



Wood and Green Building

Why using wood from North American forests is a sustainable choice



As green building has evolved beyond its initial emphasis on operational energy efficiency, greater attention has been given to the choice of structural materials and the degree to which they influence a building's environmental impact.

Wood is the only major building material that grows naturally and is renewable. The use of wood from sustainably managed forests also offers significant benefits when compared to materials that require large amounts of fossil fuels to manufacture. While some people question the ability of our forests to meet long-term demand for wood products, the following facts demonstrate that using wood from North American forests is a sustainable choice.

“Responsible forest management has resulted in more than 50 consecutive years of net forest growth that exceeds annual forest removals.”

Fact: North American forests are renewable and sustainable.

The United States and Canada share a demonstrated commitment to forest sustainability. During the last 50 years, less than 2 percent of the standing tree inventory in the U.S. was harvested each year while net tree growth was close to 3 percent.¹ In Canada, less than 1 percent of the managed forest is harvested annually and the law requires regeneration.²

In the U.S., 57 percent of the forest land base is privately owned by corporations, investment funds and other entities, as well as more than 10 million family forest owners.³ The rest is owned by public entities such as national, state and local governments. A large number of federal policies cover U.S. forests, and the state and local legal requirements are extensive. In Canada, where 93 percent of the forests are publicly owned, forest companies operate under stringent sustainability laws and regulations. In both countries, responsible forest management has resulted in more than 50 consecutive years of net forest growth that exceeds annual forest removals.⁴

At the same time, as land values continue to rise and markets for forest products decline, it is becoming increasingly difficult for some landowners to justify keeping their lands forested. The U.S. Forest Service estimates that roughly 57 million acres of U.S. forests will face potential development by 2030.⁵

Fact: The U.S. and Canada are world leaders in forest certification.

Wood is the only building material that has third-party certification programs in place to demonstrate that products being sold have come from a sustainably managed resource. Forest certification allows forest companies to demonstrate the effectiveness of their practices by having them independently assessed against a stringent standard that considers environmental, economic and social values.

In the U.S. and Canada, more than 845 million acres of forest are certified under one of the four main programs recognized internationally (listed by acres certified in North America): the Sustainable Forestry Initiative (SFI), Canadian Standards Association's Sustainable Forest Management Standard (CSA), Forest Stewardship Council (FSC), and American Tree Farm System (ATFS). This represents more than half of the world's certified forests.

Fact: Modern forest practices are deeply rooted in principles of sustainability.

Forestry as a profession in North America is about 100 years old. Over the past century, the field has evolved from practices that were focused on maximizing timber values to approaches that are deeply rooted in ecology, science, and principles of sustainability.

Some forest owners have not chosen certification, but they still operate under layers of federal, state/provincial, and local regulations and guidelines that foresters and harvesting professionals must follow to protect water quality, wildlife habitat, soil and other resources. In the U.S., forestry is also guided by best management practices (BMPs) that build on a common set of science-based principles and are tailored to the specific conditions and needs of each state.

Training, continuing education and certification for loggers and foresters support ongoing improvement and use of the latest information and best practices in forest management.

Fact: Deforestation and illegal logging are not issues in North America.

Until the early 20th century, settlers coming to North America cleared an average of 2.1 acres of forest per person to survive and grow food. Since that time, the establishment of industrial agriculture and other changes in land use have mitigated forest clearing in North America, and forest acreage has been stable for over a century. The rate of deforestation in the U.S. and Canada has been virtually zero for many decades. The U.S. reported an annual increase in forest area of 0.12 percent in the 1990s and 0.05 percent from 2000 to 2005, while Canada reported no change.⁶ Stringent regulations in both countries prevent the illegal harvesting of timber.



Fact: Strong markets for wood products give landowners incentives to keep their lands forested.

Private landowners need sustainable forest product markets to ensure a positive return on investment over the long term. Vibrant markets provide the income necessary not only to keep lands forested but to invest in additional forest management techniques to improve forest health. Without strong markets for wood products, landowners may be forced to subdivide and sell their land for development.

Photos (in order): Sandy McKellar, Benjamin Benschneider, www.naturallywood.com

¹ *The State of America's Forests*, M. Alvarez, 2007, Society of American Foresters

² Natural Resources Canada; Forest Products Association of Canada

³ U.S. Forest Resources of the United States, 2007 (Table 60)

⁴ Natural Resources Canada; USDA Forest Service

⁵ *Private Forests, Public Benefits: Increased Housing Density and Other Pressures on Private Forests*, 2009, USDA Forest Service

⁶ *The State of America's Forests*, M. Alvarez, 2007, Society of American Foresters; *State of the World's Forests Report*, 2007, United Nations Food and Agriculture Organization