



Supply Base Report: Pinnacle Renewable Energy Inc. (Northern Pellet Limited Partnership)

Main (Initial) Audit



The promise of good biomass



Completed in accordance with the Supply Base Report Template Version 1.3

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

Document history

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1 Overview

Producer name: Pinnacle Renewable Energy Inc. – Northern Pellet Limited Partnership

Producer location: 9401 – 124th Ave. Mailing address: PO Box 3549 High Level, AB T0H 1Z0

Geographic position: 58.49307551778262, -117.15520628222252

Primary contact: Joseph Aquino – Director of Sustainability

Company website: www.pinnaclepllet.com

Date report finalised: 19/Oct/2020

Close of last CB audit: 18/Nov/2020

Name of CB: SCS Global Services

Translations from English: N/A

SBP Standard(s) used: Standard 2 ver. 1.1, Standard 4 ver. 1.0, Standard 5 ver. 1.0

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

SBP Endorsed Regional Risk Assessment: N/A

Weblink to SBE on Company website: N/A

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations				
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance
X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 Description of the Supply Base

2.1 General description

The supply base is the Province of Alberta, which has a total land base of 66.1 million hectares of which 53% or (35 million hectares) is forested, where approximately 77% are within forest management agreement areas. Approximately 77% of Alberta Forests are within the Boreal-mixed forests, which includes several tree species such as white and black spruce, aspen, balsam poplar, lodgepole pine, jack pine, balsam fir, larch and tamarack. There are numerous parks and protected areas within the Province totalling 9.5 million hectares or approximately 14% of the total land base.

The Province of Alberta owns all public forested land within the Province totalling 35.2 million hectares. Alberta has a robust sustainability and certification program covering all managed forest lands in the Province. Alberta Agriculture and Forestry has ISO 9001 certification for all ten offices in the Province conducting compliance monitoring on managed forest lands. Many licensees operating on managed forest lands also have voluntary certification schemes such as SFI, FSC or CSA that monitor forest management activities.

Forest tenure provides the authorization for companies to harvest timber from crown land. There are various forms of tenure; the three main categories of tenures are: forest management agreements (FMA's), timber licenses, and timber permits. Approximately 87% of timber harvested in Alberta is from public lands with a forest management agreement. There can be multiple forest management units (FMU's) within an FMA. Each FMU has specific measurable targets for forest management strategies and is how the Province ensures there is collaborative efforts for management strategies across the landscape level.

Management of harvesting volume is governed under the Forests Act. Allowable annual cuts (AAC) are calculated at the FMU level using growth and yield data within the "green areas" of the FMU. An FMA will have one or more FMU's and licensees operating in the FMA are responsible for implementing a Forest Management Plan (FMP) for their FMU. Provincial and FMU AAC's fluctuate over time depending on variables that impact the amount of green area within the FMU such as an increase in parks and protected areas, natural disasters (wildfire or pests) changes in growth and yield data or changes to FMU boundaries.

Management of harvesting practices is governed under the Forests Act and is detailed in the FMP's for each operating licensee. Landscape level and site level forest management objectives are described in FMP's. FMP's are forward looking technical documents that can contain management plans for harvesting for a ten year period. The Provincial government, specifically the Ministry of Agriculture and Forestry has a compliance and enforcement division that inspects forest practices to ensure proponents are meeting the requirements of the FMP's.

Private land represents a relatively small portion of Alberta's landbase and does not overlap with managed forest boundaries. Private land is considered outside the timber harvesting and managed forest landbase, and therefore is not reflected when determining FMU level AAC's. Some parcels of private land contain treed areas that when harvested are sold to various wood product manufacturing facilities. The Agroforestry and Woodlot Extension Society governs best management practices for land owners who conduct timber harvesting on private land. The timber and the harvesting practices on private land are governed by various pieces of Provincial and Federal legislation that ensure ownership and legality of timber is legitimate and

impacts to natural systems are minimized. Less than 1% of the total fibre procured by PREI is from private land.

Please note all fibre procured for NPLP originates from one supplier who maintains FM and CoC certification.

ⁱ Forest Governance in the Province of Alberta. 2016. Province of Alberta. Accessed from: https://www.sfmcanada.org/images/Publications/EN/AB_info_Provinces_and_territories_EN.pdf

ⁱⁱ Sustainable Forest Management, 2015 Facts and Statistics. 2017. Agriculture and Forestry. Accessed from: [https://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/formain15744/\\$FILE/2015-AAC-Fact-Sheet.pdf](https://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/formain15744/$FILE/2015-AAC-Fact-Sheet.pdf)

Supply Base Forest Areas

The province is divided into forest areas managed by government offices that authorize access to timber resources. The Forest areas where PREI sources fibre includeⁱⁱⁱ

1. Calgary Forest Area
2. Rocky Mountain House Forest Area
3. Edson Forest Area
4. Whitecourt Forest Area
5. Grand Prairie Forest Area
6. Slave Lake Forest Area
7. Lac La Biche Forest Area
8. Peace River Forest Area
9. Fort McMurray Forest Area
10. High Level Forest Area

Secondary Feedstock

Currently 100% of the feedstock procured by Northern Pellet is secondary fibre. Secondary fibre is residual material or bi-products from the lumber, plywood and remanufacturing industry in the form of bark, sawdust, shavings and chips.

100% of the feedstock procured by Northern Pellet is forest management certified and is accompanied by chain of custody claim certificates. The fibre supply accompanied with a PEFC CoC claim certificate represents the tonnage of SBP compliant material produced. All material originates from one supplier.

2.2 Actions taken to promote certification amongst feedstock supplier

Customer demand for certified wood products drives extensive forest certification in AB. PREI requires that claim certificates for PEFC certified fibre are issued from PEFC certified suppliers. PREI requires all non-certified suppliers and certified suppliers providing non-certified fibre, sign a supplier declaration verifying their compliance with the various legality, forest management and environmental requirements set out by the certification scheme. Pinnacle promotes certification schemes with suppliers as it is a core value of

Pinnacles business. Pinnacle provides suppliers with the tools necessary to achieve certification compliance through shared knowledge.

2.3 Final harvest sampling programme

N/A – Only secondary fibre at Northern Pellet

2.4 Flow diagram of feedstock inputs showing feedstock type [optional]

Insert flow diagram.

2.5 Quantification of the Supply Base

Supply Base

- a. Total Supply Base area (ha): **≈27,000,000ha**
- b. Tenure by type (ha): **100% Crown Land Tenures**
- c. Forest by type (ha): **Boreal-Mixed – 27,000,000ha**
- d. Forest by management type (ha): **100% Natural managed forest**
- e. Certified forest by scheme (ha): **Approximately 65%**

Feedstock

- f. **Total NPLP volume of Feedstock: 150,000 odt**
- g. **Total volume of primary feedstock: 0 odt**
- h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes.
- i. **NPLP:**
 - Primary feedstock certified to an SBP-approved Forest Management Schemes – **0%**
 - Primary feedstock not certified to an SBP-approved Forest Management Schemes – **0%**
- j. List all species in primary feedstock, including scientific name

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
Engelmann Spruce	Picea engelmannii	Mountain Hemlock	Tsuga mertensiana
White Spruce	Picea gluaca	Tamarack	Larix laricina
Black Spruce	Picea mariana	Alpine Larch	Larix lyalli
Sitka spruce	Picea sitchensis	Western Larch	Larix occidentalis
Sub-alpine fir	Abies lasiocarpa	Rocky Mountain Juniper	Juniperus scopulorum
Douglas fir	Pseudotsuga menziesii	Western Yew	Taxus brevifolia
Grand Fir	Abies grandis	Paper Birch	Betula papyrifera
Amabilis Fir	Abies amabilis	Black Cottonwood	Populus trichocarpa
Lodgepole Pine	Pinus contorta	Balsam Poplar	Populus balsamifera
Ponderosa Pine	Pinus ponderosa	Trembling Aspen	Populus tremu/oides
Limber Pine	Pinus flexilis	Red Alder	Alnus rubra
Western White Pine	Pinus monticola	Bigleaf Maple	Acer macrophyllum

Western Red Cedar	Thuja plicata		
Yellow Cedar	Chamaecyparis nootkatensis		
Western Hemlock	Tsugo heterophyllo		

- k. Volume of primary feedstock from primary forest – **0 odt**
- l. List percentage of primary feedstock from primary forest (i), by the following categories. Subdivide by SBP-approved Forest Management Schemes
- Primary feedstock from primary forest certified to an SBP-approved Forest Management Schemes – **0%**
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Schemes – **0%**
- m. **Total volume of secondary feedstock:** **150,000 odt**
- n. **Origin: AB**
- o. **Type: Sawmill residuals, sawdust, bark, shavings, hog**
- p. **Total Volume of tertiary feedstock:** **0 odt**
- q. **Origin:**

3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
<input type="checkbox"/>	X

4 Supply Base Evaluation

4.1 Scope

N/A

4.2 Justification

N/A

4.3 Results of Risk Assessment

N/A

4.4 Results of Supplier Verification Programme

N/A

4.5 Conclusion

N/A

5 Supply Base Evaluation Process

N/A

6 Stakeholder Consultation

N/A.

6.1 Response to stakeholder comments

N/A

7 Overview of Initial Assessment of Risk

N/A

8 Supplier Verification Programme

8.1 Description of the Supplier Verification Programme

N/A

8.2 Site visits

N/A

8.3 Conclusions from the Supplier Verification Programme

N/A

9 Mitigation Measures

9.1 Mitigation measures

N/A

9.2 Monitoring and outcomes

N/A

10 Detailed Findings for Indicators

N/A

11 Review of Report

11.1 Peer review

The SBR was peer reviewed by an external certification consultant, Nate Ryant – NMR Resources. Nate has extensive experience in the resource sector providing certification expertise across Canada. Nate is a Registered Professional Forester in the Province of BC and has extensive knowledge on forest legislation in BC, Alberta and Canada. PREI has contracted Nate for the past five years to provide certification services and expertise.

This report is publically available and accessible online at <http://www.pinnaclepellet.com>

11.2 Public or additional reviews

N/A

12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	<i>Joe Aquino</i>	<i>Director of Sustainability</i>	<i>October 19, 2020</i>
	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:	<i>Vaughan Bassett</i>	<i>Senior Vice President – Sales and Logistics</i>	<i>October 19, 2020</i>
	Name	Title	Date
Report approved by:	<i>[name]</i>	<i>[title]</i>	<i>[date]</i>
	Name	Title	Date
Report approved by:	<i>[name]</i>	<i>[title]</i>	<i>[date]</i>
	Name	Title	Date

13 Updates

N/A

13.1 Significant changes in the Supply Base

N/A

13.2 Effectiveness of previous mitigation measures

N/A

13.3 New risk ratings and mitigation measures

N/A

13.4 Actual figures for feedstock over the previous 12 months

Supply Base

- a. Total Supply Base area (ha): **≈27,000,000ha**
- b. Tenure by type (ha): **100% Crown Land Tenures**
- c. Forest by type (ha): **Boreal-Mixed – 27,000,000ha**
- d. Forest by management type (ha): **100% Natural managed forest**
- e. Certified forest by scheme (ha): **Approximately**

Feedstock

- f. Total NPLP volume of Feedstock: **150,000 odt**
- g. Total volume of primary feedstock: **0 odt**
- h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes.
- i. **NPLP:**
 - Primary feedstock certified to an SBP-approved Forest Management Schemes – **0%**
 - Primary feedstock not certified to an SBP-approved Forest Management Schemes – **0%**
- j. List all species in primary feedstock, including scientific name
 - **Lodgepole pine – *Pinus contorta***
 - **Hybrid white spruce – *Picea glauca x engelmannii***
 - **Engelmann Spruce – *Picea engelmannii***

- Douglas fir – *Pseudotsuga mensezii*
- Black spruce – *Picea mariana*
- Western hemlock – *Tsuga heterophylla*
- Sub-alpine fir (Balsam) – *Abies lasiocarpa*
- Western Red Cedar – *Thuja plicata*
- Western Larch – *Larix occidentalis*
- Paper Birch – *Betula papyrifera*
- Trembling aspen – *Populus tremuloides*
- Black cottonwood – *Populus balsamifera*

- k. Volume of primary feedstock from primary forest – **0 odt**
- l. List percentage of primary feedstock from primary forest (i), by the following categories. Subdivide by SBP-approved Forest Management Schemes
- Primary feedstock from primary forest certified to an SBP-approved Forest Management Schemes – **0%**
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Schemes – **0%**
- m. **Total volume of secondary feedstock:** **150,000 odt**
- n. **Origin:** **AB**
- o. **Type:** **Sawmill residuals, sawdust, bark, shavings, hog**
- p. **Total Volume of tertiary feedstock:** **0 odt**
- q. **Origin:** **AB**

13.5 Projected figures for feedstock over the next 12 months

Supply Base

- a. Total Supply Base area (ha): **≈27,000,000ha**
- b. Tenure by type (ha): **100% Crown Land Tenures**
- c. Forest by type (ha): **Boreal-Mixed – 27,000,000ha**
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j. List all species in primary feedstock, including scientific name

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
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White Spruce	<i>Picea glauca</i>	Tamarack	<i>Larix laricina</i>
Black Spruce	<i>Picea mariana</i>	Alpine Larch	<i>Larix lyalli</i>
Sitka spruce	<i>Picea sitchensis</i>	Western Larch	<i>Larix occidentalis</i>
Sub-alpine fir	<i>Abies lasiocarpa</i>	Rocky Mountain Juniper	<i>Juniperus scopulorum</i>
Douglas fir	<i>Pseudotsuga menziesii</i>	Western Yew	<i>Taxus brevifolia</i>
Grand Fir	<i>Abies grandis</i>	Paper Birch	<i>Betula papyrifera</i>
Amabilis Fir	<i>Abies amabilis</i>	Black Cottonwood	<i>Populus trichocarpa</i>
Lodgepole Pine	<i>Pinus contorta</i>	Balsam Poplar	<i>Populus balsamifera</i>
Ponderosa Pine	<i>Pinus ponderosa</i>	Trembling Aspen	<i>Populus tremuloides</i>
Limber Pine	<i>Pinus flexilis</i>	Red Alder	<i>Alnus rubra</i>
Western White Pine	<i>Pinus monticola</i>	Bigleaf Maple	<i>Acer macrophyllum</i>
Western Red Cedar	<i>Thuja plicata</i>		
Yellow Cedar	<i>Chamaecyparis nootkatensis</i>		
Western Hemlock	<i>Tsuga heterophylla</i>		

k. Volume of primary feedstock from primary forest – **0 odt**

l. List percentage of primary feedstock from primary forest (i), by the following categories. Subdivide by SBP-approved Forest Management Schemes

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- Primary feedstock from primary forest not certified to an SBP-approved Forest Management Schemes – **0%**

m. **Total volume of secondary feedstock:** **150,000 odt**

n. **Origin:** **AB**

o. **Type:** **Sawmill residuals, sawdust, bark, shavings, hog**

p. **Total Volume of tertiary feedstock:** **0 odt**

q. **Origin:** **AB**

ⁱ Forest Governance in the Province of Alberta. 2016. Province of Alberta. Accessed from: https://www.sfmcanada.org/images/Publications/EN/AB_info_Provinces_and_territories_EN.pdf

ⁱⁱ Sustainable Forest Management, 2015 Facts and Statistics. 2017. Agriculture and Forestry. Accessed from: [https://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/formain15744/\\$FILE/2015-AAC-Fact-Sheet.pdf](https://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/formain15744/$FILE/2015-AAC-Fact-Sheet.pdf)

ⁱⁱⁱ Forest Areas. 2017. Alberta Government. Accessed From: <http://wildfire.alberta.ca/resources/maps-data/documents/ForestAreas-May03-2017.pdf>