

The Association between One Particular Green Building Program and the Use of Environmentally Certified Wood by US Homebuilders¹

Randall A. Cantrell, Indroneil Ganguly, Ivan Eastin, and Tait Bowers²

This research was supported by Agriculture and Food Research Initiative Competitive Grant no. 2010-65400-20435 from the USDA National Institute of Food and Agriculture.

Quick facts

- The information contained in this article is adapted from a forthcoming study that employed a representative sample of US homebuilders (Ganguly, Eastin, Cantrell, and Bowers, 2012,). The regional representation of that sample is closely aligned with the regional breakdown of US housing starts in 2010.
- According to the Western Wood Products Association (WWPA), the residential construction industry is the largest potential market for Environmentally Certified Wood Products (ECWPs) in the United States (WWPA 2009).
- The majority of users of wood certified by the Forest Stewardship Council (FSC) cite "green building points" as one of the major reasons for using ECWPs (Ganguly et al., 2012).

Terms to help you get started

• **Green Building** Describes a set of policies and practices to ensure that buildings are built and used in ways that

are as environmentally responsible and resource-efficient as possible from construction to demolition (Allen and Iano, 2008)

- USGBC US Green Building Council
- **LEED for Homes** Leadership in Energy and Environmental Designfor Homes, a residential green building program established by the USGBC
- Environmentally Certified Wood Products Wood products that have been certified to have been produced in accordance with a documented process that ensures responsible forest management practices
- Forest Stewardship Council A non-profit organization that sets standards to ensure that forestry is practiced in an environmentally responsible and socially beneficial manner (Taylor, 2012)
- Sustainable Forestry Initiative Label A label indicating that forest products were derived from well-managed forests (SFI, 2012)

- 1. This document is FCS3307, one of a series of the Family Youth and Community Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date March 2012. Visit the EDIS website at http://edis.ifas.ufl.edu.
- 2. Randall A. Cantrell, assistant professor, Department of Family, Youth and Community Sciences, University of Florida, Gainesville, FL 32611; Indroneil Ganguly, research associate; Ivan Eastin, professor, Tait Bowers, research assistant; University of Washington's Center for International Trade in Forest Products, PO Box 352100, Seattle, WA 98115

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. U.S. Department of Agriculture, Cooperative Extension Service, University of Florida, IFAS, Florida A&M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place , Dean

Keywords

Residential Green Building Programs, Environmentally Certified Wood Products, Forest Stewardship Council

What is sustainable forest management?

The United Nation's Food and Agriculture Organization describes sustainable forest management as a scientific process whose goal is to ensure that forest-based goods and services are able to supply not only current market needs but long-term ones as well. Thus, sustainable forest management practices include matters related to administrative, legal, technical, economic, social, and environmental aspects of the conservation and use of forests (FOA, n.d.).

What is environmental certification of wood, and how does it affect homebuilders?

Environmental certification of wood is usually associated with voluntary eco-labeling and chain-of-custody programs, which are designed to ensure that wood products are harvested from sustainably managed forests. Alternatively, mandatory regulations that attempt to accomplish the same goal are sometimes imposed by governments and international associations. Voluntary environmental certification of wood encourages sustainable management of forests through market-based incentives (Vidal et al., 2003). Ultimately, the market acceptance of environmentally certified wood products (ECWPs) requires consumer confidence in the certification process as well as market awareness and appreciation of the environmental attributes of certified wood by specifiers (e.g., architects, designers) and end-users.

Where might homebuilders be using environmentally certified wood products?

US homebuilders sampled in the Ganguly et al., 2012 study are involved in homebuilding in urban/suburban areas, small towns, and rural areas (58%, 29%, and 13%, respectively).

Homebuilder awareness of green building programs and wood certification programs

There are multiple green building programs in the US; however, this article only addresses one in particular because of the limited data that the Ganguly et al. study has gathered and analyzed to date. Subsequent findings will address other programs as that data becomes available. According to the data available thus far, the USGBC LEED for Homes green building program is recognized by more than 94% of the homebuilders sampled. Approximately 11% of them have used the program, and an additional 24% are planning to use the LEED for Homes program in the near future. Although LEED only certifies wood products through FSC, homebuilders sampled made it clear that they are aware of other existing wood-certification programs—specifically the Sustainable Forestry Initiative (SFI).



I haven't heard about I am aware of it, but I have occasionally I frequently use it it have never used it used it





Figure 2. Reasons that Homebuilders Use Certified Wood

Summary

Although only 11% of homebuilders sampled use the LEED for Homes program (mostly larger homebuilders at this time), there is an emerging trend for smaller- and medium-sized homebuilders to begin using the LEED for Homes green building program in the near future. Half of the homebuilders sampled desire to receive "green-building Archival copy: for current recommendations see http://edis.ifas.ufl.edu or your local extension office.



Figure 3. Reasons that Homebuilders Do Not Use Certified Wood

points," and one way to do so is by using FSC-certified wood. According to the data thus far available from this study, LEED for Homes appears to have increased US homebuilder awareness of and use of FSC-certified wood.

References and Resources

- Allen, E, and J. Iano (2008). Fundamentals of building construction: materials and methods. Hoboken, New Jersey: John Wiley & Sons Inc.
- FAO (n.d.). Sustainable Forest Management. Retrieved on January 24, 2023 from: http://www.fao.org/waicent/ search/2_dett_fao.asp?strLang=en&pub_id=137646.
- Ganguly, I., I. Eastin, R. Cantrell, and T. Bowers (2012). The role of green building programs in enhancing the usage of environmentally certified wood in the US residential construction industry, Forthcoming in: The International Journal of Construction Education and Research.
- SFI (2012). Retrieved January 11 from http://www. sfiprogram.org/.
- Taylor, L. (2012). The New York Times. Retrieved January 12 from http://poolandpatio.about.com/od/ patioglossary/g/FSC.htm.
- Vidal, N., R. Kozak, and D. Cohen (2003). Chain of custody certification: an assessment of the North American solid wood sector, Forest Policy and Economics, 7: 345–355.
- WWPA (2009). 2008 Statistical yearbook of the western lumber industry. Portland, OR: Western Wood Products Association.