

## Segmenting Consumers of Ecolabeled Forest Products

### Executive Summary

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**Description:** A survey of The Home Depot consumers in Eugene and Albany, Oregon.

**Objectives:**

- 1) Evaluate the importance environmental certification relative to other product attributes.
- 2) Identify a consumer segment that is most likely to buy ecolabeled forest products (EFP's).

**Methods:** In-store completion of paper-based questionnaires. Conjoint analysis was used to determine the importance of environmental certification relative to other plywood attributes. Logistic regression was used to identify which attitudes, beliefs, social values, and demographics were significantly associated with the consumers most likely to buy EFP's.

**Key Findings:**

- Respondents preferred environmentally certified plywood to non-environmentally certified plywood.
- About 58 percent of the respondents rated environmental certification as the most important product attribute.
- A consumer segment exists that is likely to buy EFP's.
- Members of this segment are: more likely to be younger, politically liberal, willing-to-pay a premium for EFP's, more likely to believe environmental information on product packaging, and more likely to have engaged in past environmentally friendly purchase behavior.

### Introduction

In the last four decades, environmental degradation has become a significant social concern. Experts have pointed out that society's rising concern about environmental issues has market implications. For example, a series of national surveys by the

Roper Starch Worldwide organization have shown that increasing numbers of Americans consider themselves green consumers, i.e. those that consider a product's environmental attributes/impact in their purchase decision. Accordingly, many manufacturers have taken note of the trend, and green products have become pervasive.

In the case of the forest products industry, social concern about environmental degradation has focused on deforestation, illegal logging, and forest sustainability. To begin proactively addressing these forest specific issues, environmental non-government organizations (ENGO's) introduced the concept of forest certification in the early 1990's. Environmental forest certification is a process by which an independent third party verifies that a landowner's forest management practices are sound. The forest products derived from such forests feature ecolabels, an on-product, or on-packaging trademark that serves to indicate the product's environmental attributes. The underlying assumption is that some consumers will discriminate their purchases in favor of EFP's. Therefore, it is of interest to: 1) understand the importance consumers place on environmental certification relative to other attributes, 2) identify a consumer segment that is most likely to buy EFP's.

### Methods

During the fall of 2002, 303 The Home Depot consumers in Eugene and Albany, Oregon completed a questionnaire. Over 90% of the respondents were do-it-yourselfers, 71% were male, the median income was \$40-60,000, and 87% had at least some college education.

The questionnaire was divided into two sections. The first section used conjoint analysis to model purchase behavior. This technique is thought to realistically model the decision processes a consumer uses when purchasing a product. In this case, we used conjoint analysis to determine whether consumers prefer environmentally certified products to non-environmentally certified products.

The technique also yields the importance each respondent places on environmental certification relative to other product attributes. We used this measure to categorize respondents into two groups –

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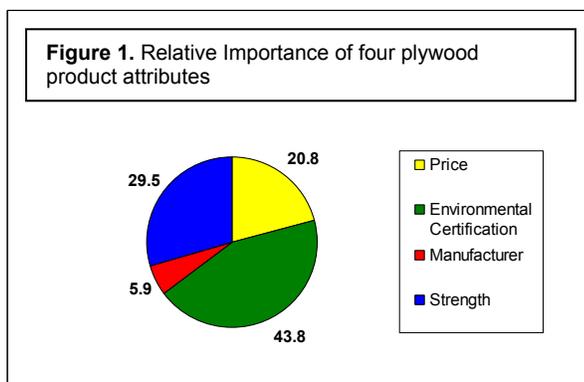
those most likely to buy EFP's and those least likely to buy EFP's.

In the second section of the questionnaire, we used Likert-type scales to measure consumer attitudes, beliefs, and social values that were hypothetically related to those most likely to purchase EFP's. For example, we hypothesized that altruistic people (those concerned for the welfare of others) would be more likely to buy EFP's. Thus, we had a scale to measure altruism. In addition to such scales, we collected demographic information about each respondent.

We then used logistic regression to test for associations between group membership and the various attitudes, beliefs, social values, and demographics. The dependent variable was the group membership classification and the explanatory variables were all of the attitudes, beliefs, values, and demographics that we had measured.

## Results

**Figure 1** displays the relative importance rankings of the four product attributes. Note that environmental certification was rated the most important among these four product attributes – about 1.5 times as important as strength, about 2.0 times as important as price, and about 7.0 times as important as who manufactured the plywood.



241 of the 303 (80.3%) consumers preferred environmentally certified plywood to non-environmentally certified plywood. However, the strength of this preference for environmental certification varied considerably among consumers. Therefore, we used environmental certification's relative importance to categorize respondents into two groups – those most likely to buy EFP's and

those not likely to buy EFP's. Although the cut-off value between groups is somewhat arbitrary, our classification revealed that about 50 percent of consumers are likely to purchase ecolabeled forest products.

Finally, those respondents classified as most likely to purchase ecolabeled forest products were:

- More likely to be younger
- Politically liberal
- Willing-to-pay a premium for EFP's
- More likely to believe environmental information on product packaging
- More likely to have engaged in past environmentally friendly purchase behavior

## Limitations

Throughout this report, we have assumed that respondents with strongly held, positive attitudes for EFP's, are likely to buy EFP's, and therefore represent a target market. However, researchers have long questioned the strength of the link between attitude and behavior. Thus, one must remember that we measured attitudes rather than behavior<sup>3</sup>. Second, we only surveyed a convenience sample of consumers from two stores in one state. Thus, these results are not generalizable to broader populations of consumers.

## Managerial Implications

However, one could consider the following managerial implications if it were assumed that our sample represents US consumers. First, we estimated that about 50 percent of consumers are a target market for EFP's. The size of such a market makes it a legitimate segment to pursue. Second, the target segment would be easily accessible for promotion and distribution efforts. This is because we identified variables associated with target consumers, e.g. age, political affiliation, and past environmental purchase behavior. Finally, willingness-to-pay extra for EFP's was a characteristic of the likely to purchase segment. This suggests that there may be a core group of consumers that is strongly committed to purchasing EFP's and that manufacturers and retailers may be able to obtain price premiums from members of this core group.

<sup>3</sup> For further information about actual consumer behavior see: <http://www.cof.orst.edu/cof/fp/faculty/hansen/Home%20Depot%20Experiment%20one%20pager.pdf>