Gottstein Fellowship Report 2019

Review of Contractor Certification Schemes

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Contents

Executive Summary

This project explored international approaches to contractor certification. This analysis was informed by observations and interviews with participants and users involved with contractor due diligence systems in New Zealand, British Columbia, Canada, the states of Kentucky and Maine in the United States of America, Finland, Sweden and the state of Baden-Württemberg, Germany.

The report details the status of contractor certification internationally, the main policy and regulatory context, key drivers for participation, potential benefits and outcomes, current concerns and impediments from broader adoption. Information was gathered via meetings, discussions and site visits with relevant company representatives, certification scheme managers, certification bodies, auditors, contractors, forest workers, industry associations and policy makers.

Internationally contractors are becoming more sophisticated businesses with significant investments in plant and equipment. Now that timberlands are a recognised class of investment, management and ownership can change as investment portfolios are reassessed. Often the local contractors and their workers are the most stable part of the management arrangements for a patch of forest. For long term knowledge preservation and in turn sustainable management it is important that the significance of forestry contractors is acknowledged and recognised within management frameworks. Contractor certification may be a means of providing contractors with a moat around their business and providing some longer-term security to their business.

Throughout the tour, two main motivations were found for the use of contractor certification. In Canada and New Zealand contractor certification was used for the management of health and safety, whereas in Maine, Sweden and Germany it was used to support sustainable forestry certification schemes.

The study found three success factors for a sustainable forestry contractor certification framework.

- An operational environment supportive of forestry contractor certification that can sufficiently resource the associated overheads of third-party audits and record keeping.
- A framework that empowers and encourages independent contractors.
- An active and engaged contractor association to advocate the benefits of participation to their members.

The following sections summarise key characteristics of the certification schemes reviewed.

Standard and system governance

Jurisdiction: Certification Scheme	Independent Board	Broad Stakeholder input	External Support	External Standard Review	Auditor Quality Assurance	Funding source
New Zealand: Safetree Certification	Yes	Yes	Moderate	No	Yes	Industry levies and certification fees
British Columbia, Canada: BC ForestSafe	Yes	Yes	High	Yes	Yes	Industry levies and certification fees
Kentucky, USA: Master Logger	No	No	Low	No	N/A	N/A
Maine, USA: Master Logger	Yes	Yes	Moderate	Yes	Yes	Insurer support and certification fees
Sweden: PEFC	Yes	Yes	High	Yes	Yes	Certification fees
Baden-Württemberg, Germany: PEFC	Yes	Yes	High	Yes	Yes	Certification fees
International: FSC Type III Group	Yes	Yes	Low	No	Yes	Certification fees

Scope

Jurisdiction: Certification Scheme	Safety Standards	Environmental Standards	Employment Standards	Business Management Standards
New Zealand: Safetree Certification	Yes	Under development	Not mandatory	Leadership & professionalism
British Columbia, Canada: BC ForestSafe	Yes	No	No	No
Kentucky, USA: Master Logger	Few	Yes	No	No
Maine, USA: Master Logger	Yes	Yes	No	Yes
Sweden: PEFC	Yes	Yes	Yes	Yes
Baden-Württemberg, Germany: PEFC	Yes	Yes	Yes	Yes
International: FSC Type III Group	Yes	Yes	Yes	Yes

Jurisdictional Support

Jurisdiction: Certification Scheme	Regulator	Forest Owner / Managers	Wood Processors	FSC	PEFC	Insurers
New Zealand: Safetree Certification	Enabling	Good adoption	N/A	No	No	Yes – subsidise cost
British Columbia, Canada: BC ForestSafe	Full	Full	N/A	No	No	Pre-requisite
Kentucky, USA: Master Logger	Not apparent	Poor	Poor	Enabled	No	Offer discounts
Maine, USA: Master Logger	Not apparent	Varied	Varied	Enabled	No – SFI is a frustration	Discounts and tangible support
Finland: No Scheme	No	No	No	Trying to create opportunities	Support contractors via FM certification	Unsure
Sweden: PEFC	Unsure	Full	Full	No	Full	Unsure
Baden-Württemberg, Germany: PEFC	Unsure	Unsure	Unsure	No	Full	Unsure
International: FSC Type III Group	No	Unclear	Unclear	Yes	No	No

Contractor Types

Jurisdiction: Certification Scheme	Harvesting Contractors	Haulage Contractors	Silvicultural Contractors	Civil and ancillary works	Foresters	Other Forest Users
New Zealand: Safetree Certification	Yes	Loading only	Yes	No	No	No
British Columbia, Canada: BC ForestSafe	Yes	Yes	Yes	Yes	Yes	Yes
Kentucky, USA: Master Logger	Yes	No	No	No	No	No
Maine, USA: Master Logger	Yes	No	No	No	No	No
Sweden: PEFC	Yes	Loading only	Yes	Yes	Yes	No
Baden-Württemberg, Germany: PEFC	Yes	Unsure	Yes	Yes	No	No
International: FSC Type III Group	Yes	Yes	Yes	Yes	Yes	Yes

Jurisdictional Context

Jurisdiction: Certification Scheme	Minimum wage[1] / Average wage[2]	Duty of Care legislation	Workers' compensation	Standard Contracts	Certified Wood Product	Industry due diligence	National Operator qualifications
New Zealand: Safetree Certification	24,745 / 39,024	Yes	Universal	No	Export focus	Yes	Yes
British Columbia, Canada: BC ForestSafe	21,956 / 34,421	Yes	Universal	Unsure	Export focus	Unclear	Yes
Kentucky, USA: Master Logger	15,080 / 51,147	No	For employees of companies	No	Minor	Variable	No
Maine, USA: Master Logger	15,080 / 51,147	No	For employees of companies	No	Export focus for fibre-based products	Variable	No
Finland: No Scheme	Not set / 33,471	Yes	Universal	Yes	Well accepted	Unsure	Yes
Sweden: PEFC	Not set / 47,020	Yes	Universal	Yes	Well accepted	Yes	Yes
Baden-Württemberg, Germany: PEFC	24,531 / 38,971	Unsure	Universal	Yes	Unsure	Unsure	Yes

[1] Real minimum wages for 2021 as calculated by the OECD, source https://stats.oecd.org/index.aspx?DataSetCode=RMW

[2] Average national wages as reported by the OECD in its Better Life Index, source https://www.oecdbetterlifeindex.org/

1. Introduction

Having supported Australian forestry contractors and forest management businesses with due diligence and quality assurance systems for more than 20 years, the author proposed to trustees of the Gottstein fund a review of experiences by other individuals and organisation involved in designing, administering, auditing and using similar due diligence and quality assurance systems internationally. The focus of the project was to understand the key drivers that underpin the success of schemes involved with certifying small and medium sized business who provide services in the forestry sector to meet a minimum set of standards.

Throughout this report the term forestry contractors will be used as a general descriptor for any independent business who provide services to the owners or managers of forests that are being managed to produce wood products. The study was limited to business that provide their services within planted and naturally regenerated forests. The types of services offered by these businesses captured by the term "forestry contractors" includes:

1. Harvesting standing trees and processing them in the forest in preparation for transport to a secondary processing or export facilities.
2. Haulage of logs or wood chips to processing or export facilities.
3. Site preparation, tree planting, protection and tending operations.
4. Forest mensuration and monitoring, and
5. Forest management.

Additionally, the term contractor certification schemes will be used as a generic term to describe an arrangement that involves a governance group setting certification criteria and authorising or enabling independent auditors to validate the conformance of forestry contractors to the certification criteria. Once contractors are found to conform with the certification criteria they are referred to as certified forestry contractors. These arrangements generally then confer some benefit to the certified forestry contractors. Benefits may include a preferred status during contract negotiations or reduced insurance premiums. The administration of the scheme involves a cost that is generally paid for by the certified forestry contractors.

The report will consider the scopes of the contractor certification schemes. The project proposal outlined and approved by the funds trustees indicated that this review will also consider four broad subject matter themes within the design of certification schemes:

1. Worker health and safety
2. Environmental protection
3. Employment terms and conditions, and
4. Business management considerations

2. Methodology

To understand the key drivers and necessary elements of a contractor certification scheme the Gottstein fund supported travel to key international locations who have experience working with small to medium sized businesses that provide services to forestry sector. The locations and organisations were initially selected based on prior knowledge from work in the sector, recommendations, and referrals from auditors with knowledge of the Master Logger Certification scheme, searches on the worldwide web and discussions with the peak organisations involved in managing the two international sustainable forest management certification schemes. These being the Programme for the Endorsement of Forest Certification (PEFC) and Forest Stewardship Council® (FSC®) Certification. The final tour plan and study scope was refined following the review and selection process conducted by the trustees of the Gottstein Fund.

The following places were visited during the study:

- Christchurch, New Zealand,
- Nanaimo, British Columbia, Canada and a local harvesting operation managed by Mosaic Forestry,
- Lexington, Kentucky, United States of America (USA) and harvesting operations in eastern Kentucky,
- Augusta and Fort Kent, Maine, and three harvesting contractors in Maine,
- Helsinki, Finland,
- Upsala, Stockholm and Jönköping, Sweden, and
- Stuttgart, Germany.

Summaries of the Forestry Contractor Certification Schemes reviewed are outlined in the following sections as well as observations by some of the people involved in the implementation and application of the Schemes. Details of the organisation visited, and the certification schemes reviewed are listed in Appendix I.

3. New Zealand – Safetree Certification

3.1 Background and context

Safetree Certification, the contractor certification scheme in New Zealand is run by the Forest Industry Safety Council (FISC), a pan-industry body set up to lead harm prevention efforts in forestry. FISC includes representatives of forest owners, forest managers, contractors, farm foresters, the Accident Compensation Corporation (ACC), WorkSafe, unions and workers. FISC was established is response to a government review into the high numbers of workers being killed in forestry operation in New Zealand[3]. The forest industry and the New Zealand government fund the FISC through a combination of levies and direct contributions. FISC's annual revenue is around NZD[4] 1.5 million. The primary object of FISC is zero fatalities and serious harm injuries in New Zealand's Forest industry.

At the same time FISC was formed, New Zealand introduced the *Health and Safety at Work Act*, *2015*[5] which was modelled on the legal framework for health and safety regulation in Australia. The framework recognised that "a well-functioning health and safety system relies on participation, leadership and accountability by government, business and workers." It sets out principles, duties and rights but does not prescribe solutions. At the heart of the framework is a consultative model that seeks to empower workers to actively identify risk to their health or safety and have them effectively addressed. Businesses have the primary responsibility for the health and safety of their workers and officers within these businesses are made individually accountable to ensure that business understands and is meeting its health and safety responsibilities. Duties are also prescribed for workers to take care of their own health and safety and not put others at risk by their actions. The duties cannot be modified by contract and apply irrespective of the way in which workers are engaged to do their work for a business. Ultimately, this means that a forest owner or manager that engages forestry contractors owes a duty of care to the forestry contractor's workers. The penalties for a business or a director failing to look after the health and safety of workers it influences or directs are significant and varied.

FISC therefore has actively worked to develop resources for the forest industry to assist all parties within the industry work co-operatively and to think differently about achieving safe outcomes. The development of Safetree Contractor Certification, a framework for certifying to forestry contractors, was a significant part of the work program in the early years of FISC. FISC defines, a certified forestry contractor, as a one who has been independently assessed to meet industry-agreed standards of professionalism and safety.

[3] Adams, G., Armstrong, H and Cosman, M (2014) Final report - Independent Forestry Safety Review, An agenda for change in the forestry sector. https://www.fisc.org.nz/uploads/6/6/2/5/66257655/final-report-independent-forestry-safety-review.pdf

[4] NZD – New Zealand Dollars, 1NZD = 0.90AUD (7 June 2022)

[5] Health and Safety at Work Act 2015, New Zealand, https://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5976660.html

3.2 Scope and certification framework

3.2.1 Governance and eligibility

Safetree Certification is governed by the FISC Council, according to Certification Rules developed by the FISC Council. It is supported by a formal issue and complaint mechanism.

As described above, the primary focus of Safetree Contractor Certification is ensuring that a contractor has a well-resourced and functional system for managing the health and safety of its workers and other people who may come in contact with its operations. Any organisation supplying services to the forestry industry may apply to be certified, but the tools developed to support the framework focus primarily on harvesting, haulage and silvicultural operations. Other ancillary services like aerial operations are not explicitly addressed by the scheme tools, despite being an important part of the industry.

The assessment framework covers the standards outlined in Figure 1.

Figure 1 - Safetree Contractor Certification Standards (Safetree Contractor Certification Guidance v1.1)[6]

3.2.2 Certification process

The process for being certified requires a contractor:

- to pay an annual fee of NZD $695.
- complete an online self-assessment which requires contractors to supply company details, copies of current insurance certificates and details of the employment status of its workers.

[6] https://safetree.nz/wp-content/uploads/2018/05/Safetree-Contractor-Certification-Guidance-v1.1.pdf

- arrange and pay for a field audit[7] conducted by an independent auditor selected from a list of authorised auditors. An indicative cost for a full day audit is between NZD800 and NZD1000. The length of the audit depends on the size and complexity of the business. The business documentation is reviewed centrally and then each separate crew is assessed in the field.

Field auditors operate under a code of conduct and are subject to an initial peer reviewed audit and then further peer review every two years. Auditors are not allowed to sell products or services to the contractor. At least two of the critical risks identified in Figure 1 must be reviewed during an initial field assessment. Records of the field audit are collected and reported via an online portal. Once a field auditor is satisfied that a contractor meets the requirements of the certification standard a contractor is added to the Safetree Certified Contractors register[8].

To retain their status as a Safetree Certified Contractor needs to continue paying the annual fee, address any findings raised during the field audit, supply evidence of current insurance and submit to a field audit every two years.

3.2.3 Other considerations

New Zealand's forest industry is built around its significant Radiata Pine (*Pinus radiata*) plantation estate. The trees and forests are predominantly privately owned. The ownership is very diverse ranging from large international timberland investment organisations, through indigenous communities to individual farmers. Tree owners are supported by professional foresters who are either engaged directly by the forest owners or engaged via independent forestry service businesses.

The geology and geography in New Zealand mean that much of the forest industry is conducted on steep grounds so that aerial operations and cable extraction systems are significant parts of the industry. The industry's environmental performance is tightly regulated. Since 2019, the Safetree framework has been enhanced by the addition of environmental questions to mitigate potential impact of harvesting and roading[9].

Currently the management of over 1 million of the 1.8 million hectares of plantation forest in New Zealand is FSC®[10] certified[11]. However, the application of this framework within New Zealand's forestry industry has not been a key driver in the development of forestry contractor certification.

As indicated above the primary driver for forest contractor certification is workplace health and safety. Other national resources that support the certification framework are as follows:

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[7] SafeTree Field Audit criteria v2.0 https://safetree.nz/wp-content/uploads/2019/11/Safetree-Field-Audit_v2.0.pdf
[8] Safetree Certification Register https://safetree.nz/contractor-register/
[9] Safetree Audit - PART 4 – NES, Environmental: Harvesting and Roading https://safetree.nz/wp-content/uploads/2020/10/Safetree-Audit-PART-4-NES-Environmental-Harvesting-and-Roading.pdf
[10] FSC® is a registered trademark of the Forest Stewardship Council. The Forest Stewardship Council is an independent, non-governmental, not for profit organisation established to promote the responsible management of the world's forests.
[11] https://www.nzfoa.org.nz/plantation-forestry/certification viewed 28th May 2022.

- New Zealand maintains a comprehensive framework for defining and assessing the competence of forest workers[12]. These are embedded within the national training and accreditation framework and is supported by New Zealand's education system. Certified Contractors are required to have all their workers trained and assessed as competent to these standards.
- The Accident Compensation Corporation[13] is a government owned and managed insurance framework for supporting anyone in New Zealand who has an accident and is injured. The scheme is funded through levies on personal income, businesses, petrol, vehicle registration or through government funding.
- FISC tracks and publishes whole of industry health and safety performance statistics[14]. These show a reduction in the total number of fatalities and serious injuries annually since 2016, but frequency rates of fatalities are still significantly higher than other New Zealand industries.

The benefits for contractors participating in the system are:

- preferential treatment during contract,
- improved risk management within their own business.

3.3 Observations from interviews

Interviews conducted with contractors who attended the Safetree 2019 Conference: Partnering for Change, indicated some scepticism about the value of the process and frustration that there was inconsistent application of standards. However, since 2019 the framework has continued to grow and there are now more than 280 Safetree Certified Contractors, which suggests more contractors are seeing value in investing in Safetree Certifcation. This investment includes the direct costs as well as time and effort to address the requirements.

FICA the contractor's association associated with the development of Safetree is a keen supporter of the framework. They see significant benefits in being able to promote and support the professionalism of their members and support their capacity to grow and prosper independently from the forest owners and managers. It is viewed as a key element of making New Zealand's forestry industry a better place to work and help attract new workers to the industry.

FISC's National Safety Director, viewed Contractor Certification as a key element to building a better whole of industry safety culture. Owners and managers of forestry contractors can significantly influence the way work is done in New Zealand forests. The contractor certification scheme supports an adaptive management framework that encourages contractors to actively manage risk and find their own solutions to reduce it. In discussion she had frustrations that the initial framework was too

[12] New Zealand Qualification Authority, forestry studies standards https://www.nzqa.govt.nz/nzqf/search/results.do?q=&area=76481&searchSubject=Forestry+Studies+%C2%BB+Agriculture%2C+Environmental+and+Related+Studies&type=&lvl=&credit=&status=Current

[13] https://www.acc.co.nz/about-us/

[14] FISC (2021), Health and Safety Performance of the NZ Plantation Forestry Industry December 2021 https://www.fisc.org.nz/uploads/6/6/2/5/66257655/safetree_-_dashboard_update_may_2022.pdf

focused on safety rules and she wanted the focus to change to address relevant behaviours and important elements of positive and proactive safety culture.

4. British Columbia, Canada – BC ForestSafe

4.1 Background and context

The British Columbia Forest Safety Council (BCFSC) was created in 2004 as a not-for-profit society dedicated to the health and safety of forest workers. Its history is similar to New Zealand's FISC, as it was created following an inquiry into forest sector safety that outlined a comprehensive strategy[15] to improve safety performance in the forests. BCFSC is governed by a representative board for workers, employers, government and Crown Corporations. It has a formal constitution and related by-laws. The organisation is funded predominantly by WorkSafe BC[16] levies paid by employer organisations, but also generates some of its own revenue from the programs it runs. The annual revenue of the business exceeds CAD[17]6 million.

BC Forest Safety (BCForestSafe) is the operating organisation that delivers programs for BCFSC. One of these programs is the maintenance of forestry contractor certification scheme. Certified forestry contractors are known as SAFE Companies. In December 2021, 2,981 companies were SAFE Certified. The other program BCForestSafe delivers is the co-operative development of industry training materials and the delivery of training for forest industry workers both online and in person.

The legal framework in British Columbia (BC) extends a responsibility to workers of forestry contractors to the organisations who engage forestry contractors[18]. This acts to drive a co-operative whole of industry approach to the management of health and safety.

4.2 Scope and certification framework

4.2.1 Governance and eligibility

The BC forest sector developed SAFE Companies (Safety Accord Forestry Enterprise) as a pre-qualification safety initiative required to bid on forestry work in BC and to ensure a minimum standard of safety in all forestry work places. All organisations who wish to conduct operations in BC forests are required to become certified under this framework. As well as forestry contractors of all types of organisations undertaking activities in BC forests are required to be SAFE companies. This includes organisations facilitating recreational activities like Mountain Bike clubs.

[15] Forest Safety Taskforce (2004) A Report and Action Plan to Eliminate Deaths and Serious Injuries in British Columbia's Forests https://www.bcforestsafe.org/wp-content/uploads/2021/01/ForestSafetyTaskForce_2004Report.pdf

[16] WorkSafe BC is the government organisation that regulates workplace health and safety in British Columbia and also manages British Columbia's compulsory workers compensation insurance scheme.

[17] CAD – Canadian Dollars 1CAD = 1.10AUD (7 June, 2022)

[18] S21 Workers Compensation Act, https://www.worksafebc.com/en/law-policy/occupational-health-safety/workers-compensation-act

There are different requirements depending on the size of the business. There are three business sizes recognised, those with more than 20 personnel, those with 2 to 19 personnel and owner operators with 1 to 2 personnel.

The BCForestSafe SAFE Companies framework integrates with BC Work Safe's Certificate of Recognition (COR) program. COR companies receive incentive payments from WorkSafe BC if they are in good standing with WorkSafe BC. SAFE Certified companies are automatically assessed for eligibility for a COR by BCForestSafe after a company successfully completes the requirements of a SAFE Company. There are other requirements related to the BC Work Safe eligibility rules.

4.2.2 Certification process

There are three steps to become SAFE Certified under the standard framework. Figure 2 describes the standard framework. The key three steps are:

1. Register to becomes SAFE Certified.
2. Train an internal auditor or engage an external auditor.
3. Complete a certification audit. Businesses with less than 20 personnel can conduct internal audits which are carefully reviewed and validated by BC Forest Safe staff. While large businesses must engage an external accredited auditor. External audits are also reviewed by BCForestSafe.

The complexity of the certification audit relates to the size of the business. Large businesses need to address 40 questions, mid-size business complete 24 questions and owner operators complete 14 questions. The criteria are based on an adaptive management system framework with specialised forest industry criteria that reflect the regulatory requirements[19]. The framework is frequently reviewed to ensure that it is kept relevant.

The costs of certification include a registration fee which ranges from CAD125 to CAD1,200 depending on the business size. To conduct and internal audit at least one person in the business needs to do Internal Auditor training which is a 14-hour online course with a course fee of CAD525. External audits are conducted on a fee for service basis. External auditors must complete a training programme that is managed by BC Forest Safe.

Throughout the certification process BCForestSafe staff are available to support contractor complete their internal audit and meet the requirements of the program. SAFE Certification must recertify every three years. During the intervening years annual maintenance audits are required. The maintenance can be conducted by Internal auditors. For COR companies, internal auditors need to successfully complete refresher training.

BCForestSafe have developed and maintain an online portal that they encourage SAFE companies to use for the submission of audits. 79% of audits were submitted electronically in 2019.

[19] 2022 BASE Audit Submission Form, https://www.bcforestsafe.org/safe-companies-cor/audits/base-basic-audit-safety-evaluation-audit/

Figure 2 - BCForestSafe SAFE Certification process[20]

4.2.3 Other considerations

The BC forest industry is predominantly based on the use of its extensive natural forests. Approximately 95% of the forest resource is publicly owned. Much of the forest area can be harvested mechanically and extracted using forwarders, however in the coastal forests harvesting requires skilled hand fallers. Tree extractions are undertaken using wheeled skidders, tracked machines and in some instance horses. In the mountainous regions cable haulers are necessary for extraction. Throughout the winter season, operations are conducted on ice and snow.

There are strong rules regulating the environmental impacts of forestry operations in British Columbia and there are two competing standards for voluntarily third-party sustainable forest

[20] https://www.bcforestsafe.org/safe-companies-cor/becoming-safe-certified/who-can-be-safe/

management certification. However, the requirements to be a SAFE Company intentionally do not address any environmental standards.

BCForestSafe maintains and tracks incident statistics and also conducts investigations into the underlying causes of some incidents. Figure 3 and Figure 4 shows that over the past five years good progress has been made in reducing injury rates in forest harvesting operations.

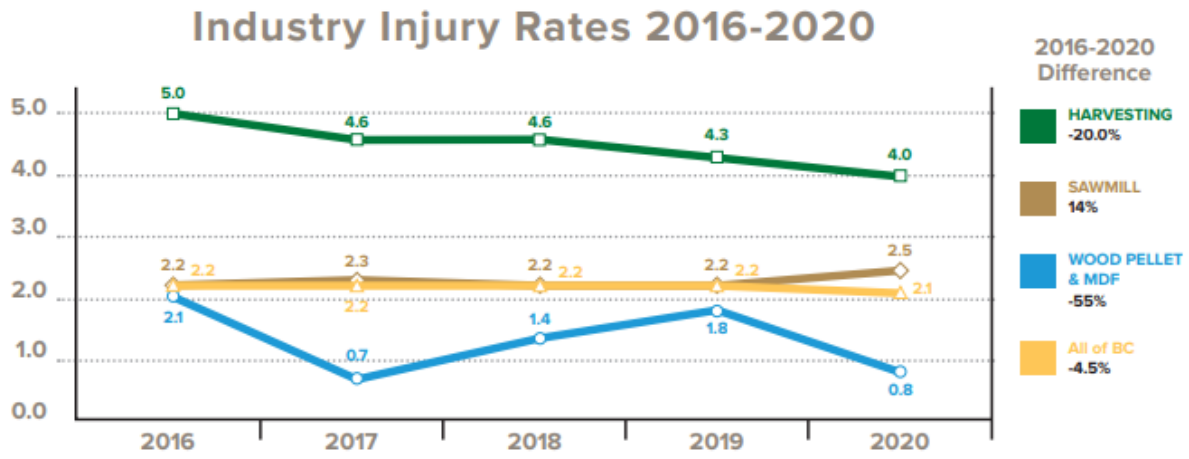

Figure 3 - BC Forest Industry Injury Rates 2016-2020

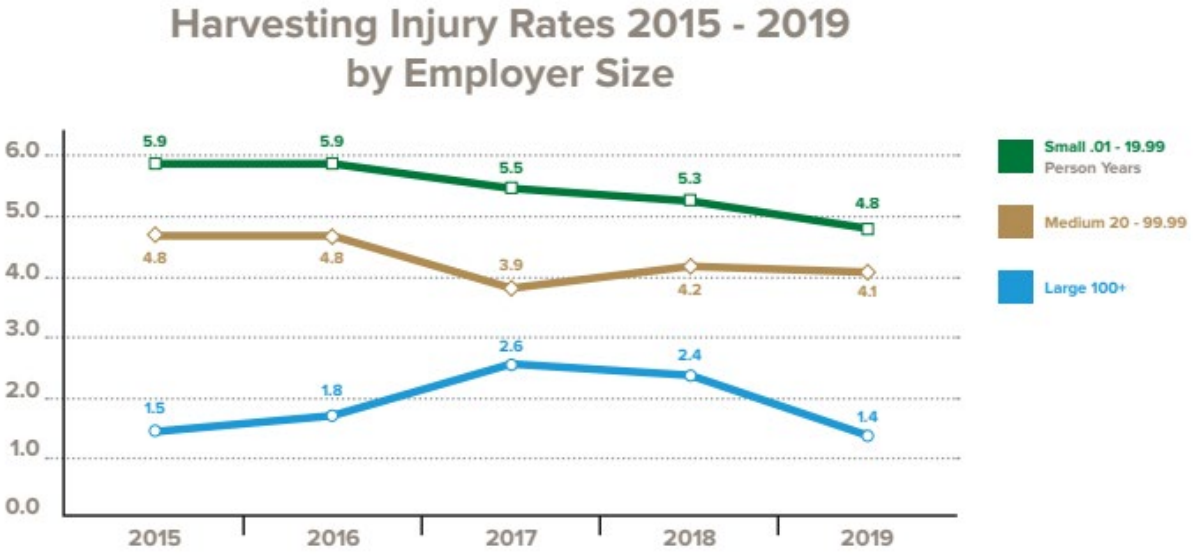

Figure 4 - BC Harvesting Injury Rates by Employer Size 2015-19

4.3 Observations from interviews

During the visit a harvesting operation on private land managed by Mosaic Forest Management Corporation was inspected. The highlight of this visit was watching a small patch (less than 1 hectare) of old growth of Douglas Fir being carefully assessed and skilfully hand fallen. The entire operation was supervised by quality control officers from Mosaic Forestry. This patch falling was a small operation within a larger mechanised clear fall operation of younger forest. Logs were stacked at the roadside and carted in log lengths in excess of 10m.

On-site I was introduced to the owner of the principal contractor for the site, Elco Contracting, who inducted me onto his operation and showed me his documentation. These documents were similar in structure and intent to similar documents found in operations in Australia and included:

- emergency plans,
- site hazard information,
- induction pages for workers and visitors to sign,
- information about environmental controls, and
- possible rare and threatened speed species.

The organisation is requested to complete a check list at the commencement of the operation and submit this to their forest manager. On the site there were at least three independent business cooperating to get the area harvested in accordance with Mosaic's plans.

An issue of concern raised by the Mosaic supervisor was the adequacy of the safety signage for the operation. It was also noted during the visit that my AS/NZS 4602 compliant high visibility garment did not comply with the regulations in BC. The BC rules prescribe a large area of high visibility material and a large St Andrew's cross of retro-reflective material (refer Figure 5).

Figure 5 - High visibility vests on the crew of Elco Contracting.

Back in ForestSafe's office at Nanaimo, discussions with key staff outlined the origins of ForestSafe in 2003 and the processes that support the certification of nearly 3,000 separate companies. BCForestSafe employs more than 30 people who are resourced to undertake meetings, workshops, training programs and check audits all over the province of British Columbia.
Safe Companies is only one of several service offerings, the others are:

- a training facilitation and implementation role,
- 2 focused programs to address the most hazardous activities (tree falling and log haulage), and
- support for the timber products manufacturing sector.

In 2019 there was a large focus on changing the industry training model to a competency-based structure. Over 3 years competency documentation was developed for 40 forestry occupations and related assessor tools. The implementation phase was just commencing at the time of my visit.

ForestSafe also has a licence from BC Worksafe for SAFE certified companies to take advantage of BC Worksafe COR (Certificate of Recognition) program. Companies who elect to do this and continue to hold a valid SAFE certificate are eligible for a 10 per cent rebate on their workers compensation levy.

Benefits for contractors associated who a SAFE certified and COR compliant are:

- permission to operate in BC forestry operations.
- Reduced workers compensation premiums.
- Uniform standards procedures throughout all forestry operations in BC.

5. Kentucky, United States of America – Master Logger

5.1 Background and context

There is not a widely adopted forestry contractor certification scheme in Kentucky. The main system for ensuring the standard of operations is the Kentucky Master Logger program. This program focuses on providing forest workers involved in harvesting with the relevant knowledge to effectively implement Kentucky's environmental and safety regulations. All logging operations must have at least one Master Logger onsite under Kentucky Law. The program is managed by the University of Kentucky (UKY), Department of Forestry. The initial training course is a three-day course focused on the following:

1. Water quality laws and regulations,
2. OSHA regulations and standards,
3. Timber Trespass
4. Best management practices (BMP's)
5. Fatality review,
6. Chainsaw safety and directional felling

The fee for the three-day course is USD[21]85.

To maintain accreditation as a Master Logger six hours of Continuing Education (CE) every three years are required. The programs offered by UKY have focused themes that participants are free to select. The fee for CE is USD50.

In Kentucky, the Kentucky Forest Conservation Act (KFCA – KRS 149.330 to 149.355) require the use of Best Management Practices for water quality protection. The content and details of these requirements are addressed in Master Logging training. Health and safety obligations for logging operations are specified in Federal legislation by the federal Occupational Safety and Health Administration. The focus of the Occupational Safety and Health Standard that relates to Logging, OSHR 1910:266 Logging Operations[22], prescribes minimum requirements for all logging operations throughout the USA.

Within the state of Kentucky forestry related fatalities are significant, "of the 10 farming, fishing, and forestry fatalities in 2020, 7 were loggers."[23] This is from an industry with over 2,600 accredited Kentucky Master Loggers.

[21] USD – United States of America Dollar, 1USD = 1.38AUD (7 June 2022)
[22] OSHR 1910:266 Logging Operations https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.266
[23] Kentucky Injury Prevention and Research Center (2021) Kentucky FACE Program 2020 Annual Report, https://kiprc.uky.edu/sites/default/files/2021-06/2020%20FACE%20Annual%20Report%20Final.pdf

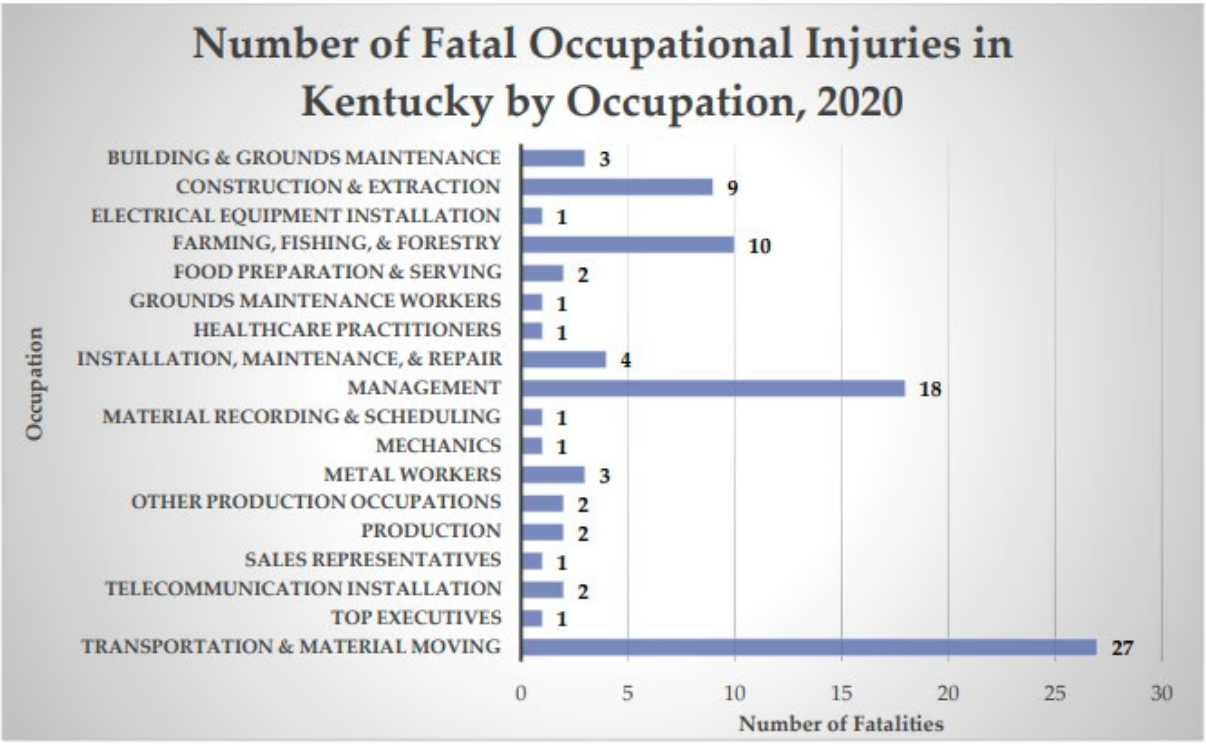

Figure 6 - Kentucky Fatal Occupational Injuries in Kentucky, 2020[24]

The forests in Kentucky are diverse and cover over half the State. The majority are privately owned. The normal method of sale is via a competitive auction of standing trees. All operations are overseen by a professional consulting forester who estimates the volume available for a sale and marks up the operation. Most operations are thinning operations. The forests visited were mixed hardwood forests.

A key issue identified with logging in Kentucky was the costs of workers compensation. For companies that employ manual fallers the insurance premiums were between USD1.20-1.50 per dollar of remuneration. Whereas, fully mechanised operations the premiums were reduced to USD0.30-0.50 per dollar of remuneration.

UKY have developed a Certified Master Logger Program© (CML) for loggers in Kentucky and Tennessee. This involves UKY working with forestry contractors and auditors verifying conformance with a set of criteria. CML was certified by Rainforest Alliance through its umbrella contractor certification SmartWood SmartLogging Program. The program was first established in 2008.

[24] Ibid, p8.

The following subject areas are reviewed by scheme auditors:

1. Best Management Practices – operational practices are reviewed
2. Laws and regulations - Health and Safety, Workmans compensation insurance and various environmental laws are considered
3. Pre-harvest – verifies the presence of a written contract and harvest plan.
4. Harvesting - considers issues like recovery of harvestable volume, retained tree damage, delivery records, working hours and interactions with local community
5. Business – considers a range of business records including maintenance records and employment contracts.

Initially, contractors were offered incentives for participation by the mills who engaged them but this has not continued. Some worker compensation insurers offer further reductions to premium rates for mechanical crews that are also certified under the CMS program. FSC Chain of Custody certified mills use the CMS process to validate their supply chain. However, as there is no domestic demand for either FSC® or PEFC certified solid timber, the only organization's driving demand are pulp and paper operations, which are a small portion of Kentucky's timber industry.

It does not appear that the process had any governance framework that provided forestry contractors any voice in the way the system was administered.

5.2 Observations from interviews

The harvesting operation visited was a manual operation being conducted on behalf of businesses related to Somerset Wood Products. The sale was facilitated by a professional forester. The sawmill running the operation won a competitive tender from two other sawmills. The forest had been marked by the professional forester and it was a selectively thinned from above. Preference had been given to retaining white oak, the highest value timber, for another harvest (see Figure 7). Within the forest there were many species of hardwoods including black oak, cherry oak, white oak, beech and yellow poplar. All logs, peelers and sawlogs, are carted to central merchandising yard managed by the sawmill for further sorting.

The logging crew had three workers, a hand faller, skidder operator and dozer operator. Both machines had open cabins with winches. The dozer was consolidating loads for the skidder. The skidder was hauling about half mile (refer Figure 8). Maximum skids can be up to mile on some operations. There was no formal induction on site and no use of high visibility vests. All operators wore safety helmets.

Figure 7 - Retained White Oak

Figure 8 - Skidder operation.

I also spoke with Chris Terry, the owner and president of Terry Logging. Terry Logging is a highly regarded logging contractor and has received several industry awards. It runs a mechanised harvesting crew working under contract for the International Paper Company pulp mill at Maysville. They work in private forests undertaking clearfall operations. Trees are harvested and hauled to a central merchandising facility in 40 foot lengths. Terry logging uses a feller bunched with a hotsaw to fall trees, a grapple skidder and then a processor with a bucking saw (refer Figure 9) to delimb and cut trees into lengths that can be hauled safely. A separate machine is used to load logs onto trucks.

Terry logging uses its own truck to haul logs. In Kentucky, a trucks maximum pay load is 22 US ton. There is a crew of 5 people including Chris, which aim to produce 7-8 truckloads each day. The advantage of being a mechanised crew is the reduction in workers compensation premium from USD1.50 per USD of payroll to about USD0.20 per USD of payroll. Terry Logging has not participated in the Smart Logger program because the premium reduction provided was not any greater than what he has received by changing his operation from a manual crew to a mechanised crew. Chris has developed his own Health and Safety program which includes drug and alcohol testing.

Figure 9 - Example of a bucking saw. N.B. This is not a Terry Logging operation.

6. Maine, United States of America – Master Logger

6.1 Background and context

The State of Maine is in the northeast of the United States and has a long history of forestry. In some places forests are being logged for the third time since European settlement in North America. About ninety percent of the state is forested. The northern part of the state is forested with extensive natural softwood forests dominated by spruce and fir. Seven large land companies own and manage the forests for timber production. Southern Maine is more closely settled and the forests are dominated with deciduous hardwood species like oaks and maples. In the southern third of the state there are about 300,000 small woodlots about 100 acres in size. Much of Southern Maine's landscape was totally cleared and used for sheep grazing. In the 1700's agriculture moved away following the civil war into the more arable country in the Midwest of the USA.

Figure 10 - Remnants of a dry stone wall used when the area was cleared for sheep grazing.

As in Kentucky, there is environmental law to protect streams and supporting Best Management Practices for Forestry and the safety regulations are set by the Federal government.

The land companies and business purchasing fibre for biomass participate predominantly in the Sustainable Forest Initiative which is the sustainable forestry certification standard recognised by PEFC in the United States. This standard only requires at least one Certified Logging Professional (CLP)[25] to be on a crew. The requirements to be a CLP are similar to those specified for Master Loggers in Kentucky.

The Professional Logging Contractors of Maine (PLC) view this framework as inadequate and disempowering for their members. Dissatisfaction with being required to apply centrally imposed arbitrary standards has led to the development of Master Logger Certification. The focus is on certifying a business with good practices and a demonstrated commitment to continual improvement. The key drivers for PLC are:

- ensuring that forests are sustainably managed in perpetuity,
- forest workers are provided with safe workplace
- members are fairly remunerated.

6.2 Scope and certification framework

6.2.1 Governance and eligibility

The North-East Master Logger Certification (NEMLC) scheme is governed by the NEMLC Certification Board. The board is a multi-stakeholder board of ten people with expertise in one or more aspect of natural resource management and rural economic development. Members must not have any conflicting interests. The board makes all the certification decisions based on verifiable evidence presented by applicants. The scheme is administered by the Trust to Conserve Northeast Forestlands (TCNEF). The framework is periodically audited to ensure conformance with the Smart Logging framework. The scheme is only available to logging contractors. It works in parallel with the North Safe Logger initiative which is an entry level safety and workers compensation compliance training program. There have been instances where certification has been withdrawn from a certified logger. There is also an opportunity for contractors to belong to the TCNEF Chain of Custody group scheme. This enables contractors to take ownership of timber and sell to certified mills when harvesting from certified forests.

There are nine performance goals with multiple related responsibilities. These standards have been cross referenced with all the sustainable forest management standards applicable in the USA including Forest Stewardship Council Principles and Criteria (FSC P&C), Sustainable Forests Initiative (SFI) and the related Programme for Endorsement of Forest Certification (PEFC) as well as relevant laws and regulations.

- [25] MAINE TREE, Certified Logging Professional https://clploggers.com/

The nine goals are:

1. Document harvest operations planning
2. Protect water quality
3. Maintain soil productivity
4. Sustain forest ecosystems
5. Manage forest aesthetics
6. Ensure workplace safety
7. Demonstrate continuous improvement
8. Ensure business viability, which includes ensuring liveable wages and adequate benefits are paid.
9. Uphold certificate integrity

6.3 Observations from interviews

6.3.1 Fort Kent Safety Training and White Oak Incorporated

There was no government specified training framework for loggers and their workers in Maine. The training available to contractors is provided mainly by equipment suppliers and the PLC. Workers Compensation insurers take an active role in promoting good practice. A two-day training workshop was run by the PLC in Fort Kent with the financial support of workers compensation insurers. The program involved practical training sessions including incident investigation, hydraulic hazards and road and job site communication. There was also a driving simulator on display that demonstrated the hazards of distracted driving. Engagement in the workshop was really good.

Following attendance at the workshop, the crew from White Oak Incorporated, a certified Master Logger, conducted a tool-box meeting for a crew of about 20 people during which a hot meal was served. At this meeting each member of the crew was asked to explain lessons learnt at the previous day's safety workshop. This was a great example of active workplace learning and the active application of goal seven of the Master Logger framework.

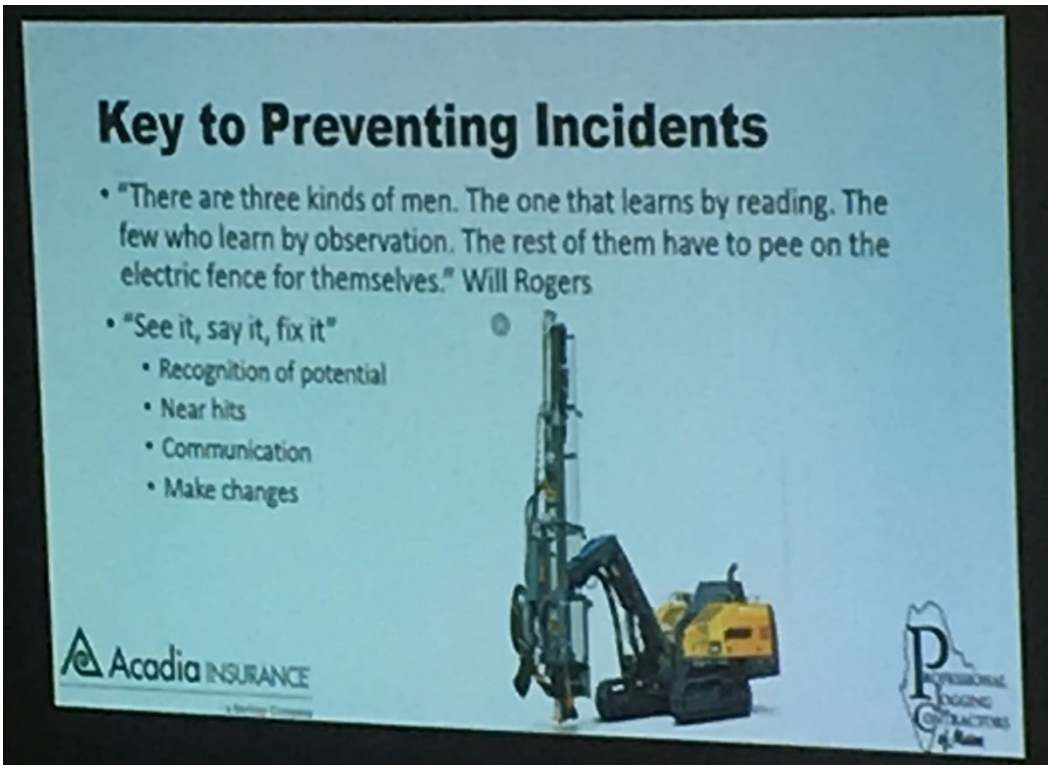

Figure 11 - Example of material presented at Fort Kent safety workshop

A key concern raised by the manager of White Oak during the site visit was the lack of control he had over his operations. He was being asked to quote on jobs with very poor information about the standing timber resource. This lack of empowerment had led him recently to become a certified Master Logger. He is now actively exploring options to get better and more precise estimates of the forests he is being asked to log, ahead of any operations so that he can more accurately price his work.

A key theme of the discussion with PLC members was a dissatisfaction with professional foresters in Maine because of the lack of respect for their members who often had millions of dollars invested in their businesses. Master Logger certification is viewed a tool to address this concern.

6.3.2 Discussion in Maine Legislature

During the visit large forest owners and consuming mills were challenging a bill that would allow Maine loggers the right to collectively negotiate rates of remuneration as a unit. Some of these forest owners and mills were FSC® certified, all were SFI certified. During discussions, these businesses advocated that Maine loggers should not be able to advocate collectively by creating a Collective Bargaining Council. Maine loggers reached out to representatives of the US office of FSC® to explain to the Maine legislature how the system operated and its expectations with respect to the eight International Labour Organisation Core Labour Conventions. To this day, no repercussions have resulted through auditing from the either FSC® or SFI® systems. Maine Loggers are concerned that this could be seen as a system failure. Figure 12 shows the order of proceedings from the Maine

legislature regarding proposed amendments to include logging contractors within the operation of the Maine Agricultural Marketing and Bargaining Act of 1973.

Figure 12 - Maine Legislature agenda April 29, 2019 exploring laws related to collective negotiation of rates by the PLC.

6.3.3 Treeline Inc – A Certified Professional Logging Company

Brian Souers owns a certified Master Logger business, Treeline Inc., in the state of Maine in the United States of America. Brian is a trained forester from New York state who thought he wanted to be a professional musician when he was in school. Now he is the managing director of a diversified business that works in central Maine. Brian has a workforce of more than 100 employees. He manages this with the help of his daughter.

Figure 13 - Treeline Inc's machinery fleet during summer maintenance

There are three key elements of his business:

- forest harvesting, he has more than 10 mechanized crews who work on forests owned by several forest owners in central Maine. The operations are whole tree and cut to length operations and the equipment mix that is used depends on the type of forest being harvested.
- Log haulage and logistics, he has a fleet of log trucks that cart timber from the forest to domestic processing facilities. He also manages aggregation yards where long logs can be stored, sorted, and cut to length to maximise their value.
- Workshops and parts distribution, Central Maine in the middle of winter is a long way from anywhere so Brian has developed the capacity to be self-sufficient. He has expert mechanics on staff who service his fleet of trucks and harvesting equipment in custom designed workshops that are heated using woodfired furnaces. To support these facilities, he has a well-stocked store that sells spare parts and safety equipment. The workshops and store support other contractors and the local community.

Brian sits on the board of the Professional Logging Contractors of Maine, a trade association. He believes that it is important that forestry contractors have a strong voice so that businesses like his

can manage and control their own destiny. As contracting businesses become more capital intensive it is important that the owners and managers of this capital are empowered to optimise it.

He explained that his involvement in the Master Logger certification program arose from a frustration that forest owners and processing facilities were setting rules about the way his staff should be trained and supervised, in response to external pressures for sustainable forest management certification. This top-down, prescriptive standard approach did not recognize the contractor's ability to operate a solid logging business, whereas the Master Logger performance standard does just that, through in-person field auditing. It also allows logging contractors to differentiate themselves from others and become more competitive by showing clients they have met a high standard. Brian has worked with the Trust to Conserve Northeast Forestlands, program manager for the Northeast Master Logger program, to develop a broader and more wholistic workplace-based training and development program for his entire staff.

This development program underpins the management system that he has had externally certified via the Master Logger program. From here Brian has worked with his worker compensation insurer and leveraged the systems and competence of his staff to become a member of a self-insured workers compensation trust. A key element of membership of this trust is the financial sustainability of Brian's business.

Brian's focus on processes and systems enables him to minimise his insurance costs, protect the environment he works in and look after his family and his employees. However, this is only possible because he has a truly safe and sustainable business that looks after the health and welfare of all his staff. Master Logger certification is a key element of this solution.

6.3.4 Western Maine Timberlands Inc

In southern Maine, contractors need to find work from small forest owners. In some Counties tax incentives are paid to landowners for the active management of forests. This means forests need to be harvested to improve forest health. To be able to do this a management plan needs to be prepared and lodged with the local government, but there does not appear to be any obligation to implement the plan or ensure the plan has any particular outcome. There is a push to make it a requirement that a plan must be developed by a forester. In response to this Western Maine Timberlands have taken the proactive step to directly employ a professional forester and prepare their own plans. Western Maine Timberlands run a biomass crew (refer Figure 14) and cut to length crew (refer Figure 15). Western Maine Timberland view Master Logger certification as a point of difference when finding new work with private landowners.

Figure 14 - Mobile chipper loading chip for biomass onsite.

Figure 15 - Maintaining the chain of a processor head on a cut to length operation.

7. Finland

Finland does not currently support a contractor certification scheme despite having a well organised and very capable association that represents forestry contractors and a well-established PEFC group certification system. Koneyrittäjät or the Trade Association of Finnish Forestry, Earthmoving and Energy Contractors (TAFFEC) work in the same building as the Finnish PEFC in Helsinki.

TAFFEC has operated since 1969 and has 2300 members. Figure 16 shows where contractors are used in the wood value chain. The services that TAFFEC provides its members are:

- Influencing on politicians and legislation, authorities, customers, other stakeholders to make the business environment more favorable to its members.
- Lobbying for their members as employers. They have established 3 collective agreements with labour unions, support development of vocational education, safety at work and social dialogue.
- Services for employers include trouble solving, giving advice, training, job costing formulas.
- Negotiating benefits and agreements with suppliers including:
  - insurance products and tariffs
  - purchase of oil products, spare part, tyres, welding equipment etc.
- Debt collection services
- Training and development activities.

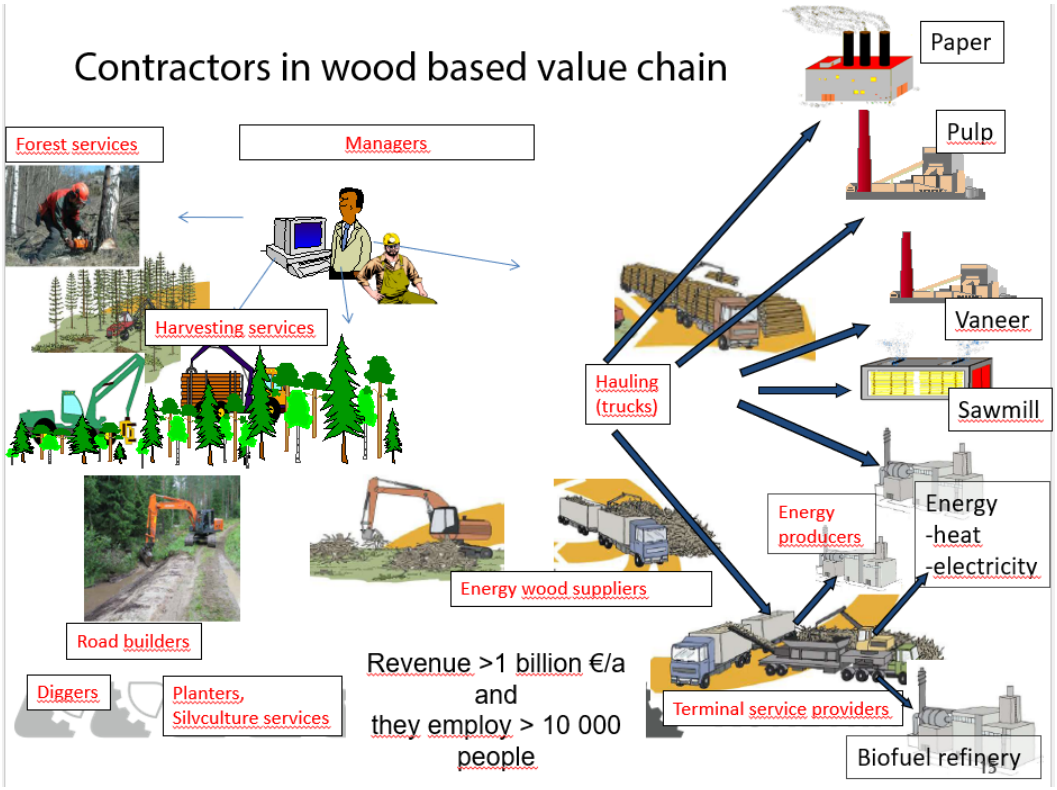

Figure 16 - Finnish contractors in the wood value chain

It is the clear view of TAFFEC that there is no tangible benefit to its members from stand-alone Contractor Certification. They view the system as a means of wood purchasers transferring costs and responsibilities and are sceptical about any long-term benefits. The experience of their members was that the introduction of Sustainable Forest Management certification introduced new costs without any recompense. However, following the Gottstein visit, TAFFEC have actively engaged with PLC of Maine and other like organisation with a view to developing global co-operation amongst forestry contractors (see Appendix II). During these discussions TAFFEC's view was that for any contractor certification scheme to be successful, their needed to be long term tangible benefits for participation.

It should be noted that the vice-president of TAFFEC is part of the governing board of PEFC Finland and there is a specific PEFC checklist for forest contractors as part of the very large PEFC group certification system managed by KMY (Sustainable Forestry Association). Finnish contractors are included within this framework at no cost. There is a specific checklist with which contractor members must comply. KMY maintain a list of contractors who comply with its requirements.

Health and safety is treated very seriously. In 2018 there were no deaths related to forestry. One of the biggest concerns is workers coming from other countries like Russia, Estonia, Latvia and Lithuania who are not trained and who are willing to work for low wages.

7.1 FSC® Contractor Certification

While in Finland, discussions were held with the FSC® project officer responsible for the development of the FSC® Contractor Certification system. Prior to the tour, PF Olsen Australia had been selected by FSC® to trial a pilot contractor certification scheme. The FSC® system proposed to add a new class of members to its Group certification system. The pilot system required the Group Scheme Manager to work with contractor members to establish which of the normative criteria in the FSC® principles contractor members would be accountable for.

The definition of contractors embraced within this framework was very broad and included forestry professionals who may be responsible for preparing plans and supervising operations. In some ways the framework proposed and now adopted by FSC® mirrors the way that contractors have been included within the PEFC certification framework in Finland. It is likely that the system would be effective at ensuring that the certification framework is an effective system for assuring contractors and their workers are engaged on fair terms, work safely and are held accountable for applying relevant environmental standards to their operations. However, it is less likely that it will empower them to actively improve their businesses and take ownership of their own management systems.

Including contractors within a Group Scheme framework is an effective mechanism to facilitate small forest owners to co-operate and share responsibilities with contractors and the costs related to FSC® certification. Figure 17 outlines some of the relationships that may be established between certified contractors, group scheme members and the group scheme manager. This system relies on contractors accepting and adopting the normative standards under the relevant national FSC® Forest Management standard. Given the very low levels of small-scale commercial forestry in Australia and the reluctance of domestic wood purchasers to support certified small forest growers, PF Olsen Australia has not successfully applied this model in Australia. However, in countries with many small forest owners, like Finland it is feasible the model could work well and assist small forest owners to embrace FSC® certification.

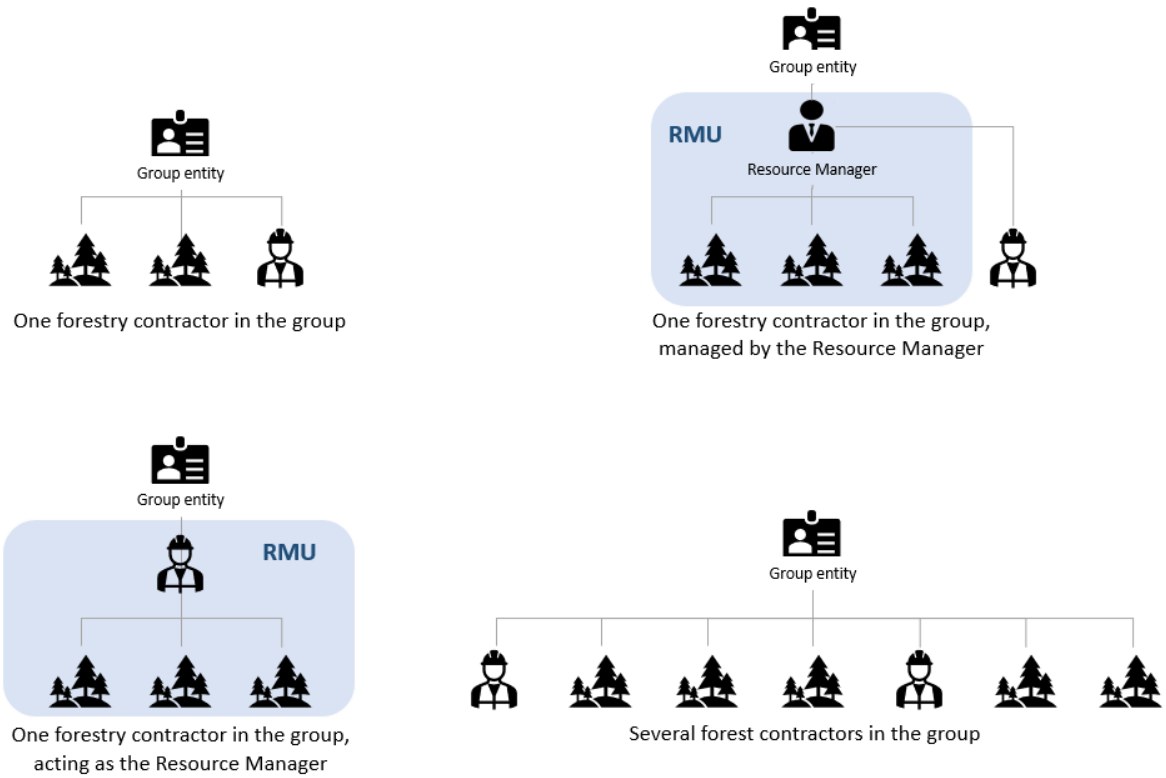

Figure 17 – Extract from FSC-STD-30-005 V2-0 which shows examples of how forestry contractors can be included in FSC® Group Certificates.[26]

8. Sweden - PEFC

8.1 Background and context

Sweden has established a stand-alone standard for contractor certification under their national PEFC certification framework. PEFC has established this standard co-operatively with the Swedish contractor associations, unions, the Swedish Green employer association (Grona), representatives of forest owners and large processors. It is viewed as a means of contractors demonstrating their commitment to sustainable forestry and decent working conditions. All PEFC certified forest owners must engage PEFC certified contractors.

About half of all forest land in Sweden is owned by family enterprises. This is mainly in southern Sweden. There are about 200, 000 family enterprises with more than five hectares of forest. The average holding is about 50 hectares. About half of these family enterprises belong to forestry cooperatives who negotiate timber sales on their behalf. About 25% of the land is owned by large industrial owners, the public forest (about 14% of forest land) belongs to a state owned company and then remaining areas of forest is owned by state owned intuitions and the church[27].

[26] FSC International (2020) FSC-STD-30-005 V2-0 Forest management groups (https://fsc.org/en/document-centre/documents/resource/367)

[27] The Royal Swedish Academy of Agriculture and Forestry (2009) The Swedish Forestry Model (https://www.ksla.se/wp-content/uploads/2010/10/The-Swedish-Forestry-Model.pdf)

Figure 18 - Retained stumps for wildlife on PEFC certified forest in Sweden

In parallel with the certification framework is a training framework that has clear pathways for school student to learn how to operate sophisticated forest machinery while still in secondary school. Workplace health and safety laws in Sweden, like Australia and New Zealand describe a duty for employers to prevent employees from exposure to illness or accidents. Swedish health and safety laws and other workplace standards are higher than other countries, especially non-EU countries. However, much of the workforce in Swedish forests, especially those involved in manual silvicultural operations come from these countries. This has driven the development of training and guidance materials in different languages. Figure 18 is an example of the environmental enhancements expected under the Swedish PEFC standard. It shows high stumps that are retained for hollow dependent wildlife.

Sweden was the country that had most completely integrated a framework for contractor certification within their forest industry.

8.2 Scope and certification framework

8.2.1 Governance and eligibility

The certification framework allows for three categories of contractors:

- Harvesting or felling operation contractors
- Silvicultural contractors
- Forest management planning contractors, this includes companies involved with conducting forest inventory and other planning functions required under the PEFC framework.

The focus of the certification framework are the operations that occur within forests. There did not seem to be any provisions in the systems for haulage contractors or contractors engaged in road construction or other ancillary activities.

Smaller contracting business can belong to a group certification scheme. There are five organisations who offer group certification. Part of the services offered by these businesses are coaching and support to assist contractors meet certification requirements. The organisations managing the groups are audited for conformance with the group management standard by PEFC endorsed certification bodies annually.

Larger contracting business can elect to hold a certificate independently.

The standard for contractor certification[28] is maintained by PEFC Sweden and is reviewed every five years.

8.3 Observations from interviews

During the visit in Sweden, PEFC Sweden arranged interviews with organisation involved in implementing and using the system. This did not include any conversations with contractors.

8.3.1 Forest certification Prosilva AB

Prosilva is one of 5 organisations who offers group certification for forest owners. They provide certification mainly in the north of Sweden and hold both FSC® and PEFC group forest management certificates. Under their PEFC group certificate they also manage group certification for contractors. Pro-silva has a staff of five, one forester, two biologists, a manager and office support person.

Currently, Prosilva certify more than 400 contractors. They explained the certification process as follows:

[28] PEFC SWE 003.3 (2017) PEFC Sweden Forestry Contractor Standard https://cdn.pefc.org/pefc.se/media/2021-02/cd8d76d6-9588-4f20-8a92-97efc0ad4dfd/8a8ad650-26be-5acc-a343-39439decb1c2.pdf

1. Contractor contacts Prosilva and pays a 2500 SEK[29] initial fee which covers set-up costs and first 12months certification.
2. Prosilva send a pre-certification checklist to contractor and organises an initial interview to explain to Contractor what evidence is required to be certified which includes:
    (a) Basics - insurances, business registration details
    (b) Competence - training and accreditation records
    (c) Sub-contractors - written agreement and evidence of certification, i.e. sub-contractors must also be certified.
    (d) Safety - working together, working alone, employee list, emergency procedures, first aid kits
    (e) Preventative Environmental Work - use of vegetable oil in place of mineral oils, lists of chemicals and relevant safety data sheets.
    (f) Terms of Employment - written contracts, written job descriptions, induction of new employees, written health and safety policy
    (g) Working Environment - agreement on health services, annual development meetings, hut/staff room, workplace meetings (at least 2per year), systematic assessment and management of risks.
3. Following a verbal interview, normally conducted remotely, the contractor must prepare a portfolio of evidence and present it to Prosilva for review.
4. Annually contractors are required to complete a self-evaluation and send this to Prosilva for review.
5. Annually a minimum of 10% of contractors from each category are audited by Pro-silva staff - audits generally take 2-3 hours and must include a review of operations in the field.
6. Annual surveillance audits of Prosilva are conducted by its external Certification Body.

The annual fees are for PEFC certified contractors are between 600 and 6000 SEK depending upon size of an organisation. Contractors pay these fees directly.

There are also additional costs for training which are quite significant. This training needs to be refreshed every five years.

During general discussion about various requirements, it was established that:

- there is no formal health monitoring but there is a requirement for contractors to provide a health services agreement.
- certified contractors must use plant derived fuels and oils as per specified standards.

[29] SEK – Swedish Krona. 1SED=0.14AUD (7 June 2022)

- it is possible for organisations to provide evidence of relevant inhouse refresher training as an alternative to formal training.

8.3.2 ECSkog

EC Skog is another organisation that manages a group certification scheme. They have more than 2400 certified contractors on their register and operate throughout Sweden. They are owned in part by forest owner co-operatives. They focus exclusively on forestry contractor certification. During our discussion they explained that contracting companies with 25 or more people must have their own internal audit plan. Otherwise, the process for certification was very similar to Prosilva. They are well regarded and the largest group certification scheme for Swedish forestry contractors.

ECSkog is also focusing on how they can effectively measure the carbon footprint of the contractors they audit and develop plans to enable these businesses work towards net zero carbon dioxide emissions.

8.3.3 Grona arbetsgivare

This is the Swedish federation of green employers. It is an organisation for employers in agriculture, forestry, horticulture, landscaping, golf and animal clinics. Members of this organisation are bound to follow provision of collective agreements applicable to their business and take out insurance policies for employees.

8.3.4 Skogsentreprenorerna

This is the organisation that represents Swedish forestry contractors. In addition to playing a key role in the development of the PEFC Standard for contractors in Sweden, they have established a standard form contract with standard terms of engagement for their members. They are also involved in arranging group purchases of materials required by their members like fuels and oils.

Skogsentreprenorerna manage a group scheme for their members which includes about 800 contractors. Their website indicates a higher intensity of audit than some other schemes and highlights the number of discrepancies (non-conformances) identified. It indicates that 50 contractors have lost their certificates in past years as an indication of how their scheme is increasing the professionalism of their members. Other businesses expressed some concerns about contractors certifying their own members as being anti-competitive.

8.3.5 BillerudKorsnäs

This is a packaging solutions company which engages certified contractors to harvest its own forests and the forests of other small owners. In addition to requiring contractors to be certified, they have an internal auditor that audits the safety of contractors.

They have staff that develop harvest plans to ensure that environmental standards are maintained. There is an internal training program that is delivered online to explain the companies approach to sustainable forest management and their required standards. The course content has been endorsed by Grona. This supplements the requirements of certification and supports contractors to maintain certification. The course includes:

- An outline of the relevant laws
- The requirement of agreements with workers including relevant ILO requirements.
- Quality and operation production aspects
- Health and safety requirements.
- Some aspects of the United Nations Declaration on the Rights for Indigenous Peoples (UNDRIP)Agreement

Independently from PEFC certification, Billerud verify aspects of the management systems of their contractors before engaging them to do work. There forestry staff directly supervise operation and they formally audit at least ten percent of their contractors each year using independent auditors.

8.3.6 Gunnar Rundgren

Gunnar is an independent consultant who was engaged by FSC® Sweden to review the Swedish PEFC contractor certification system. Gunnar established the first organic certification process for Sweden and continues to work with groups in Sweden and Africa to establish sustainable farming systems.

In the main he was complimentary about the PEFC system for certifying contractors. He noted that his discussions with auditors and forest managers involved with dual certified forests, used PEFC contractor certification as a strong piece of evidence that a forest manager was able to comply with many of the elements of the FSC® standard associated with legality, health and safety and worker's rights.

Gunnar had a strong view that it was important to have a formal process for assessing contractors given the direct impact their activities can have on the environmental outcomes of their operations. He made the point that contractors engage and directly control the workers on the coalface who can avoid, cause or mitigate adverse impacts.

We spoke about the difficulty of designing and administering a system for contractors of varying size and sophistication. Gunnar indicated that using self-evaluation had the benefit of increasing an organisation's understanding of the requirements of the standard, especially when changes are made. However, he felt that these self-assessments tended to be a little soft.

His other criticisms of the system are that:

- internal audits do not specifically examine the compliance of obligations in respect to environmental impacts, the system is designed currently so that this element is addressed within forest management audits. Given on small forests the sampling intensity by group managers is set at 10% Gunnar commented that many operations go unchecked. He was unsure about what other checks are conducted by forestry planners and the organisations purchasing wood.
- the minimum specified audit frequency of 10% sample size was felt to be too low, as this means that a single contractor may only be audited once every ten years. Coupled with the low

intensity of audits on small grower forests he thought the system had the potential to miss critical environmental impacts.

9. Baden-Württemberg, Germany

9.1 Background and context

In Stuttgart, Baden-Württemberg, Germany, the German office of PEFC explained that they had developed procedures and criteria to recognise forest operator certificates. Within Germany, forests are owned by the state, local municipalities, communes and private individuals. The state is the largest forest owner. The State has required contractor certification for many years. There is an overabundance of forestry contractors because of past incentive programmes and the low barriers to entry for contractors. This has led to low profitability and is reflected in the age of the machinery currently in use.

Sustainable Forestry Certification is believed to have added costs to contractors because of requirements to use more sophisticated machines and equipment. There is also a frustration that the current arrangements for forestry tenders lead to tenders being allocated on price alone. The negotiations are viewed as lopsided.

In this environment contractor certification is viewed as an opportunity. This is because it generally requires trained staff, therefore creating a barrier for the unskilled workers coming from non-EU countries. It is also noted that small forest owners are becoming more sceptical about forest certification, as it has added to their costs but has not resulted in any increase in prices received for timber. There are about 3,300 certified forest service contractors in Germany. Conversations with relevant staff were constrained by a language barrier.

9.2 Scope and certification framework

Notable elements of the certification framework for forestry contractors are as follows:

- Audits of field operations by independent auditors are required every two years.
- Subcontractors are “considered in” audits but not required to be separately certified.
- Chainsaw operators must hold a certificate confirm attendance at a basic training course.
- Machine operators must be qualified.
- Minimum safety requirements are specified including:
  - Suitable personal protective equipment
  - No solo work with a chainsaw, winch or tree climbing
  - Maintenance of exclusion zones
  - Carrying of first aid equipment.
- Avoidance of rutting on roads.
- Utilisation of marked trees
- Suitable equipment with evidence of periodic safety checks

- Use of biodegradable chain oils, special fuels and hydraulic fluids.
- Skill kits for oil spills.
- Adherence to health and safety regulations.
- Business certification, tax clearance certificate, proof of insurance and work permits for workers from non-EU countries.
- Adherence to collective bargaining agreements.

10. Discussion

During this study tour there were two different drivers for contractor certification. In New Zealand and Canada, the main driver was to develop a framework to encourage contractors to actively manage the health and safety of their operations. Whilst in Maine, Sweden and Germany it appeared to be a response to the demands placed on forestry contractors by the introduction of sustainable forest management certification. In Maine a key driver was the contractor association's desire to give their members more direct control of the standards applying to their business to ensure their relevance and effectiveness.

On the whole, contractor certification was viewed as process that would improve the standards of forest management and assure the sustainability of the contracting business. The schemes that related directly to the sustainable certification standards were holistic and included independent verification of worker health and safety, environmental protection, employment terms and conditions, and sustainable business management considerations.

The types of contractors covered varied markedly. In Maine and New Zealand, the focus was predominantly on contractors involved in harvesting. While in BC and Sweden the schemes were more inclusive. This reflected the governance framework that existed to support the schemes. In BC it was requirement for any type of work in a forest, where as in Maine it was a method for Master Loggers to establish a point of difference for their business. Sweden made it a condition for work in PEFC certified forests while New Zealand made it a voluntary opt-in scheme. Maine and BC were the only places where contractors received a direct financial benefit from certification via reduced workers compensation insurance premiums. In other places certification was simply a condition of working in a forest or a means of differentiation.

Other jurisdictions like Finland and Kentucky have not adopted a certification scheme. Contractors in these jurisdictions view certification sceptically as a process that will introduce more costs into their business without delivering any associated benefits.

There was a wide variety of means for assuring conformance with relevant standards. In most place, self-assessment, supported by expert review was judged to be sufficient. This recognises that costs involved with travelling to independently review forestry operations in remote locations. However, all schemes included periodic field verification of standards. The intensity of these field reviews varied from once in ten years to annual visits. The use of technology and web-based platforms to collect and verify evidence was not widespread.

In Canada and New Zealand where the schemes were developed in response to concerning levels of forest worker fatalities, the introduction of contractor certification appeared to coincide with a decline in the frequency and severity of workplace injuries. However, it must be noted that these schemes were not the only initiatives implemented. Therefore, it was very difficult to discern any clear performance improvement that was clearly a result of forestry contractor certification. However, there was a lot of anecdotal support for the schemes. Contractors interviewed said that it helped them sleep better at night because there was a whole system supporting them. Audit organisations were measuring continuing improvement in conformance with relevant standards.

It was noted that there was also a wide variety of other supplementary legislation and institutional support provided to assure safe forest operations with low environmental impacts. The European countries, New Zealand and Canada had very comprehensive state supported training frameworks. The US states was less centrally administered and quite dependent upon local institutions like universities or insurance companies.

In New Zealand, Canada and Sweden where there are legislated health and safety responsibilities for businesses engaging contractors that extend to the workers of these contractors, contractor certification was viewed as one means of satisfying this duty. However, it was recognised that it was unlikely to be wholly sufficient. In Sweden, for instance certification was also supplement with diligent field supervision and other independent audits.

Subsequent to this tour there has been some interest within the national contractor associations visiting and others in South Africa, Japan and South America, in developing an international framework for forestry contractor certification. Appendix II highlights the reasoning and benefits from an approach like this. The initiative is being driven by the PLC in Maine and so the initial focus is on harvesting contractors. Figure 19 is a strawman framework of a possible international standard for a Forestry Contractor Certification standard. This diagram draws heavily on the initial work done by ForestWorks and the Australian Forestry Contractors Association to develop a contractor certification framework in Tasmania, Australia[30] and has been supplemented by the elements of best practice observed in the various schemes reviewed during this project. As outlined in Appendix II, any certification scheme will also need to have a robust and transparent governance structure that truly represents the interests of relevant interest groups. There will need to be rules to ensure diligent, fair and consistent application of the framework. Most importantly there will need to be the financial resources to ensure qualified auditors can administer the standard and conduct independent audits in sufficient detail to assure the credibility of the system.

[30] This framework has also been adapted and applied by the AFCA ForestFit Initiative, https://www.afca.asn.au/forestfit

I-LIFE

International Logger's Initiative for their Families and the Environment

Policy Accountabilities & responsibilities Risk Management Training o Induction, o Internal job training o Licences o Competency to operate machinery Machinery standards Worker consultation o Toolbox/tailgate meetings Emergency plans Audits o Internal o Client audits o Regulator audits Records o Workplace inspections o Equipment maintenance o Chemical register and usage records	Policy Procedures for o Complying with laws o Waste management o Chemical spillage o Selecting fuels and oils o Working towards net zero carbon dioxide emissions o Minimising smoke, noise, dust impacts o Protection of water ways o Protection of rare and threatened species Non-conformance procedure Programs to improve Environmental Management Audits o Self-inspection to demonstrate conformance with environmental standards o Client audits o Regulator audits Records o Equipment calibration o Chemical register and usage records	Business plan Business registration details Insurances (types/coverage) Written contracts Wages and conditions of workers Agreements with sub-contractors Pricing model Credit references Trade references	Staff Records and procedures o Number of staff employed o Staff turnover rate o Fair remuneration o Access to representation o Equal opportunity Workforce Development o Job descriptions o Training plan Local Community - Communication and Support

Figure 19 - Strawman framework for an International Forestry Contractor Certification standard.

11. Conclusions

For a forestry contractor certification to be successful it is necessary that there is a deep engagement with affected contractors in the development of the program and clear benefits for contractors. The model and design of the schemes reviewed reflected the broader social, operational, legal and institutional environment in each jurisdiction reviewed. In isolation it is unlikely that these schemes will be successful in improving worker health and safety, reducing environmental harm, ensuring fair employment terms and conditions or assuring business sustainability.

To be successful, the framework supporting the scheme needs to be appropriately resourced and there needs to be broad acceptance and support for the scheme so that certified forestry contractors are afforded some benefit for participation. Forestry contractors are very cost conscious so the benefits for participation must be compelling.

However, during the project other benefits for participation were highlighted by some contractors. Businesses that embraced the adaptive management principles that are at the heart of certification frameworks were clearly able to grow and perform better. However, there were also examples of contractors that were able to successfully grow and perform better without the additional impost of a formal certification framework. It was very clear that contractor empowerment was an important principle of successful schemes. Giving contractors the ability to highlight their professionalism and be recognised for the importance in the forest industry is a key driver for some participants. Centrally managed and prescribed standards are unlikely to be sustained or supported in the long term by independent contractors.

As contractors become more sophisticated and invest significant amounts of capital into plant and machinery, they need to ensure that their business practices are sound, and they are able to attract and retain good workers. Modern businesses are realising that having well-structured and well-planned business systems and practices is a fundamental part of ongoing success. External certification and review are a good way to help maintain the continual improvement that is necessary to succeed. Contractor Certification needs to be structured in a manner that support forestry contracting businesses to learn and improve, without this the processes will become stale and potentially only an expensive barrier to entry for new businesses.

One challenge facing many of the schemes reviewed was how to ensure equity of access given the large variety in size and type of forestry contracting businesses. In many parts of the world forestry contractors are muti-generational family businesses with less than 10 employees but also there are larger businesses competing in the same space who engage in excess of 100 employees. Having a process that is accessible and fair is a real challenge.

Sustaining a viable certification framework and the necessary resources to audit and maintain relevant records requires sufficient scale to resource the necessary certification scheme overheads. Voluntary opt-in frameworks have the advantaged of empowering proactive participants, but they run the risk of never gaining sufficient scale to be sustainable. Mandatory schemes on the other hand have a risk of disenfranchising contractors and simply become of barrier to entry and a possible additional cost to contracting businesses which prescribe minimum standards rather than encouraging continual improvement.

Appendix I – Contact details for further information

New Zealand	
Organisation	**Website**
Forest Industry Safety Council	https://www.fisc.org.nz/
Forest Industry Contractors Association	https://www.fica.org.nz/
Safetree Certification	https://safetree.nz/certification/
British Columbia, Canada	
Organisation	**Website**
British Columbia Forest Safety Council	https://www.bcforestsafe.org/
Mosaic Forest Management Corporation	https://www.mosaicforests.com/about-mosaic
Kentucky, United States of America	
Organisation	**Website**
Kentucky Master Logger	https://masterlogger.ca.uky.edu/
Somerset Wood Products	https://www.somersetwood.com/
Maine, United States of America	
Organisation	**Website**
Maine Professional Loggers Association	http://maineloggers.com/
North East Master Logger	https://masterloggercertification.com/
Finland	
Organisation	**Website**
Maine Professional Loggers Association	http://maineloggers.com/
North East Master Logger	https://masterloggercertification.com/
Treeline Incorporated	http://www.treelineinc.biz/
Western Maine Timberlands Incorporated	http://westernmainetimberlands.com/
Finland	
Organisation	**Website**
FSC Finland	https://fi.fsc.org/
PEFC Finland	www.pefc.fi
KMY - Group Scheme Manager for PEFC small growers	www.kestavametsa.fi
Koneyrittäjät - Trade Association of Finnish Forestry , Earthmoving and Energy Contractors (TAFFEC)"	https://www.koneyrittajat.fi/
MTK (Finnish Small Owners group)	www.mtk.fi

Sweden	
Organisation	**Website**
PEFC Sweden	www.pefc.se
Forest certification Prosilva AB	https://skogscertifiering.se/
Grolink, an independent facilitator of organic certification	http://grolink.se/
Entreprenörscertifiering Skog AB	www.ecskog.se
BillerudKorsnäs	https://www.billerudkorsnas.com/
Skogsentreprenörerna	http://www.skogsentreprenorerna.se/english/
Baden-Württemberg, Germany	
Organisation	**Website**
PEFC Germany	www.pefc.de
VDAW - Association of Agricultural Business for Baden-Württemberg	http://www.vdaw.de

Appendix 2 – A discussion paper prepared to encourage an international framework for Forestry Contractor Certification.

Master Logger Certification - Program for Strengthening Global Forest Sustainability and Viability of Forestry Contracting Through Performance Based Certification of the Logging company

Adopted from a paper prepared by
Ted Wright[31], Dana Doran[32], Richard Donovan[33] and David Bennett
July 2020

Background

Logging companies play a critical role in the supply chain of forest products throughout the world. Their impact socially, environmentally, and economically is vast as the boots on the ground who are invested not only in their equipment, but in their people, their communities and the responsible management of the forest. To date, no logger certification program or initiative has been endorsed globally that endorses their impact as compared to other forest managers (i.e. consulting foresters, land management companies and forest owners) and mills.

Forest certification has been in existence for close to 30 years. The Food and Agriculture Organization of the United Nations (FAO) defines "forest certification as a voluntary market mechanism used to promote the sustainable use and management of forests and to identify "sustainably produced" products for the consumer. The goal is to reward forest managers who voluntarily pursue sustainable forest practices rather than practices with the potential to cause negative economic, social and environmental impacts. A certification label on a forest product informs potential buyers that the product was produced in a well-managed forest in accordance with a given set of standards."[34]

According to the FAO, "forest managers may choose forest certification in expectation of better prices for their products, to maintain or increase access to markets for their products, to improve their public image, and to achieve social and environmental goals."[35] All of these goals are legitimate and important. However, the state of one's public image to the general population as a forest manager does not necessarily correspond to whether stakeholders in directly affected rural areas see any improvement in their socio-economic status or other values. There may be a perception by those purchasing certified products that the lives of those in rural communities are improved by the forest manager's actions.

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[31] Executive Director of The Trust to Conserve North East Forestlands
[32] Executive Director of Professional Logging Contractors of Maine
[33] Independent Senior Forest Advisor and a founder of the Forest Stewardship Council®
[34] http://www.fao.org/sustainable-forest-management/toolbox/modules/forest-certification/basic-knowledge/en/
[35] http://www.fao.org/sustainable-forest-management/toolbox/modules/forest-certification/basic-knowledge/en/

Our perspective is that certifying forest management activities is important but doesn't fully recognize the importance of accountability for all actors who participate in the chain. It is for that reason why we are proposing third party, performance-based logger company[36] certification as a complement to forest management certification.

While we believe that forest certification has had a positive impact by changing the behavior of forest managers and logging companies, we do not believe it has improved the overall benefits to the value chain to their fullest extent. In our opinion, forest certification does not sufficiently focus on the logging companies and their employees who perform the work on the ground. In order to both monitor and recognize well-performing logging companies from an environmental, social and technical perspective, and improve the sustainability of the forest products supply as well as logging company success, a rigorous, third-party and performance-based international logging company certification program is needed. The goal is to establish such a program for auditing of loggers, recognize and ultimately reward those who voluntarily pursue the most responsible harvesting practices, ensuring positive economic, social, cultural and environmental impacts through certification.

Performance Based Logging Company Certification

In 2000, the Professional Logging Contractors of Maine (United States) developed the Master Logger Certification (MLC) program as the world's first performance-based approach to recognize logging companies for their performance on the ground. In 2006, after interaction with various collaborators in MLC programs, the Rainforest Alliance designed a "SmartLogging" certification approach based upon MLC and their pioneering experience with SmartWood – the first global forest certification program. The first step was development of a public standard. Then, protocols were established for the third-party auditing that was required in order to attain certification.

Since that point in time, multiple entities have been certified in the USA, Estonia and Colombia through this program and there is interest in Chile, Brazil and other important forest and forestry countries. Separately there have been other positive and somewhat similar logger certification efforts that can be used as a foundation for future work. We are in communication with or documented relevant initiatives in Australia, Canada (British Columbia), Sweden (through the PEFC system), New Zealand, Japan and the German state of Badem- Wurttemberg. Though each of these efforts have been somewhat different, they all offer helpful experience to redesign and implement logger certification as we propose. It is critical to recognize that a single global approach has not been embraced due in part to the absence of uptake in the marketplace, the absence of a coordinated multi- organization approach. In cooperation with the logging community and other key stakeholders (companies, social and environmental interests, machinery suppliers, insurers, certification bodies and forest certification systems), we now propose to change this at the global level.

Instead of performance-based auditing, some certification systems (e.g. Sustainable

36 Use of the term "logger company" means legally registered in the country of operation. Such a company may be a single operator (sole proprietor) or larger.

Forestry Initiative, or SFI, in the US and Canada) have used worker training as both a benchmark for qualification of logging services in compliance with certification standards as well as a requirement for logging companies to sell their harvested products to certified operations. This has had some degree of success in supporting worker training and possible (but unverified) improvements in field performance, per the Sustainable Forestry Initiative (SFI) and the related Programme for Endorsement of Forest Certification (PEFC). However, in this case, third party auditing only focused on ensuring that loggers supplying various mills had at least one properly credentialled/trained worker and was not performance based. Also, the program has largely been used as an enforcement approach (a "stick") for sourcing, rather than directly incentivizing or recognizing (the "carrot") good performance. The system disempowers the owners of logging companies whereas a performance-based system ensures the business is sustainable and responsible.

We see logging company certification differently. We want it to both rigorously foster and recognize good logger performance at the grass roots level to strengthen the sustainability of forests around the globe and strengthen public acceptance for well-planned active forest management. Ultimately what is important to us is the sustainability of the logging company businesses to nurture the unique skills of their workers, pay fair wages, support rural communities and ensure that the specialized equipment they own is well maintained. Done well, it will also have value for buyers who seek to ensure the overall quality and sustainability of their wood supply.

In our approach, credible logger certification standards and certified logger performance must respect ecological, social/cultural and economic values as well as require conformance to management prescriptions that relate to strict conservation, due care around rare, threatened and endangered species (RTEs), special community or indigenous values requiring protection, riparian zones, etc. but not forgetting the importance of viability of business and living wages.

More than ever, at this time in history when there is increased attention being placed on a circular economy based on using renewable biological resources sustainably, responsible logging is of vital importance to sustainable forest management. Whether the focus is legality, social values, economic livelihoods, living wages, communities, indigenous groups, occupational health and safety, rare/threatened/endangered species, chemical use, roads or water and soil resource protection, loggers can have negative and positive impacts. Our focus is on incentivizing good performance in terms of these issues and values. We are deeply concerned that all too often loggers perform in a way that undermines the credibility of the sector. This is not always the fault of contractors but the business environment and atmosphere in forestry allows this to happen. Asymmetric structure of forestry contracting market (big powerful customers and small-medium size service providers) can easily lead to not wanted / unsatisfactory results. This has to change and the coalition we are building to embrace this change could well represent a new era for a more respected logging community, establishing global consistent performance standard. Building on learning through the evolution of sustainability certification programs globally, we believe we can use the experiences mentioned above (and others in places like Colombia, Germany, Japan, Sweden, Portugal and New Zealand) to design and implement a global logger company certification initiative that strongly supports responsible forest management.

And lastly, realizing that wide variations exist between logging companies as well as systems of wood procurement around the globe, similar to how FM Certification provides a differentiation for responsible and irresponsible landowners, logging company certification can have the same impact because at this point nothing substantial has been done to distinguish between responsible and irresponsible logging companies. Professional and responsible loggers need a way to distinguish themselves and this must be led by responsible loggers.

Why Is Logging Company Certification Important?

- The amount of certified forests (PEFC or FSC) varies widely among countries- i.e. 93% in Finland, 13% in the USA, and 3.5 % in Japan. Yet, virtually 100% of all commercial harvesting is done by professional logging companies.
- Logging company certification will improve third party in forest scrutiny for countries with large areas of certified forests by ensuring logging companies are engaged, empowered and differentiated, not just managed by the certificate holder. It is also a powerful way to increase the quality of work and differentiate logging companies that operate on non-certified forests, especially where logging companies purchase the timber they harvest to sell to processors.
- Small landowners are generally involved with harvesting their forest only once in their lifetime, getting this work this work done properly requires a professional logger who does similar work every day of the year.
- A large majority of stakeholders, particularly loggers, have seen at best inconsistent benefits or improvements through top down forest management certification. More often than not, economic viability of logging companies and social values like worker safety and welfare are overlooked.
- Top down approaches of certifying the practices of forest managers based solely on logger training or credentialing have not led to better socioeconomics or credible claims of better environmental performance in rural areas.
- Logging company certification can be applied to small, medium and large forest ownerships – all scale. Small and medium forest landowners have largely been left out of forest certification due to the high costs and limited benefits. In some regions with large amounts of uncertified small forest, this restricts the positive impact of forest management certification on those small forest owners as well as the amount of certified wood available to consuming mills that could be used for market driven certification.
- Through the development of a multi-stakeholder logger certification initiative, such an effort will enhance interaction between stakeholders that are deeply concerned about logging and forest management, enabling stakeholders of all perspectives to weigh in to better harvesting and related practices, increase the uptake of certified products, and create esprit de corps for the global logger community based on sound environmental, social and technical perspectives and performance.

Logging Company Certification Will Facilitate an Understanding of the Roles, Responsibilities, and Risks that These Companies Are Committed To:

- Operating under strict legal requirements;
- Responsibility for the training, safety and well-being of their workers;
- On the ground performance directly protecting soils, water, and other natural resources. Enhancing biodiversity;
- Deep engagement with rural communities and being available to protect them in times of crises like wildfire;
- Innovation with logging practices using new techniques and technology (e.g. forwarders) that reduce forest impacts and enhances the quality of silviculture, occupational health and safety, and business management;
- Reducing financial risk and commitment to work in a heritage profession.

What does Logging Company Certification provide?

- A point of harvest model that provides third-party verification of practices at the origin - a bottom up approach;
- A market mechanism used to promote the sustainable use of forests and to identify "sustainably produced" products for the consumer;
- A reward to loggers and logging contractors who pursue sustainable forest practices rather than practices that cause negative economic, social and environmental impacts;
- A basis to ensure globally consistent standards for worker wellbeing;
- Transparent standards that are ubiquitous across forest certification systems will enable contractors to serve multiple customers with greater efficiency;
- A program that, when used in combination with forest management certification systems, can provide assurance that the certification label on a specific forest product was produced in a responsible fashion in accordance with globally consistent and transparent standards.

How does Logging Company Certification work?

Logging company certification provides third-party, performance-based audit and certification for timber harvesting practices. The intent is to acknowledge and certify logging operations that comply with a set of social, environmental, and economic criteria. As part of this initiative, we will examine the experiences of the past 15 or so years, and create a new, global standard.

Existing standards typically have core or basic requirements, applicable at the harvest level. These include requiring loggers to demonstrate their commitment to harvesting practices that respect local and international laws and regulations, conserve forest health and productivity, protect worker health and safety, and are financially viable and respect the values of local people (indigenous or otherwise), of which they are a part of. Issues that we will re-examine as part of the process, to ensure ample but efficient coverage,

include workers' rights, fair pay or living wage, the latest guidance on RTEs or high conservation values (HCVs), etc.

Master Logger Certification and Smartlogging are two of the most recognized performance-based models. Both standards consist of the following general principle-level areas:

1. Addressing Legal Requirements
2. Harvest Planning and Monitoring
3. Protection of Soil, Water, and Residual Trees
4. Protection Natural Ecosystems
5. Respect of Community Values and Heritage
6. Occupational Health and Safety
7. Continuous Improvement/Innovation
8. Business Viability
9. Upholding Certificate Integrity

The objective will be to build a standard that is globally applicable but locally relevant. With careful stakeholder engagement the standard should be recognized as an important part of FM certification.

Finally, as part of our review, we will examine some of the latest innovations or approaches being tested in various certification system, e.g. use of "critical" or "continuous improvement" criteria or indicators, simplification of standard language, and streamlined (but still rigorous) group or small operation models.

The Benefits of Logging Company Certification

Through this initiative we hope to achieve the following:

- Empower the largest, most critical, and often overlooked segment of the forest products chain;
- Create market incentives for loggers that meet high standards – these will not necessarily be higher prices for the service provided, but could be in economic viability for the company, lower workers' compensation insurance rates, access to lower cost capital, or company marketing;
- Create a culture where extraction of forest products is based on quality and volume, rather than just volume;
- Provide forest managers an opportunity to reduce the criteria that they are audited against for forest certification.
- Improve the harvesting practices in countries with large amounts of uncertified forests.
- Reduction of risk for worker injury, mitigation of environmental harm and machinery damage = more productivity and lower operating costs.
- Allow the improvement of the socio-economic conditions in rural forested areas to be undertaken by the people that reside in these areas - not just the corporate forest management companies and mills.

- Increase the uptake of certified fiber so consuming mills can meet consumer demand; and,
- Increased respect by the public for responsibly sourced products as a result of point of harvest verification.

The addition of logger certification to forest certification can bring interested stakeholders closer to achieving responsible, sustainable management practices and responsible, sustainable management harvesting practices that have positive impacts on the social, economic, and environmental impacts that forest certification set out to achieve over 25 years ago.

Key requirement for a global logger certification scheme

- Global Organization with efficient, cost-effective governance structure for supporting third-party, performance-based logger certification globally (this will initially require grants or donations, but should ultimately be self-supporting through fees, with the exception of special projects that might receive outside funding)
- Core Group for managing the initiative and Network of Collaborating Organizations
- Website Platform for managing the initiative, including social messaging for consultative processes and general communication
- Network of outside collaborators, including companies, NGOs, forest and forestry-related certification programs engaged using a variety of communication tools.
- Multi-stakeholder-based Logging Company Certification Standard and relevant procedures for third-party auditing (including direct and group certification requirements)
- Core criteria for company certification, auditing and accreditation which can also be adjusted based upon additional country criteria.