

U.S. home-center retailer attitudes, perceptions and behaviors regarding forest certification.

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[Forest Products Journal](#) • March, 2008 •

Abstract

Forest certification continues to generate promise, discussion, and debate. In this study, we surveyed the top 500 home-center retailers in the United States to ascertain their participation in certification, perceptions of current and future forest certification trends, as well as certification systems they deem acceptable and preferable. One hundred and 32 companies responded resulting in an adjusted response rate of 26 percent. All respondents sold wood products in 2004. The top-rated criteria in selecting wood products suppliers were price, quality, delivery, and availability. Certification/eco-labeling was ranked last. One-third of respondents sold certified wood products at the time the study was conducted and an additional 13 percent said they planned to do so in the future. The most cited reasons for purchasing/selling certified wood products were that they were the only products available and to improve the company's image. Forest Stewardship Council (FSC) certification was reported to be the most accepted and most preferred scheme, followed by Sustainable Forestry Initiative (SFI) certification.

Public concern for the environment has grown during the last few decades, both in developed and developing countries. As a result, environmental issues are beginning to take center stage in global economic and trade policy discussions. The emergence of "forest certification," a process that attempts to identify products from well-managed forests and indicates how well a product is environmentally adapted, is a contemporary example of how social interests have influenced differentiating goods and services based on environmental considerations.

Forest certification is intended to give consumers a credible guarantee that the product they purchase comes from "environmentally friendly" sources. A credible certification program should be designed to evaluate the integrity of the producer's claim and the authenticity of product origin (Baharuddin 1995). In order to provide the necessary information to the final consumer, Simula (1997) points out two essential components of any certification scheme; forest management certification and product certification. Product certification includes a process, also known as "chain of custody" certification, which tracks timber from forest to final consumer through various production phases of the supply chain such as transportation, storage, processing, and distribution. This study attempts to shed light on the retail distributor of the supply chain, where decisions on certification implementation will be made.

According to the U.S. Census Bureau, new single-family home sales in 2005 were 1,282,000 with an average annual sales price of \$292,200. This sustained increasing trend in housing expenditures can be attributed to strong growth in household income and wealth which has also given rise to a high-end market (NAHB 2006). After single family housing construction, repair and remodel applications of wood sold primarily through home-center retailers account for the second largest demand market. Therefore, retail home centers have been the primary driver of certification from the demand side of the equation in the United States. Since the early 1990s, growth in spending on residential remodeling and repairs has remained steady. The estimated total expenditure on residential remodeling by U.S. consumers in 2005 was \$210 billion (JCHS Harvard Univ. 2005). The National Association of Home Builders (NAHB 2006) predicts that this would increase to \$238 billion in 2006. Consumer demographics is a highly influential factor in driving the wood products market in the United States. The Baby Boomer generation has been the mainstay of the U.S. wood products market for the last few decades. There are 75.8 million Baby Boomers, most reaching their peak spending years and their spending on home improvement projects reached \$72 billion in 2003 (JCHS Harvard Univ. 2005).

Evidence suggests that consumers' preferences for certified products and their understanding of certification concepts are also on the rise. For instance, a comparative study by Ozanne and Vlosky (2003) on U.S. consumer perspectives of certification shows that overall consumer understanding of the concept of certification has increased. Price Waterhouse Coopers also predicts an annual growth of 100 to 150 percent per year for certified products in the United States (Dixon 1999). In another study on the impact of certification on preferences for wood furniture, Anderson and Hansen (2004) concluded environmental certification was a favorable product attribute with nearly 21 percent of respondents giving it the top priority. However, for the typical respondent, the importance of other product attributes outweighed that of certification.

Availability of price premiums for certified products is an issue of continuous debate. Humphries et al. (2001) reported that although retailers pay more for certified products, on the sales side of the transaction, they receive a much lower premium or no premium at

all. Based on their calculations for average premium paid to suppliers and premium received from sales, retailers lost an average of 6.1 to 6.4 percent on certified products. As the price premium for certified products increases, consumers tend to go for the cheaper noncertified products (Anderson et al. 2005).

Despite the uncertainty over availability of price premiums, major wood products retailers, specifically Lowe's and Home Depot, have committed to providing "certified forest products" to consumers. Home Depot's Wood Purchasing Policy states in part that "the Home Depot will give preference to the purchase of wood and wood products originating from certified well managed forests whenever feasible." It also recognizes the Forest Stewardship Council (FSC) as the certification system with the highest certification standards (Home Depot 2006). Following the Home Depot's announcement of its new timber purchasing policy, several other leading retailers such as Home Base, Menards, 84 Lumber, Lanoga, Wickes Lumber, and Payless Cashways have announced policies to avoid purchasing timber products from non-sustainable sources.

At present, the main certification systems in the United States are Forest Stewardship Council (FSC), Sustainable Forestry Initiative (SFI), and the Program for the Endorsement of Forest Certification schemes (PEFC). Each certification system has its advantages and disadvantages. Which program will gain acceptability among different organizations and interests is a key question.

Although several major wood products retailers have already announced their commitment to provide certified forest products to their consumers, it is unclear which of the five major certification systems will ultimately be accepted by these forest products retailers. This paper focuses on the home-center retailers' attitudes and participation regarding forest certification, which has received relatively scant scholarly attention over the past few years. The study had two primary objectives: 1) ascertain perceptions of current and future forest certification trends and; 2) identify which certification systems are deemed "acceptable" and "preferable."

The study

During the period fall 2005 to spring 2006, a mail questionnaire was sent to the 500 largest home-center retailers in the United States based on sales in 2004. The mailing list was purchased from Home Channel News. The purpose of this survey was to determine trends in home-center certification strategies, certification systems accepted or under consideration, certification criteria important to these retailers and other related trends in the home-center arena.

The questionnaire was pretested with a subset of 20 representatives from the sample and revised before the final mailing. Mailing procedures followed the Tailored Design Method (Dillman 2000) and included a prenotification postcard, the first questionnaire mailing with a postage paid return envelope, a reminder postcard, and a second mailing to first-mailing nonrespondents. Personalized cover letters that accompanied the questionnaires were signed by the principal investigator and were addressed to marketing managers or marketing vice presidents by name and title.

Nonresponse bias is often a common concern in survey research. Nonresponse is a problem in any survey because it raises the question of whether those who did respond are different in some important way from those who did not respond (Churchill 1987). In mail surveys, the bias associated with nonresponse is generally due to two factors (Dillman 2000). First, individuals with an interest in the subject matter are more likely to respond than uninterested individuals. The second major bias is that well-educated individuals usually return questionnaires faster than less educated individuals. Bias due to nonresponse can be evaluated by comparing those who responded to the initial mailing to those who respond as a result of subsequent mailings and other follow-up efforts (Armstrong and Overton 1977). Nonresponse bias was measured by using a two-tailed t-test conducted on percent of companies by region, comparing respondents and companies that fell into the nonresponse/undeliverable category. No difference in regional distribution was detected ($p = 0.042$).

In addition, research has shown that late respondents typically respond similarly to non-respondents. Accordingly, second mailing respondents, as a proxy for nonrespondents, were compared to first mailing respondents by state of origin (Donald 1960). In this case as well, no difference in company size measured by 2004 sales was detected at $[\alpha] = 0.05$ ($p = 0.002$).

Results

General profile

Of the 500 mailed questionnaires, 132 were returned as usable. After accounting for nondeliverables and seven respondents that did not sell wood products, the adjusted response rate was 26 percent. Almost 1/3 of respondents (32%) are headquartered in the South, followed by the North Central, Northeast and Western regions with 27 percent, 23 percent, and 18 percent of respondents, respectively (Fig. 1).

In order to mask responses from the five respondent companies in the top 20 U.S. home centers, respondents were segmented into

large, medium, and small companies based on 2004 total sales and number of employees. Fifty-six percent of respondents are small, with 2004 sales of \$50 million or less. Similarly, 90 percent of respondents had 500 or fewer employees in 2004. On the other end of the scale, 6 percent of respondents had sales of \$200 million or more, and 10 percent of respondents had more than 500 employees in 2004.

All respondents sold wood products with moulding and millwork, softwood lumber, softwood plywood, and treated wood products carried by 91 percent of respondents. For 79 percent of respondents, wood products accounted for more than 50 percent of their total sales in 2004. Although a direct comparison to the top 500 home-center retailers is not available, Home Channel News (2005) reports that for this group, the following categories accounted for a total of 47 percent of sales in 2004: lumber and plywood (18%), flooring (10%), doors and windows (7%), cabinets (5%) and other building materials (7%).

Respondents purchase wood products from a variety of suppliers. Allowing for multiple responses, U.S. brokers or wholesalers were the main purchasing channel for wood products for 94 percent of respondents, followed by international manufacturers and brokers/wholesalers at 27 percent and 26 percent of respondents, respectively. Again, allowing for multiple responses, 97 percent of respondents said they purchase wood products from North America, followed by South America (62 percent of respondents), Europe (51%), Asia (29%), Central America (22%), Oceania (7%), and Africa (6%).

Using a 3-point scale (1 = Not Important at All; 2 = Somewhat Important; 3 = Very Important), respondents were asked to rate the relative importance of criteria they use to select wood product suppliers (Fig. 2). Fair prices, product quality, and consistent delivery ranked at the top (2.9) closely followed by product availability (2.8), high level of customer service (2.7), and the need for supplier representatives to speak English (2.7). Certification/Eco-labeling was ranked last on the list of 21 criteria. Independent t-tests comparing respondents that sell certified wood products to those that do not yielded no significant differences for any of the criteria at $[\alpha] = .05$. Certification/Eco-labeling was ranked last for both groups.

Certification

At the time that the study was conducted, 33 percent of respondents ($n = 42$) said that they sold certified wood products and, of the 67 percent that did not sell certified products at that time, 19 percent said they planned to do so in the future. Respondents were also asked about their company's approximate percentage of certified wood products sales of their total wood products sales. For the 32 respondents that answered this question, on average 38 percent of company total wood product sales (by value) are certified.

Respondents were asked why they entered the certified wood products market (Fig. 3). The most cited reasons (by 29 percent of respondents) were "was the only product available" and "improve company image." This was followed by customer demand (22%), increase sales volume (20%), and business owner commitment to environmental issues (20 percent.) Pressure from environmentalists, avoidance of business risk, and seeking increased profits were least cited reasons.

Identifying current and future certification programs acceptable to home-center retailers was a prime objective of this study. For the 41 respondents who sell certified products, Forest Stewardship Council (FSC) certification is the most accepted and preferred scheme followed by Sustainable Forestry Initiative (SFI) certification and the Program for the Endorsement of Forest Certification schemes (PEFC) (Fig. 4).

We also examined cost aspects of certification. When asked about the premium paid for certified wood products relative to noncertified alternatives, 50 percent of respondents ($n = 21$) said they do not pay anything extra for certified wood products (Fig. 5). Eleven percent of respondents said they pay more than 10 percent for certified wood products relative to comparable noncertified wood products. About 13 percent of certified wood products retailers ($n = 5$) have requested that wood suppliers become certified. No respondent experienced unexpected costs due to participating in certification while 5 percent of respondents said they experienced unexpected benefits.

When asked about certification promotion, 11 percent (4 respondents) of certified wood sellers respondents said that their company actively promotes its products as certified to customers. Twenty-nine percent ($n = 11$) said their certified products carry eco-labels, 55 percent said they do not and 16 percent were unsure if their certified wood products carry an eco-label.

Finally, we were interested in home-center retailer perceptions of past and future demand for their certified wood products sales. Sixty-two percent of certified wood products retailers ($n = 26$) have experienced a moderate or significant increase and no respondent experienced a decrease in sales of certified wood products over the past 5 years (Fig. 6). A majority (69 percent of respondents) ($n = 29$) anticipate a moderate or significant increase in certified wood sales in the next 5 years. Three percent said they expected sales would decline somewhat and no respondent thought certified wood sales would decrease significantly.

Discussion and conclusions

Results from the present study better frame certification-related issues from the perspective of wood products retailers looking for the best way to market and sell their products. Despite the fact that at present the wood products retail industry is dominated by five companies (Home Depot, Lowe's, Wal-Mart, Sears, and CCA Global Partners), it is equally important to assess the views of other medium to small scale companies' perspectives on certification because they represent one-third of top 500 home-center sales (Home Channel News 2006).

Results suggest that only a handful of leading wood products retailers have undertaken certification and obtained a chain of custody. Product quality, fair prices and supply issues are still regarded as main concerns rather than environmental safeguarding by home-center retailers in order to be successful in the business. This is evident from the fact that eco-labeling ranked last on a list of 21 criteria for selecting product suppliers.

Results indicate that in general, price premiums for certified products are rare. Other factors such as improving company image and preexisting certified suppliers seem to be the main reasons for companies to enter the certified market rather than price premiums or pressure from environmentalists. If certification is to gain momentum in the future, one would expect demand would come from the end users, which would motivate retailers to provide certified wood products.

FSC and SFI certification schemes are accepted by most retailers at present, followed by PEFC. These two certification programs are likely to remain as the top certification programs preferred and accepted by retailers in the future as they continue to dominate the certified forest acreage in the United States.

On the sales side, home-center retailers have experienced an increase in their sales volumes for certified products during the recent past and they remain optimistic that it will continue to rise in the future. This may be attributed to their anticipation that awareness among consumers will continue to increase with time or it may be a promotional tool to deflect criticism from the environmentalist community.

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* Forest Products Society Member. Figure 1.--Distribution of respondent corporate locations-percent of respondents