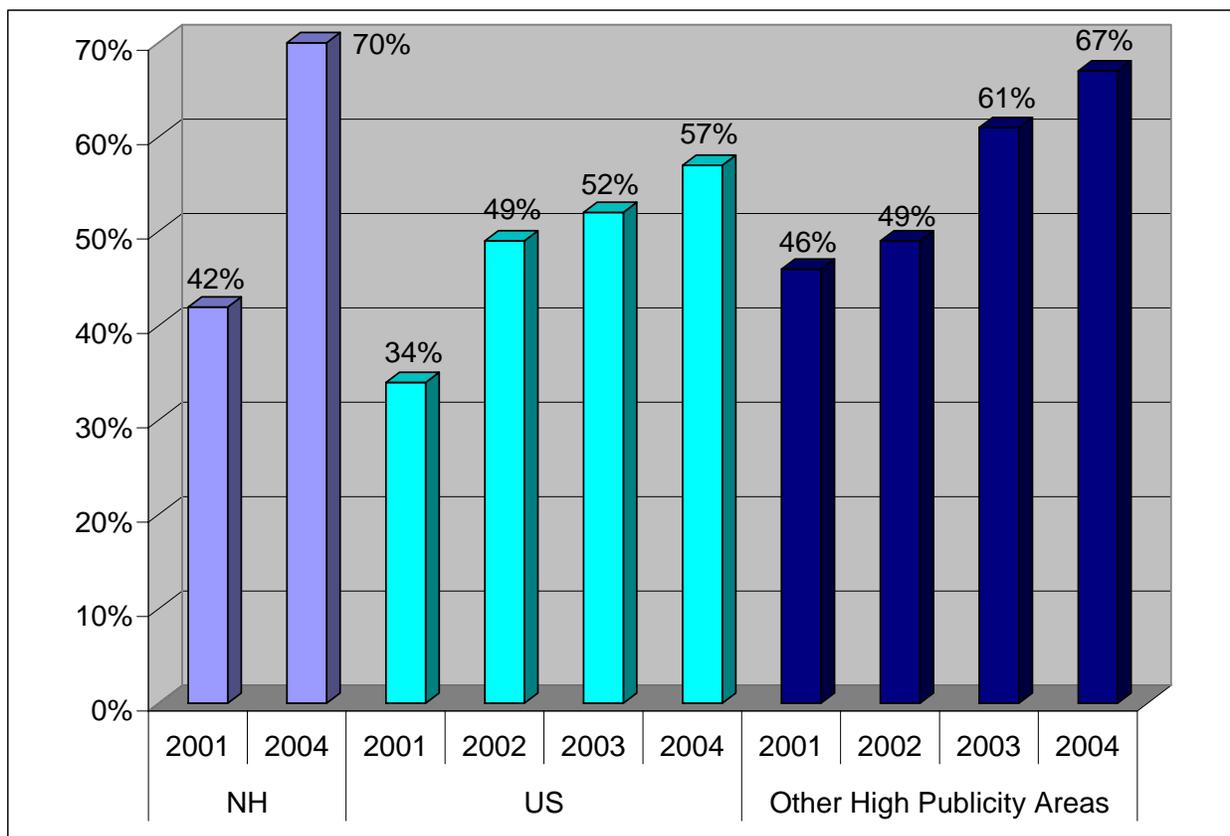
- Overall Product Associations.** Overall, New Hampshire residents are significantly more likely than those in the U.S. as a whole to have seen the label on at least one product (Figure 4). People in New Hampshire are significantly likelier than those in the U.S. as a whole to recall seeing the label on refrigerators, clothes washers, and windows. These differences can be explained by promotions or product prevalence: product associations are higher where New Hampshire has programs promoting ENERGY STAR-labeled products, including appliances and lighting products.

Figure 4: Percent of Respondents who have seen the ENERGY STAR label on any Product



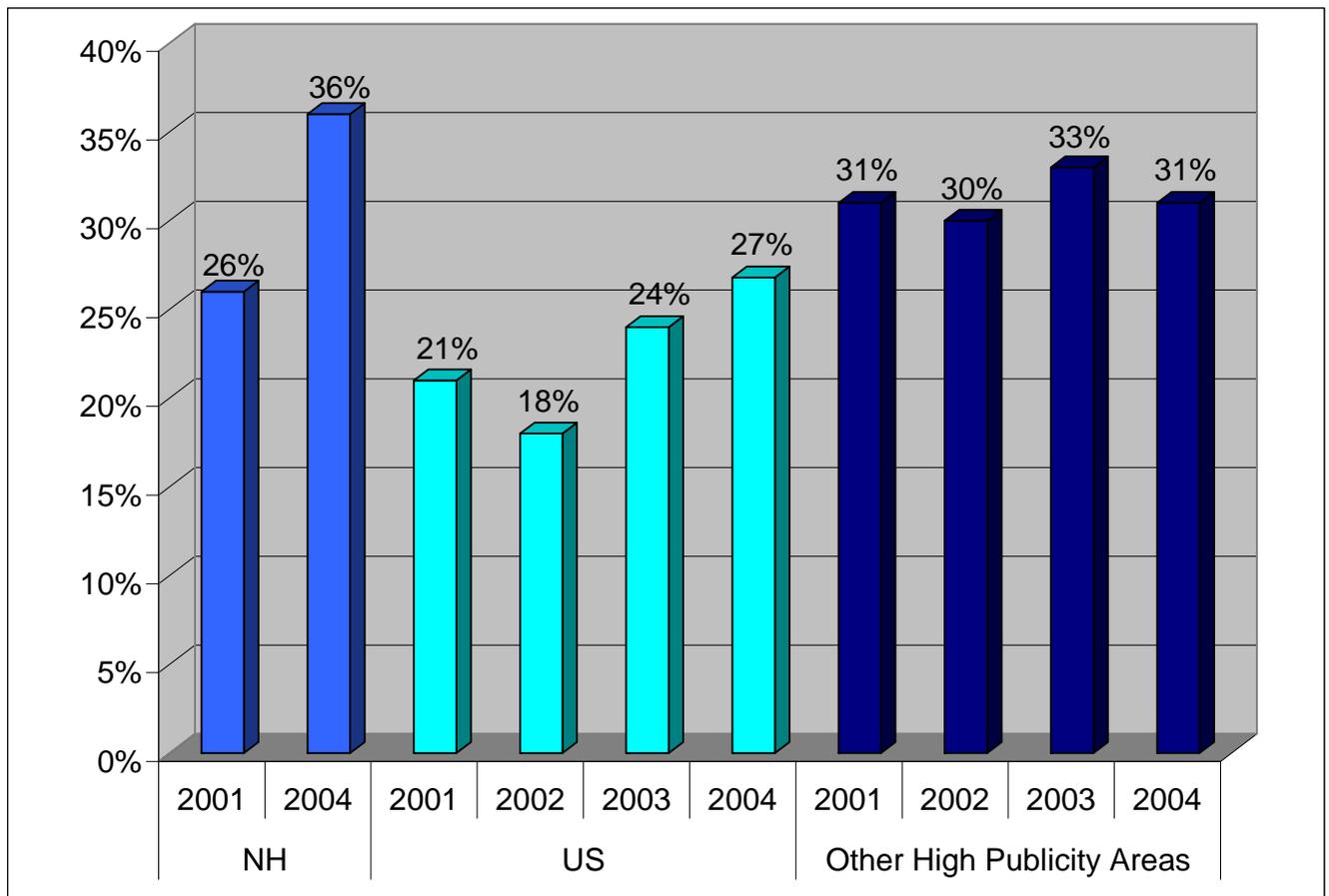
- Understanding.** Understanding of the ENERGY STAR label in New Hampshire has significantly increased in 2004 compared to 2001; 70% of New Hampshire residents now demonstrate a high understanding of the label, up from 42% (Figure 5). New Hampshire respondents are significantly more likely than respondents in the U.S. as a whole to show a high understanding of the ENERGY STAR label, and significantly less likely to show no understanding. New Hampshire respondents also report higher understanding than those in other high publicity areas, though not significantly so. Importantly, of the states considered, only Californians reported higher understanding of the ENERGY STAR label.

Figure 5: Percent of Respondents with High Understanding of the ENERGY STAR label



- Product Purchases.** Compared to 2001, New Hampshire residents are now (2004) significantly more likely to have purchased a dishwasher, light bulb, microwave oven, and window with the ENERGY STAR label (Figure 6). People in New Hampshire are significantly more likely than those in the U.S. as a whole to have purchased all appliances as a group. The net effect is that people in New Hampshire are more likely, though not significantly so, to recall seeing the label on their newly purchased products than are people in the country as a whole and those in high publicity regions.

Figure 6: Percent of Respondents who have seen the ENERGY STAR label on any Product Purchased



- Influence of the ENERGY STAR Label.** Compared to 2001, a higher proportion of 2004 New Hampshire respondents (16% vs. 14%) said the ENERGY STAR label very much or somewhat influenced their purchase, though the difference is not significant. However, the percentage of New Hampshire consumers who say that the label very much or somewhat influenced their decision to purchase a product is significantly higher than in the U.S. as a whole. There are, though, no sizable differences between New Hampshire and other high publicity areas.

- **Rebates for ENERGY STAR Products.** At 6%, New Hampshire consumers of ENERGY STAR-labeled products are more likely to report receiving rebates for their ENERGY STAR-labeled products than are consumers in the U.S. as a whole and similar to those in other high publicity areas.
- **Likelihood of Purchase without Rebate.** Those respondents who reported receiving rebates were asked if they would have purchased the ENERGY STAR product without the rebates. Though the sample sizes are very small for New Hampshire, the percentage of respondents who said they were somewhat likely or very likely to have purchased without a rebate was significantly lower in 2004 than in 2001. In addition, New Hampshire respondents in 2004 were less likely to purchase without a rebate than those in the U.S. as a whole, High Publicity areas, and several of the comparison states.
- **Loyalty to ENERGY STAR.** Loyalty to ENERGY STAR, expressed as likelihood to recommend it to a friend, has not changed among New Hampshire consumers since 2001 (16%). Among New Hampshire consumers who have bought an ENERGY STAR-labeled product, loyalty is not significantly higher or lower than among people in other areas who have bought such products.
- **Sources of Information.** The Web TV survey asked respondents where they would look for information about heating and cooling products as well as for home appliances, lighting, and home electronics. When searching for information on these products, New Hampshire residents primarily rely on advice from friends/neighbors/relatives/coworkers (50% or higher), advice from salespeople, Consumer magazines, and the Internet.
- **Attitudes toward ENERGY STAR Products.** When given a list of statements concerning ENERGY STAR products, New Hampshire residents generally agreed with the expected response for the statement (i.e., agreed with a positive statement regarding ENERGY STAR products or disagreed with a negative statement). Compared to the U.S. as a whole and other high publicity regions, significantly more New Hampshire residents agreed that ENERGY STAR products cost less to use and are better for the environment than are standard products. In addition, significantly more New Hampshire residents than U.S. residents agreed that ENERGY STAR products meet energy efficiency guidelines.