



## IDEAS & SOLUTIONS

# Forest Certification

## *Multiple standards advance sustainable forest management*

*Kathy Abusow*

*Great strides in knowledge, science and technology have allowed the forest sector to continually improve the way it manages the forest resource. This coupled with progressive legislation means that harvested areas are being regenerated and wildlife habitat protected.*

### TERMINOLOGY

**Certification** – the voluntary process by which planning, procedures, systems and performance of on-the-ground forestry operations are audited by a qualified and independent third party against a predetermined standard. Forest operations found to be in conformance with the given standard are issued a certificate. [hence certification].

**Chain-of-Custody** – a system to track a specific wood product from an exact source of certification through the processing and marketing channels to the final user; can also be audited by a third party.

**Labeling** – when chain-of-custody for a product has been verified by a third party, the product may carry a label indicating that it came from a forest managed to one of the recognized standards. Labeling is optional.

**Life-cycle analysis** – an evolving process for assessing environmental effects at all stages of a product's life including resource procurement, manufacturing, construction, service life and disposal; designed to help us understand the total environmental impact of products, including the production process.

### SOME FACTS:

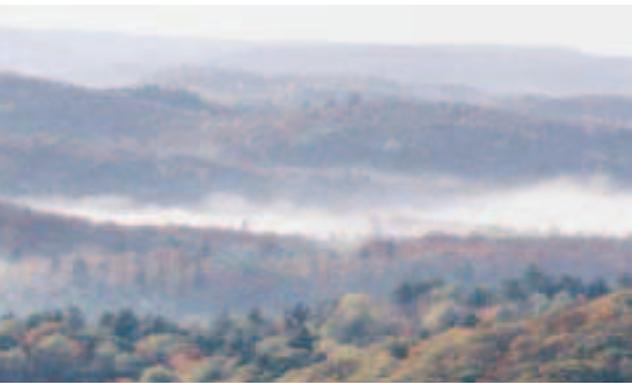
- In the U.S., 67% of the 747 million acres of forest land is commercial forest land. Canada has over 1 billion acres of forest and, although 56% are designated for commercial use, less than 30% are actually being managed for wood production.
- In the U.S. about 2% of its commercial forest is harvested annually. In Canada less than 1/2 of 1% of its commercial forest is harvested annually.
- North America's forests are increasing not decreasing. The United Nations Food and Agriculture Organization's [FAO] State of the World's Forests 2001 reports that North American forest cover expanded nearly 10 million acres over the last decade.
- Between them, Canada and the United States contain 15 percent of the Earth's forest cover [10 percent in Canada and 5 percent in the U.S.].
- Canada has over 90% of its original forest cover, while the U.S., with its larger population, has maintained 72% of the forest cover existing in 1600, with no decrease in forest area since 1920.

In recent years, new tools to improve forest management have emerged in the form of voluntary standards similar in concept to the product and construction standards used by building professionals every day.

A successful audit to these voluntary standards by an independent third party results in certification and provides added assurance that the forests are being well managed. However, certification is still relatively new. It is costly, it takes time to achieve, and with some systems the standards are still being developed.

As a result, the availability of "certified" wood products is still small relative to the overall supply. In fact, forest management certifications in both Canada and the U.S. account for approximately 10% of the managed forest area.<sup>1</sup> Moreover, less than 1% of the managed forest area in both Canada and the U.S. is certified to the FSC – a standard that most environmentalists often suggest be specified [see Standards sidebar].

One need not be dismayed by the small amount of certified wood available because, even though certification provides an added assurance of responsible forest management through a third party audit, the vast majority



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of wood products produced in North America do come from well-managed forests. The incorporation of new knowledge, science, technology and legislation has been improving forest sustainability, and now certification is added to that mix to give the added proof that forests are well managed.

#### **MULTIPLE STANDARDS INCREASE COMPETITION**

There are over 50 voluntary forestry standards world-wide, and five certification standards in use in North America. Why so many when one standard would seem to simplify the process for all parties concerned? Alas, we are talking forests, not toasters.

The reality is that one standard could not easily address the diversity of forest types and ecosystems across North America, not to mention the range of tenure systems from public to private ownership, the different needs and operating systems within a business, including their varied sources of wood supply, and the different needs and priorities of users of wood products.

What is important is that all of the standards share the objective of improving forest management, based on balancing economic, social and environmental goals, but none use the same approach to get there.

While having one standard could run the risk of not addressing the forest management realities of many operations, many standards will likely result in more widespread application, and more “added assurances” of sustainable management for designers and users of wood products. Moreover, multiple standards bring competition in certification and labelling costs. While designers and buyers might want that “added assurance”, they don’t usually want it at a higher cost.

1. The various forest certification standards available use different approaches to give added assurance that forests are sustainably managed. Photo by Malak.

#### **FOREST CERTIFICATION STANDARDS IN NORTH AMERICA**

**[ISO 14001] International Organization for Standardization** – the most widely recognized standard for environmental management systems. Forest managers identify the environmental aspects of their operations, determine which ones are significant, and build management programs with performance objectives to manage the identified environmental risks. Although not a forest-specific standard, ISO offers a special technical report ISO 14061 that is specific to forestry and assists with implementation of ISO 14001 in forestry. ISO 14001 is often used as a foundation for moving to some of the forest-specific standards outlined below. [see [www.iso.ch](http://www.iso.ch)]

**[CSA] Canada’s National Sustainable Forest Management Standard**, published in 1996 by the Canadian Standards Association [CSA] according to nationally and internationally recognized criteria for standards development. Created by a multi-stakeholder committee representing the interests of government, industry, private woodlot owners, academics, professionals, aboriginals, consumers, environmentalists, and workers, the Standard is based on nationally and internationally recognized criteria for sustainable forest management, and takes into account environmental, social and economic factors. The standard also benefits from a strong systems foundation and requires a rigorous public participation process. In 2001 the CSA launched a chain-of-custody and a labelling option. [see [www.csa-international.org/certification/forestry/](http://www.csa-international.org/certification/forestry/)]

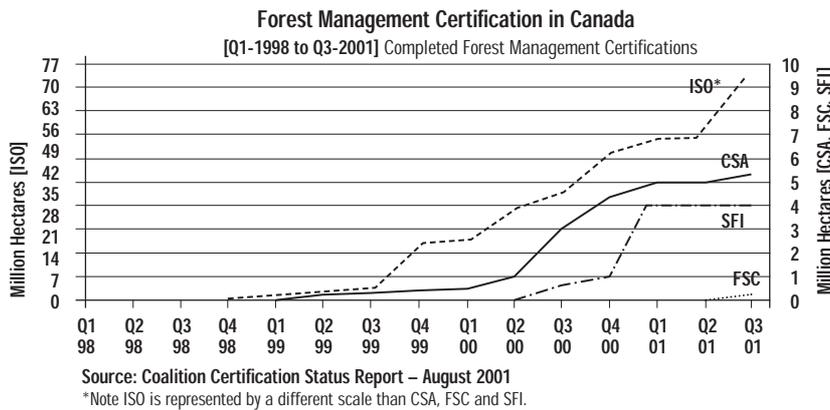
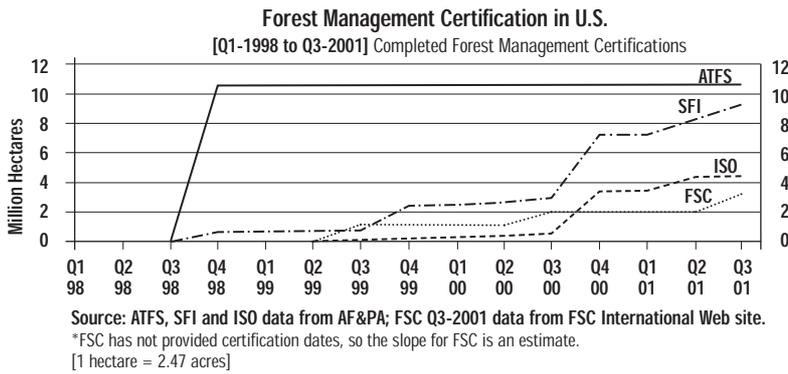
**[SFI] The Sustainable Forestry Initiative®** – adopted by the American Forest & Paper Association [AF&PA] in October 1994, it includes environmental objectives and performance measures and integrates the growing and harvesting of trees with the protection of wildlife, plants, soil and water quality along with other conservation goals. An independent External Review Panel, comprised of representatives from the

environmental, professional, conservation, academic and public sectors reviews the program and advises AF&PA on its progress. Member companies of the AF&PA must adhere to the SFI program, which may also be used by other companies under license. An SFI label launch is expected in early 2002. [see [www.afandpa.org/forestry/sfi\\_frame.html](http://www.afandpa.org/forestry/sfi_frame.html)]

**[ATFS] The American Tree Farm System** – developed in 1941 and sponsored by the American Forest Foundation to provide conservation education to non-industrial private forestland owners. Those seeking certification must have a written management plan based on the Tree Farms’ sustainable forest management standards and guidelines. Volunteer foresters conduct the certification inspections. The AF&PA recognizes the ATFS as being an acceptable alternative to SFI for non-industrial private landowners. [see [www.treefarmssystem.org/treefarm/index.htm](http://www.treefarmssystem.org/treefarm/index.htm)]

**[FSC] The Forest Stewardship Council** – an international non-profit organization founded in 1993 that oversees the development of national and regional standards based on its 10 overarching forest principles and associated criteria. The FSC places a strong emphasis on social, aboriginal and labour issues, and has the support of major environmental groups. In Canada, FSC has yet to develop and endorse a set of regional standards. A national boreal forest standard is being planned and one approved FSC standard is in place for the Maritime region. In the U.S. it is developing a variety of regional FSC standards.

FSC certification levels will likely remain quite low until its standards are finalized and businesses know what is expected of them. And while environmentalists are encouraging designers, code writers, and retailers to specify FSC-only, less than 1% of the managed forest area in both Canada and the U.S. is currently certified to the FSC. The FSC offers a chain-of-custody and labeling option. [For Canada visit [www.fscscanada.org](http://www.fscscanada.org), for the USA visit <http://fscus.org/html/index.html>]



Third party certification builds on the reality that forests are well-managed in North America, and provides designers with the added assurance that wood products come from well-managed forests.

And, as Life Cycle Analysis becomes more prevalent in choosing building products and methods, wood products have the scientific proof of their beneficial environmental qualities – from forest, through service life, to final disposal or re-use – a claim few other construction materials can make. 

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- 1 If ISO certifications are counted, the area certified in Canada increases to about 55% of the total managed forest area, however because ISO is not a forestry-specific one, some prefer that ISO certifications are not tallied together with the others.
- 2 While the area of certified forests is still small relative to the overall supply, there are still resources available to track them down – [www.certifiedwood.org](http://www.certifiedwood.org) provides a listing by company of certifications to the FSC in North America and [www.certificationcanada.org](http://www.certificationcanada.org) gives an update on each standard currently in use in North America, relevant publications, as well as a listing of companies that have achieved certifications.

## MUTUAL RECOGNITION – A COPING MECHANISM

The majority of players involved in certification support the need for some sort of internationally agreed upon criteria to assess the credibility of a given standard. Such recognition will help designers, retailers, and consumers cope with the diversity of standards.

The credibility of a standard does not rest on the content of the standard alone but also on factors such as who developed it, how it was developed, whether it is scientifically supported, who audits it, and how the auditors get accredited to do the audits.

An International Forest Industry Roundtable has initiated the work of drafting criteria and setting up a credible governance structure to oversee an international mutual recognition framework. In addition, the Pan-European Forest Certification Council [PEFCC] already has a functioning mutual recognition program that has endorsed several European national standards representing some 94 million acres world-wide of certified forests. [see [www.pefcc.org](http://www.pefcc.org)]. The PEFCC is now opening its doors to non-European standards, and the developers of both the CSA and SFI standards, as members of PEFCC, are now interested in pursuing PEFCC endorsement of their standards.

## SUPPLY REALITIES

All credible forest-management standards promote sustainable forest management. Their recognition in the marketplace will encourage their use. However, encouraging is quite different from specifying certified wood, which is likely to result in disappointment.

There is a shortage of supply in wood derived from certified forests.<sup>2</sup> Certification is rigorous. It takes time and money. The supply scenario will change in the next few years, however, businesses with limited human and financial resources, will have difficulty implementing a voluntary certification standard.

While forest certification standards are about the forests and how they are managed, and while chain-of-custody audits track wood from the source of certification to the end user, neither deals with the significant environmental issues related to raw material transportation, manufacturing, construction, service life and disposal.

Such Life Cycle Analysis will likely become more prominent for all types of products. The early work of the ATHENA™ Project shows that, compared to other building materials, wood products derived from well-managed forests, have the lowest overall effect on the environment.

## ATHENA LIFE-CYCLE STUDY RANKS WOOD ABOVE STEEL & CONCRETE

The ATHENA™ Sustainable Materials Institute's ultimate goal is to encourage the selection of material mixes that will minimize the environmental impact of a building over its life-cycle. The ATHENA computer model was used to compare alternative wood, steel and concrete structural designs for a three-story office building. The model found the structure built with wood to have the lowest environmental effect based on raw materials and energy use, and emissions to air, water and land. The findings are the result of a five-year research program involving architects, environmentalists, economists, engineers, and representatives from the steel, concrete and wood industries. For further information on the ATHENA study visit the Canadian Wood Council's web-site at [http://www.cwc.ca/publications/tech\\_bulletins](http://www.cwc.ca/publications/tech_bulletins). Information on the Athena Sustainable Materials Institute can be found at [www.athenasmi.ca](http://www.athenasmi.ca).