Sustainable forest management certification: The Canadian programme¹

by Gerald Lapointe²

In 1994, the Canadian Standards Association (CSA) was asked by a coalition of twenty-three Canadian forest industry associations to undertake development of standards for Sustainable Forest Management (SFM). CSA agreed with the proposal and, for this purpose, formed a Technical Committee with representation from a wide variety of interested parties, including producers, woodlot owners, professionals and scientists, public and environmental groups, and governments. The open process, which was entirely that of CSA, was completed in two years, with the draft standards being approved by the Standards Council of Canada (SCC) as National Standards of Canada in September 1996. Verification that the standards have been achieved is accomplished through an independent audit conducted by a Registrar (certifying organization) accredited by the SCC. Certification is voluntary.

The Standards framework consists of an environmental management system which is consistent with that of ISO 14001; however, requirements also include a public participation component, field performance measures, and the use of national SFM Criteria and Indicators developed by the Canadian Council of Forest Ministers, which in turn are based on results of the international Montreal process.

En 1994, une coalition de vingt-trois associations de l'industrie forestière a demandé à l'Association canadienne de normalisation (CSA) d'entreprendre l'élaboration de normes d'aménagement forestier durable (AFD). La CSA a accepté la proposition et, à cette fin, a formé un Comité technique représentant une grande variété de parties impliquées, dont les producteurs, les propriétaires de boisés privés, les professionnels et les chercheurs, le public et les groupes environnementaux, ainsi que les gouvernements. Le processus ouvert, entièrement orchestré par la CSA, a été complété en deux ans, par l'approbation des normes préliminaires par le Conseil canadien des normes (CCN) et qui sont devenues les Normes nationales du Canada en septembre 1996. La vérification que ces normes indiquent bien ce qu'elles doivent démontrer, est effectuée au moyen d'une vérification indépendante menée par un organisme homologué (une organisation pouvant produire une certification) reconnu par le CCN. La certification est optionnelle.

Le cadre des normes consiste en un système d'aménagement environnemental qui est compatible avec celui d'ISO 14001; toutefois, les éléments requis comprennent une composante portant sur la participation du public, des mesures de la performance sur le terrain, et l'utilisation des Critères et Indicateurs nationaux élaborés par le Conseil canadien des ministres des Forêts, qui découlent des résultats du processus international de Montréal.

Introduction

Four years ago, in 1993, the Canadian forest industry became aware of two trends developing on the international scene. Firstly, there was a growing public concern with the poor state of the world's forests allegedly brought about by improper management practices. The result has been a call for sustainable forest management and a means by which forest managers could demonstrate responsible stewardship. As the world's major exporter of forest products, Canada has a lot at stake in this debate. Canadian industry felt that the sooner it became involved the greater would be the opportunity to participate in developments having an impact on its future.

At the same time, some enquiries were beginning to be made in the marketplace, particularly in Europe, about the availability of certified forest products. This development was being encouraged by some environmental groups which were actively promoting a demand for certified products while simultaneously establishing their own certification process, in the form of the Forest Stewardship Council (FSC), to meet anticipated demand. However, as the FSC is essentially a self-appointed group without accountability, it operates entirely outside of the world's mainstream standards process and lacks credibility with

most major producers and members of the trade. Consequently, the Canadian forest industry felt obliged to pursue development of a more widely accepted international standard for sustainable forest management (SFM) through the International Organization for Standardization (ISO). The first step would be development of SFM standards for Canada, through the appropriate standards' mechanism, and then use the acquired experience in international discussions.

The Canadian Standards Association (CSA)

To pursue its objectives, industry formed a Coalition of twenty-three forest industry associations from across Canada, representing virtually the country's entire forest products sector. The Coalition in turn engaged the Canadian Standards Association (CSA), an accredited standards — writing organization, to undertake development of the SFM standards.

The CSA process for standards development is both open and inclusive, and involves the establishment of a Technical Committee set up for that purpose. The CSA SFM committee comprised thirty-two voting members, from which a Chair was chosen, and fifteen to twenty associate members and observers. To ensure appropriate representation from interested stakeholders, voting members were drawn in approximately equal numbers from four groups:

1. Producers — industry, woodlot owners and cooperatives.

¹Paper presented at the "Forestry Towards the 21st Century" Symposium sponsored by the Chinese Society of Forestry and the Canadian Institute of Forestry, Beijing, 11–16 June 1997.

²Sustainable Forestry Certification Coalition, Montreal, Quebec, Canada.

2. Professional and scientific — academic, research and professional groups.
3. Public interest — consumer and environmental non-government organizations, and aboriginals.
4. Regulatory — federal and provincial groups.

Committee operations, including voting, were in accordance with procedures used by CSA for all its committees. Associate members and observers participated freely in discussions; voting members were expected to vote as individual rather than as a representative of their organization.

Development of the CSA SFM Standards

Over a two-year period ending in June 1996, the CSA Technical Committee met on nine occasions to produce acceptable drafts of two documents. The Guidance document (Z808) explains the nature of the standard for those contemplating its use, while the Specifications document (Z809) details requirements to be met during the auditing process.

As drafts of the documents were progressively developed, they were made available to any interested party for comments. A series of four meetings was held in various locations across the country to which representatives of the forest community were invited, resulting in written submissions from more than seventy-five groups. One of the meetings was organized specifically for the Canadian Environmental Network (CEN), an association of more than one hundred environmental groups; this was because some environmentalists had refused to take part in the work of the Technical Committee for reasons which the Committee felt were unjustified. These four meetings were over and above the normal requirements of the standards development process.

A formal thirty day public review occurred in the spring of 1996, proceeded by nation-wide advertising in the daily press. Over ninety written submissions were received. In addition, six pilot tests, representing a diverse range of forest conditions and ownerships, were held in different locations. Each test was done by a different group of auditors, the objectives being to determine if the proposed standards were operationally practical, auditable and affordable. Although the three criteria were met, the tests revealed a number of possibilities for improvements to the documents.

Results of the field tests and written submissions from the public consultation and review processes were carefully reviewed and considered by the Technical Committee. Final drafts of the documents were sent to members of the Technical Committee for balloting by July 15, 1996. Although approval required a two-thirds majority, the vote turned out to be unanimously in favour of both documents. The documents were approved in September 1996 as National Standards of Canada by the Standards Council of Canada (SCC), and published by CSA on October 29 of the same year.

National Standards system

The Standards Council of Canada (SCC) is a Crown Corporation having responsibility for all aspects of standards development and implementation in the country; it is also Canada's official representative in international standards bodies such as ISO.

SCC undertakes its domestic responsibilities by administering what is known as the National Standards System, an endeavour which consists of five components:

1. Accreditation of standards — writing organizations.
2. Approval of standards submitted by the above organizations.
3. Accreditation of registrars (certifying organizations).
4. Accreditation of organizations to certify auditors.
5. Accreditation of auditor training courses and course providers.

Taken together these elements are designed to ensure the highest possible quality and consistency throughout the system. The CSA SFM Standards, for example, have passed the first two elements. A procedure is now in place for accrediting registrars and, at the time of writing, at least one registrar has successfully met the criteria. In addition, a system for certifying SFM auditors is currently being developed and is expected to be operational by September of this year. Auditor training courses are being accommodated in a similar manner.

Using standards which are part of the National Standards System provides assurance to the applicant and customers that the standards themselves have been developed by a rigorous, demanding process, and the auditing function will be conducted in a fair and consistent manner by competent registrars and auditors.

Features of the CSA SFM Standards

The CSA SFM Standards are to be used as a tool by organizations interested in continuously improving their management system to ensure field performance is consistent with the goal of sustainable forest management. They are intended to complement existing forest policies, laws and regulations and consist of two basis elements — performance measures and a management system — that are applied to a specified forest area.

Performance Element

This element is based on a national set of Criteria and Indicators (C&I) for SFM which were developed under the aegis of the Canadian Council of Forest Ministers (CCFM). The six Criteria cover the full range of ecological, social and economic values associated with forest ecosystems; they are linked to both Canada's National Forest Strategy (1992) and the Forest Principles adopted by UNCED also in 1992. The Indicators were developed in an open and transparent process with wide representation. Although many of the Indicators are only applicable at regional or national levels, some may be used at the forest management unit level. Collectively, they provide a framework for describing forest management and the state of forests. Over time, their reassessment will demonstrate the degree of sustainable forest management.

The CSA SFM Standards set out some specific performance requirements that must be addressed by the management system and implemented successfully. Through a process of public participation, the applicant must:

1. Address all critical elements of the CCFM's six Criteria for SFM.

2. Develop and address local SFM values, goals, indicators and objectives.

This public participation process will produce management objectives for the applicant and appropriate indicators for measuring the field performance of the SFM system to ensure that the SGFM system is being implemented and producing the intended results.

System Element

To achieve performance objectives, the CSA SFM Standards incorporate a management system which is based on the ISO 14001 Environmental Management Systems (EMS) standard. The ISO 14001 framework has been restructured into four main components, with a system subset within the third:

- Commitment
- Public Participation
- Management System Elements
  - Preparation
  - Planning
  - Implementation
  - Measurement/Assessment
  - Review/Improvement
- Continual Improvement

ISO 14001 framework has been restructured to specifically identify commitment, public participation and continual improvement as a basic structure within which the management system operates. In addition, the CSA Standards emphasize that planning requirements reflect application of the principles of adaptive management, involving the full cycle of considering alternatives; this process includes the making of explicit forecasts, assessing outcomes in relation to the forecasts, and analyzing results in order to make better forecasts.

The CSA SFM Standards go beyond ISO 14001 in their requirement for a public participation process and for the audit to include evidence of system performance. This means that the auditor must include on-the-ground examination of the forest and the result of forestry activities in relation to planned objectives and environmental impacts.

Application of the Standards

Both the CSA SFM Standards and ISO 14001 are similar in terms of their application. As previously indicated, accredited registrars and certified auditors will be available as part of the National Standards System. Auditor qualifications will be similar to those for ISO 14001 but with additional requirements to include professional forestry and other competencies such as wildlife biology.

Application by an organization for an audit leading to certification is voluntary. Following a successful audit, a second full audit will be conducted three years later and every five years thereafter. Documentation audits will be conducted annually.

Applying an environmental standard to a forestry situation is quite different from a manufacturing facility. Differences relate primarily to what is being audited, ownerships and responsibilities. While the following examples relate to Canada,

the factors involved apply in varying degrees in other jurisdictions as well.

First, the CSA SFM Standards apply not only to a system but equally to the management area, i.e. the area to which the system is being applied.

As opposed to a manufacturing plant, the area encompassed by the audit may be very large, typically ranging in size up to a million hectares or more. It will include many forest types and conditions and may not be in one contiguous parcel.

Secondly, ownership of the forest may be different from the organization doing the managing. In Canada, seventy-one percent of forest land is owned by the government (provinces), while forest management planning and activities are usually the responsibility of private forest companies; in some areas there may be more than one operating company on the same forest. Regulations vary by province and government approval is mandatory in all cases.

Similarly, small private woodlot owners, especially in eastern Canada, often band together in regional organizations or associations for purposes of marketing and, in some cases, management. Although the association may apply for certification of its members' lands on a collective basis, some elements are clearly beyond the control of the individual owners.

In the third case, ownership of natural resources other than timber, such as wildlife, is usually that of the province, regardless of actual land ownership. As an applicant for certification can only be responsible for those resources and activities over which he has control, the auditor will therefore have to distinguish between those requirements that relate to the owner and those that are the manager's. In the case of wildlife, for example, a manager may be able to provide suitable habitat, but he cannot be held responsible for population levels.

ISO Forestry Standards

Canada has always been a strong supporter of the need for an international forestry standard, especially through ISO. At the 1995 annual meeting of TC 207, the Technical Committee responsible for ISO's Environmental Management Programme, Canada and Australia made a joint proposal calling for work on a sector specific application of ISO 14001 for forestry.

Although this proposal was turned down, it did generate a considerable amount of discussion, and resulted in the formation of Working Group 2 (WG 2) in Forestry at TC 207's 1996 annual meeting in Rio de Janeiro. The Working Group's mandate is to develop a Technical Report providing information for organizations wishing to apply ISO 14001 to forestry.

Chaired by New Zealand, WG 2 has produced several drafts of the report as well as receiving valuable input from a wide audience at TC 207's 1997 annual meeting in April in Kyoto, Japan. On schedule, WG 2 plans to submit its final report for ballot before the end of 1997. The Working Group is comprised of approximately fifty participants representing twenty-two countries.

Chain-of-Custody and Product Labelling

One aspect of forestry certification that remains unresolved is the question of product labelling. Certification to standards such as the CSA SFM or ISO 14001 refers to the organization's management system and its forest, and not to its products. It allows the organization to promote its certification in advertising, on its letterhead or in other dealings with its customers;

however, labels may not be affixed to its products. This is because not all of its production may in fact be derived from certified forests; the problem is how to differentiate the two sources.

For a product labelling scheme to be valid, there must be an additional audit of the chain-of-custody of forest products. In other words, there has to be a documented and auditable trail from the stump through to the final product, regardless of the number of processing, transportation and handling stages involved. It requires that two lots of products be physically maintained at every stage — certified and non-certified.

Although a chain-of-custody audit in the forest industry may be feasible in relatively simple cases, it is generally considered to be impracticable in an industry noted for multiple sources of fibre supply. It becomes particularly complicated in the case of pulp mills, many of which use both roundwood and sawmill chips, each from many sources, and where the sawmills in turn derive their material from numerous suppliers. The problem is further compounded where recycled fibre is used or when a conversion facility purchases pulp on the open market. There are, in addition, logistical problems in terms of space limitations, fibre handling equipment, species sorts and cost.

An alternate to a full chain-of-custody audit is to use an input-output approach in which the sale of certified products is related to the proportion of certified fibre entering the system. There are several options, one of which is simply the use of a label attesting to the proportion of certified fibre in the product (similar to recycled content); another alternative is to sell as certified a volume of production equivalent to the percentage of certified fibre entering the plant. Discussions on this issue are continuing, although producers are increasingly tending to favour the input-output approach.

Why Undertake SFM Certification?

Although a decision to undertake SFM certification represents a major commitment on the part of any organization, there are three compelling reasons for proceeding:

First, in the context of the current global concern with sustainable development, the certification standards provide a

framework for implementing a sustainable forest management system. Although there have been several previous attempts to deal with increasingly complex forest management requirements, there is now available, for the first time, an all-inclusive, structured and disciplined approach to developing and implementing an SFM system required for today's needs. Furthermore, the system has the necessary built-in flexibility to accommodate changes arising out of acquired experience and increased knowledge. Forest managers are beginning to view the implementation of SFM, with or without certification, as a positive step forward.

Second, along with improved performance, is the ability of forest managers to verify good management practices, and provide the badly needed assurance to customers and the general public. Environmental dialogues to date have been characterized as confrontational, usually based on emotion rather than factual information. Certification, with its third-party auditing component, offers the prospect of changing the tone of environmental debates to focus on continuous improvement and a more scientific basis for dealing with issues. At the very least, it leads to a much more constructive and positive atmosphere.

The third reason, a very pragmatic and practical one, is for producers to ensure their continued place in the marketplace. There seems little doubt that, in time, customers and consumers will be requesting some assurance of good stewardship of natural resources; SFM certification allows the forest community to do this.

Conclusion

SFM Certification is a major step forward in the practice of forestry throughout the world; it represents a significant challenge to everyone involved, but will particularly have a profound influence on professional foresters and their accountability to the public.

Judging by the positive reaction received so far from professionals, organizations and governments, SFM Certification will undoubtedly dominate our approach to forest management well into the next century.