Supply Base Report:
Shaw Renewables - Hardwood Lands

First Surveillance Audit

www.sbp-cert.org

Completed in accordance with the Supply Base Report Template Version 1.5

For further information on the SBP Framework and to view the full set of documentation see www.sbp-cert.org

Document history

Version 1.0: published 26 March 2015

Version 1.1 published 22 February 2016

Version 1.2 published 23 June 2016

Version 1.3 published 14 January 2019; re-published 3 April 2020

Version 1.4 published 22 October 2020

Version 1.5 published 11 November 2022

Contents

1 Overview

Producer name: Shaw Renewables - Hardwood Lands

Producer address: 1239 Sandy Desert Road, B0N 1Y0 Hardwoodlands, Canada

SBP Certificate Code: SBP-04-16

Geographic position: 45.067200, -63.519200

Primary contact: Julie Griffiths, +1 902 750 0173,jgriffiths@shawrenewables.ca

Company website: www.shawgroupltd.com

Date report finalised: 21 Dec 2022

Close of last CB audit: 19 Jan 2023

Name of CB: SCS Global Services

SBP Standard(s) used: SBP Standard 2: Verification of SBP-compliant Feedstock, SBP Standard 4: Chain of Custody, SBP Standard 5: Collection and Communication of Data Instruction

Weblink to Standard(s) used: https://sbp-cert.org/documents/standards-documents/standards

SBP Endorsed Regional Risk Assessment: Not applicable

Weblink to SBR on Company website: https://shawresources.ca/about-shaw/why-shaw/

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations					
Main (Initial) Evaluation	**First Surveillance**	**Second Surveillance**	**Third Surveillance**	**Fourth Surveillance**	**Re-assessment**
☐	☒	☐	☐	☐	☐

2 Description of the Supply Base

2.1 General description

Feedstock types: Secondary, Tertiary

Includes Supply Base evaluation (SBE): No

Includes REDII SBE: No

Feedstock origin (countries): Canada

2.2 Description of countries included in the Supply Base

Country: Canada

Area/Region: New Brunswick, Nova Scotia, Prince Edward Island

Exclusions: No

Shaw Resources - Eastern Embers, located in Hardwood Lands, Nova Scotia, manufactures and supplies wood pellets primarily to the Atlantic Canada region, while some are exported to European markets. Sawmill residuals (I.e. sawdust, shavings, flakes, woodchips, bark) supplied by locally sourced sawmills (Nova Scotia and New Brunswick) are the only feedstock used in wood pellet production at Eastern Embers. The sawmill suppliers source their logs primarily from Nova Scotia or New Brunswick forests, and a very small percentage (<1%) originate from Prince Edward Island forests. Currently, about 20-40% of Eastern Embers secondary and tertiary feedstock originates from certified forests and is SBP-compliant, whereas the other 60-80% is SBP-controlled.

Nova Scotia Forestry

The Nova Scotia Department of Natural Resources (NSDNR) has the authority over Crown forests in Nova Scotia. They monitor and enforce activities to prevent unauthorized harvest. Harvesting companies with Crown allocations must pay stumpage royalties for the timber products that they harvest. The majority of primary wood products supplied to industry in Nova Scotia are from privately owned woodlots. The provincial government has developed forest management strategies to encourage and assist private woodlot owners to manage their land effectively.

Businesses and individuals that acquire primary forest products for processing must report to the Nova Scotia Registry of Buyers. The registry helps to build reliable data to understand wood demand, estimate sustainable harvest levels, and assist with long-term forest management in Nova Scotia. Registered buyers also contribute to a silviculture program based on a rate per volume basis. Silviculture and training programs encourage the sustainable use of Nova Scotia Forests. At the current state, harvest levels on Crown, industrial and private lands are sustainable.

Nova Scotia's Code of Forest Practice are the guidelines for sustainable forest management, which are mandatory on Crown lands (administered by NSDNR), and highly encouraged on private woodlots in Nova Scotia. The Code is implemented through various provincial and federal legislation and regulations. The

Nova Scotia Forests Act was implemented to develop a healthy productive forest capable of yielding high volumes of high quality product and is directed towards both private woodlot owners and Crown lands in the province. The enforcement division of NSDNR completes regular visits to areas being harvested on both Crown and private lands to ensure that both the Forests Act and the Crown Lands Act are adhered to.

Forestry is a big economic driver in Nova Scotia, employing 11,500 Nova Scotians directly and indirectly. In 2015, the Nova Scotia forest industry generated over $2 billion in economic impact (NS Forest Industry Economic Impact, 2016).The three major export producers are pulp and paper, wood-fabricated materials, and primary wood products. (https://novascotia.ca/natr/forestry/reports/State_of_the_Forest_2016.pdf). Economically, the Eastern Embers pellet plant is an important part of the forest products supply chain; it directly employs 10 local workers and employs many others indirectly (i.e. local contractors and tradespeople).

The harvest of primary forest products in Nova Scotia are primarily for sawmills (53%), pulp mills (34%), and energy generation (~6%) (Registry of Buyers Report 2020). Wood pellets are generally made from secondary and tertiary forest products that would have normally been wasted: sawmill residues (sawdust and shavings) and low-grade timber from harvest sites that have no other economic value. Fibre sources for Eastern Embers include secondary (sawdust, chips, and green shavings) and tertiary (kiln dried shavings) sawmill residuals. The scale of wood pellet operations is usually dependent on the availability of fibre sources; however pellet plants in Eastern Canadian provinces generally have an annual production in the range of 50,000 to 100,000 mt/yr.

New Brunswick Forestry

In NB, the forest industry has been described as one of the province's biggest economic drivers, creating 24,000 jobs with 600 forest companies, and more than 2,500 in the supply chain. Forest products are one of the top private GDP generators (Economic Impacts of the NB Forest Sector, 2016).

The provincial government proclaimed the Crown Lands and Forests Act in 1982, and this is the legal foundation of Crown forest management in the province. The Act divides Crown land into 10 timber licences; each license is leased through a 25 year forest management agreement to a large forest based company called a Licensee. On a 5 year cycle, the Department of Natural Resources assesses how the licensee has managed the Crown forest, and if satisfactory, will renew the agreement for another 5 year period. Each licensee must produce a 25 year forest management plan that is sustainable over an 80 year planning horizon. Annual operating plans are also required of licensees and are monitored by the government to ensure that each licensee is following the regulations and standards. Most forest operations on Crown land are ISO 14001 certified and certified under an independent sustainable Forest Management System (i.e. CSA, FSC, SFI), making NB the first jurisdiction in the world to require certification of licensee operations.

The provincial government sets the annual allowable cut (AAC) for both Crown and private woodlots based on on-going research of forest inventory. New Brunswick has one of the best forest inventory programs in Canada. Analysis of aerial photography and ground sample plots chart the province's timber growth and yield. These data are updated on an annual cycle using a computerized geographical information system.

All feedstock originating from private sources in New Brunswick is monitored through 1 of 7 regional marketing boards. The marketing boards provide forest management assistance to private woodlot owners including calculating timber inventory, harvesting layout, management plan development and programs that encourage the improved management of woodlots. Private woodlot owners operating under regional marketing boards can also obtain annual subsidies for silviculture programs.

Prince Edward Island Forestry

A very small percentage (<1%) of secondary feedstock originates from Prince Edward Island (PEI). Most of PEI's forests are privately owned (87%). The provincial government provides technical advice and assistance to land owners. Most of PEI's commercial softwood is sold to mills in NB and NS. As required by the Forest Renewal Program Regulations, commercial softwood harvested from private and public lands are subject to a cord fee. The fee is reinvested into forest management programs on both private and public lands.

There are currently no tree species listed in CITES found in Nova Scotia, New Brunswick, or Prince Edward Island

2.3 Actions taken to promote certification amongst feedstock supplier

Suppliers recognize that the Eastern Embers plant is certified to PEFC chain of custody and Sustainable Biomass Program standards. Sustainability is a common practice amongst many of Shaw Resources' suppliers; suppliers continue to seek third party SFM certifications (FSC, or SFI) where possible. The organization has implemented training programs company-wide to ensure that employees understand the purpose of each of the certifications Shaw Resources' PEFC sustainability mission statement is publicly available and is posted on the company website:

"Shaw Resources PEFC COC (Programme for the Endorsement of Forest Certification, Chain of Custody) program exists to support our customers' requirements for a socially responsible and sustainable, renewable energy source. It reflects Shaw Resources' commitment to providing its employees with a safe environment to work and to ensuring the sustainability of the natural resources used and the protection of the environment of the regions that the Shaw Resources wood pellet plants operate in."

Shaw Resources' suppliers sign PEFC scoping-in agreements and provide quarterly supplier declarations as part of the PEFC chain of custody. Furthermore, all suppliers are required to sign a supplier's assertion, which declares that feedstock originates from within the defined supply base and is not from controversial sources.

2.4 Quantification of the Supply Base

Supply Base

a. **Total Supply Base area (million ha)**: 10,63
b. **Tenure by type (million ha):**5.40 (Privately owned), 5.23 (Public)
c. **Forest by type (million ha):**10.63 (Boreal)
d. **Forest by management type (million ha):**10.63 (Managed natural)
e. **Certified forest by scheme (million ha):**5.50 (SFI)

Describe the harvesting type which best describes how your material is sourced: N/A
Explanation: Feedstock is sourced from sawmills

Was the forest in the Supply Base managed for a purpose other than for energy markets? Yes - Majority
Explanation: Harvesting operations primarily source sawmills and pulpmills

For the forests in the Supply Base, is there an intention to retain, restock or encourage natural regeneration within 5 years of felling? Yes - Majority
Explanation: As discussed in 3.1 above, there are intentions to retain, restock and encourage natural regeneration in the supply base.

Was the feedstock used in the biomass removed from a forest as part of a pest/disease control measure or a salvage operation? No
Explanation: Only secondary/tertiary feedstock from sawmills is used.

What is the estimated amount of REDII-compliant sustainable feedstock that could be harvested annually in a Supply Base (estimated): N/A N/A
Explanation:N/A

Feedstock

Reporting period from: 01 Nov 2021

Reporting period to: 31 Oct 2022

a. **Total volume of Feedstock**: 1-200,000 tonnes
b. **Volume of primary feedstoc**k: 0 N/A
c. **List percentage of primary feedstock, by the following categories.**
    - Certified to an SBP-approved Forest Management Scheme: N/A
    - Not certified to an SBP-approved Forest Management Scheme: N/A
d. **List of all the species in primary feedstock, including scientific name:** N/A
e. **Is any of the feedstock used likely to have come from protected or threatened species?** N/A
    - Name of species: N/A
    - Biomass proportion, by weight, that is likely to be composed of that species (%): N/A
f. **Hardwood (i.e. broadleaf trees): specify proportion of biomass from (%):** N/A
g. **Softwood (i.e. coniferous trees): specify proportion of biomass from (%):** N/A
h. **Proportion of biomass composed of or derived from saw logs (%):** N/A
i. **Specify the local regulations or industry standards that define saw logs:** N/A
j. **Roundwood from final fellings from forests with > 40 yr rotation times - Average % volume of fellings delivered to BP (%):** N/A
k. **Volume of primary feedstock from primary forest:** N/A N/A
l. **List percentage of primary feedstock from primary forest, by the following categories. Subdivide by SBP-approved Forest Management Schemes**:
    - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme: N/A
    - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: N/A
m. **Volume of secondary feedstock**: 1-200,000 tonnes
    - Physical form of the feedstock: Chips, Sawdust, Offcuts
n. **Volume of tertiary feedstock**: 1-200,000 tonnes
    - Physical form of the feedstock: Shavings

o. **Estimated amount of REDII-compliant sustainable feedstock that could be collected annually by the BP:** N/AN/A

Proportion of feedstock sourced per type of claim during the reporting period				
Feedstock type	**Sourced by using Supply Base Evaluation (SBE) %**	**FSC %**	**PEFC %**	**SFI %**
Primary	0,00	0,00	0,00	0,00
Secondary	0,00	0,00	100,00	0,00
Tertiary	0,00	0,00	100,00	0,00
Other	0,00	0,00	0,00	0,00

3 Requirement for a Supply Base Evaluation

Note: Annex 1 is generated by the system if the SBE is used without Region Risk Assessment(s). Annex 2 is generated if RED II SBE is in the scope.

Is Supply Base Evaluation (SBE) is completed? No

N/A

Is REDII SBE completed? N/A

N/A

4 Supply Base Evaluation

4.1 Scope

Feedstock types included in SBE: N/A

SBP-endorsed Regional Risk Assessments used: Not applicable

List of countries and regions included in the SBE:

Country: N/A

Indicator with specified risk in the risk assessment used:
N/A

Specific risk description:

4.2 Justification

N/A

4.3 Results of risk assessment and Supplier Verification Programme

N/A

4.4 Conclusion

N/A

5 Supply Base Evaluation process

N/A

6 Stakeholder consultation

N/A

6.1 Response to stakeholder comments

N/A

7 Mitigation measures

7.1 Mitigation measures

N/A

7.2 Monitoring and outcomes

N/A

8 Detailed findings for indicators

Detailed findings for each Indicator are given in Annex 1 in case the Regional Risk Assessment (RRA) is not used.

Is RRA used? N/A

9 Review of report

9.1 Peer review

N/A

9.2 Public or additional reviews

N/A

10 Approval of report

Approval of Supply Base Report by senior management			
Report Prepared by:	**Julie Griffiths**	**Program Coordinator**	**21 Dec 2022**
	Name	**Title**	**Date**
The undersigned persons confirm that I/we are members of the organisation's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalisation of the report.			
Report approved by:	**Julie Griffiths**	**Program Coordinator**	**21 Dec 2022**
	Name	**Title**	**Date**

Annex 1: Detailed findings for Supply Base Evaluation indicators

N/A

Annex 2: Detailed findings for REDII Supply Base Evaluation indicators (Level B)

N/A