

Investor Brief

Protecting the value of Canada's timberland investments: The role of FSC certification

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1. Introduction

Timberlands are an attractive asset class for pension funds and other institutional investors, since they generate long-term, sustainable cash flows with strong risk-adjusted returns (trees grow regardless of stock market fluctuations and their volume and value increase as they do), they are good portfolio diversifiers (they are renewable assets that have low correlation with other assets such as bonds and stocks), and they can serve as a hedge against inflation (managers can harvest trees when timber prices are up and delay harvests when prices are down. In addition, increased value resulting from biological growth can help counter the impact of reduced timber prices).

Canada's private timberland holdings attract around C\$20 billion of institutional capital, and they have been growing at a yearly rate of about 20 percent since the early 1980s.¹ How solid those timberland investments are in the long term, however, will depend considerably on whether timberlands are managed in a way that does not diminish or compromise the forest ecosystem's capacity for renewal and timber production. Unlike publicly owned forests, Canada's private timberlands are not thoroughly regulated for environmentally sound management,² and there is evidence that private forests of ecological significance are not being managed sustainably.³ In that context, forest certification can be used as a tool to verify that adequate environmental standards are being observed by forest managers.

This briefing note seeks to assist institutional investors in choosing among the major forest certification schemes available in Canada to mitigate environmental risks and protect the long-term value of their timberland investments. The document shows how Forest Stewardship Council (FSC) certification is superior to competing systems in mitigating risks and adding value to timberland investments (for instance by allowing companies to gain access to new markets that favour FSC-certified products), and why it is preferred by many investors, including some of Europe's largest pension funds.

2. Timberlands as an asset class: benefits and risks

Timberlands have gained growing interest among pension funds in Canada and Europe since the early 1980s, when the first timberland funds were created in the United States. As discussed in the introduction, timberland investing offers several benefits to institutional investors, including portfolio diversification, low correlation with other financial instruments such as stocks and bonds, long-term, low-volatility returns, and inflation hedging potential. Timberlands

¹ Timberland: The Natural Alternative, by Clark S. Binkley et al, *Benefits and Pensions Monitor* (Oct. 2004).

² For instance, while companies managing public lands must respect "allowable annual cuts," which are revised periodically and seek to ensure that the volume of trees harvested in a year does not exceed what the forest can grow, harvest levels on private lands are generally unregulated, which makes it "difficult to determine the level of harvest deemed to be sustainable on these lands." (Natural Resources Canada, *The State of Canada's Forests*, 2009).

³ See Ben Parfitt, "Restoring the Public Good on Private Forestlands," Canadian Centre for Policy Alternatives (July 2008), pp. 4-5; and "Forests: Restoring the Health of Nova Scotia's Forests," A Panel of Expertise Report on Forests to the Steering Panel (Feb. 2010), p. 17.

outperformed inflation by an average of 3% a year over the last century, and historical records show that they have outperformed the stock market at least since 1987, with an annual nominal return of 15% versus 10.54% for the S&P 500 index.⁴

In addition to owning timberland in three major timber-growing regions in the United States (South, Pacific Northwest and Northeast), institutional investors now own timberland in Argentina, Australia, Brazil, Canada, Chile, New Zealand, South Africa and Uruguay, among other countries. This report focuses on timberland investing in Canada, and the risks and opportunities that Canada's timberlands present to investors.

2.1. Timberland investing in Canada

Institutional timberland investing in Canada occurs primarily on privately owned forests, which make up only around 7 percent of Canada's total forested area (of approx. 402.1 million hectares), but are significant in terms of size and production. If they were a national forest, Canada's private forests would constitute the world's eleventh largest and occupy the eighth place in terms of wood production.⁵ Almost one-fifth of Canada's logs and pulpwood comes from privately owned forests, as do most maple products, fuel wood and Christmas trees. Private forests also provide recreational opportunities, support wildlife habitat and biodiversity, help clean water and regulate the climate, and contribute to the beauty of the forest landscape.⁶ Their distribution across Canada varies widely from province to province, with the highest concentration in the eastern Atlantic Provinces,⁷ and smaller but ecologically significant private forests in British Columbia.⁸

Despite their economic and ecological significance, Canada's private forests are not subject to the same regulations that cover public forests and seek to ensure their environmentally sound management (such as limits on the amount of wood that can be harvested each year to ensure the sustainability and long-term productivity of the forest),⁹ and there is evidence that some private forests are being seriously mismanaged. In B.C., for instance, an independent research report claims that logging is in some cases "more than twice what forest auditors say can be sustained," and that "Douglas fir logging... is occurring at a near liquidation pace."¹⁰ In Nova Scotia, where around 76 percent of the forested land is privately owned, a 2010 government expert panel report claims that the "worst cases of unsustainable harvests have often occurred on private lands where large tracts of forests are liquidated for quick cash."¹¹ These studies suggest that private

⁴ See Robert Stammers, CFA, "Timber Investments Cut Down Portfolio Risk" (2008); and International Woodland Company, "Timberland Investments in an Institutional Portfolio" (11 March 2009).

⁵ See Tony Rotherham, "Canada's Privately Owned Forest Lands: Their Management and Economic Importance" (2003) 79:1 *The Forestry Chronicle*, pp. 106-109.

⁶ See Canadian Council of Forest Ministers (CCFM), Fact Sheet: Managing Canada's Diverse Forests (2008).

⁷ See *ibid.*

⁸ Although only 3% of B.C.'s forests are privately owned, they are a highly significant area known for its fertile soils and globally rare Douglas fir trees. See B.C. Private Managed Forest Land Council (September 2008); and Parfitt, *supra* note 3, p. 4.

⁹ See *supra* note 2. Some private forests are regulated in B.C., but "there is widespread concern that [regulations] do not provide sufficient rigour... [and that] standards prescribed are not sufficiently developed to permit effective enforcement." Another concern is that, because the provincial agency in charge of protecting the environmental values of BC's regulated private forests is funded by landowners, it "may not have the independence to rigorously enforce forest management regulations for the public interest." See "Review of the Port Alberni Forest Industry," prepared by Macauley & Ass. Consulting Inc. for the B.C. Ministry of Forests and Range Operations Division (30 Apr. 2007), pp. 34-35.

¹⁰ See Parfitt, *supra* note 3, pp. 4-5.

¹¹ A Panel of Expertise Report on Forests (Nova Scotia), *supra* note 3. The report also notes that these private industrial lands "support some of the best, most productive forests in the province." (*ibid.*, p. 17)

timberland investors may be exposed to significant long-term risks associated with forest management, as future returns depend on maintaining the health and productive capacity of the forest.

2.2. Key Risks of Timberland Investing

Despite their appeal, timberland investments can present considerable risks to institutional investors. The primary risks of timberland investing are market uncertainty (fluctuation of timber and timberland prices associated with macroeconomic conditions such as the health of the housing market), relative illiquidity compared to stocks and bonds (the absence of an organised timber exchange can make it difficult to find a buyer), and environmental risks, which are the focus of this report. As discussed below, certification can help mitigate environmental risks through third-party verification of superior management practices by forest managers.

Environmental risks

Environmental risks of timberland investing include physical risks such as pests, diseases, fire, invasive plant introductions and climatic changes, as well as forest management issues that can affect timber supply, including the quality of silvicultural management and more stringent environmental regulations, such as restrictions on timber harvesting to protect species at risk.

Although events such as fire and disease can harm the timber to be collected and reduce investment returns, large timberland companies reportedly have experienced minimal asset impairment from these factors and claim that, historically, less than 0.5 percent annually of commercial timberland owned by institutional investors has been damaged by fire, insects, disease or other natural hazards. Forest managers also point to evidence that timber exposed to physical hazards such as fire can be salvaged and capture most of the timber's undamaged value (for example, they note that when Mt. St. Helens erupted in Washington in 1980, 85 percent of the timber salvaged was sold for saw timber or pulp).¹²

In the longer term, however, environmental risks, in particular those associated with climate change, promise to become more significant. In Canada, scientists predict higher incidences of forest fire and insect and disease outbreaks as a result of climatic changes,¹³ and the unprecedented pine beetle outbreak in British Columbia is seen as clear evidence that climate change is already affecting Canada's forests.¹⁴ Researchers at the Centre for Forest Conservation Genetics and the B.C. Forest Service are concerned that the rate of climate change anticipated for the next century may exceed the adaptive capacity of many tree species.¹⁵ The risks that climate

¹² See Thomas Healy et al., "Timber as an Institutional Investment" (2005) *The Journal of Alternative Investments* 60-74; and Hancock Timber Resource Group (HTRG), *Timberland Investing, FAQs* (Jan. 2011), http://www.htrg.com/educate_invest_questions.htm.

¹³ See Canadian Forest Service, "Climate change and mountain pine beetle range expansion in [BC]" (August 2003) at: <http://cfs.nrcan.gc.ca/news/92>; and BC Ministry of Forests and Range, "FAQs" (2008), at: http://www.for.gov.bc.ca/hfp/mountain_pine_beetle/faq.htm#2.

¹⁴ Although cyclical infestations of pests and forest fires are not uncommon, the current mountain pine beetle epidemic in B.C. is attributed to human-induced climate change. See FPAC Press release, "Forest Products Industry Applauds Federal Government Action on Mountain Pine Beetle" (23 March 2007); House of Commons, "Canada's Forest Industry: Recognising the Challenges and Opportunities," Standing Committee on Natural Resources (June 2008), 39th Parliament, 2nd sess., pp. 10, 37 and 41; and Food and Agriculture Organization of the United Nations (FAO), "State of the World's Forests 2007," p. 74.

¹⁵ See BC Forestry Climate Change Working Group, "Forest Adaptation," available from: <http://www.bcclimatchange.ca/>. (See "How Forests Help")

change presents to the forest industry are also recognised by the Forest Products Association of Canada (FPAC), which believes that “the economic health of the [forest] industry depends entirely on the health of the forests and a changed climate presents challenges in forest health issues such as the mountain pine beetle epidemic.”¹⁶

In order to deal with those risks, researchers emphasize the importance of forest management practices that protect forest biological diversity to improve forest resilience and enable tree species to adapt to climatic changes.¹⁷ In a 2009 report, a team of government experts concluded that, “given the lack of detailed understanding of climate change impacts on forest insects and disease, a general strategy is to understand and adhere to the principles of Sustainable Forest Management” that deal with “maintaining forest ecosystem biodiversity, health and productivity. To the extent that these principles are used in forest management, Canadian forest managers will be in the best position to cope with future climate change.”¹⁸

Maintaining a healthy forest ecosystem is of particular relevance to investors with very long-term investment time horizons such as pension funds. Timberlands are a long-term investment that depends on the physical growth of trees, so funds typically take between 10 and 30 years to reach maturity and start generating returns. Beyond that timeframe, returns will ultimately depend on the forest’s continued ability to regenerate and produce good quality timber, and to offer other sources of income such as recreation and conservation easements (i.e., financial agreements with interest groups to protect ecologically significant parts of the forest).

Experienced timberland managers agree that, in addition to diversification among timber regions to reduce volatility within individual markets, “the risks of timberland investment can be minimized by actively managing properties in a sustainable manner.”¹⁹ How sustainable forest management should be defined and verified, however, is the subject of disagreement among key stakeholders, including forest managers and major environmental organizations and conservation groups, with forest certification standards at the centre of the debate.

3. Sustainable forest management and forest certification

Forest certification is a market-led, voluntary process whereby forest management practices are independently evaluated against a set of predetermined standards. The underlying goal of forest certification is to promote and recognise forest practices that are environmentally, socially and economically sustainable over the long term.²⁰ The certification process identifies well managed forests, environmentally responsible companies and retailers and, through individual labelling, forest products that originate from sustainably managed forests.²¹

¹⁶ FPAC Press release, *supra* note 14.

¹⁷ All tree species require many generations to adapt to environmental changes, for which they require high levels of genetic diversity. In addition, large-seeded tree species such as oaks, walnuts and hickories depend on animals for seed dispersal. This highlights the importance of biological diversity to the health of Canada’s forests and their ability to adapt to climate change. See Natural Resources Canada, “Climate change and biodiversity: species dispersal, migration, and adaptation,” Vol. 4, No. 1 (Winter 2000).

¹⁸ M. Johnston et al., “Climate change impacts and adaptation strategies for the forest sector in Canada,” 2nd Climate Change Technology Conference (12-15 May 2009), p. 8:
<http://www.for.gov.bc.ca/hre/forgen/interior/SCV444.pdf>.

¹⁹ HTRG, *supra* note 12.

²⁰ See E. Hansen et al, “Forest Certification in North America,” Oregon State U. Extension Service (Feb. 2006), online: <http://www.woodworks.org/files/PDF/keyIssues/ForestCertificationinNorthAmerica.pdf>.

²¹ See Hadley Archer et al., “The impact of forest certification labelling and advertising: An exploratory assessment of consumer purchase intent in Canada,” *The Forestry Chronicle*, March/April 2005, Vol. 81, No. 2.

Forest certification has become a common practice in the northern hemisphere, and some Canadian provinces consider it an integral part of their strategy for achieving sustainable forest management.²² Many companies in the forest sector are also embracing certification as a way to demonstrate to the public, the government, environmental non-governmental organizations (ENGOs) and customers that their forestry operations are sustainable, while forest products retailers use certification labelling as a way to capture new markets and/or gain market advantage.

For investors, certification is a way to verify that forest managers and large forest product consumers are committed to sustainable forestry and thereby mitigate risks associated with forest management and protect the long-term value of their investments. Because there are substantial differences between different certification standards, however, it is essential that investors have a clear picture of the strengths and weaknesses of each standard to determine which of them better serves to protect their forestry investments.

3.1. Forest certification in Canada

The main forest certification standards used in Canada are those of the Canadian Standards Association (CSA), the Sustainable Forestry Initiative (SFI) and the Forest Stewardship Council (FSC). All of them require forest managers to comply with applicable regulations. As discussed above, however, Canada's private timberlands are not subject to the same regulations that seek to ensure that publicly owned forests are managed in ways that do not diminish the forest ecosystem's capacity for renewal. In view of that, timberland investors need to pay careful attention to the environmental requirements of each certification scheme in order to determine which is most likely to result in sustainable forest management on the ground.

As shown in **Table A** and discussed below, a comparison between the three schemes shows that FSC sets forth the most specific and stringent environmental (as well as social) requirements and has a more rigorous evaluation method than its SFI and CSA counterparts. FSC is also more independent from the forest products industry. Taking these criteria into account, FSC appears to provide stronger assurances to investors that forest managers are meeting certain minimum sustainable management standards. FSC certification can also serve to access markets that are not currently available to the other two schemes (see section 3.2. below for details).

Environmental Standards

The FSC international standard sets forth a number of principles and specific environmental criteria that forest managers must meet in order to become certified, which are complemented by regional standards that further define the practices managers must employ in particular types of forests.²³ The FSC's environmental requirements include the establishment of protected areas or zones to preserve endangered species and their habitats; the protection of representative samples of ecosystems in their natural state (and their mapping); and the prohibition of use of genetically

²² Such is the case with BC and Ontario. See Ministry of Forests of BC, "Forest Certification," online: <http://www.for.gov.bc.ca/het/certification/>; and Ministry of Natural Resources of Ontario, "Forest Certification," online: http://www.mnr.gov.on.ca/en/Business/Forests/2ColumnSubPage/STEL02_167417.html.

²³ The FSC standard is made up of international "Principles and Criteria" that apply to all forests, and specific indicators that are developed at the national or sub-national level to reflect the ecological and social traits of forests in different regions of the world. In Canada, regional standards have been developed for the Boreal region, BC, the Maritimes region, and the Great Lakes-St Lawrence region (in draft).

modified organisms (GMOs), of certain groups of highly hazardous chemicals, and of forest conversion to plantations or non-forest land uses (with a few exceptions).

Instead of specific environmental criteria, the SFI contains broad principles and objectives that by and large require the adoption of plans or programs rather than specific results. The conservation of biological diversity, for instance, requires forest managers to adopt programs that promote biological diversity, such as programs that seek to protect threatened and endangered species, or to locate and protect forests with “exceptional conservation value.” Another biodiversity-related provision asks forest managers to apply knowledge gained through research to conserve biodiversity, with key indicators being the collection of information, mapping or participation in relevant programs, and the adoption of a methodology to incorporate biodiversity research results into forest management decisions. More specific environmental requirements are less stringent than those of the FSC scheme. Regarding pesticide use, for instance, the SFI asks forest managers to “minimize chemical use required to achieve management objectives” while protecting people and the environment, but there are no prohibitions of use of certain chemicals, or of GMOs. Similarly, foresters are required to “identify special sites” and to manage ecologically sensitive areas “in a manner that takes into account their unique qualities,” but there is no explicit requirement that they protect those sites or samples of representative ecosystems.²⁴

In addition to incorporating more general environmental requirements than FSC, the SFI deliberately “does not try to duplicate the comprehensive sustainable forestry laws and processes already mandatory in the United States and Canada (...) Given the wide range of due process and compliance mechanisms that ensure conformance with applicable laws, the SFI Standard purposefully focuses on continual improvement of the practice of sustainable forestry, forest productivity, environmental performance processes and community outreach that complements the existing legal framework.”²⁵ Because Canada’s privately owned forests are not subject to the same regulations that seek to ensure the sustainable management of public forests, this lack of specificity means that the SFI program may not provide sufficient guidance on sustainable forest management for private forestlands. The same can be said of the CSA standard, which according to FPAC “was written to complement tough policies, guidelines and government oversight already in place for the public forestlands in Canada.”²⁶

Unlike FSC, the CSA standard does not define environmental standards that forest managers must meet in order to become certified. Instead, it requires forest managers to follow a participatory process to establish a set of environment-related values, objectives, indicators and targets, and to incorporate those elements into sustainable forest management (SFM) plans for defined forest areas. SFM plans must address the conservation of biological diversity, forest ecosystem condition and productivity, soil and water resources, and forest conditions that contribute to the health of global ecological cycles (e.g., carbon storage). SFM plans must also include certain environmental indicators, including the degree of habitat protection for selected species, reforestation success, and levels of soil disturbance. A set of issues must be discussed in the participation process, including the use of pesticides and GMOs, old-growth forest attributes conservation, and timber harvesting practices (e.g., clear-cutting).²⁷

²⁴ See SFI, “Requirements for the SFI 2010-2014 Program: Standards, Rules for Label Use, Procedures and Guidance” (Jan. 2010).

²⁵ *Ibid.*, p. 3.

²⁶ FPAC, “Forest Certification in Canada: The Programs, Similarities & Achievements” (Feb. 2010), p. 11.

²⁷ See CSA Z809-08, *Sustainable Forest Management Standard* (December 2008), Chapter 6.

Evaluation (auditing)

Evaluation constitutes another important difference between the SFI, FSC and CSA certification systems. Independent audits are the backbone of any certification scheme, since they verify that applicants meet certain standards before they can become certified or maintain a certificate after it has been awarded. While the three systems require periodic third-party audits, their approach to evaluation and auditing differ significantly, partly as a result of the standards themselves (e.g., the FSC's more specific environmental requirements lead to more specific conditions that companies must meet to become or remain certified).

Since the SFI standard sets very few requirements regarding forest conditions, "the data and conclusions of SFI audits are focused almost exclusively on the presence of a management system."²⁸ In other words, conformance with the SFI standard is evaluated primarily on the basis of a company's adoption of certain plans or programs. In contrast, FSC certification is largely based on on-the-ground performance, and major failures to conform to any individual principle (developed through detailed criteria) will normally disqualify a candidate for certification or lead to de-certification.²⁹ Major nonconformities with performance standards could also disqualify an organization from CSA certification or lead to de-certification, but as discussed above, those standards are broadly defined objectives that forest managers themselves must develop. In addition, "progress towards" performance targets can suffice for an organization to gain CSA certification, as long as continual improvement in performance is shown.³⁰

In a 2010 study that reviews 130 forest certification audits conducted in Canada under the SFI, CSA or FSC standards, academic researchers conclude that "FSC audits required a much greater number of conditions and recommendations than the other two schemes ... and more changes in all themes (environmental, social, economic and management systems)."³¹ Regarding environmental issues, the authors claim that "the broad and often vague conditions presented in the CSA audit reports parallel similarly broad requirements of the CSA standard, e.g., they call for maintaining water quality and quantity without specifying the means to achieve the objectives (...). In contrast, the FSC audits dealt with more specific conditions, reflecting the specific nature of the FSC standard requirements." For instance, "the specific requirement of the FSC standard pertaining to [high conservation value forests] led to ...many more conditions and recommendations than the other two standards" in that category.³²

Different evaluation approaches and degrees of specificity of requirements can lead to markedly different results on the ground. As discussed above, some private forests in BC reportedly are

²⁸ See Andrew Long, "Auditing for Sustainable Forest Management: The Role of Science," (2006) 31:1 Columbia Journal of Environmental Law, p.20. Long argues that "SFI embraces flexibility throughout its standards, requiring less assessment of forest conditions" than FSC, for instance by requiring participants to adopt "programs to promote biological diversity" rather than requesting that biodiversity "shall be maintained." This difference in the standards, he claims, "translates into a significant difference in the demand for scientific assessment during the audits, in terms of both data requirements and analytical methodology." (p. 22).

²⁹ See FSC, "Structure and Content of Forest Stewardship Standards" (2004, FSC-STD-20-002) p. 2.

³⁰ See CSA SFM standard, *supra* note 27, Annex B, para 4.1 and Annex A, para A.1.

³¹ See Megan Masters et al., "Forest certification audit results as potential changes in forest management in Canada" The Forestry Chronicle, July/Aug. 2010, p. 459 (The study reviews 28 CSA audits; 39 FSC audits; and 63 SFI audits. Personal communication with one of the authors, December 3, 2010).

³² *Ibid.*, p. 456.

being logged at unsustainable rates, yet those forests are either SFI- or CSA-certified.³³ Similarly, according to a 2007 report by Greenpeace, in 2004 Abitibi-Consolidated (now AbitibiBowater) received CSA certification for its Whiskey Jack Forest Management Unit plan even though the forest was severely degraded and there were serious ongoing social conflicts with the Grassy Narrows First Nation. The report claims that while FSC certification would have required tangible actions to redress the grievances of the Aboriginal community, the company received CSA certification with only commitments to procedural steps such as issuing invitations and providing training to staff, while degradation of the forest continued.³⁴ Lastly, a 2010 report on SFI by ForestEthics claims that out of 543 SFI audits conducted between 2004 and 2010, only eight found “major non-compliance issues” (including three industry association membership issues), and none related to key environmental issues such as “soil erosion, clear-cutting, watershed issues, or chemical usage.” The report maintains that the only wildlife-related non-compliance found “was resolved in less than one year based on revisions to the company’s action plans, without proof that the wildlife problem was actually fixed.”³⁵

Origin and governance structure

The SFI, CSA and FSC certification systems also differ in terms of origin and governance structures. While the SFI and CSA schemes were developed by actors closely associated with industry (albeit with public input),³⁶ the FSC standard was developed by an international NGO composed of indigenous peoples, ENGOs, wood trade organizations, foresters and certification bodies representing over twenty-five countries.³⁷ Environmental, social and economic interests are represented in the governing bodies of three systems. However, due to the special status of First Nations in Canada, FSC Canada is governed by *four* chambers with equal voting powers that represent, respectively, aboriginal, social, environmental and economic interests.³⁸

SFI grants equal voting powers to environmental, social and environmental interests, and requires a minimum of 80 percent of those present, which must include at least two representatives of each sector, to approve any action of its Board. This structure ensures that “no sector of the Board of

³³ See Parfitt, *supra* note 3, p. 4 [Parfitt’s report focuses on private forests owned by TimberWest, Island Timberlands LP and Western Forest Products, three companies whose tenures are certified to either the SFI or the CSA sustainable forestry standard].

³⁴ Greenpeace, “Consuming Canada’s Boreal Forest: The chain of destruction from logging companies to consumers” (Aug. 2007), p. 30.

³⁵ See ForestEthics, “SFI: Certified Greenwash. Inside the Sustainable Forestry Initiative’s Deceptive Eco-Label” (Nov. 2010), p. 9.

³⁶ The SFI standard was developed in 1994 by the board of directors of the American Forest and Paper Association, an industry trade group; the CSA standard (rev. in 2008) was developed in 1996 by a multi-interest technical committee coordinated by the CSA at the request of the Canadian Pulp and Paper Association. SFI recognises the CSA standard as its functional equivalent, and both have been endorsed by the Programme for the Endorsement of Forest Certification schemes (PEFC), an umbrella organization that recognizes national forest certification systems and was launched in 1999 by European forestland owners and industry groups. See E. Hansen et al., *supra* note 20 and PEFC, “Who We Are,” at: <http://www.pefc.org>.

³⁷ See Bureau Veritas, “FSC Certification” (2007).

³⁸ The CSA Board of Directors consists of 27 members from the academic, government, industry and consulting sectors. The SFI is governed by an 18-member Board of Directors made up of three chambers with equal representation: environmental, social and economic. In Canada, the FSC Board of Directors consists of 8 members representing four chambers (2 for each chamber): environmental, economic, social and aboriginal. See Metafore, “CSA”: <http://www.metafore.org/index.php?p=CSA&s=169>; SFI, “Governance”: <http://www.sfi-program.org/sustainable-forestry-initiative/sfi-governance.php>; and FSC Canada, “Governance”: <http://www.fsccanada.org/Governance.htm>.

directors can control the future”³⁹ of SFI, but also means that substantial change to the SFI standard, originally developed by the forest products industry, will require a high level of agreement among SFI participants.

Issues	FSC	SFI	CSA
Origin/affiliation	Created by ENGOs, wood trade organizations, foresters, indigenous peoples and certification bodies	Industry-led (American Forest and Paper Association) with some public input	Industry-led (Canadian Pulp and Paper Association); CSA-coordinated multi-interest technical committee
Governance structure	Board of directors made up of four equally powerful chambers: environmental, social, economic and aboriginal interests (the latter only in Canada)	Board of directors made up of three equally powerful chambers representing environmental, social and economic interests	Board of directors from academic, government, industry and consulting sectors
Regulatory requirements	Comply with applicable laws and regulations	Comply with applicable laws and regulations	Comply with applicable laws and regulations
Environmental requirements (key examples)	Set aside areas to protect endangered species/habitats; protect representative samples of ecosystems in their natural state; prohibit use of specific groups of pesticides; prohibit use of GMOs; identify areas of high conservation value and implement detailed management plans to maintain or enhance their attributes	Practice “sustainable forestry;” minimize chemical use required to achieve management objectives; use “least-toxic and narrowest-spectrum pesticides;” adopt programs to promote biological diversity at stand and landscape levels; identify and manage special sites.	Set values, objectives, indicators & targets in SFM plans re: conservation of: biodiversity; ecosystem condition and productivity; soil and water; and forest conditions that contribute to global ecological cycles. Include specific indicators in plans (e.g., degree of habitat protection for species at risk).
Social requirements (aboriginal issues) (key examples)	Recognise indigenous people’s rights to control the management of their lands & resources (unless they delegate it through free and informed consent); ⁴⁰ ensure that forest management does not threaten or diminish the resources or tenure rights of indigenous people; identify and protect sites of special significance to indigenous people; compensate indigenous people for use of their traditional knowledge	Confer with affected indigenous peoples (in public lands); adopt program to enable companies to “understand and respect” traditional forest-related knowledge; identify sites of special significance to indigenous peoples; and address the sustainable use of non timber products of value to indigenous peoples	Engage in public participation process that gives interested parties (in particular indigenous people) a chance to provide input in major management steps that could affect them. Special efforts to contact interested aboriginal communities; recognise aboriginal and treaty rights (without prejudice of future settlements).
Evaluation of conformance with the standard (audits)	Based on overall performance (major failures to conform to any individual principle will normally disqualify a candidate or lead to de-certification).	On the basis of the adoption and/or implementation of plans or programs.	Requires “progress towards” or achievement of SFM performance targets and “continual improvement” in performance.

Table A. Comparison between the FCS, SFI and CSA certification schemes.

³⁹ By-laws of the SFI, Inc., Art. III.5: <http://www.sfi-program.org/files/pdf/SFI%20Inc%20%20Bylaws%20-%20Final%20March%2026th%202010.pdf> (March 2010)

⁴⁰ In BC, this principle requires that “under no circumstances should certification proceed in the face of dissatisfaction of the affected First Nation(s) regarding management activities within the Management Unit.” (FSC-BC Regional Standards – October 2005, Pple. 3, Criterion 3.1)

3.2. FSC as the “gold standard” for forest certification

In view of its greater independence from the forest products industry and its more stringent requirements, leading ENGOs see FSC as the only credible forest certification system currently available. In addition to ENGOs, a wide range of actors see FSC as the gold standard for forest certification, including aboriginal organizations such as Canada’s National Aboriginal Forestry Association (NAFA), reputable certification schemes such as the LEED green building standard (of the US Green Building Council), large forest product retailers/consumers (including IKEA, Kimberly-Clark, Lowe’s, RONA, Staples and Indigo Books), some of Canada’s largest forest companies (e.g., Domtar, Tembec, Al-Pac), and a number of institutional investors in Europe and North America.

According to Domtar, “FSC certification is the benchmark in environmental sustainability and social responsibility for forest management practices... It is also the only standard welcomed and supported by over 85 leading environmental groups.”⁴¹ In view of that, Domtar favours FSC-certified suppliers⁴² and has pursued FSC certification for many of its forest tenures and mills.⁴³ Similarly, Tembec holds FSC certificates in the four provinces where it manages forests.⁴⁴ The company claims that “[FSC] is recognized worldwide as the Gold standard for well-managed forests,” and has pledged to continue to expand its FSC certified operations to demonstrate its commitment to “continuous improvement of forest management and partnership development, including with local First Nations.”⁴⁵ In June 2008, Tembec’s CEO said that it was FSC certification that allowed Tembec to survive the economic downturn that affected the forest industry long enough to be restructured and reborn. According to the CEO, Tembec’s customers, suppliers and employees stuck with the company for two tough years because of its decision to become “the global giant” in FSC certification.⁴⁶

FSC is also preferred by a number of privately owned forest companies. Alberta-Pacific Forest Industries Inc., for instance, gained FSC certification for 5.5 million hectares of its forest tenures in Alberta. According to the company, FSC was chosen because of its “credibility in the marketplace, track record as a results-oriented independent organization, focus on social and economic as well as environmental standards, and endorsement by Aboriginal people, environmental and conservation groups and business.”⁴⁷ Similarly, in August 2008, Kruger Inc. announced its intention to seek FSC certification for its (mostly CSA-certified) operations. A company executive stated at the time that “achieving FSC certification will provide further guarantees that [Kruger] is environmentally responsible and continues to maintain the highest sustainability standards.”⁴⁸ Both Al-Pac and Kruger are members of the Forest Products Association of Canada (FPAC), which in May 2010 signed an historic agreement with nine ENGOs to protect (via conservation and sustainable management) over 72 million hectares in Canada’s boreal forest. Among other things, FPAC members committed to implementing “world-leading” forest management practices in their Boreal tenures, which will use the on-the-ground application of the FSC National Boreal standard as the reference point.⁴⁹

⁴¹ See Domtar, “FSC Certification,” at: <http://www.domtar.com/en/sustainability/certification/3279.asp>.

⁴² See Domtar, 2006 Sustainable Growth Report.

⁴³ See *ibid.* at 14.

⁴⁴ See Tembec, 2007 Environmental Report.

⁴⁵ Tembec Press Release, “Tembec receives FSC certification for its Senneterre operations, Quebec” (30 Sep. 2008).

⁴⁶ See “Tembec plan gets court approval,” by The Montreal Gazette (28 Feb. 2008).

⁴⁷ Alberta-Pacific Forest Industries Inc., *The Advance*, Vol. 1 issue 2 (Fall 2005).

⁴⁸ Kruger, Press Release, “Kruger to Implement FSC Management Certification” (28 Aug. 2008).

⁴⁹ See Canadian Boreal Forest Agreement, Schedule A, article 2(a).

The move toward FSC certification by some of Canada's major forest companies is largely a response to growing demand for FSC-certified products by institutional customers, including large retailers or manufacturers of forest products such as wood construction materials, wood furniture, paper and tissue products. FSC is currently the preferred forest certification scheme of IKEA, Lowe's, RONA, Staples and Kimberly-Clark. Some of these companies adopted procurement policies favouring FSC partly in response to investor concerns (see section 3.3. for details).

In 1999, the Home Depot, the world's largest home improvement specialty retailer (with operations in ten Canadian provinces and over 27,000 employees in Canada),⁵⁰ pledged to increase its sale of FSC-certified wood products. Between 1999 and 2005, its sales of FSC-certified wood products increased from \$16 million to \$350 million.⁵¹ Although Office Depot's 2004 paper procurement policy does not state a preference for a particular certification system, in 2008 the company decided to give preference to FSC-certified papers when all other things (price, quality, service) are equal.⁵² 61 percent of Office Depot's marketing papers came from FSC-certified forests in 2009, an 18 percent increase from 2008.⁵³ 28 percent of the wood fibre that Kimberly-Clark purchased in 2009 was FSC-certified (up from 13 percent in 2008), and the company reportedly "continues to work toward increasing the available supply of fibre from FSC-certified suppliers."⁵⁴

RONA, which has a 17.5 percent share of the Canadian renovation and construction market, reported in 2009 its success in raising the overall proportion of FSC-certified lumber sold in its corporate and franchise network from 2 to 9 percent, noting that while "there is currently limited availability of FSC-certified wood," the "goal is to reach 25% by the end of 2012." Five RONA stores in Ontario and Quebec exclusively offer softwood lumber from forests certified to the FSC standard, which RONA considers "best responds to its requirements with regard to relations with local communities and biodiversity."⁵⁵ IKEA's share of FSC-certified wood also grew from 7 percent in 2008 to 16 percent in 2009, and the company's "long-term goal is to source all wood used in IKEA products from forests certified as responsibly managed... IKEA refers to such forests as preferred sources. Today [FSC] is the only certification scheme recognised by IKEA."⁵⁶

As discussed above, FSC is also the only forest certification system recognized by the LEED green building program, which is being used in hundreds of construction projects across North America.⁵⁷ In 2008, despite the economic crisis, 867 projects received LEED certification in the U.S., while the number of LEED Accredited Professionals grew from 12,497 to 17,846.⁵⁸ According

⁵⁰ Home Depot Canada, "Our Company," online:

http://www.homedepot.ca/communityaffairs/content/en_CA/CAOurCompany.html

⁵¹ The Home Depot, "Wood Purchasing" (17 May 2005), online: <http://corporate.homedepot.com/wps/portal>.

⁵² See Office Depot, "Environmental Paper Procurement Policy & Vision Statement" (2004), available at: <http://www.community.officedepot.com/epap.asp> and Office Depot, "Buying Green: Buying Papers from Certified "Responsibly Managed Forests"," online: http://www.officedepot.cc/environment/buying_green_2.asp

⁵³ See Office Depot, 2010 Corporate Citizenship report, p. 27, online:

http://www.officedepotcitizenship.com/PDF/OfficeDepot_LoRes2.pdf.

⁵⁴ See Kimberly-Clark Corporation, "Performance in 2009: Fibre Procurement," (2010), online:

http://www.kimberly-clark.com/aboutus/sus_2010/sustainability_pg22.aspx.

⁵⁵ In RONA, Annual report, 2009, p. 31, online: <http://www.rona.ca/rona/img/ATTACHMENT1269637075297.pdf>.

⁵⁶ IKEA, 2009 Sustainability report, p. 55, online:

http://www.ikea.com/ms/en_GB/about_ikea/pdf/IKEA_Sustainability_Report_2009.pdf.

⁵⁷ See FSC Canada, "FSC Wood and the Green Building Market" (2008), online:

<http://www.fsccanada.org/woodmarket.htm>.

⁵⁸ See "Green Building Branches Out: For Most, Green Is Rapidly Becoming the Dominant Color in the Woodworking Industry," by Wade Vonasek and Matt Warnock, Wood & Wood Products (1 Feb. 2009), online: <http://www.allbusiness.com/construction/construction-materials-components/11804785-1.html>.

to McGraw Hill Construction's Green Outlook 2009 market intelligence report, green building will constitute 25 percent of all commercial and institutional building starts and 20 percent of residential construction in 2013, up from up from 2 percent in 2005. The report suggests that green building is one area of construction insulated by the economic downturn, and predicts it will continue to grow over the next five years despite negative market conditions to be a \$96-\$140 billion market (up from \$10 billion in 2005).⁵⁹

3.3. FSC certification and investors

Some institutional investors in North America see FSC as superior to competing schemes in mitigating environmental and social risks. Calvert Asset Management, Domini Social Investments and Green Century Capital Management, for example, have pressed companies in their portfolios to obtain or switch to FSC certification. In 2008, Domini filed FSC-related shareholder resolutions at Lowe's, Kimberly-Clark, Best Buy and Home Depot which claimed that FSC is the "only independent certification system in the world accepted by the conservation, aboriginal and business communities."⁶⁰ Calvert filed a similar resolution at Weyerhaeuser in 2006, arguing that FSC goes "beyond compliance with law, and hence provides for strong protection of forest ecosystems and the communities that depend on them."⁶¹ In a 2006 proposal filed at International Paper Co., Green Century objected to the company's certification of its U.S. land holdings to the SFI standard, asserting that SFI has come under "consistent criticism from forest conservation groups because it allows unsustainable forestry practices, such as the conversion of natural forests to single-species tree plantations."⁶²

As discussed below, a number of large institutional investors in Europe and North America also acknowledge the benefits of forest certification in mitigating risks and protecting the long-term value of their timberland investments. Some of these investors have adopted investment policies or strategies that consider FSC to be the best certification system available for environmentally and socially responsible forest management.

3.4. FSC in Timberland Investing

Some of Europe's largest pension plans explicitly recognise FSC as the best certification system available to protect the long-term value of their timberland investments. The ATP Group, Denmark's largest pension fund and one of Europe's largest pension investors, directly owns all the forests it invests in so as to ensure that forestry operations are sustainable. Based on the premise that long-term, healthy earnings and the preservation of the real value of investments require careful consideration of environmental and social issues, ATP only invests in forestry assets certified to the FSC standard, and in forests located in North America, Australia, New Zealand and the EU region.⁶³

⁵⁹ See McGraw-Hill Construction, *2009 Green Outlook: Trends Driving Change*, available at: http://construction.com/market_research/reports/GreenOutlook.asp.

⁶⁰ Resolution filed at Home Depot by Domini Social Investments (2008). Similar resolutions were filed by Domini at Lowe's (2007), Best Buy (2008) and Kimberly-Clark (2007) [Source: Interfaith Center for Corporate Responsibility (ICCR) database].

⁶¹ Resolution filed by Calvert Asset Management Co. at Weyerhaeuser Co. (2006) (ICCR database).

⁶² Resolution filed by Green Century Capital Management at International Paper Co. (2006) (Domini Social Investments filed a similar resolution with the same company in 2008). (ICCR database).

⁶³ See ATP, "Timberland Invest K/S," available at: <http://www.atp.dk>; and Hugh Wheelan, "ATP seeds €400m sustainable forestry investment programme: Fund to buy FSC certified timberland in North America, Australia, New Zealand and EU, Responsible Investor (24 March 2009), online: http://www.responsible-investor.com/home/article/atp_forests/.

ABP, the largest pension fund in the Netherlands, has a responsible investment policy in place that favours forestry projects certified to the FSC standard. Although ABP supports SFI-certified projects in North America on the grounds that the SFI system is “more widespread in North America than FSC,” the fund explicitly recognises FSC to be the “best quality control label for forestry.”⁶⁴ PGGM, the second largest pension plan in the Netherlands, only invests in sustainably managed forests, and sees forest certification as an indicator of sound management. PGGM’s timberland investments are certified to FSC, SFI and other standards, but the fund reportedly envisages “investing primarily in forestry projects that qualify for FSC certification.”⁶⁵

Pensioenfond Metalektro (PME), the Dutch industry-wide pension fund for the metalworking and electrical engineering industry, also pursues timberland investments that are environmentally sustainable. According to Gerda Smits, spokeswoman of PME, the fund incorporates environmental, social and governance criteria in its timberland fund contracts and has “a contractual obligation to pursue FSC.”⁶⁶

In 2008, the California Public Employee Retirement System (CalPERS), the largest pension fund in the U.S., adopted an investment policy that requires CalPERS to seek forestland investments that have achieved or are scheduled to achieve independent forest certification. According to CalPERS’s chief investment officer, “investing in forests is an important move to guard against inflation and the management practices are essential to make sure [the fund’s] assets are standing for generations to come.”⁶⁷ The policy, which was amended in 2010, requires “full consideration of impacts on biodiversity, water and air quality, soil conservation and local communities, especially indigenous groups” in the management of each timberland investment,⁶⁸ which as discussed in this report are aspects that the FSC scheme addresses in a more comprehensive manner than the CSA and SFI standards.

The Nature Conservancy (TNC), a US non-profit that helped CalPERS develop its forestland investments policy, asserts that it “strongly supports FSC as the standard that addresses ecological issues most comprehensively and has the potential to bring the biggest gains to biodiversity around the world.”⁶⁹ TNC has worked with other standards in North America, however, and has been “instrumental in integrating biodiversity considerations into SFI standards.” The Conservancy recognises that SFI “has evolved into a certification system with third-party verification and improved standards.”⁷⁰

⁶⁴ ABP, 2008 Responsible Investment Report, p. 9.

⁶⁵ Investments & Pensions Europe (I&PE), “Another Dutch giant invests in trees” (6 July 2007), online: http://www.ipe.com/news/another-dutch-giant-invests-in-trees_22494.php?s=timber.

⁶⁶ Project M, “Knock on Wood,” June 2009, online: http://www.projectm-online.com/en/perspectives/2009_1/Pages/24Knock.aspx.

⁶⁷ “CalPERS to Invest in the Ultimate Growth Fund--Sustainable Forestry,” California Green Solutions (23 Feb. 2008), online: <http://www.californiagreensolutions.com/cgi-bin/gt/tpl.h.content=1764>.

⁶⁸ CalPERS, Statement of Investment Policy for the Inflation-Linked Asset Class (17 May 2010), Forestland Program, (Attachment D, Section A): <http://www.calpers.ca.gov/eip-docs/investments/policies/inv-asset-classes/ilac-policies/ilac.pdf>

⁶⁹ The Nature Conservancy, “Forest Conservation: Responsible Trade. Forest Certification and The Nature Conservancy,” online: <http://www.nature.org/initiatives/forests/strategies/art22184.html>.

⁷⁰ The Nature Conservancy is an FSC-certified land manager and many of the forests it owns and/or manages are FSC-certified (See *ibid.*). The Conservancy owns one SFI-certified forest in Montana, US. See SFI database, available at: <http://64.34.105.23/PublicSearch/SearchSFIForests.aspx>.

CalPERS's policy does not identify or require any single certification system, but states that CalPERS "shall strive to use the best and highest forest management standards commercially and economically feasible."⁷¹ These qualifiers give considerable flexibility to CalPERS' managers to choose among various certification systems.

In Canada, the Fonds de Solidarité FTQ, a labour-sponsored capital fund that has timberland investments in Quebec covering an area of 150,000 hectares, chose to obtain FSC certification for those forests. The fund's subsidiary, Solifor, decided to pursue FSC certification on the grounds that FSC is the most widely recognised certification system globally (especially in Europe); clients seem to prefer FSC over other certification systems; FSC is more stringent, in particular concerning the environment; and it is the preferred certification scheme of major environmental NGOs such as Greenpeace.⁷²

4. Conclusion

Timberlands are a long-term investment that offers many advantages to pension funds and other institutional investors, including long-term, sustainable cash flows with strong risk-adjusted returns, portfolio diversification and inflation hedging properties. The long-term value of timberland investments, however, depends to a large extent on preserving or improving the capacity of the managed forest to regenerate and continue to produce good quality timber.

As investors with very long-term investment time horizons, pension funds have an interest in protecting the long-term value of their timberland investments and future returns by ensuring that timberlands are managed sustainably. In order to do this, these investors can use forest certification as a means to verify that forest managers are following a set of adequate predetermined environmental (and social) standards.

Investors must pay careful attention to which certification system they choose, in particular in Canada, where timberland investments occur primarily in privately owned forests that are not thoroughly regulated for sustainable management. As discussed throughout this report, not all certification systems offer equal protection to investors. A wide range of actors, including large forest companies, forest products customers and institutional investors in North America and Europe, recognise FSC as the gold standard for forest certification. A comparison between FSC and its two competing certification systems in Canada, namely the SFI and CSA sustainable forestry certification schemes, reveals that FSC has the most stringent environmental and social standards available, as well as a more robust evaluation procedure and balanced governance structure, with equal votes and representation of economic, environmental, social and aboriginal interests.

As the best indicator available that superior forest management practices are being followed on the ground, FSC certification can help pension funds and other long-term institutional investors to protect the long-term value of their timberland investments and thereby secure sound future returns. In that context, pension funds that have not yet adopted timberland investing policies or that currently do not require third-party certification for their investments have the opportunity to adopt or switch to FSC to mitigate risks associated with forest management. FSC certification can also open the door to new markets and customers, including access to the increasing number of institutional customers that have adopted FSC-related procurement policies and/or are seeking to expand their purchases of FSC-certified forest products.

⁷¹ See *supra* note 68.

⁷² Personal communication between SHARE and Fonds de Solidarité FTQ (15 Oct. 2010).

For pension plans that have invested in timberland funds, there is also an opportunity to engage with fund managers to persuade them to adopt, or to move toward, the more stringent social and environmental standards of the FSC. For pension funds that prefer to directly own timberlands in order to ensure sustainable forest management (such as Danish giant pension fund ATP), policies that require FSC certification can help verify that adequate environmental standards are being followed so as to preserve the real value of timberland investments and secure future returns for plan members.

SHARE, June 2011*

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