# Environmental Paper Procurement

Review of Forest Certification Schemes in Canada

*Final*

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# EXECUTIVE SUMMARY

Publishers select the most appropriate paper that meets the needs of the publication. Various factors are considered in deciding on the quality of the paper to be used and of course, cost plays a significant role. Recently, some specific publications have selected environmental papers, but publishers and printers still struggle in developing corporate procurement frameworks to address this practice.

The demand for a strategy to guide media companies in this area led to the present close examination of the forest certification schemes in operation in Canada. This includes the schemes of:

- the Forest Stewardship Council;
- the Canadian Standards Association; and
- the Sustainable Forestry Initiative.

A fourth scheme, the Programme for the Endorsement of Forest Certifications was also reviewed.

This report presents the findings and conclusions of that review.

ÉEM inc finds that a sustainable forest is most likely to exist under an FSC certification. A CSA certification can be acceptable but further knowledge of the forest and management practices is required to be sure that the environmental performance of the forest is adequately defined and managed. The SFI Program is weaker with respect to forest management practices and the lack of independence in the certification process in the past means that it is still struggling with credibility issues. Some improvements have been made, but implementation of these will take time.

Availability and cost are key concerns when discussing certified papers. This has not been explored in this review beyond comparing the annual allowable cut of the forests under the different schemes.

With a better understanding of sustainable forestry and the certification schemes, media companies may be able to develop an approach to greening the paper procurement process. Using fibre from certified forests is but one environmental aspect of paper procurement. The use of recycled fibre is paramount.

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# 1 OBJECTIVE OF THE STUDY

The objective of the study was to find the commonalities and differences between the certification schemes in operation in Canada to form a basis for making informed decisions about which environmental papers to promote in media company operations.

Our growing need for paper and other forestry products has put a great strain on forests, both in Canada and around the globe. After the much-publicized destruction of the rainforest in the early 1990s, numerous groups came together in an attempt to create a certification scheme to ensure that the wood we use comes from properly managed forests.

Good forest management also plays a key role in the combat of climate change since a growing forest absorbs $CO_2$ into its wood. This is eventually released as the tree decomposes at the end of its natural life, or as the paper decomposes in the landfill site.

The forest management standards set a series of requirements, guidelines and targets aimed at ensuring the sound environmental management of forest. Forest operators can then be certified against a specific standard.

To track the fibre from forest to end product, pulp and paper producers, paper brokers and printers may apply for Chain-of-Custody certifications, for which further standards have been developed.

The three organizations with forest management standards used in Canada are:

- the Forest Stewardship Council (FSC),
- the Canadian Standards Association (CSA) and,
- the Sustainable Forest Initiative (SFI).

A fourth organization, the Programme for the Endorsement of Forest Certifications (PEFC) is also in operation, but this group endorses certifications delivered by the other schemes and does not operate its own, as described later.

The study did not investigate cost and availability of papers in the Canadian marketplace under the different schemes, but aimed to understand:

- the environmental benefits or shortfalls of the different schemes;
- the rigour of the certification process;
- the uptake of the schemes in Canada;
- the perception of the public;
- the meaning and reliability of the product labels.

# 2 METHOD

ÉEM inc conducted a desktop study of the certification schemes using information available to the public as well as information provided directly by certification bodies. The principal types of information reviewed were:

- the official versions of the standards against which certifications are given for each of the schemes;
- additional information on the website of each certification scheme;
- various certification tracking websites;
- forestry legislation in various provinces;
- forest industry association websites;
- forest protection advocacy websites;
- various NGO forest protection campaign websites; and
- public information from other organizations undertaking similar reviews, such as the UK government

A detailed bibliography of the information consulted is presented in Section 7 of this report.

To compare the different schemes, criteria were developed to cover:

- the reach of the certification schemes;
- the forest management aspects;
- the independence and transparency of the organization;
- the certification process and auditing.

Under these criteria, pertinent extracts of the standards have been presented, along with discussion and conclusions.

The findings are presented in the detailed table in Appendix A of the report, with highlights in Section 3. Further discussion and conclusions are presented in Sections 4 and 5 respectively.

## 2.1 Limitations of the study

As mentioned above, the study did not look into the cost and availability of the papers under the different schemes. Similarly, the study was limited to the environmental aspects of forest management and did not assess the social aspects, such as the rights of indigenous peoples on the forested land. This is a weakness of the study as the social impact of forest management is often closely related to the forest's health and productivity.

Secondly, the study was limited to a review of available documentation. Although this included some case study reports from persons visiting the forests, little of the available documentation answers the question, Has the implementation of the forest management practices required by the scheme resulted in a sustainable forest?

# 3 RESULTS

The findings of the study have been presented in the detailed table in Appendix A. Highlights of the findings are presented in this section.

## 3.1 Uptake of the Schemes in Canada

At present, the three schemes cover approximately 84% of the working forests of Canada, totaling an area of 125 million hectares of forests. CSA certifications cover 62% of certified land, followed by SFI with 26 % and FSC with 14%.

In January 2002, the Forest Products Association of Canada required that all lands under its members' management must be certified by one of the three schemes. This goal is near being achieved.

## 3.2 Forest Management

### *3.2.1 Requirements for forest management*

The three schemes include elements to address the key issues for forest management such as:

- Maximum clear-cut area
- Reforestation
- Pesticide Use
- High Conservation Value Areas
- Wildlife Habitat

However, the approach of the three schemes in addressing these is different:

The FSC has an umbrella standard (Principles and Criteria), which is combined with regional standards so that specific requirements are set out for these elements. Forest management standards have been developed by FSC Canada for the Maritimes, British Columbia and the National Boreal. A further standard is being finalized for Great Lakes/ St Lawrence (areas just south of the boreal forest). These ensure that regional differences in climate and forest type are taken into consideration.

Under CSA, the standard itself defines a system to be used to ensure forest management is adequately addressed, but does not set performance standards. Performance for the forest must be defined with the input of local interested parties in the form of a forest management plan for each forest area. There can be great variation in the forest management plans as a result of the differing local interested parties. If there are no forest or ecosystem protection advocates active in the area, the forest management plan may be less rigorous and may not offer significant improvement over legislative requirements in Canada. Equally, the standards set may be just as rigorous as the FSC

Similarly, an ISO14001 certification indicates that a company has implemented systems to support a commitment to regulatory compliance and continuous improvement, but does not guarantee that the environmental performance of the company is good.

regional standards.

The SFI standard uses a set of Principles, Objectives, Performance Measures and Indicators. Program Participants must apply all relevant portions of the standard, including those indicators defined as "core indicators". Program Participants must address core indicators either by demonstrating conformance with the indicator or, with the concurrence of the verifier, substituting another indicator that more appropriately provides evidence of conformance with the performance measure. The indicators are both systems-based and performance-based. It must be noted that the performance-based indicators tend to be similar to the minimum requirements of the forestry legislation in Canada.

The PEFC is a European based organization that operates worldwide. It assesses certification schemes in different countries to see if they meet the standards of the PEFC. It does not deliver certificates to forests operators. However, products from a forest certified under a scheme endorsed by PEFC can carry the PEFC trademark.

Two other elements of forest management are expressly prohibited by FSC but are not addressed by CSA or SFI:

- Forest conversion from natural forest to plantation
- Genetically modified trees.

### *3.2.2 Annual Allowable Cut*

Although not an indicator of sustainability, the annual allowable cut rate[1], (measured in $m^3$/hectare) for a forest area is one means of comparing the different schemes[2].

Using this indicator, it can first be seen that although the three schemes cover approximately 84% of the working forests of Canada, they only account for approximately 50% of the annual allowable cut. A significantly larger portion of the forest is allowed to be cut in uncertified forests (4.45 $m^3$/hectare) than in certified forests (average 0.84$m^3$/hectare).

There are also great differences in the annual allowable cut between the three certification schemes. Much less cutting is allowed in an FSC-certified forest (0.43 $m^3$/hectare), compared to a CSA-certified forest (0.75 $m^3$/hectare). SFI-certified forests average three times more cutting than FSC forests, at a cut rate of 1.27 $m^3$/hectare.

### *3.2.3 Summary*

In summary,

- The FSC standard has rigorous forest management criteria, adapted to regional forest types. Strengths include the protection of ecologically important forests and the banning of the conversion of natural forests into plantations.

[1] A figure for wood harvested would be better for this comparison but is not readily available. The annual allowable cut has been used as a reasonable substitute.
[2] Note that regional differences in the forest types may also influence the allowable cut rate.

- Under the CSA standard, the forest management practices can vary greatly between certified forests. This is because it depends on the development of a forest management plan for each certified forest. While this flexibility can be seen as a positive adaptive approach, the forest management plan can vary from being similar to the current forestry legislation to considerably better, usually as a result of the number of forest advocates in the area. The CSA standard does not address forest conversion into plantations, or protection of high conservation value areas and wildlife habitat, other than those protected by government.
- The new 2005 version of the SFI standard, which is compared here, makes significant improvements on its previous edition, but still lacks rigour with regards to some forest management issues. When examined closely, the wording of the standard allows for largesse in the interpretation. The conversion of forests and high value areas into plantations is not forcefully addressed. The recent changes to the standard have improved it but many participants have yet to upgrade.
- The PEFC has endorsed the CSA and SFI certification schemes, so weaknesses described in those systems also apply to PEFC.

## 3.3 Certification Process and Organizational Aspects

### *3.3.1 Certification process*

FSC has a transparent certification process, where findings and corrective action requests (CARs) are made public. There is an appropriate degree of separation between the FSC organization and the organization being certified. Strict legal compliance is required.

The CSA process is less transparent as findings and CARs are not made public, but this is not unusual for certification schemes. There is an appropriate degree of separation between the CSA and the organization being certified, and there is an additional degree of separation in the use of accredited registrars. Strict legal compliance is required.

The SFI process is less transparent, as findings and CARs are not made public, but this is not unusual for certification schemes. There is little separation between the American Forest and Paper Association (AF&AP), the Sustainable Forest Board and the organization being certified. The additional degree of separation in the use of registrars is critical in this set up and the accreditation of the registrar becomes important. This is only just being implemented in the last year. Many certificates were issued before this became mandatory. Strict legal compliance is not required.

### *3.3.2 Organizational Aspects*

The FSC is administered by a balanced board representing both industry and environmental and social agendas.

The CSA standard is administered in a similar fashion to all its other standards, with no particular industry bias.

The SFI program is designed by members of the American Forest and Paper Association (AF&PA) for its members with no independent accreditation (at present)[3] and is overseen by the Sustainable Forestry Board, which has a strong industry weighting.

The PEFC organization has a strong industry bias.

It should be noted, that it is in the best interests of all three schemes to certify as many forests as possible (without compromising its credibility).

## 3.4 Labelling and Chain of Custody Certifications

The chain of custody standards are now similar under each of the schemes, although minor differences exist. They all require that the amount of fibre from the certified forest be suitably tracked and verified. They allow for two methods:

- Direct Tracking System. A pulp mill separates certified fibre from other fibre and labels the paper produced as certified fibre. If mixed with non-certified fibre, the ratio of the mix is expressed as a percentage on the label.
- Volume Credit Accounting System. A pulp mill buys 70% of its fibre over a defined period from certified forests, with the remainder from non-certified forest. It can then label 70% of the paper produced as being 100% from a certified forest, with the rest unlabelled.

Note that the same volume credit accounting system can be used by paper-brokers and printers with chain of custody certifications.

Although the methods are the same in all schemes, there are subtle differences, such as:
- the way other fibre is included in the calculations (post-consumer recycled fibre, pre-consumer recycled fibre, other neutral sources, such as agricultural residues, etc;
- required minimum content, and
- application of labels to forest certified under other certification schemes.

As the chain of custody (COC) certifications and product labelling have been in place for over a decade, the FSC labelling is widely recognized by buyers of forest products. At the consumer level, this recognition may be limited. All the FSC papers have a minimum of 70% fibre from an FSC-certified forest (or recycled alternative), usually more. In the coming update to the COC Standard, the labels will be clearer.

The non-FSC paper that carries the FSC Controlled Wood name (no label) assures buyers that the fibre is not only from a legal source, but also not from a high conservation value forest (unless those value have been protected), which is stronger than the SFI or PEFC claims, which focus on the legal aspect only.

[3] Accreditation of registrars (certification services) by the American National Standards Institute Standards Council of Canada will be required starting late 2006.

CSA certification is recognized in the Canadian marketplace, but has yet to be taken up by large paper producers. The CSA labels are straightforward and guarantee a 70% content of certified fibre from a CSA forest (not counting recycled alternatives).

SFI Fibre Source labelling has been in use for some time but does not speak to the content from an SFI certified forest and cannot be relied on. The new COC standards and the new percent content labels are judged reliable but few companies are yet certified to use them. They are available for fibre coming from an SFI certified forest, or a forest certified under the American Tree Farm System (ATFS), a system not assessed in this review.

The PEFC label can be relied upon to ensure that the fibre comes from certified forests through a certified chain of custody, with a minimum content of 70%. For Canada, this means CSA or SFI-certified forests. Weaknesses in the forest certification system diminish the meaning of the label.

## 3.5 Overall Assessment

### *3.5.1 FSC*

FSC has widespread recognition as a forestry standard among consumers, NGOs and business. Although it makes no claims to sustainability, it is the scheme that is most likely to result in a sustainable forest through rigorous performance based standards for forest management.

The COC and labelling system is well established and will shortly be improved for clarity.

FSC papers have a minimum 70% fibre from an FSC forest[4] (or alternative recycled material) and are guaranteed not to come from illegal harvesting or high conservation value forests unless those values have been protected.

### *3.5.2 CSA*

CSA is a widely recognized and respected label, but the label has not yet been widely applied to final products. CSA has certified a large amount of land in Canada.

A significant weakness to the standard is that performance for forest management is defined for each forest and requirements can vary greatly between certified forests. The CSA certification can be relied upon to guarantee compliance to regulatory requirements, but for further performance criteria, the forest management plan of the particular forest must be reviewed. Without further knowledge of the forest and the local management practices, it is not possible to ensure that the cut areas are reasonable, that high conservation areas are being preserved and that natural forest is not being converted to plantations.

CSA labelled papers have a minimum 70% fibre from a CSA certified forest (not counting recycled alternatives). They are guaranteed not to come from illegal harvesting but there is no protection for high conservation value forests, especially in the portion coming from non CSA-certified forests.

[4] Under a volume credit accounting system, described in section 3.4, it is said that fibre comes from a certified forest where it would be more accurate to say that it represents fibre from a certified forest, since batches of certified and non-certified fibre are mixed. In this report, this subtlety has not been emphasized. Under current FSC labeling rules, the volume credit accounting system can only be used where at least 10% of the mixed fibres are from FSC certified forests.

### *3.5.3 SFI*

Prior to the 2005 enhancements to the standard, the requirements with respect to forest management were weak, ill-defined and weakly implemented. Some improvements have been made but performance is still only loosely defined by the standard. Also in the past, self-accreditation by forest operators was allowed. Up until very recently, accreditation by an independent body, of companies providing certification services was not required. The certification of auditors has only been required since 2005. For these reasons, the SFI Program has lacked credibility and had a bad reputation amongst NGOs.

SFI labels are widely used but these tend to be the old-style labels (Fibre Sourcing) that do not speak to the content from an SFI certified forest. The new COC standards and the new percent content labels are not yet in widespread use.

### *3.5.4 PEFC*

Through endorsement of numerous forest certification schemes, the PEFC label is becoming widely recognized, although its COC system was only established in 2004.

The PEFC has endorsed the CSA and SFI certification schemes in Canada, so any weaknesses in forest management described in those systems also apply to PEFC. This is why key NGOs reject PEFC.

There may be a trend for operators sourcing from CSA-certified forests or SFI-certified forests to adopt PEFC labelling, rather than the CSA or SFI label, especially for international trade.

# 4 DISCUSSION

Although the three forest management certification schemes in operation in Canada aim to result in sustainable forestry, it is clear that the standards differ greatly in their requirements on how this should be achieved.

Unfortunately, there are few on-the-ground studies to produce evidence for comparing how effective the three forest management systems are in achieving this goal. Opinions must therefore be based on a comparison of the requirements under the different schemes and an assessment of the rigour of the certification process.

There can also be considerable variation in the forest management practices within the same scheme. This is particularly true of the CSA scheme, where a forest management plan is developed for each forest to be certified. This means that a whole-hearted endorsement of the scheme cannot be made but that CSA-certified forest in particular areas may have the same performance requirements as an FSC forest in the area.

There are numerous areas to be studied when discussing the sustainability of a forest and this review has not covered all of these. However, along with ensuring the sustainability of forest tracts, three important principles should be respected:

- High conservation value forests should be protected;

- Conversion from natural forests to plantations should be avoided; and
- Illegal logging should not be condoned.

# 5 CONCLUSION

In conclusion, ÉEM inc finds that a sustainable forest is most likely to exist under an FSC certification. A CSA certification can be acceptable but further knowledge of the forest and management practices is required to be sure that the environmental performance of the forest is adequately defined and managed. The SFI Program is weaker with respect to forest management practices and the lack of independence in the certification process in the past means that it is still struggling with credibility issues. Some improvements have been made, but implementation of these will take time.

Availability and cost are key concerns when discussing certified papers. This has not been explored in this review.

With a better understanding of sustainable forestry and the certification schemes, publishers and printers will be able to develop an approach to greening their paper procurement. However, using fibre from certified forests is but one environmental aspect of paper procurement. The use of recycled fibre is paramount.

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# 7 ABBREVIATIONS

| | |
|---|---|
| AAC | Annual Allowable Cut |
| AF&PA | American Forest and Paper Association |
| COC | Chain of Custody |
| CSA | Canadian Standards Association |
| FSC | Forest Stewardship Council |
| GMOs | Genetically Modified Organisms |
| NGOs | Non-Government Organizations |
| SFI | Sustainable Forestry Initiative |
| SFM | Sustainable Forest Management |